

Draft Study

Prepared by Hemson for the City of Ottawa



Amended Development Charges Background Study

January 9, 2026

As Amended February 23, 2026



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Foreword

The Development Charges Act requires that a background study be published at least 60 days prior to passage of a DC By-law. The study was made available on January 9, 2026. Since the release, changes have been made to the analysis to align with the new requirements under Bill 60 and based on feedback from stakeholders.

A. Changes Since the January 9, 2026 Development Charges Background Study

The following provides a summary of the changes made to the development charges rates following the release of the Amended Development Charges Background Study dated January 9, 2026.

i. Land Acquisition

On November 27, 2025, Bill 60, *Fighting Delays, Building Faster Act, 2025* was granted Royal Assent. Changes arising from this legislation include direction on special treatment of land acquisition for inclusion of development charges, including the removal of land from the calculation of historical service levels. As part of this amended study, a distinct category of service and development charge rate has been included for Land Acquisition costs.

ii. Allocation of Post Period Benefit Shares

Since the release of the January 9, 2026 Amended Development Charges Background Study, further examination on the post period benefit shares included in the Roads & Related Services capital program was completed and applied as part of this update. A post-period allocation has been applied to two projects; 1.1.12 Airport Parkway Widening (Brookfield Road to Mer-Bleue Road) and 1.1.14 New Road in the Hurdman Area. Both projects are planned to be constructed late in the planning horizon and will provide

capacity for development beyond 2035, details are show on Table 1-2.1 in Appendix A.

iii. Alignment of Cost Allocation Between Residential & Non-Residential Development

Additional review of the development forecast over the planning period to 2035 and the allocation of development-related costs between residential and non-residential development was examined. Changes to the residential/non-residential cost allocations have been made to better reflect future development in the City.

The net effect of these changes in slight shifts in the development charge rates provided in the original January 9, 2026 version of the Background Study.

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List of Acronyms

AMP Asset Management Plan

BTE Benefit to Existing

COG Cost of Growth

DCA Development Charges Act

DC Development Charges

GFA Gross Floor Area

LRFP Long Range Financial Plan

IGB Inside the Greenbelt

IMP Infrastructure Master Plan

OGB Outside the Greenbelt

PPB Post-Period Benefit

PPU Persons Per Unit

TMP Transportation Master Plan

1. Introduction

The City of Ottawa released a 2024 Provisional Development Charges (DC) Background Study for City-wide and Area-Specific services as part of the process to lead to the approval of a new DC By-law in compliance with the *Development Charges Act, 1997* (DCA). Since the adoption of the by-law by Council in May 2024 (By-law 2024-218), the City has adopted Part 2 of the Transportation Master Plan (TMP), which provides updated information for Roads & Related and Public Transit services. An interim update to the existing DC Background Study and By-law is required to incorporate these changes.

The DCA and O. Reg. 82/98 require that an Amended DC Background Study be prepared in which development charges are determined with reference to:

- The average capital service levels provided in the City over the 15-year period immediately preceding the preparation of the background study (if applicable);
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred, or to be incurred, by the City or its local boards to provide for the expected development, including the determination of the eligible and ineligible components of the capital projects; and,
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

This study presents the results of the review which determines the development-related net capital costs attributable forecast to occur in the City. These development-related net capital costs are then apportioned among residential and non-residential development in a manner that reflects the increase in the need for each service attributable to each type of

development. The study arrives, therefore, at calculated development charges for various types of development.

The DCA provides for a period of public review and comment regarding the proposed development charges. Following completion of this process in accordance with the DCA, Council will review this study, and comments received regarding this study or other information brought to Council's attention about the proposed charges. Council will then pass an amended development charges by-law for the City.

The remainder of this study sets out the information and analysis upon which the proposed development charges are based.

A. Legislative Context

The study is prepared in accordance with the DCA and associated regulations, including the amendments that came into force most recently on November 27, 2025 as per *Bill 60: Fighting Delays, Building Faster Act, 2025*. This study also considers all amendments under *Bill 23: More Homes Built Faster Act, 2022* and *Bill 185: Cutting Red Tape to Build More Homes Act, 2024*. Key legislative changes incorporated into this consolidated study include:

- Historical service level standards have been extended from a 10 to 15-year planning period;
- DC by-laws now expire every 10 years instead of 5 years;
- The amount of interest paid on DC deferrals and freeze is capped at prime plus 1%;
- Costs associated with affordable housing services are now ineligible for recovery through DCs;
- Municipalities must spend or allocate 60% of available DC reserve funds per year for roads, water and wastewater services;

- Creation of a distinct category of service for land acquisition costs;
- Establishment of a local service policy to determine the infrastructure that will be provided as a local service;
- Discounts for purpose-built rentals based on the number of bedrooms; and
- Exemptions for Affordable and Attainable housing developments which meet the definitions under the DCA.

B. Consultation and Approval Process

The following provides a summary of the consultation and approval process to be completed as part of the DC Background Study. Following the release of the DC Background Study, consultation with the public and development industry stakeholders prior to the passage of the new DC By-law will occur.

Timeline of Consultation and Approval Process

Activity	Date
Release of Amending DC Background Study	January 9, 2026
Release of Revised Amending DC Background Study	February 23, 2026
Release Draft DC By-law	February 27, 2026
Statutory Public Meeting	March 4, 2026
Passage of Amended DC By-law	March 11, 2026

C. Relevant Analysis Relating to the Amending DC Background Study

This amending study covers the updates arising from the completion of Part 2 of the City’s TMP. The amending study includes changes to the City’s Roads & Related and Public Transit services.

Additional details on the TMP can be found on the City's website:
[https://engage.ottawa.ca/transportation-master-plan.](https://engage.ottawa.ca/transportation-master-plan)

2. The DC Methodology Aligns Development-Related Costs and Benefits

Several key steps are required in calculating a development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, we have tailored our approach to the City of Ottawa's unique circumstances. The approach to the calculated development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them.

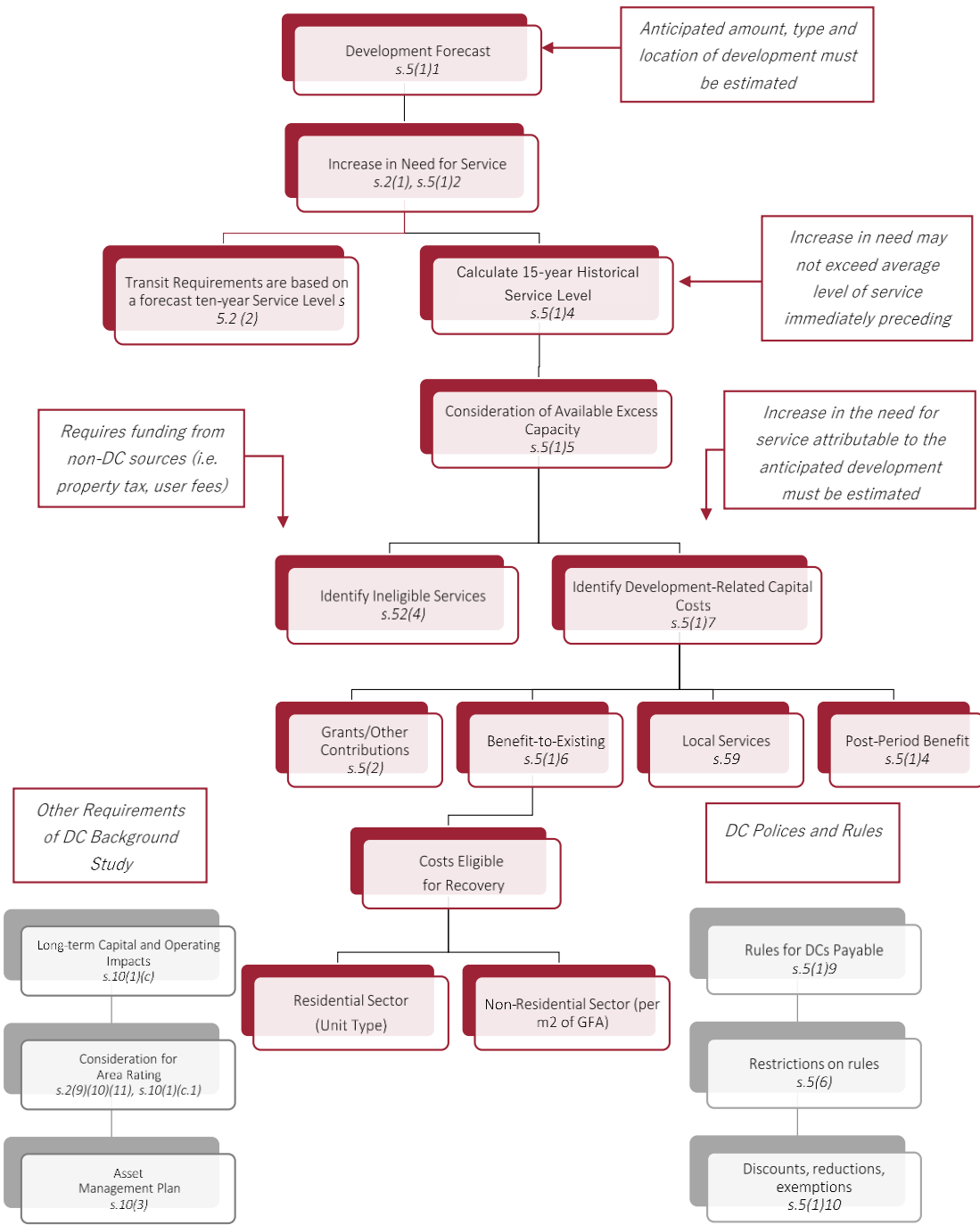
A. Consideration for Area Rated Services

In accordance with the DCA, Council must consider the use of area rating, also known as area-specific development charges, as part of the development charges background study. Consistent with the City's historical practices, both city-wide and area-specific DCs have been calculated. The City has four primary benefitting areas: City-wide, Inside the Greenbelt (IGB), Outside the Greenbelt (OGB) and Rural. For the purposes of this amending study, Roads & Related services are calculated on a City-wide and area specific basis. Public Transit and Land Acquisition are calculated on a City-wide basis.

B. Key Steps In Determining DCs for Future Development-Related Projects

Several key steps are required in calculating DCs for future development-related projects. These are summarized below and shown schematically in Figure 1.

Figure 1: Statutory Requirements of Development Charge Calculation and Study Process



i. Development Forecast

The first step in the methodology requires a development forecast to be prepared. A planning horizon of 2026-2035 has been used for Roads &

Related and Land Acquisition services. For Public Transit services, the growth forecast and associated ridership used in the 2024 Provisional DC Background Study are held constant.

The forecast of the future residential and non-residential development by location is based on growth anticipated to occur in the City. For the residential portion of the forecast both the Census population growth and population growth in new units is estimated. Net population growth determines the need for additional facilities and provides the foundation for the development-related capital program.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the planning horizon to 2035. The forecast of GFA is based on the employment forecast for the City. Factors for floor space per worker by category are used to convert the employment forecast into gross floor areas for the purposes of the development charges study.

ii. Service Categories and Historical Service Levels

The DCA provides that the increase in the need for service attributable to anticipated development:

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 15-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical 15-year average service levels generally form the basis for development charges. Consistent with the approach employed in the City's 2024 Provisional Development Charges Background Study, the quantity level of service measurement for Roads & Related services is based on road volume/capacity by screenline for 2011 to 2031. In contrast, the quality level of service measure is based on road costs assumptions provided by IBI Group

(dated September 2013) and indexed to current day dollars. This analysis is included under Appendix A.

No historical service level is provided for Public Transit services are based on a “planned level of service”. There are no requirements to provide historical service levels for Land Acquisition services.

iii. Development-Related Capital Program and Analysis of DC Eligible Costs to be Recovered through Development Charges

A development-related capital program has been prepared as part of the study. The program identifies the gross and net municipal costs, after allowing for capital grants, subsidies or other recoveries as required by the Act (DCA, s. 5. (2)). The capital program provides another cornerstone upon which development charges are based. The DCA requires that the increase in the need for service attributable to the anticipated development may include an increase:

... only if the council of the Municipality has indicated that it intends to ensure that such an increase in need will be met. (s. 5. (1) 3.)

The development-related capital program prepared for this study ensures that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built to accommodate future anticipated development. It is not sufficient in the calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, O. Reg. 82/98, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the *Act*, the council of a Municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

For some projects in the development-related capital program, a portion of the project may confer benefits to existing residents. As required by the DCA, s. 5(1)6., these portions of projects and their associated net costs are the funding responsibility of the City from non-development charges sources. The amount of municipal funding for such non-DC-eligible shares of projects is also identified as part of the preparation of the development-related capital program.

There is also a requirement in the DCA to reduce the applicable development charge by the amount of any “uncommitted excess capacity” that is available for a service. Such capacity is available to partially meet the future servicing requirements. Adjustments are made in the capital program analysis to meet this requirement of the DCA where applicable.

iv. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and the non-residential sectors. In the City of Ottawa, the allocation is based on the projected changes in population and employment over the planning periods, the anticipated demand for services and other relevant factors.

The residential component of the development charges is applied to different housing types based on average occupancy factors. The non-residential component is applied based on gross building space in square metres.

v. Final Adjustment

The final determination of the development charge results from adjustments made to development-related DC eligible costs resulting from the application of any unallocated growth-related reserve fund balances that are available to finance the development-related capital costs in the capital program. A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA.

C. Operating & Capital Cost Impacts and Asset Management Plan Legislative Requirements

Section 10 of the *DCA* identifies what must be included in a Development Charges Background Study, namely:

- s.10 (2) The development charge background study shall include,
 - (c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service; and
 - (c.2) an asset management plan prepared in accordance with subsection (3).

i. Asset Management Plan

- (3) The asset management plan shall,
 - (a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;
 - (b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;
 - (c) contain any other information that is prescribed; and
 - (d) be prepared in a prescribed manner.

The requirement to include an Asset Management Plan (AMP) was part of the *DCA* amendments that came into effect on January 1, 2016. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life-cycle.

3. Development Forecast

The *DCA* requires the City to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the City to prepare a reasonable development-related capital program.

B. City-wide Development Forecast

The forecast has been adjusted slightly from the analysis contained in the City’s 2024 Provisional DC Background Study dated July 19, 2024. First, the forecast was updated to assume a 2025 base year. Changes were also made to the forecast to align with the forecast assumptions used in the City’s TMP. In this respect, the following assumptions apply:

- A forecast to 2035 is based on the City achieving population and employment forecasts set out in its Official Plan, readily available Census data and assumptions provided by City staff.
- The population and household growth determines the need for additional facilities and provides the foundation for the development-related capital program. Table 1 summarizes the population and household development forecast. The table shows that the City’s Census population is forecast to increase by roughly 111,600 people by 2035. The number of dwellings will increase by 59,000 units over the same planning period.
- In addition to the net population forecast, a forecast of “population in new units” that will result from the addition of new housing units has been made. In total, 147,000 is the forecasted population growth in new

dwelling units to 2035. Population growth in new units is estimated by applying the following PPU's to the housing unit forecast:

- 3.36 for single and semi-detached units;
 - 2.65 for rows and multiples; and
 - 1.62 for apartments
-
- Non-residential development charges are calculated on a per square metre/square foot of gross floor area (GFA) basis. Therefore, as per the DCA, a forecast of non-residential building space has been developed.
 - Average employment densities by employment type per employee have been used to convert the employment forecast into building space estimates.
 - Major Office – 23 m² per employee
 - Employment Land – 110 m² per employee
 - Population Related – 50 m² per employee
 - A summary of the GFA forecasts is provided in Table 1. The total GFA growth is forecast at roughly 2.1 million square metres (or 22.9 million square feet) with an accompanying growth of 42,000 employees.

TABLE 1
CITY OF OTTAWA
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
DEVELOPMENT FORECAST
CITY-WIDE

Development Forecast	2025 Estimate	10-Year 2026 to 2035	
		Growth	Total at 2035
Residential Development Forecast			
Total Occupied Dwelling Units	476,753	58,978	535,731
<i>Population In New Dwellings</i>		146,995	
Total Population	1,172,477	111,623	1,284,100
<i>Census Population</i>	1,123,116	106,207	1,229,323
Non-Residential Development Forecast			
Employment*	623,634	41,962	665,596
Non-Residential Building Space (sq.m.)		2,126,261	
Non-Residential Building Space (sq.ft)		22,886,883	

* Excludes work at home employment but includes no fixed place of work

C. Area-Specific Development Forecast

Like the City-wide development forecast above, the area-specific development forecast is based on the 2024 Provisional DC Background Study, with adjustments to reflect the recent TMP. Table 2 below summarizes the residential development forecast to 2035 for the City’s IGB, OGB and Rural areas. A non-residential forecast is not included as the services considered under this study are calculated on a City-wide basis for non-residential development.

TABLE 2

CITY OF OTTAWA
 SUMMARY OF RESIDENTIAL DEVELOPMENT FORECAST
 AREA-SPECIFIC DEVELOPMENT FORECAST

AREA-SPECIFIC	2025 Estimate	10-Year 2026 to 2035	
		Growth	Total at 2035
Inside the Greenbelt			
Occupied Dwellings			
Total Occupied Dwelling Units	281,371	25,772	307,143
<i>% of City-wide Dwelling Units</i>		44%	
Population			
Census Population	577,552	27,350	604,902
<i>% of City-wide Population</i>		26%	
<i>Population In New Dwellings</i>		46,331	
Outside the Greenbelt			
Total Occupied Dwelling Units	159,366	28,065	187,431
<i>% of City-wide Dwelling Units</i>		48%	
Population			
Census Population	446,192	66,456	512,648
<i>% of City-wide Population</i>		63%	
<i>Population In New Dwellings</i>		86,632	
Rural			
Occupied Dwellings			
Total Occupied Dwelling Units	36,016	5,141	41,157
<i>% of City-wide Dwelling Units</i>		9%	
Population			
Census Population	99,372	12,401	111,773
<i>% of City-wide Population</i>		12%	
<i>Population In New Dwellings</i>		15,596	

4. Development-Related Capital Forecast

A. A Development-Related Capital Forecast is Provided for Council's Approval

The DCA requires the Council of a Municipality to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section 2, O. Reg. 82/98, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a Municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

One of the recommendations contained in the Amendment DC Background Study is for Council to adopt the amended Roads & Related, Land Acquisition and Public Transit capital programs derived for the purposes of the development charges calculation. It is acknowledged that additional changes to the costs and/or scope of work proposed may occur through the City's normal capital budget process.

B. Determination of Benefit to Existing (BTE)

As part of the DC Amendment Study process the City, together with Hemson, undertook a review of the approach to calculating the benefit to existing (BTE) of different types of road projects. The City presented the proposed approach to representatives of the development industry and made refinements to the approach, reflecting the feedback received.

Table 2 describes the BTE approach used in this DC Amendment Study.

Table 2 – Roads & Related (Services Related to a Highway) BTE Allocations

Project Category	Proposed BTE	Description & Rationale
TMP Road Projects - Capacity	0-5%	<ul style="list-style-type: none"> ▪ 0% BTE applied to net new roads constructed to meet the needs of growth and includes transit lanes within new roads. ▪ 1-5% BTE applied to road widening projects based on the cost of resurfacing/reconstruction the length of the existing road segment and sidewalks. BTE shares will be calculated on a project-by-project basis. This approach would apply to road widening required to accommodate transit and high-occupancy vehicles lanes.
Other Road Capacity Projects - General Purpose Lanes (Intersection Control Measures & Network Modification Program)	0-5%	<ul style="list-style-type: none"> ▪ 0% BTE applied to all net new intersections (defined or undefined). ▪ 5% BTE for adding capacity to existing intersections for general purpose vehicles aligns with the BTE for TMP projects to widen existing roads. In some locations, the TMP recommends that full road widenings be replaced with intersection-focused widenings only.
TMP Roads Projects – Transit Lanes and Intersection Modifications	4-5%	<ul style="list-style-type: none"> ▪ Includes continuous bus lanes (within roads right-of-way) ▪ 4-5% BTE applied when providing dedicated infrastructure for transit along an existing road corridor (e.g. widening existing roads to add bus lanes). The BTE is quantified based on the resurfacing or reconstruction costs of the existing roadway. ▪ 5% BTE for adding capacity to existing intersections for transit aligns with the BTE for

Project Category	Proposed BTE	Description & Rationale
		adding continuous bus lanes to an existing road (“transit priority isolated measures”).
TMP Road Urbanization & Development Sidewalks	5%	<ul style="list-style-type: none"> Includes projects to add walking and cycling facilities to arterial and collector roads without sidewalks in response to growth occurring in areas that are development (were previously rural). Additional information is provided in the <u>TMP – Road Network Development Report</u>.
TMP Mainstreet Improvements	51%	<ul style="list-style-type: none"> Projects to upgrade Mainstreet Corridors and roads in Design Priority Areas with new sidewalks, cycle tracks, and amenities to support intensification. Additional information is provided in the <u>TMP – Road Network Development Report</u>. 51% BTE allocation consistent with the BTE applied to cycling facilities in the 2024 DC Background Study.
Planning Studies	5%	<ul style="list-style-type: none"> BTE share to align with allocation used for associated roads projects.
Pedestrian Facilities Program	75%	<ul style="list-style-type: none"> Consistent with approach in previous DC Background Studies to recognize benefit to existing development
Cycling Facilities Program	51%	<ul style="list-style-type: none"> Consistent with approach in previous DC Background Studies to recognize benefit to existing development
Multi-Use Pathway	0-57%	<ul style="list-style-type: none"> Consistent with approach in previous DC Background Studies to recognize benefit to existing development
Transportation Programs	50%-84%	<ul style="list-style-type: none"> Consistent with approach in previous DC Background Studies to recognize benefit to existing development

Project Category	Proposed BTE	Description & Rationale
Public Works	15%-80%	<ul style="list-style-type: none"> Additional projects included to align with TMP with BTEs ranging from 20% to 80%
City-Wide Missing Links	57%	<ul style="list-style-type: none"> Consistent with approach in previous DC Background Studies to recognize benefit to existing development
Debentures	0%	<ul style="list-style-type: none"> 0% BTE as the City issues the DC eligible share of projects for debenture funding.

C. The Development-Related Capital Forecast

i. Eligible Capital Costs

Eligible capital costs as per s. 5(3) of the DCA include:

- Costs to acquire land or an interest in land, including a leasehold interest
- Costs to improve land
- Costs to acquire, lease, construct or improve buildings and structures
- Costs to acquire, lease, construct or improve facilities including
 - Rolling stock with an estimated useful life of seven years or more;
 - Furniture and equipment, other than computer equipment; and
 - Materials acquired for circulation, reference or information purposes by a library board as defined in the Public Libraries Act.
- Interest on money borrowed to pay for costs described in paragraphs 1 to 4. 1997, c. 27, s. 5(3)

ii. Ineligible Costs

It is not implied that all these costs are to be recovered from new development by way of DCs. Portions of the capital forecast not recoverable from DCs in the Study generally include:

- Operating, capital maintenance and lifecycle costs;

- Capital infrastructure needed to service the existing community that has no benefit to future development;
- Costs addressing existing service deficiencies;
- Costs benefiting growth anticipated to occur beyond the 2026-2035 planning period;
- Capital infrastructure that increase the City's service levels; and
- Ineligible capital costs (e.g. tourism facilities, parkland acquisition, etc.) as determined by the regulations.

The total gross 10-year capital program cost amounts to \$12.3 billion. Of particular importance, \$8.0 billion is identified in grants, subsidies and other recoveries which largely relates to upper levels of funding for Public Transit infrastructure. Table 3 below provides a summary of the development-related capital program considered under this amending study:

Table 3 – Development-Related Capital Program Summary (\$Millions)

Service	Gross Costs	Grants & Subsidies	Replacement & BTE	Prior Growth	Post Period	Net DC Eligible
Roads & Related Services	\$1,967.1	\$319.2	\$258.6	\$0.0	\$107.2	\$1,282.0
Public Transit	\$10,236.2	\$7,710.2	\$185.9	\$0.0	\$1,073.5	\$1,266.5
Land Acquisition	\$82.0	\$0.0	\$3.7	\$0.0	\$0.0	\$78.3
Total	\$12,285.2	\$8,029.4	\$448.2	\$0.0	\$1,180.7	\$2,626.9

Additional adjustments are required to be made to the DC eligible capital expenditures in accordance with the requirements of the DCA. Such adjustments include a reduction for replacement and benefit to existing shares and post-period benefit. Available DC reserve funds or prior growth have also been applied to the DC capital costs. A discussion of these adjustments is provided in Appendix A for Roads and Related Services, Appendix B for Public Transit services and Appendix C for Land Acquisition.

5. Calculated Development Charges

This section summarizes the calculation of DCs for each service category considered under this amendment study. For residential development, the total per capita amount is converted to a variable charge by housing unit type using various unit occupancy factors. For non-residential development, the rate per employee is divided by the related floor space per worker (FSW) assumption to arrive at a \$/square metre. The non-residential charge is differentiated between industrial and non-industrial building space.

A. City-Wide Residential (\$/capita) and Non-Residential (\$/square metre) DCs

Two approaches were used in calculating the residential and non-residential DCs by service under this amendment study. For Public Transit and Land Acquisition services, an “unadjusted” development charge rate calculation is used. As the timing for Roads & Related works is known, a cash flow analysis is undertaken to account for the timing of projects and receipt of DCs. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA. This is consistent with the City’s historical DC calculation practices.

B. Proposed Development Charges: City-Wide and Area-Specific Residential and Non-Residential DCs (IGB, OGB, and Rural)

Residential DCs vary by dwelling unit type to reflect different occupancy factors and resulting demand for services. The proposed residential DCs for Roads & Related, Land Acquisition and Public Transit services are shown in Table 4. These rates are applied to all development occurring in the City. Table 5 includes the non-residential industrial and non-industrial City-wide rates.

Consistent with the City's current practices, the non-residential rate is calculated on a City-wide basis, as such only residential development charges are proposed to vary by benefitting area (e.g. IGB, OGB and Rural). The remainder of the rate tables include the following:

Table 6: IGB calculated residential rates

Table 7: OGB calculated residential rates

Table 8: Rural (Serviced) calculated residential rates

Table 9: Rural (Unserviced) calculated residential rates

The calculated rates vary by unit type and benefitting area based on the development and services occurring within each area.

TABLE 4

CITY OF OTTAWA
 CITY-WIDE DEVELOPMENT CHARGES
 RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge per Capita	Residential Charge by Unit Type ⁽¹⁾				
		Single-Detached and Semi-Detached Dwelling	Townhouse, Multiple, Row and Mobile Dwelling	Apartment Dwelling (2+ Bedrooms)	Apartment Dwelling (Less than 2 Bedrooms)	Dwelling Rooms
Roads & Related Services	\$5,233.14	\$17,583	\$13,868	\$9,524	\$6,751	\$5,233
Public Transit	\$4,868.98	\$16,360	\$12,903	\$8,862	\$6,281	\$4,869
Land Acquisition	\$399.95	\$1,344	\$1,060	\$728	\$516	\$400
Other DC Eligible Services (Under By-law 2024-218)	N/A	\$9,565	\$7,552	\$5,184	\$3,687	\$2,848
TOTAL CITY-WIDE CHARGE	\$10,502.07	\$44,852	\$35,382	\$24,298	\$17,235	\$13,350
⁽¹⁾ Based on a Persons per Unit of:		3.36	2.65	1.82	1.29	1.00

TABLE 5

CITY OF OTTAWA
 CITY-WIDE DEVELOPMENT CHARGES
 NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Industrial		Non-Industrial	
	Per Square Metre of GFA	Per Square Foot of GFA	Per Square Metre of GFA	Per Square Foot of GFA
Roads & Related Services	\$62.85	\$5.84	\$158.04	\$14.68
Public Transit	\$57.96	\$5.38	\$134.18	\$12.47
Land Acquisition	\$4.22	\$0.39	\$10.62	\$0.99
Other DC Eligible Services (Under By-law 2024-218)	\$88.69	\$8.24	\$192.57	\$17.89
TOTAL CITY-WIDE CHARGE	\$213.73	\$19.86	\$495.41	\$46.02

TABLE 6

CITY OF OTTAWA
 INSIDE THE GREENBELT DEVELOPMENT CHARGES
 RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge per Capita	Residential Charge by Unit Type ⁽¹⁾				
		Single-Detached and Semi-Detached Dwelling	Townhouse, Multiple, Row and Mobile Dwelling	Apartment Dwelling (2+ Bedrooms)	Apartment Dwelling (Less than 2 Bedrooms)	Dwelling Rooms
Roads & Related Services- Area-Specific	\$371.50	\$1,148	\$962	\$676	\$479	\$371
Roads & Related Services- City-wide	\$5,233.14	\$17,583	\$13,868	\$9,524	\$6,751	\$5,233
Public Transit	\$4,868.98	\$16,360	\$12,903	\$8,862	\$6,281	\$4,869
Land Acquisition- City-wide	\$399.95	\$1,344	\$1,060	\$728	\$516	\$400
Other DC Eligible Services (Under By-law 2024-218)	N/A	\$19,547	\$15,914	\$11,063	\$7,865	\$6,076
TOTAL INSIDE THE GREENBELT CHARGE	\$10,873.56	\$55,982	\$44,707	\$30,853	\$21,892	\$16,950
⁽¹⁾ Based on a Persons per Unit of:		3.09	2.59	1.82	1.29	1.00

TABLE 7

CITY OF OTTAWA
 OUTSIDE THE GREENBELT DEVELOPMENT CHARGES
 RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge per Capita	Residential Charge by Unit Type ⁽¹⁾				
		Single-Detached and Semi-Detached Dwelling	Townhouse, Multiple, Row and Mobile Dwelling	Apartment Dwelling (2+ Bedrooms)	Apartment Dwelling (Less than 2 Bedrooms)	Dwelling Rooms
Roads & Related Services- Area-Specific	\$869.76	\$3,001	\$2,322	\$1,583	\$1,122	\$870
Roads & Related Services- City-wide	\$5,233.14	\$17,583	\$13,868	\$9,524	\$6,751	\$5,233
Public Transit	\$4,868.98	\$16,360	\$12,903	\$8,862	\$6,281	\$4,869
Land Acquisition- City-wide	\$399.95	\$1,344	\$1,060	\$728	\$516	\$400
Other DC Eligible Services (Under By-law 2024-218)	N/A	\$24,280	\$18,933	\$12,945	\$9,202	\$7,110
TOTAL OUTSIDE THE GREENBELT CHARGE	\$11,371.83	\$62,568	\$49,086	\$33,642	\$23,872	\$18,482
⁽¹⁾ Based on a Persons per Unit of:		3.45	2.67	1.82	1.29	1.00

TABLE 8

CITY OF OTTAWA
RURAL SERVICED DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge per Capita	Residential Charge by Unit Type ⁽¹⁾				
		Single-Detached and Semi-Detached Dwelling	Townhouse, Multiple, Row and Mobile Dwelling	Apartment Dwelling (2+ Bedrooms)	Apartment Dwelling (Less than 2 Bedrooms)	Dwelling Rooms
Roads & Related Services- Area-Specific	\$790.15	\$2,505	\$1,778	\$1,438	\$1,019	\$790
Roads & Related Services- City-wide	\$5,233.14	\$17,583	\$13,868	\$9,524	\$6,751	\$5,233
Public Transit	\$4,868.98	\$16,360	\$12,903	\$8,862	\$6,281	\$4,869
Land Acquisition- City-wide	\$399.95	\$1,344	\$1,060	\$728	\$516	\$400
Other DC Eligible Services (Under By-law 2024-218)	N/A	\$10,000	\$7,862	\$5,435	\$3,864	\$2,985
TOTAL RURAL CHARGE	\$11,292.22	\$47,792	\$37,470	\$25,987	\$18,431	\$14,277
⁽¹⁾ Based on a Persons per Unit of:		3.17	2.25	1.82	1.29	1.00

TABLE 9

CITY OF OTTAWA
RURAL UNSERVICED DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge per Capita	Residential Charge by Unit Type ⁽¹⁾				
		Single-Detached and Semi-Detached Dwelling	Townhouse, Multiple, Row and Mobile Dwelling	Apartment Dwelling (2+ Bedrooms)	Apartment Dwelling (Less than 2 Bedrooms)	Dwelling Rooms
Roads & Related Services- Area-Specific	\$790.15	\$2,505	\$1,778	\$1,438	\$1,019	\$790
Roads & Related Services- City-wide	\$5,233.14	\$17,583	\$13,868	\$9,524	\$6,751	\$5,233
Public Transit	\$16,359.78	\$16,360	\$12,903	\$8,862	\$6,281	\$4,869
Land Acquisition- City-wide	\$399.95	\$1,344	\$1,060	\$728	\$516	\$400
Other DC Eligible Services (Under By-law 2024-218)	N/A	\$6,874	\$5,394	\$3,740	\$2,659	\$2,054
TOTAL RURAL CHARGE	\$22,783.01	\$44,666	\$35,002	\$24,292	\$17,226	\$13,346
⁽¹⁾ Based on a Persons per Unit of:		3.17	2.25	1.82	1.29	1.00

A. Comparison of Calculated and Existing DCs for City-Wide and Area-Specific DCs (IGB, OGB and Rural)

Tables 10 to 16 below provide a comparison of the current and calculated DCs by area for Roads & Related, Public Transit and Land Acquisition services.

TABLE 10

**CITY OF OTTAWA
CITY-WIDE DEVELOPMENT CHARGES
COMPARISON OF CURRENT VS CALCULATED DEVELOPMENT CHARGES (SINGLES & SEMIS)**

Service	Single-Detached Current Charge	Single-Detached Calculated Charge	Difference (\$)	Difference (%)
Roads & Related Services	\$17,964	\$17,583	(\$381)	-2%
Land Acquisition	\$0	\$1,344	\$1,344	N/A
Public Transit	\$18,325	\$16,360	(\$1,965)	-11%
Other DC Eligible Services (Under By-law 2024-218)	\$9,565	\$9,565	\$0	0%
TOTAL CITY-WIDE CHARGE	\$45,854	\$44,852	(\$1,002)	-2%

TABLE 11

**CITY OF OTTAWA
CITY-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE FOOT**

Service	Industrial Current	Industrial Calculated	Difference (\$)	Difference (%)
Roads & Related Services	\$6.04	\$5.84	(\$0.20)	-3%
Land Acquisition	\$0.00	\$0.39	\$0.39	N/A
Public Transit	\$6.02	\$5.38	(\$0.64)	-11%
Other DC Eligible Services (Under By-law 2024-218)	\$8.26	\$8.26	\$0.00	0%
TOTAL CITY-WIDE CHARGE	\$20.32	\$19.88	(\$0.44)	-2%

TABLE 12

**CITY OF OTTAWA
CITY-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE FOOT**

Service	Non-Industrial Current	Non-Industrial Calculated	Difference (\$)	Difference (%)
Roads & Related Services	\$15.26	\$14.68	(\$0.58)	-4%
Land Acquisition	\$0.00	\$0.99	\$0.99	N/A
Public Transit	\$14.00	\$12.47	(\$1.53)	-11%
Other DC Eligible Services (Under By-law 2024-218)	\$3.89	\$3.89	\$0.00	0%
TOTAL CITY-WIDE CHARGE	\$33.15	\$32.02	(\$1.13)	-3%

TABLE 13

**CITY OF OTTAWA
INSIDE THE GREENBELT DEVELOPMENT CHARGES
COMPARISON OF CURRENT VS CALCULATED DEVELOPMENT CHARGES (SINGLES & SEMIS)**

Service	Single-Detached Current Charge	Single-Detached Calculated Charge	Difference (\$)	Difference (%)
Roads & Related Services- Area-Specific	\$563	\$1,148	\$585	104%
Roads & Related Services- City-wide	\$17,964	\$17,583	(\$381)	-2%
Public Transit	\$18,325	\$16,360	(\$1,965)	-11%
Land Acquisition- City-wide	\$0	\$1,344	\$1,344	N/A
Other DC Eligible Services (Under By-law 2024-218)	\$19,547	\$19,547	\$0	0%
TOTAL INSIDE THE GREENBELT CHARGE	\$56,399	\$55,982	(\$417)	-1%

TABLE 14

**CITY OF OTTAWA
OUTSIDE THE GREENBELT DEVELOPMENT CHARGES
COMPARISON OF CURRENT VS CALCULATED DEVELOPMENT CHARGES (SINGLES & SEMIS)**

Service	Single-Detached Current Charge	Single-Detached Calculated Charge	Difference (\$)	Difference (%)
Roads & Related Services- Area-Specific	\$3,176	\$3,001	(\$175)	-6%
Roads & Related Services- City-wide	\$17,964	\$17,583	(\$381)	-2%
Public Transit	\$18,325	\$16,360	(\$1,965)	-11%
Land Acquisition- City-wide	\$0	\$1,344	\$1,344	N/A
Other DC Eligible Services (Under By-law 2024-218)	\$24,280	\$24,280	\$0	0%
TOTAL OUTSIDE THE GREENBELT CHARGE	\$63,745	\$62,568	(\$1,177)	-2%

TABLE 15

**CITY OF OTTAWA
RURAL (SERVICED) DEVELOPMENT CHARGES
COMPARISON OF CURRENT VS CALCULATED DEVELOPMENT CHARGES (SINGLES & SEMIS)**

Service	Single-Detached Current Charge	Single-Detached Calculated Charge	Difference (\$)	Difference (%)
Roads & Related Services- Area-Specific	\$1,374	\$2,505	\$1,131	82%
Roads & Related Services- City-wide	\$17,963	\$17,583	(\$380)	-2%
Public Transit	\$18,325	\$16,360	(\$1,965)	-11%
Land Acquisition- City-wide	\$0	\$1,344	\$1,344	N/A
Other DC Eligible Services (Under By-law 2024-218)	\$10,000	\$10,000	\$0	0%
TOTAL RURAL (SERVICED) CHARGE	\$47,662	\$47,792	\$130	0%

TABLE 16

**CITY OF OTTAWA
RURAL (UNSERVICED) DEVELOPMENT CHARGES
COMPARISON OF CURRENT VS CALCULATED DEVELOPMENT CHARGES (SINGLES & SEMIS)**

Service	Single-Detached Current Charge	Single-Detached Calculated Charge	Difference (\$)	Difference (%)
Roads & Related Services- Area-Specific	\$1,374	\$2,505	\$1,131	82%
Roads & Related Services- City-wide	\$17,963	\$17,583	(\$380)	-2%
Public Transit	\$18,325	\$16,360	(\$1,965)	-11%
Land Acquisition- City-wide	\$0	\$1,344	\$1,344	N/A
Other DC Eligible Services (Under By-law 2024-218)	\$6,874	\$6,874	\$0	0%
TOTAL RURAL (UNSERVICED) CHARGE	\$44,536	\$44,666	\$130	0%

6. Cost of Growth Analysis

This section provides a brief examination of the long-term capital and operating costs as well as the asset management-related annual provisions for the capital facilities and infrastructure to be included in the DC By-law. This examination is required as one of the provisions of the *DCA*.

A. Asset Management Plan

The summary below provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2026-2035 DC recoverable portion for Roads & Related services. The year 2036 has been included to calculate the annual contribution for the 2026-2035 period as the expenditures 2035 will not trigger asset management contributions until 2036. By 2036, the City should fund an additional \$34.2 million per annum to fund the full life cycle costs of the Roads & Related services works. As land is not an infrastructure asset, no additional requirements are identified to fund full lifecycle costs. The cost of growth analysis for Public Transit services included in the 2024 Provisional DC Background Study (found in Appendix B) is still applicable and not updated as part of this amendment study. In addition to this analysis, the City recently completed a Transit Asset Management Plan that would be applicable to this DC analysis.

B. Long-Term Capital and Operating Cost Impacts

The City's 2024 Provisional DC Background Study provided an overview of the City's recent long-range financial plans (LRFPs) for utility services, transit services and all other property tax supported services. These reports clearly identify the fiscal impacts (operating, capital and state of good repair) of funding and operating City facilities and infrastructure, including infrastructure proposed to be funded, in whole or part, from development charges included in this study. The additional details on this report, and other

relevant plans and studies, can be found in Appendix H of the City's 2024 Provisional DC Background Study.

C. Financial Sustainability of the Program

The calculated annual provision for Roads & Related services is already or will be fully integrated in the City's ongoing Corporate Asset Management Planning and the LRFPs discussed above. The annual provisions are considered financially sustainable, as it is expected that the increased capital asset management requirements can be absorbed by the LRFP forecasted tax increases over the planning period. Importantly, the City's annual budget analysis will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

7. Other Considerations and Legislative Requirements

This section sets out other considerations and legislative requirements relating to the DCA including administration and collection, recent legislative changes, and consideration for area rating.

A. Development Charges Administration and Collection

The DCA requirements in respect of the collection of DCs, certification and remittance, as well as reserve fund management are outlined in this section.

i. Development Charges Amount Payable and Date of Payment

The total amount of a DC is the amount of the DC that would be determined under the by-law on the day of an application for site plan approval or the day of an application for rezoning or, if neither of these apply, the day of building permit issuance. Full details on determining the DCs payable in any particular case are provided in section 26 and section 26.2 of the DCA.

The default date of payment of a DC is the date of building permit issuance. However, under section 27 of the DCA the City may enter into an agreement with a developer to alter the timing of payment.

For rental housing and institutional development, DCs must be paid in six equal annual installments beginning at building occupancy (permit or actual occupancy) and for the following five anniversaries of that date.

For required instalments, the City may charge interest from the date the DC would have been payable to the date the instalment is paid. Interest may accrue on each installment until the final payment has been made. Any skipped or late payments can be added to the tax roll (including interest). Full details on the prescribed payment plans are provided in section 26.1 of the

DCA. In accordance with section 26.3 the maximum interest rate a municipal can charge is prime plus 1%.

ii. Reserve Funds

Under the DCA, a municipality that has passed a development charge by-law must establish a separate reserve fund for each service to which the development charge relates and pay each development charge it collects into the respective reserve fund. While the DCA does permit municipalities to borrow from the reserve fund, the amount borrowed is to be repaid with interest at a rate not less than the prescribed minimum interest rate. Additionally, money in the reserve fund is to be spent only on development-related capital costs.

Annual financial statements are to be provided to Council and must include the following:

- Opening and closing balances and in-year transactions
- A description of service or category of service
- Details on credits paid by individual credit holders
- Amounts borrowed and purpose of borrowing
- Interest accrued on borrowing
- Amount and source of money used to repay borrowing
- Projects funded from DCs including amount and source of DC and non-DC funding

B. Development Charges Administration

Many of the administrative requirements of the DCA will be similar to those presently followed by the City in terms of collection practices. However, changes will likely be required in the use of and reporting on the new development charges. In this regard:

- It is recommended that the present practices regarding collection of development charges and by-law administration continue to the extent possible;
- As required under the DCA, the City should codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption;
- The proposed draft by-law will set out the rules to determine development charges applicable in any particular case. Rules for exemptions are also outlined in the proposed draft by-law; and
- It is recommended that Council adopt the development-related capital forecast included in this background study, subject to annual review through the City's normal capital budget process.

Appendix A
Roads & Related Services Technical
Appendix

Roads & Related Services Technical Appendix

A. Historical Service Levels

Consistent with the approach employed in the City's 2024 Provisional Development Charges Background Study, the quantity level of service measurement for Roads & Related services is based on road volume/capacity by screenline for 2011 to 2031. In contrast, the quality level of service measure is based on road costs assumptions provided by IBI Group (dated September 2013) and indexed to current day dollars. This analysis is provided in Table A-1.

B. Development-Related Capital Program

Table A-2 provides the amended City-wide, IGB, OGB and Rural capital program for Roads & Related services. The total gross cost of the capital program is \$2.0 billion. The following summarizes the City-wide and area-specific capital programs:

- **City-wide Capital Program** – The development-related capital forecast that will benefit development occurring over the 2026 to 2035 period includes road extensions and other improvements, environmental assessments, pedestrian facilities, cycling facilities, a multi-use pathway, public works equipment and facilities, intersection improvements, transit priority measures (as related to infrastructure within the roads right-of-way) as well as the recovery of outstanding debenture payments. The total gross cost of the capital program is \$1.8 billion. Grants, subsidies and other recoveries of \$319.2 million are identified and removed from the development charge calculation. Replacement and benefit to existing shares of \$258.6 million have

also been removed from the total DC eligible costs as well as \$101.3 million in post period shares. The remaining \$1.1 billion is considered eligible for recovery through development charges and included in the rate calculation.

- **Inside the Greenbelt Capital Program** – The total gross capital program related to development IGB totals \$16.5 million and related to intersection control measures. No grants and subsidies or benefit to existing and replacement shares have been identified, and therefore the total \$16.5 million is included in the DC rate calculation.
- **Outside the Greenbelt Capital Program** – The total gross capital program related to development OGB totals \$111.1 million and includes intersection control measures, outstanding debenture payments, and multi-use pathways. No grants and subsidies or benefit to existing and replacement shares have been identified. A post period benefit share of \$5.3 million is included and therefore \$105.8 million is included in the DC rate calculation.
- **Rural Capital Program** – The total gross capital program related to Rural development totals \$16.7 million and includes intersection control measures and multi-use pathways. No grants and subsidies or benefit to existing and replacement shares have been identified. Post period benefit shares of \$526,200 are identified and therefore \$16.2 million is included in the DC rate calculation.

C. Cash Flow Analysis

Consistent with the approach used the City's previous DC Studies, the development charges for the Roads and Related projects related to IGB, OGB and Rural areas have been calculated using a cash flow analysis.

A cash flow analysis is undertaken to account for the timing of projects and receipt of DCs. It is particularly applicable where the timing of the forecast capital expenditures is significantly front-ended or back-ended over the

planning period. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA. Based on the development forecast, the analysis calculates the DC rate required to finance the discounted development-related capital spending plan including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

To determine appropriate DC rates reflecting borrowing and earnings necessary to support the discounted development-related funding requirement, assumptions are used for the inflation and interest rates. An inflation rate of 3.0% is used for the funding requirements, an interest rate of 3.0% is used for positive opening balances, and a rate of 5.0% is used for negative opening balances.

The table below displays the results of the cash flow analysis and provides the adjusted or final per capita residential and per employee in new non-residential DC rates. For residential development charges, a per capita amount has been calculated for development occurring IGB, OGB and the Rural area. Table A-6 provides all detailed cash flow analysis.

Summary of Adjusted Area-Specific Roads Cash Flow Analysis

Benefitting Area	Adjusted Charge
Residential	
City-wide (\$/capita)	\$5,233
Inside the Greenbelt (\$/capita)	\$371
Outside the Greenbelt (\$/capita)	\$870
Rural (\$/capita)	\$790
Non-Residential – Industrial	
City-wide (\$/square metre)	\$62.85
Non-Residential – Non-Industrial	
City-wide (\$/square metre)	\$158.04

**APPENDIX A
TABLE A-1.1
CITY OF OTTAWA
MAJOR SCREENLINES LEVEL OF SERVICE**

Screenline	2022 (Base Network)				2046 (Priority Network)					Source of Capacity Change
	V	C	V/C	V/C >1.0	V	ADD C	C	V/C	V/C <1.0	
SOUTHEAST										
#13 CNR East	11,059	11,400	0.97	N	12,890	800	12,200	1.06	N	+1 lane on Airport Parkway (+800)
#8 Leitrim	4,765	6,000	0.79	N	5,791	0	6,000	0.97	Y	none provided
SOUTHWEST										
#12 CNR West	11,300	13,400	0.84	N	12,112	800	14,200	0.85	Y	+1 lane on Prince of Wales Drive (+800)
#9 Fallowfield	9,297	13,600	0.68	N	10,378	800	14,400	0.72	Y	+1 lane on Prince of Wales Drive (+800)
EAST										
#16 Green's Creek	10,217	10,200	1.00	Y	9,993	0	10,200	0.98	Y	none provided
#45 Bilberry Creek	7,658	11,200	0.68	N	8,324	1,000	12,200	0.68	Y	+1 lane on Brian Coburn Boulevard (+1000)
WEST										
#10a Eagleson (north)	7,508	11,200	0.67	N	8,000	0	11,200	0.71	Y	none provided
#10b Eagleson (south)	3,027	5,600	0.54	N	4,400	0	5,600	0.79	Y	none provided
#44 Terry Fox	7,736	20,200	0.38	N	9,572	0	20,200	0.47	Y	none provided

**APPENDIX A
TABLE A-1.2**

**CITY OF OTTAWA
ROADS AND RELATED SERVICES - REPLACEMENT COSTS**

Type	Existing Cross-Section	Proposed Cross-Section	Unit Cost 2026 (\$Millions)
New Construction	-	2 Lane Rural, Undivided	\$6.98 / km
		2 Lane Urban, Undivided	\$12.70 / km
		4 Lane Urban, Divided	\$16.21 / km
		6 Lane Urban, Divided	\$18.57 / km
Widening	2 Lane Rural, Undivided	4 Lane Rural, Undivided (ref. B1)	\$9.23 / km
		4 Lane Rural, Divided	\$10.29 / km
		4 Lane Urban, Undivided (ref. B2)	\$13.69 / km
		4 Lane Urban, Divided (ref. B3)	\$16.39 / km
	2 Lane Urban, Undivided	6 Lane Urban, Divided (ref. B4)	\$19.41 / km
		4 Lane Urban, Undivided	\$12.05 / km
		4 Lane Urban, Divided	\$14.71 / km
		4 Lane Rural, Divided	\$9.41 / km
4 Lane Urban, Divided	6 Lane Rural, Divided (ref. B5)	\$9.41 / km	
4 Lane Urban, Divided	6 Lane Urban, Divided	\$10.50 / km	

Source: IBI GROUP FINAL DRAFT: ROAD NETWORK DEVELOPMENT REPORT THE CITY OF OTTAWA, Exhibit 5-2: Summary of Benchmark Costs for Roadway Projects

Notes:

- (1) Preliminary cost estimates include: Property – 10%; Engineering-15%; Project Management – 10%; Miscellaneous Soft Costs (Permits, Public Art, etc.) –5%; and Project Contingency – 40%.
- (2) Typical roadway cross-sections (identified as ref. B1-B5 above) are provided in Appendix B.

APPENDIX A
TABLE A-1.3
CITY OF OTTAWA TRANS Model (V1.13)
Morning Peak Hour VKT by residents only

Increase in Vehicle Kilometres Travelled (VKT)								
Auto Mode								
From	To	Vehicle Km Travelled (VKT)					% distribution of growth	
		2022	2046	change	% change			
Inside Greenbelt	Everywhere	520,561	603,439	82,878	16%	Inside Greenbelt	35%	35%
Orleans	Everywhere	193,361	209,261	15,900	8%	Outside Greenbelt	7%	50%
Riverside South, Leitrim and Tewin	Everywhere	59,161	125,629	66,467	112%		28%	
South Nepean	Everywhere	142,075	152,619	10,545	7%		4%	
Kanata-Stittsville	Everywhere	201,562	229,362	27,800	14%		12%	
Rural	Everywhere	252,419	288,353	35,933	14%	Rural	15%	15%
Total		1,369,140	1,608,663	239,523	17%		100%	100%

**TABLE A-2.1
CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS & RELATED SERVICES**

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			Benefiting Area
					BTE Share (%)	Replacement & BTE Shares (\$)		Prior Growth ⁽¹⁾	2026 - 2035	Post 2035	
ROADS & RELATED SERVICES											
1.1 TMP Road Projects - Capacity											
1.1.1 Greenbank Rd (Chapman Mills to Cambrian) (6 lanes - 4 general purpose + 2 bus lanes)	2026 - 2028	\$ 151,600,000	\$ 38,400,000	\$ 113,200,000	5%	\$ 5,660,000	\$ 107,540,000	\$ -	\$ 107,540,000	\$ -	City-wide
1.1.2 Bank St (Leitrim to Blais)	2026 - 2028	\$ 8,200,000	\$ -	\$ 8,200,000	5%	\$ 410,000	\$ 7,790,000	\$ -	\$ 7,790,000	\$ -	City-wide
1.1.3 Brian Coburn Extension (Renaud Road Realignment)	2026 - 2028	\$ 43,800,000	\$ -	\$ 43,800,000	5%	\$ 2,190,000	\$ 41,610,000	\$ -	\$ 41,610,000	\$ -	City-wide
1.1.4 Carp Rd (Hwy 417 to Hazeldean)	2026 - 2028	\$ 20,000,000	\$ -	\$ 20,000,000	5%	\$ 1,000,000	\$ 19,000,000	\$ -	\$ 19,000,000	\$ -	City-wide
1.1.5 Brian Coburn Widening (Mer Bleu to Tenth Line)	2029 - 2031	\$ 39,720,000	\$ -	\$ 39,720,000	3%	\$ 1,191,600	\$ 38,528,400	\$ -	\$ 38,528,400	\$ -	City-wide
1.1.6 Stittsville Main Street Extension (Maple Grove Road to Derreen Drive)	2029 - 2031	\$ 8,540,000	\$ -	\$ 8,540,000	0%	\$ -	\$ 8,540,000	\$ -	\$ 8,540,000	\$ -	City-wide
1.1.7 Greenbank Road Re-Alignment (Cambrian Road to Kilbirnie Drive) (4 lanes - 2 general purpose + 2 bus lanes)	2029 - 2031	\$ 50,000,000	\$ 19,200,000	\$ 30,800,000	0%	\$ -	\$ 30,800,000	\$ -	\$ 30,800,000	\$ -	City-wide
1.1.8 Robert Grant Avenue Extension (Palladium Drive to Hazeldean Road)	2032 - 2035	\$ 85,670,000	\$ -	\$ 85,670,000	0%	\$ -	\$ 85,670,000	\$ -	\$ 85,670,000	\$ -	City-wide
1.1.9 Prince of Wales Drive Widening (Deakin Street to Amberwood Crescent)	2032 - 2035	\$ 29,100,000	\$ -	\$ 29,100,000	3%	\$ 873,000	\$ 28,227,000	\$ -	\$ 28,227,000	\$ -	City-wide
1.1.10 Earl Armstrong Road Extension (Bovesville Station to Bank Street)	2032 - 2035	\$ 96,380,000	\$ -	\$ 96,380,000	3%	\$ 2,891,400	\$ 93,488,600	\$ -	\$ 93,488,600	\$ -	City-wide
1.1.11 Greenbank Road Re-Alignment (Kilbirnie Drive to Barnsdale Road)	2032 - 2035	\$ 19,830,000	\$ -	\$ 19,830,000	0%	\$ -	\$ 19,830,000	\$ -	\$ 19,830,000	\$ -	City-wide
1.1.12 Airport Parkway Widening (Brookfield Road to Hunt Club Road)	2035 - 2037	\$ 85,900,000	\$ -	\$ 85,900,000	5%	\$ 4,295,000	\$ 81,605,000	\$ -	\$ 24,481,500	\$ 57,123,500	City-wide
1.1.13 Brian Coburn Boulevard Widening (Navan Road to Mer-Bleue Road)	2032 - 2035	\$ 49,520,000	\$ -	\$ 49,520,000	3%	\$ 1,485,600	\$ 48,034,400	\$ -	\$ 48,034,400	\$ -	City-wide
1.1.14 New Road in the Hurdman Area	2035 - 2037	\$ 24,550,000	\$ -	\$ 24,550,000	0%	\$ -	\$ 24,550,000	\$ -	\$ 2,455,000	\$ 22,095,000	City-wide
Subtotal - TMP Road Projects - Capacity		\$ 712,810,000	\$ 57,600,000	\$ 655,210,000		\$ 19,996,600	\$ 635,213,400	\$ -	\$ 555,994,900	\$ 79,218,500	
1.2 Other Road-Related Capacity Projects - General Purpose Lanes											
1.2.1 Intersection Control Measures Outside Greenbelt	2026 - 2035	\$ 96,500,000	\$ -	\$ 96,500,000	0%	\$ -	\$ 96,500,000	\$ -	\$ 96,500,000	\$ -	OGB
1.2.2 Intersection Control Measures Rural	2026 - 2035	\$ 15,000,000	\$ -	\$ 15,000,000	0%	\$ -	\$ 15,000,000	\$ -	\$ 15,000,000	\$ -	Rural
1.2.3 Intersection Control Measures Central	2026 - 2035	\$ 16,500,000	\$ -	\$ 16,500,000	0%	\$ -	\$ 16,500,000	\$ -	\$ 16,500,000	\$ -	IGB
1.2.3 Intersection Control Measures (Undefined)	2026 - 2035	\$ 22,000,000	\$ -	\$ 22,000,000	0%	\$ -	\$ 22,000,000	\$ -	\$ 22,000,000	\$ -	City-wide
1.2.4 Network Modification Program (including Small Scale Road Projects)	2026 - 2035	\$ 53,400,000	\$ -	\$ 53,400,000	5%	\$ 2,670,000	\$ 50,730,000	\$ -	\$ 50,730,000	\$ -	City-wide
Subtotal - Other Road-Related Capacity Projects - General Purpose Lanes		\$ 203,400,000	\$ -	\$ 203,400,000		\$ 2,670,000	\$ 200,730,000	\$ -	\$ 200,730,000	\$ -	
1.3 Other Road-Related Projects - Transit Lanes and Intersection Modifications											
1.3.1 Blair Bus Lanes	2026 - 2035	\$ 52,400,000	\$ 42,400,000	\$ 10,000,000	4%	\$ 439,245	\$ 9,560,755	\$ -	\$ 9,560,755	\$ -	City-wide
1.3.2 Carling Bus Lanes	2026 - 2035	\$ 141,530,000	\$ 123,200,000	\$ 18,330,000	5%	\$ 960,143	\$ 17,369,857	\$ -	\$ 17,369,857	\$ -	City-wide
1.3.3 St Laurent Bus Lanes	2026 - 2035	\$ 113,200,000	\$ 96,000,000	\$ 17,200,000	4%	\$ 624,360	\$ 16,575,640	\$ -	\$ 16,575,640	\$ -	City-wide
1.3.4 Transit priority isolated measures	2026 - 2035	\$ 80,000,000	\$ -	\$ 80,000,000	5%	\$ 4,000,000	\$ 76,000,000	\$ -	\$ 76,000,000	\$ -	City-wide
Subtotal - Other Road-Related Projects - Transit Lanes and Intersection Modifications		\$ 387,130,000	\$ 261,600,000	\$ 125,530,000		\$ 6,023,748	\$ 119,506,252	\$ -	\$ 119,506,252	\$ -	
1.4 TMP Road Urbanization & Development Sidewalks											
1.4.1 Development Sidewalks and Road Urbanizations	2026 - 2035	\$ 116,200,000	\$ -	\$ 116,200,000	5%	\$ 5,810,000	\$ 110,390,000	\$ -	\$ 110,390,000	\$ -	City-wide
Subtotal - TMP Road Urbanization & Development Sidewalks		\$ 116,200,000	\$ -	\$ 116,200,000		\$ 5,810,000	\$ 110,390,000	\$ -	\$ 110,390,000	\$ -	

**TABLE A-2.1
CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS & RELATED SERVICES**

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			Benefitting Area
					BTE Share (%)	Replacement & BTE Shares (\$)		Prior Growth ⁽¹⁾	2026 - 2035	Post 2035	
ROADS & RELATED SERVICES											
1.5 TMP Road Projects - Mainstreet											
1.5.1 Mainstreet improvements	2026 - 2035	\$ 98,250,000	\$ -	\$ 98,250,000	51%	\$ 50,107,500	\$ 48,142,500	\$ -	\$ 48,142,500	\$ -	City-wide
Subtotal - TMP Road Projects - Mainstreet		\$ 98,250,000	\$ -	\$ 98,250,000		\$ 50,107,500	\$ 48,142,500	\$ -	\$ 48,142,500	\$ -	
1.6 Planning Studies											
1.6.1 Arterial and Major Collector Roads - Environmental Assessment Studies	2026 - 2035	\$ 27,500,000	\$ -	\$ 27,500,000	5%	\$ 1,375,000	\$ 26,125,000	\$ -	\$ 26,125,000	\$ -	City-wide
Subtotal - Planning Studies		\$ 27,500,000	\$ -	\$ 27,500,000		\$ 1,375,000	\$ 26,125,000	\$ -	\$ 26,125,000	\$ -	
1.7 Pedestrian Facilities Program											
1.7.1 Pedestrian Facilities Standalone Capital Projects	2026 - 2035	\$ 38,152,773	\$ -	\$ 38,152,773	75%	\$ 28,614,580	\$ 9,538,193	\$ -	\$ 9,538,193	\$ -	City-wide
Subtotal - Pedestrian Facilities Program		\$ 38,152,773	\$ -	\$ 38,152,773		\$ 28,614,580	\$ 9,538,193	\$ -	\$ 9,538,193	\$ -	
1.8 Cycling Facilities Program											
1.8.1 Cycling Facilities Standalone Capital Projects	2026 - 2035	\$ 94,877,638	\$ -	\$ 94,877,638	51%	\$ 48,387,596	\$ 46,490,043	\$ -	\$ 46,490,043	\$ -	City-wide
Subtotal - Cycling Facilities Program		\$ 94,877,638	\$ -	\$ 94,877,638		\$ 48,387,596	\$ 46,490,043	\$ -	\$ 46,490,043	\$ -	
1.9 Major AT Structures Program											
1.9.1 Major AT Structures Standalone Capital Projects	2026 - 2035	\$ 41,969,589	\$ -	\$ 41,969,589	57%	\$ 23,922,665	\$ 18,046,923	\$ -	\$ 18,046,923	\$ -	City-wide
Subtotal - Major AT Structures Program		\$ 41,969,589	\$ -	\$ 41,969,589		\$ 23,922,665	\$ 18,046,923	\$ -	\$ 18,046,923	\$ -	
1.10 Transportation Programs											
1.10.1 Transportation Demand Management	2026 - 2035	\$ 5,688,000	\$ -	\$ 5,688,000	50%	\$ 2,844,000	\$ 2,844,000	\$ -	\$ 2,844,000	\$ -	City-wide
1.10.2 Area Traffic Management (Neighbourhood Traffic Calming)	2026 - 2035	\$ 30,000,000	\$ -	\$ 30,000,000	84%	\$ 25,050,000	\$ 4,950,000	\$ -	\$ 4,950,000	\$ -	City-wide
Subtotal - Transportation Programs		\$ 35,688,000	\$ -	\$ 35,688,000		\$ 27,894,000	\$ 7,794,000	\$ -	\$ 7,794,000	\$ -	
1.11 Public Works											
1.11.1 Lifecycle Renewal - Traffic Monitoring Systems	2026 - 2035	\$ 5,000,000	\$ -	\$ 5,000,000	80%	\$ 4,000,000	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	City-wide
1.11.2 New Traffic Control Devices	2026 - 2035	\$ 30,300,000	\$ -	\$ 30,300,000	20%	\$ 6,060,000	\$ 24,240,000	\$ -	\$ 24,240,000	\$ -	City-wide
1.11.3 Safety Improvement Program	2026 - 2035	\$ 12,700,000	\$ -	\$ 12,700,000	50%	\$ 6,350,000	\$ 6,350,000	\$ -	\$ 6,350,000	\$ -	City-wide
1.11.4 Traffic Incident Management	2026 - 2035	\$ 5,000,000	\$ -	\$ 5,000,000	20%	\$ 1,000,000	\$ 4,000,000	\$ -	\$ 4,000,000	\$ -	City-wide
1.11.5 Advanced Traffic Management Program	2026 - 2035	\$ 5,000,000	\$ -	\$ 5,000,000	20%	\$ 1,000,000	\$ 4,000,000	\$ -	\$ 4,000,000	\$ -	City-wide
1.11.6 New Street Lighting	2026 - 2035	\$ 2,250,000	\$ -	\$ 2,250,000	80%	\$ 1,800,000	\$ 450,000	\$ -	\$ 450,000	\$ -	City-wide
1.11.7 Vehicle & Equipment	2026 - 2035	\$ 12,000,000	\$ -	\$ 12,000,000	15%	\$ 1,800,000	\$ 10,200,000	\$ -	\$ 10,200,000	\$ -	City-wide
1.11.8 Various Works Yard Facilities	2026 - 2035	\$ 35,510,000	\$ -	\$ 35,510,000	15%	\$ 5,326,500	\$ 30,183,500	\$ -	\$ 30,183,500	\$ -	City-wide
Subtotal - Public Works		\$ 107,760,000	\$ -	\$ 107,760,000		\$ 27,336,500	\$ 80,423,500	\$ -	\$ 80,423,500	\$ -	

**TABLE A-2.1
CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS & RELATED SERVICES**

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			Benefiting Area
					BTE Share (%)	Replacement & BTE Shares (\$)		Prior Growth ⁽¹⁾	2026 - 2035	Post 2035	
ROADS & RELATED SERVICES											
1.12 Outstanding Debenture Payments - Principal and Interest - Authorized											
1.12.1 Hunt Club (Russell/Hwy 417) - Principal	2026 - 2032	\$ 6,248,113	\$ -	\$ 6,248,113	0%	\$ -	\$ 6,248,113	\$ -	\$ 6,248,113	\$ -	City-wide
1.12.2 Hunt Club (Russell/Hwy 417) - Interest	2026 - 2032	\$ 2,800,000	\$ -	\$ 2,800,000	0%	\$ -	\$ 2,800,000	\$ -	\$ 2,800,000	\$ -	City-wide
1.12.3 Hunt Club (Russell/Hwy 417) - Principal	2026 - 2035	\$ 6,569,738	\$ -	\$ 6,569,738	0%	\$ -	\$ 6,569,738	\$ -	\$ 4,092,998	\$ 2,476,740	City-wide
1.12.4 Hunt Club (Russell/Hwy 417) - Interest	2026 - 2035	\$ 15,600,783	\$ -	\$ 15,600,783	0%	\$ -	\$ 15,600,783	\$ -	\$ 9,719,408	\$ 5,881,375	City-wide
1.12.5 Trim Road (Innes to Brian Coburn) - Principal	2026 - 2035	\$ 355,121	\$ -	\$ 355,121	0%	\$ -	\$ 355,121	\$ -	\$ 221,243	\$ 133,878	City-wide
1.12.6 Trim Road (Innes to Brian Coburn) - Interest	2026 - 2035	\$ 843,286	\$ -	\$ 843,286	0%	\$ -	\$ 843,286	\$ -	\$ 525,373	\$ 317,912	City-wide
1.12.7 ISF-Extension of Terry Fox Drive - Principal	2026 - 2035	\$ 621,462	\$ -	\$ 621,462	0%	\$ -	\$ 621,462	\$ -	\$ 387,175	\$ 234,286	City-wide
1.12.8 ISF-Extension of Terry Fox Drive - Interest	2026 - 2035	\$ 1,475,750	\$ -	\$ 1,475,750	0%	\$ -	\$ 1,475,750	\$ -	\$ 919,404	\$ 556,346	City-wide
1.12.9 Alta Vista Corridor (Riverside-Hospital) - Principal	2026 - 2035	\$ 340,654	\$ -	\$ 340,654	0%	\$ -	\$ 340,654	\$ -	\$ 167,513	\$ 173,141	City-wide
1.12.10 Alta Vista Corridor (Riverside-Hospital) - Interest	2026 - 2035	\$ 485,775	\$ -	\$ 485,775	0%	\$ -	\$ 485,775	\$ -	\$ 238,875	\$ 246,900	City-wide
1.12.11 Greenbank Rd (Malvern to Strandherd) - Principal	2026 - 2035	\$ 1,579,844	\$ -	\$ 1,579,844	0%	\$ -	\$ 1,579,844	\$ -	\$ 776,872	\$ 802,971	City-wide
1.12.12 Greenbank Rd (Malvern to Strandherd) - Interest	2026 - 2035	\$ 2,252,870	\$ -	\$ 2,252,870	0%	\$ -	\$ 2,252,870	\$ -	\$ 1,107,827	\$ 1,145,044	City-wide
1.12.13 Tenth Line Rd (Innes to Harvest Valley) - Principal	2026 - 2035	\$ 838,311	\$ -	\$ 838,311	0%	\$ -	\$ 838,311	\$ -	\$ 412,231	\$ 426,080	City-wide
1.12.14 Tenth Line Rd (Innes to Harvest Valley) - Interest	2026 - 2035	\$ 1,195,439	\$ -	\$ 1,195,439	0%	\$ -	\$ 1,195,439	\$ -	\$ 587,845	\$ 607,594	City-wide
1.12.15 Trim Rd (Ott Rd 174 to Innes) - Principal	2026 - 2035	\$ 223,958	\$ -	\$ 223,958	0%	\$ -	\$ 223,958	\$ -	\$ 110,129	\$ 113,829	City-wide
1.12.16 Trim Rd (Ott Rd 174 to Innes) - Interest	2026 - 2035	\$ 319,366	\$ -	\$ 319,366	0%	\$ -	\$ 319,366	\$ -	\$ 157,045	\$ 162,321	City-wide
1.12.17 North Service Rd Sidewalk - Principal	2026 - 2035	\$ 29,120	\$ -	\$ 29,120	0%	\$ -	\$ 29,120	\$ -	\$ 14,320	\$ 14,801	City-wide
1.12.18 North Service Rd Sidewalk - Interest	2026 - 2035	\$ 41,526	\$ -	\$ 41,526	0%	\$ -	\$ 41,526	\$ -	\$ 20,420	\$ 21,106	City-wide
1.12.19 Rideau River Ped Bridge(Donald-Somerset) - Principal	2026 - 2035	\$ 1,529,256	\$ -	\$ 1,529,256	0%	\$ -	\$ 1,529,256	\$ -	\$ 751,996	\$ 777,260	City-wide
1.12.20 Rideau River Ped Bridge(Donald-Somerset) - Interest	2026 - 2035	\$ 2,180,732	\$ -	\$ 2,180,732	0%	\$ -	\$ 2,180,732	\$ -	\$ 1,072,353	\$ 1,108,379	City-wide
1.12.21 Mer Bleue Road (Innes to Navan) - Principal	2026 - 2035	\$ 457,344	\$ -	\$ 457,344	0%	\$ -	\$ 457,344	\$ -	\$ 336,125	\$ 121,220	City-wide
1.12.22 Mer Bleue Road (Innes to Navan) - Interest	2026 - 2035	\$ 351,895	\$ -	\$ 351,895	0%	\$ -	\$ 351,895	\$ -	\$ 267,109	\$ 84,787	City-wide
1.12.23 Alta Vista Corridor (Riverside-Hospital) - Principal	2026 - 2035	\$ 174,186	\$ -	\$ 174,186	0%	\$ -	\$ 174,186	\$ -	\$ 74,535	\$ 99,651	City-wide
1.12.24 Alta Vista Corridor (Riverside-Hospital) - Interest	2026 - 2035	\$ 287,824	\$ -	\$ 287,824	0%	\$ -	\$ 287,824	\$ -	\$ 123,162	\$ 164,663	City-wide
1.12.25 Trim Rd (Ott Rd 174 to Innes) - Principal	2026 - 2035	\$ 2,259,730	\$ -	\$ 2,259,730	0%	\$ -	\$ 2,259,730	\$ -	\$ 966,952	\$ 1,292,778	City-wide
1.12.26 Trim Rd (Ott Rd 174 to Innes) - Interest	2026 - 2035	\$ 3,733,969	\$ -	\$ 3,733,969	0%	\$ -	\$ 3,733,969	\$ -	\$ 1,597,787	\$ 2,136,181	City-wide
1.12.27 Strandherd Dr Ph2 (Maravista to Jockvale) - Principal	2026 - 2035	\$ 2,028,145	\$ -	\$ 2,028,145	0%	\$ -	\$ 2,028,145	\$ -	\$ 867,855	\$ 1,160,289	City-wide
1.12.28 Strandherd Dr Ph2 (Maravista to Jockvale) - Interest	2026 - 2035	\$ 3,278,699	\$ -	\$ 3,278,699	0%	\$ -	\$ 3,278,699	\$ -	\$ 1,402,975	\$ 1,875,724	City-wide
1.12.29 Strandherd Dr (Woodroffe to Pr of Wales) - Principal	2026 - 2035	\$ 4,428,210	\$ -	\$ 4,428,210	0%	\$ -	\$ 4,428,210	\$ -	\$ 2,758,809	\$ 1,669,401	OBG/Rural
1.12.30 Strandherd Dr (Woodroffe to Pr of Wales) - Interest	2026 - 2035	\$ 11,087,155	\$ -	\$ 11,087,155	0%	\$ -	\$ 11,087,155	\$ -	\$ 6,907,383	\$ 4,179,772	OBG/Rural
Subtotal - Outstanding Debenture Payments - Principal and Interest - Authorized		\$ 73,618,260	\$ -	\$ 73,618,260		\$ -	\$ 73,618,260	\$ -	\$ 45,633,834	\$ 27,984,427	
1.13 City-Wide Missing Links											
1.13.1 Active Transportation	2026 - 2035	\$ 28,900,000	\$ -	\$ 28,900,000	57%	\$ 16,473,000	\$ 12,427,000	\$ -	\$ 12,427,000	\$ -	City-wide
Subtotal - City-Wide Missing Links		\$ 28,900,000	\$ -	\$ 28,900,000		\$ 16,473,000	\$ 12,427,000	\$ -	\$ 12,427,000	\$ -	
1.14 Multi-use Pathway Construction - West Urban Community											
1.14.1 Terry Fox Drive to Fernbank Road - Multi-Use Pathway	2026 - 2035	\$ 799,700	\$ -	\$ 799,700	0%	\$ -	\$ 799,700	\$ -	\$ 799,700	\$ -	OBG/Rural
Subtotal - Multi-use Pathway Construction - West Urban Community		\$ 799,700	\$ -	\$ 799,700		\$ -	\$ 799,700	\$ -	\$ 799,700	\$ -	
TOTAL - CITY-WIDE (ROADS & RELATED SERVICES)		\$ 1,822,740,895	\$ 319,200,000	\$ 1,503,540,895		\$ 258,611,189	\$ 1,244,929,706	\$ -	\$ 1,143,575,952	\$ 101,353,754	
TOTAL - INSIDE THE GREENBELT (ROADS & RELATED SERVICES)		\$ 16,500,000	\$ -	\$ 16,500,000		\$ -	\$ 16,500,000	\$ -	\$ 16,500,000	\$ -	
TOTAL - OUTSIDE THE GREENBELT (ROADS & RELATED SERVICES)		\$ 111,128,857	\$ -	\$ 111,128,857		\$ -	\$ 111,128,857	\$ -	\$ 105,805,931	\$ 5,322,926	
TOTAL - RURAL (ROADS & RELATED SERVICES)		\$ 16,686,208	\$ -	\$ 16,686,208		\$ -	\$ 16,686,208	\$ -	\$ 16,159,961	\$ 526,246	
TOTAL - ROADS & RELATED SERVICES		\$ 1,967,055,960	\$ 319,200,000	\$ 1,647,855,960		\$ 258,611,189	\$ 1,389,244,771	\$ -	\$ 1,282,041,845	\$ 107,202,927	

⁽¹⁾ Prior growth funds are adjusted through the cost allocation analysis shown below

**TABLE A-2.1
CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS & RELATED SERVICES**

Cost Allocation by Benefiting Area				
Residential Calculation				
		Total Cost	Reserve Adjust.	DC Rate
Inside the Greenbelt Residential Calculation				
Residential Share of DC Eligible Costs (2026-2035)	55%	\$ 9,007,485	\$ (6,984,924)	\$ 15,992,409
10-Year Population Growth		46,331		46,331
Unadjusted Per Charge per Capita		\$ 194.42		\$ 345.18
Outside the Greenbelt Residential Calculation				
Residential Share of DC Eligible Costs (2026-2035)	79%	\$ 83,784,409	\$ 7,646,739	\$ 76,137,670
10-Year Population Growth		86,632		86,632
Unadjusted Per Charge per Capita		\$ 967.13		\$ 878.87
Rural Residential Calculation				
Residential Share of DC Eligible Costs (2026-2035)	88%	\$ 14,166,526	\$ 1,713,791	\$ 12,452,735
10-Year Population Growth		15,596		15,596
Unadjusted Per Charge per Capita		\$ 908.36		\$ 798.47
Non-Residential Calculation				
Non-Residential Share of DC Eligible Costs (2026-2035)		\$ 31,507,472	\$ (3,559,138)	\$ 35,066,610
Industrial				
Industrial Share of DC Eligible Costs (2026-2035)		\$ 3,703,979	\$ (418,408)	\$ 4,122,387
10-Year Non-Residential Growth in GFA (m2)		542,630		542,630
Unadjusted Per Charge per Square Metre		\$ 6.83		\$ 7.60
Non-Industrial				
Non-Industrial Share of DC Eligible Costs (2026-2035)		\$ 27,803,493	\$ (3,140,730)	\$ 30,944,224
10-Year Non-Residential Growth in GFA (m2)		1,619,628		1,619,628
Unadjusted Per Charge per Square Metre		\$ 17.17		\$ 19.11

City-wide Cost Allocations (Residential & Non-Residential)				
Residential Calculation				
		Total Cost	Reserve Adjust.	DC Rate
Residential Share of DC Eligible Costs (2026-2035)	75%	\$ 858,894,753	\$ 70,986,204	\$ 787,908,549
10-Year Population Growth		146,995		146,995
Unadjusted Per Charge per Capita		\$ 5,843.02		\$ 5,360.10
Non-Residential Calculation				
Non-Residential Share of DC Eligible Costs (2026-2035)	25%	\$ 284,681,199	\$ 23,528,421	\$ 261,152,778
Industrial				
Industrial Share of DC Eligible Costs (2026-2035)	3%	\$ 33,466,764	\$ 2,765,972	\$ 30,700,792
10-Year Non-Residential Growth in GFA (m2)		542,630		542,630
Unadjusted Per Charge per Square Metre		\$ 61.68		\$ 56.58
Non-Industrial				
Non-Industrial Share of DC Eligible Costs (2026-2035)	22%	\$ 251,214,435	\$ 20,762,450	\$ 230,451,986
10-Year Non-Residential Growth in GFA (m2)		1,619,628		1,619,628
Unadjusted Per Charge per Square Metre		\$ 155.11		\$ 142.29

Reserve Fund Balances			
Service Area	Total	Residential	Non-Residential
City-wide	\$ 94,514,625	\$ 70,986,204	\$ 23,528,421
IGB	\$ (12,795,052)	\$ (6,984,924)	\$ (5,810,128)
OGB	\$ 9,656,574	\$ 7,646,739	\$ 2,009,835
Rural	\$ 1,954,946	\$ 1,713,791	\$ 241,155

TABLE A-3.1
CITY OF OTTAWA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED SERVICES (CITY-WIDE)

ROADS & RELATED SERVICES (CITY-WIDE)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
OPENING CASH BALANCE	\$ 70,986.2	\$ 57,725.0	\$ 44,614.7	\$ 31,705.0	\$ 45,611.1	\$ 61,130.3	\$ 78,366.3	\$ 60,424.9	\$ 42,879.9	\$ 25,477.1	
2026-2035 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads & Related Services (City-Wide): Non-Inflated	\$ 85,476.7	\$ 85,476.7	\$ 85,476.7	\$ 60,924.1	\$ 60,924.1	\$ 60,924.1	\$ 93,111.9	\$ 93,111.9	\$ 93,111.9	\$ 99,855.5	\$ 818,393.6
- Roads & Related Services (City-Wide): Inflated	\$ 85,476.7	\$ 87,186.2	\$ 88,930.0	\$ 64,653.2	\$ 65,946.2	\$ 67,265.2	\$ 104,859.1	\$ 106,956.3	\$ 109,095.4	\$ 119,336.6	\$ 899,704.8
- Roads & Related Services (City-Wide) Infrastructure: Debenture Finance Interest (1)	\$ 1,632.8	\$ 1,632.8	\$ 1,632.8	\$ 1,632.8	\$ 1,632.8	\$ 1,632.8	\$ 1,632.8	\$ 1,332.4	\$ 1,332.4	\$ 1,332.4	\$ 15,426.5
- Roads & Related Services (City-Wide): Inflation & Debenture Financed	\$ 87,109.5	\$ 88,819.0	\$ 90,562.7	\$ 66,286.0	\$ 67,579.0	\$ 68,897.9	\$ 106,491.8	\$ 108,288.6	\$ 110,427.7	\$ 120,668.9	\$ 915,131.2
NEW RESIDENTIAL DEVELOPMENT											
- Growth in Population in New Units - City-Wide	13,987	14,140	14,296	14,452	14,612	14,773	14,935	15,100	15,266	15,433	146,995
REVENUE											
- DC Receipts: Inflated	\$ 72,094.1	\$ 74,338.9	\$ 76,662.1	\$ 79,049.5	\$ 81,520.8	\$ 84,072.4	\$ 86,694.4	\$ 89,403.0	\$ 92,194.4	\$ 95,067.5	\$ 831,097.1
INTEREST											
- Interest on Opening Balance	\$ 2,129.6	\$ 1,731.8	\$ 1,338.4	\$ 951.1	\$ 1,368.3	\$ 1,833.9	\$ 2,351.0	\$ 1,812.7	\$ 1,286.4	\$ 764.3	\$ 15,567.6
- Interest on In-year Transactions	\$ (375.4)	\$ (362.0)	\$ (347.5)	\$ 191.5	\$ 209.1	\$ 227.6	\$ (494.9)	\$ (472.1)	\$ (455.8)	\$ (640.0)	\$ (2,519.7)
TOTAL REVENUE	\$ 73,848.3	\$ 75,708.6	\$ 77,653.0	\$ 80,192.1	\$ 83,098.2	\$ 86,133.9	\$ 88,550.4	\$ 90,743.6	\$ 93,025.0	\$ 95,191.8	\$ 844,145.0
CLOSING CASH BALANCE	\$ 57,725.0	\$ 44,614.7	\$ 31,705.0	\$ 45,611.1	\$ 61,130.3	\$ 78,366.3	\$ 60,424.9	\$ 42,879.9	\$ 25,477.1	\$ -	

2024 Principle Repayment Charge (2)	\$ 79
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$ 5,154
Total Charge per Capita	\$ 5,233

(1) Debenture payments are not inflated

(2) Principal repayment charge will not be indexed

Allocation of Capital Program	
Residential	75%
Non-Residential	25%
Rates for 2026	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.0%
Interest Rate on Negative Balances	5.0%

TABLE A-3.2
CITY OF OTTAWA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED SERVICES (INSIDE THE GREENBELT)

ROADS & RELATED SERVICES (INSIDE THE GREENBELT)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
OPENING CASH BALANCE	\$ (6,984.9)	\$ (6,501.5)	\$ (5,977.2)	\$ (5,409.7)	\$ (4,796.4)	\$ (4,134.9)	\$ (3,422.3)	\$ (2,655.6)	\$ (1,831.9)	\$ (947.8)	
2026-2035 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads & Related Services (Inside The Greenbelt): Non-Inflated	\$ 900.7	\$ 900.7	\$ 900.7	\$ 900.7	\$ 900.7	\$ 900.7	\$ 900.7	\$ 900.7	\$ 900.7	\$ 900.7	\$ 9,007.5
- Roads & Related Services (Inside The Greenbelt): Inflated	\$ 900.7	\$ 918.8	\$ 937.1	\$ 955.9	\$ 975.0	\$ 994.5	\$ 1,014.4	\$ 1,034.7	\$ 1,055.4	\$ 1,076.5	\$ 9,862.9
- Roads & Related Services (Inside The Greenbelt) Infrastructure: Debenture Finance Interest (1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
- Roads & Related Services (Inside The Greenbelt): Inflation & Debenture Financed	\$ 900.7	\$ 918.8	\$ 937.1	\$ 955.9	\$ 975.0	\$ 994.5	\$ 1,014.4	\$ 1,034.7	\$ 1,055.4	\$ 1,076.5	\$ 9,862.9
NEW RESIDENTIAL DEVELOPMENT											
- Growth in Population in New Units - City-Wide	4,633	4,633	4,633	4,633	4,633	4,633	4,633	4,633	4,633	4,633	46,331
REVENUE											
- DC Receipts: Inflated	\$ 1,721.2	\$ 1,755.6	\$ 1,790.7	\$ 1,826.5	\$ 1,863.0	\$ 1,900.3	\$ 1,938.3	\$ 1,977.1	\$ 2,016.6	\$ 2,056.9	\$ 18,846.2
INTEREST											
- Interest on Opening Balance	\$ (349.2)	\$ (325.1)	\$ (298.9)	\$ (270.5)	\$ (239.8)	\$ (206.7)	\$ (171.1)	\$ (132.8)	\$ (91.6)	\$ (47.4)	\$ (2,133.1)
- Interest on In-year Transactions	\$ 12.3	\$ 12.6	\$ 12.8	\$ 13.1	\$ 13.3	\$ 13.6	\$ 13.9	\$ 14.1	\$ 14.4	\$ 14.7	\$ 134.7
TOTAL REVENUE	\$ 1,384.2	\$ 1,443.1	\$ 1,504.6	\$ 1,569.1	\$ 1,636.5	\$ 1,707.1	\$ 1,781.1	\$ 1,858.4	\$ 1,939.4	\$ 2,024.3	\$ 16,847.9
CLOSING CASH BALANCE	\$ (6,501.5)	\$ (5,977.2)	\$ (5,409.7)	\$ (4,796.4)	\$ (4,134.9)	\$ (3,422.3)	\$ (2,655.6)	\$ (1,831.9)	\$ (947.8)	\$ -	

2024 Principle Repayment Charge (2)	\$ -
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$ 371
Total Charge per Capita	\$ 371

(1) Debenture payments are not inflated

(2) Principal repayment charge will not be indexed

Allocation of Capital Program	
Residential	55%
Non-Residential	45%
Rates for 2026	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.0%
Interest Rate on Negative Balances	5.0%

TABLE A-3.3
CITY OF OTTAWA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED SERVICES (OUTSIDE THE GREENBELT)

ROADS & RELATED SERVICES (OUTSIDE THE GREENBELT)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
OPENING CASH BALANCE	\$ 7,646.7	\$ 7,011.5	\$ 6,350.1	\$ 5,661.7	\$ 4,945.2	\$ 4,199.7	\$ 3,424.1	\$ 2,617.5	\$ 1,778.7	\$ 906.6	
2026-2035 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads & Related Services (Outside The Greenbelt): Non-Inflated	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 7,681.9	\$ 76,818.7
- Roads & Related Services (Outside The Greenbelt): Inflated	\$ 7,681.9	\$ 7,835.5	\$ 7,992.2	\$ 8,152.1	\$ 8,315.1	\$ 8,481.4	\$ 8,651.0	\$ 8,824.1	\$ 9,000.5	\$ 9,180.5	\$ 84,114.3
- Roads & Related Services (Outside The Greenbelt) Infrastructure: Debenture Finance Interest (1)	\$ 497.8	\$ 497.8	\$ 497.8	\$ 497.8	\$ 497.8	\$ 497.8	\$ 497.8	\$ 497.8	\$ 497.8	\$ 497.8	\$ 4,977.6
- Roads & Related Services (Outside The Greenbelt): Inflation & Debenture Financed	\$ 8,179.6	\$ 8,333.3	\$ 8,490.0	\$ 8,649.8	\$ 8,812.9	\$ 8,979.2	\$ 9,148.8	\$ 9,321.8	\$ 9,498.3	\$ 9,678.3	\$ 89,092.0
NEW RESIDENTIAL DEVELOPMENT											
- Growth in Population in New Units - City-Wide	8,663	8,663	8,663	8,663	8,663	8,663	8,663	8,663	8,663	8,663	86,632
REVENUE											
- DC Receipts: Inflated	\$ 7,336.1	\$ 7,482.8	\$ 7,632.5	\$ 7,785.1	\$ 7,940.8	\$ 8,099.6	\$ 8,261.6	\$ 8,426.9	\$ 8,595.4	\$ 8,767.3	\$ 80,328.1
INTEREST											
- Interest on Opening Balance	\$ 229.4	\$ 210.3	\$ 190.5	\$ 169.9	\$ 148.4	\$ 126.0	\$ 102.7	\$ 78.5	\$ 53.4	\$ 27.2	\$ 1,336.3
- Interest on In-year Transactions	\$ (21.1)	\$ (21.3)	\$ (21.4)	\$ (21.6)	\$ (21.8)	\$ (22.0)	\$ (22.2)	\$ (22.4)	\$ (22.6)	\$ (22.8)	\$ (219.1)
TOTAL REVENUE	\$ 7,544.4	\$ 7,671.9	\$ 7,801.5	\$ 7,933.3	\$ 8,067.4	\$ 8,203.6	\$ 8,342.2	\$ 8,483.0	\$ 8,626.2	\$ 8,771.7	\$ 81,445.2
CLOSING CASH BALANCE	\$ 7,011.5	\$ 6,350.1	\$ 5,661.7	\$ 4,945.2	\$ 4,199.7	\$ 3,424.1	\$ 2,617.5	\$ 1,778.7	\$ 906.6	\$ -	

2024 Principle Repayment Charge (2)	\$ 23
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$ 847
Total Charge per Capita	\$ 870

(1) Debenture payments are not inflated

(2) Principal repayment charge will not be indexed

Allocation of Capital Program	
Residential	79%
Non-Residential	21%
Rates for 2026	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.0%
Interest Rate on Negative Balances	5.0%

TABLE A-3.4
CITY OF OTTAWA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED SERVICES (RURAL)

ROADS & RELATED SERVICES (RURAL)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
OPENING CASH BALANCE	\$ 1,713.8	\$ 1,576.2	\$ 1,431.9	\$ 1,280.5	\$ 1,121.8	\$ 955.5	\$ 781.4	\$ 599.0	\$ 408.3	\$ 208.7	
2026-2035 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads & Related Services (Rural): Non-Inflated	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 1,340.4	\$ 13,404.1
- Roads & Related Services (Rural): Inflated	\$ 1,340.4	\$ 1,367.2	\$ 1,394.6	\$ 1,422.5	\$ 1,450.9	\$ 1,479.9	\$ 1,509.5	\$ 1,539.7	\$ 1,570.5	\$ 1,601.9	\$ 14,677.2
- Roads & Related Services (Rural) Infrastructure: Debenture Finance Interest (1)	\$ 54.5	\$ 54.5	\$ 54.5	\$ 54.5	\$ 54.5	\$ 54.5	\$ 54.5	\$ 54.5	\$ 54.5	\$ 54.5	\$ 544.8
- Roads & Related Services (Rural): Inflation & Debenture Financed	\$ 1,394.9	\$ 1,421.7	\$ 1,449.0	\$ 1,476.9	\$ 1,505.4	\$ 1,534.4	\$ 1,564.0	\$ 1,594.2	\$ 1,625.0	\$ 1,656.4	\$ 15,222.0
NEW RESIDENTIAL DEVELOPMENT											
- Growth in Population in New Units - City-Wide	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	15,596
REVENUE											
- DC Receipts: Inflated	\$ 1,210.5	\$ 1,234.7	\$ 1,259.4	\$ 1,284.6	\$ 1,310.3	\$ 1,336.5	\$ 1,363.3	\$ 1,390.5	\$ 1,418.3	\$ 1,446.7	\$ 13,255.0
INTEREST											
- Interest on Opening Balance	\$ 51.4	\$ 47.3	\$ 43.0	\$ 38.4	\$ 33.7	\$ 28.7	\$ 23.4	\$ 18.0	\$ 12.2	\$ 6.3	\$ 302.3
- Interest on In-year Transactions	\$ (4.6)	\$ (4.7)	\$ (4.7)	\$ (4.8)	\$ (4.9)	\$ (4.9)	\$ (5.0)	\$ (5.1)	\$ (5.2)	\$ (5.2)	\$ (49.2)
TOTAL REVENUE	\$ 1,257.3	\$ 1,277.4	\$ 1,297.7	\$ 1,318.2	\$ 1,339.1	\$ 1,360.2	\$ 1,381.7	\$ 1,403.4	\$ 1,425.4	\$ 1,447.7	\$ 13,508.2
CLOSING CASH BALANCE	\$ 1,576.2	\$ 1,431.9	\$ 1,280.5	\$ 1,121.8	\$ 955.5	\$ 781.4	\$ 599.0	\$ 408.3	\$ 208.7	\$ -	

2024 Principle Repayment Charge (2)	\$ 14
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$ 776
Total Charge per Capita	\$ 790

(1) Debenture payments are not inflated

(2) Principal repayment charge will not be indexed

Allocation of Capital Program	
Residential	88%
Non-Residential	12%
Rates for 2026	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.0%
Interest Rate on Negative Balances	5.0%

TABLE A-3.5
CITY OF OTTAWA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED SERVICES (INDUSTRIAL)

ROADS & RELATED SERVICES (INDUSTRIAL)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
OPENING CASH BALANCE	\$ 2,347.6	\$ 1,867.0	\$ 1,391.0	\$ 928.1	\$ 1,507.7	\$ 2,154.7	\$ 2,865.3	\$ 2,209.8	\$ 1,573.6	\$ 946.5	
2026-2035 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads & Related Services (Industrial): Non-Inflated	\$ 3,678.2	\$ 3,678.2	\$ 3,678.2	\$ 2,721.5	\$ 2,721.5	\$ 2,721.5	\$ 3,975.7	\$ 3,975.7	\$ 3,975.7	\$ 4,238.5	\$ 35,364.8
- Roads & Related Services (Industrial): Inflated	\$ 3,678.2	\$ 3,751.8	\$ 3,826.8	\$ 2,888.1	\$ 2,945.9	\$ 3,004.8	\$ 4,477.3	\$ 4,566.8	\$ 4,658.2	\$ 5,065.4	\$ 38,863.2
- Roads & Related Services (Industrial) Infrastructure: Debenture Finance Interest (1)	\$ 79.9	\$ 79.9	\$ 79.9	\$ 79.9	\$ 79.9	\$ 79.9	\$ 79.9	\$ 68.2	\$ 68.2	\$ 68.2	\$ 763.9
- Roads & Related Services (Industrial): Inflation & Debenture Financed	\$ 3,758.1	\$ 3,831.7	\$ 3,906.7	\$ 2,968.0	\$ 3,025.8	\$ 3,084.7	\$ 4,557.2	\$ 4,635.0	\$ 4,726.4	\$ 5,133.6	\$ 39,627.1
NEW RESIDENTIAL DEVELOPMENT											
- Growth in Non-Residential Industrial GFA	52,030	52,470	53,020	53,460	54,010	54,450	55,000	55,550	56,100	56,540	542,630
REVENUE											
- DC Receipts: Inflated	\$ 3,220.5	\$ 3,312.7	\$ 3,414.4	\$ 3,511.6	\$ 3,618.7	\$ 3,721.1	\$ 3,833.9	\$ 3,949.6	\$ 4,068.5	\$ 4,182.4	\$ 36,833.4
INTEREST											
- Interest on Opening Balance	\$ 70.4	\$ 56.0	\$ 41.7	\$ 27.8	\$ 45.2	\$ 64.6	\$ 86.0	\$ 66.3	\$ 47.2	\$ 28.4	\$ 533.7
- Interest on In-year Transactions	\$ (13.4)	\$ (13.0)	\$ (12.3)	\$ 8.2	\$ 8.9	\$ 9.5	\$ (18.1)	\$ (17.1)	\$ (16.4)	\$ (23.8)	\$ (87.6)
TOTAL REVENUE	\$ 3,277.5	\$ 3,355.7	\$ 3,443.8	\$ 3,547.6	\$ 3,672.8	\$ 3,795.3	\$ 3,901.7	\$ 3,998.8	\$ 4,099.3	\$ 4,187.1	\$ 37,279.5
CLOSING CASH BALANCE	\$ 1,867.0	\$ 1,391.0	\$ 928.1	\$ 1,507.7	\$ 2,154.7	\$ 2,865.3	\$ 2,209.8	\$ 1,573.6	\$ 946.5	\$ -	

2024 Principle Repayment Charge (2)	\$ 0.95
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$ 61.90
Total Charge per Capita	\$ 62.85

(1) Debenture payments are not inflated

(2) Principal repayment charge will not be indexed

Allocation of Capital Program	
Residential	72%
Industrial	3%
Non-Industrial	25%
Rates for 2026	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.0%
Interest Rate on Negative Balances	5.0%

TABLE A-3.6
CITY OF OTTAWA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS & RELATED SERVICES (NON-INDUSTRIAL)

ROADS & RELATED SERVICES (NON-INDUSTRIAL)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
OPENING CASH BALANCE	\$ 17,621.7	\$ 14,144.6	\$ 10,705.0	\$ 7,306.8	\$ 11,737.2	\$ 16,613.4	\$ 21,968.1	\$ 17,014.9	\$ 12,140.3	\$ 7,268.2	
2026-2035 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads & Related Services (Non-Industrial): Non-Inflated	\$ 27,610.0	\$ 27,610.0	\$ 27,610.0	\$ 20,428.8	\$ 20,428.8	\$ 20,428.8	\$ 29,843.2	\$ 29,843.2	\$ 29,843.2	\$ 31,815.6	\$ 265,461.6
- Roads & Related Services (Non-Industrial): Inflated	\$ 27,610.0	\$ 28,162.2	\$ 28,725.5	\$ 21,679.2	\$ 22,112.7	\$ 22,555.0	\$ 33,608.3	\$ 34,280.5	\$ 34,966.1	\$ 38,022.6	\$ 291,722.1
- Roads & Related Services (Non-Industrial) Infrastructure: Debenture Finance Interest (1)	\$ 599.8	\$ 599.8	\$ 599.8	\$ 599.8	\$ 599.8	\$ 599.8	\$ 599.8	\$ 511.9	\$ 511.9	\$ 511.9	\$ 5,734.2
- Roads & Related Services (Non-Industrial): Inflation & Debenture Financed	\$ 28,209.8	\$ 28,762.0	\$ 29,325.3	\$ 22,278.9	\$ 22,712.5	\$ 23,154.8	\$ 34,208.1	\$ 34,792.4	\$ 35,478.0	\$ 38,534.5	\$ 297,456.3
NEW RESIDENTIAL DEVELOPMENT											
- Growth in Non-Residential Non-Industrial GFA	156,131	157,420	158,682	159,998	161,264	162,580	163,919	165,212	166,528	167,894	1,619,628
REVENUE											
- DC Receipts: Inflated	\$ 24,301.7	\$ 24,992.4	\$ 25,696.6	\$ 26,427.9	\$ 27,169.7	\$ 27,939.3	\$ 28,732.8	\$ 29,538.6	\$ 30,369.4	\$ 31,230.9	\$ 276,399.3
INTEREST											
- Interest on Opening Balance	\$ 528.7	\$ 424.3	\$ 321.2	\$ 219.2	\$ 352.1	\$ 498.4	\$ 659.0	\$ 510.4	\$ 364.2	\$ 218.0	\$ 4,095.6
- Interest on In-year Transactions	\$ (97.7)	\$ (94.2)	\$ (90.7)	\$ 62.2	\$ 66.9	\$ 71.8	\$ (136.9)	\$ (131.3)	\$ (127.7)	\$ (182.6)	\$ (660.3)
TOTAL REVENUE	\$ 24,732.6	\$ 25,322.5	\$ 25,927.0	\$ 26,709.3	\$ 27,588.7	\$ 28,509.5	\$ 29,255.0	\$ 29,917.7	\$ 30,605.9	\$ 31,266.3	\$ 279,834.6
CLOSING CASH BALANCE	\$ 14,144.6	\$ 10,705.0	\$ 7,306.8	\$ 11,737.2	\$ 16,613.4	\$ 21,968.1	\$ 17,014.9	\$ 12,140.3	\$ 7,268.2	\$ -	

2024 Principle Repayment Charge (2)	\$ 2.39
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$ 155.65
Total Charge per Capita	\$ 158.04

(1) Debenture payments are not inflated

(2) Principal repayment charge will not be indexed

Allocation of Capital Program	
Residential	72%
Industrial	3%
Non-Industrial	25%
Rates for 2026	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.0%
Interest Rate on Negative Balances	5.0%

Appendix B

Public Transit Technical Appendix

Public Transit Technical Appendix

A. Historical Service Levels

No historical service level is provided for Public Transit services are based on a “planned level of service”.

B. Development-Related Capital Program

The 2024 Provisional DC Study included the growth-related capital needs associated with Public Transit in the City. Public Transit is calculated on a city-wide level and is not differentiated by area. As part of this amendment study, a realignment has been made to remove TMP Transit Priority Network from the Public Transit category. Removing the Transit Priority Network (\$159.1 million or 11% of the total DC eligible costs under the 2024 Provisional DC Study) results in an 11% reduction to the Public Transit city-wide DC rate. The Southwest Transitway project is also being removed from the Public Transit capital program, due to its expected delivery as part of the Greenbank Road project, though this has no impact on rates as these costs were identified as post-period in the 2024 Study.

The TMP Transit Priority Network capital program is being replaced with new project types (Continuous Bus Lanes and Isolated Transit Priority Measures) within Roads and Related Services, to better align with the characteristics of these projects and their similarity to other Roads and Related projects that are required to address increasing congestion on City roads. It is noted that several past DC Studies have also included transit priority projects within Roads and Related Services, even though this was within Public Transit in 2024.

Table B-1 provides the updated capital program to reflect the changes described here. The gross capital program totals \$10.2 billion, with \$7.7

billion identified in grants and subsidies to reduce the net municipal cost to \$2.5 billion. Benefit to existing and replacement shares of \$185.9 million are identified and removed from the DC calculation. A post-period benefit share of \$1.1 billion is also removed from the capital program, leaving \$1.3 billion in net DC eligible costs for recovery.

These costs are allocated 79 per cent (\$1.0 billion) to residential development and results in a development charge per capita of \$4,869. For non-residential development, 2 per cent (\$30.9 million) is attributed to industrial development and results in a development charge rate of \$57.96 per square metre. Lastly, 18 per cent of the costs can be attributed to non-industrial development and yields a rate of \$134.18 per square metre.

The transit ridership analysis and cost allocations (benefit to existing, in-period growth-related and post period benefit) have remained unchanged from the 2024 Provisional DC Study.

Furthermore, the Public Transit Cost of Growth Analysis provided in the 2024 DC Background Study, Appendix B.2, is unchanged.

C. Additional Public Transit Analysis

The following outlines the contents included as part of this Transit technical appendix:

- Appendix B.1 – Transit Ridership Forecast (As provided in the 2024 Provisional DC Study)
- Appendix B.2 – Public Transit Cost of Growth Analysis (As provided in the 2024 Provisional DC Study)

APPENDIX B
TABLE B-1

CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC TRANSIT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE Share (%)	Replacement & BTE Shares (\$)		Prior Growth	2026 - 2035	Post 2035
PUBLIC TRANSIT										
2.1 Recovery of Negative Reserve Fund Balance										
2.1.1 Reserve Fund Balance as of July 31, 2023	2024 - 2024	\$ 122,848,531	\$ -	\$ 122,848,531	0%	\$ -	\$ 122,848,531	\$ -	\$ 122,848,531	\$ -
Subtotal - Recovery of Negative Reserve Fund Balance		\$ 122,848,531	\$ -	\$ 122,848,531		\$ -	\$ 122,848,531	\$ -	\$ 122,848,531	\$ -
2.2 Transit Projects										
2.1.1 Bus Growth (based on electric buses)	2027 - 2033	\$ 58,180,000	\$ -	\$ 58,180,000	100%	\$ 58,180,000	\$ -	\$ -	\$ -	\$ -
2.1.2 Operations Support Vehicles - Growth	2024 - 2029	\$ 2,014,000	\$ -	\$ 2,014,000	0%	\$ -	\$ 2,014,000	\$ -	\$ 2,014,000	\$ -
2.1.3 Train Growth (O-Train Line 1)	2024 - 2024	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.4 Line 2 Lifecycle to Deferred construction	2024 - 2024	\$ 40,806,908	\$ -	\$ 40,806,908	33%	\$ 13,518,338	\$ 27,288,570	\$ -	\$ 27,288,570	\$ -
2.1.5 Park and Ride Facilities	2024 - 2033	\$ 19,000,000	\$ -	\$ 19,000,000	33%	\$ 6,294,239	\$ 12,705,761	\$ -	\$ 12,705,761	\$ -
2.1.6 Contingency Stage 2 LRT	2024 - 2027	\$ 152,000,000	\$ -	\$ 152,000,000	33%	\$ 50,353,909	\$ 101,646,091	\$ -	\$ 101,646,091	\$ -
2.1.7 Transit Corridor Protection	2024 - 2033	\$ 27,480,670	\$ -	\$ 27,480,670	33%	\$ 9,103,679	\$ 18,376,991	\$ -	\$ 18,376,991	\$ -
2.1.8 Kanata North Transitway (Corkstown to Solandt)	2027 - 2028	\$ 135,100,000	\$ 90,066,667	\$ 45,033,333	33%	\$ 14,918,450	\$ 30,114,883	\$ -	\$ -	\$ 30,114,883
2.1.9 Southwest Transitway Extension (Cambrian to Kilbirnie P&R)	2031 - 2033	\$ 4,283,333	\$ 2,855,556	\$ 1,427,778	33%	\$ 472,988	\$ 954,790	\$ -	\$ -	\$ 954,790
2.1.10 Riverside South Transitway (Limebank O-Train Station to Riverview P&R)	2031 - 2033	\$ 4,200,000	\$ 2,800,000	\$ 1,400,000	33%	\$ 463,786	\$ 936,214	\$ -	\$ -	\$ 936,214
2.1.11 Kanata North Transitway (Solandt to Terry Fox)	2031 - 2033	\$ 6,150,000	\$ 4,100,000	\$ 2,050,000	33%	\$ 679,115	\$ 1,370,885	\$ -	\$ -	\$ 1,370,885
2.1.12 Kanata North Transitway (Terry Fox to Maxwell Bridge)	2031 - 2033	\$ 12,283,333	\$ 8,188,889	\$ 4,094,444	33%	\$ 1,356,390	\$ 2,738,054	\$ -	\$ -	\$ 2,738,054
2.1.13 West Transitway (Hazeldean to Fernbank)	2031 - 2033	\$ 7,350,000	\$ 4,900,000	\$ 2,450,000	33%	\$ 811,626	\$ 1,638,374	\$ -	\$ -	\$ 1,638,374
2.1.14 Heron BRT (Heron Station to Walkley)	2031 - 2033	\$ 23,466,667	\$ 15,644,444	\$ 7,822,222	33%	\$ 2,591,312	\$ 5,230,910	\$ -	\$ -	\$ 5,230,910
2.1.15 Heron BRT (Walkley to Innes)	2031 - 2033	\$ 36,866,667	\$ 24,577,778	\$ 12,288,889	33%	\$ 4,071,011	\$ 8,217,878	\$ -	\$ -	\$ 8,217,878
2.1.16 Cumberland Transitway (Blair Station to Innes Road)	2031 - 2033	\$ 21,250,000	\$ 14,166,667	\$ 7,083,333	33%	\$ 2,346,536	\$ 4,736,797	\$ -	\$ -	\$ 4,736,797
2.1.17 Cumberland Transitway (Blair Road to Chapel Hill)	2031 - 2033	\$ 38,333,333	\$ 25,555,556	\$ 12,777,778	33%	\$ 4,232,968	\$ 8,544,810	\$ -	\$ -	\$ 8,544,810
2.1.18 Cumberland Transitway (Chapel Hill to Tenth Line)	2031 - 2033	\$ 25,000,000	\$ 16,666,667	\$ 8,333,333	33%	\$ 2,760,631	\$ 5,572,702	\$ -	\$ -	\$ 5,572,702
2.1.19 Cumberland Transitway (Tenth Line to Frank Kenney)	2031 - 2033	\$ 25,000,000	\$ 16,666,667	\$ 8,333,333	33%	\$ 2,760,631	\$ 5,572,702	\$ -	\$ -	\$ 5,572,702
2.1.20 Baseline BRT (Baseline Station to Bayshore Station)	2031 - 2033	\$ 39,383,333	\$ 26,255,556	\$ 13,127,778	33%	\$ 4,348,914	\$ 8,778,864	\$ -	\$ -	\$ 8,778,864
2.1.21 Chapman Mills (Greenbank to Strandherd Connection)	2031 - 2033	\$ 2,200,000	\$ 1,466,667	\$ 733,333	33%	\$ 242,936	\$ 490,398	\$ -	\$ -	\$ 490,398
2.1.22 Hospital Link (Hurdman to St. Laurent to Blair at Innes)	2031 - 2033	\$ 30,416,667	\$ 20,277,778	\$ 10,138,889	33%	\$ 3,358,768	\$ 6,780,121	\$ -	\$ -	\$ 6,780,121

APPENDIX B
TABLE B-1

CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC TRANSIT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE Share (%)	Replacement & BTE Shares (\$)		Prior Growth	2026 - 2035	Post 2035
PUBLIC TRANSIT										
2.1.23 Chapman Mills (Longfields to Greenbank)	2028 - 2030	\$ 10,000,000	\$ 6,666,667	\$ 3,333,333	33%	\$ 1,104,252	\$ 2,229,081	\$ -	\$ -	\$ 2,229,081
2.1.24 Old Montreal Road BRT (Trim Road to Frank Kenney)	2031 - 2033	\$ 11,950,000	\$ 7,966,667	\$ 3,983,333	33%	\$ 1,319,582	\$ 2,663,752	\$ -	\$ -	\$ 2,663,752
2.1.25 Chapman Mills (Extension to Hwy 416)	2031 - 2033	\$ 5,883,333	\$ 3,922,222	\$ 1,961,111	33%	\$ 649,668	\$ 1,311,443	\$ -	\$ -	\$ 1,311,443
2.1.26 Carling LRT (Lincoln Fields to O-Train)	2028 - 2033	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.27 Stage 3 LRT: Kanata (Moodie to Terry Fox)	2028 - 2033	\$ 1,014,391,998	\$ 1,014,391,998	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.28 Stage 3 LRT: Kanata (Terry Fox to Palladium)	2028 - 2033	\$ 826,950,000	\$ 826,950,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.29 Stage 3 LRT: Kanata (Palladium to Hazeldean)	2028 - 2033	\$ 661,560,000	\$ 661,560,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.30 Stage 3 LRT: Barrhaven (Baseline to Fallowfield)	2028 - 2033	\$ 2,716,999,998	\$ 2,716,999,998	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.31 Stage 3 LRT: Barrhaven (Fallowfield to Barrhaven Town Centre)	2028 - 2033	\$ 1,302,000,000	\$ 1,302,000,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.32 Stage 3 LRT: Procurement & Preliminary Engineering	2025 - 2028	\$ 220,520,000	\$ 220,520,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.33 Stage 3 LRT: Contingency and LRT Market Escalation	2028 - 2033	\$ 675,000,000	\$ 675,000,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
2.1.34 O-Train (Alexandre Tache to Bayview)	2024 - 2024	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal - Transit Projects		\$ 8,156,020,241	\$ 7,710,166,440	\$ 445,853,800		\$ 185,939,728	\$ 259,914,072	\$ -	\$ 162,031,413	\$ 97,882,659
2.3 Current Debt Payments - Principle & Interest										
2.3.1 By-Law 2012 282 (Various Tax Projects) - Principal	2024 - 2033	\$ 3,776,635	\$ -	\$ 3,776,635	0%	\$ -	\$ 3,776,635	\$ -	\$ 3,776,635	\$ -
2.3.2 By-Law 2012 282 (Various Tax Projects) - Interest	2024 - 2033	\$ 8,968,160	\$ -	\$ 8,968,160	0%	\$ -	\$ 8,968,160	\$ -	\$ 8,968,160	\$ -
2.3.3 Woodroffe Station at Strandherd & Transitway Corridor Protection - Principal	2024 - 2033	\$ 1,136,267	\$ -	\$ 1,136,267	0%	\$ -	\$ 1,136,267	\$ -	\$ 1,136,267	\$ -
2.3.4 Woodroffe Station at Strandherd & Transitway Corridor Protection - Interest	2024 - 2033	\$ 586,520	\$ -	\$ 586,520	0%	\$ -	\$ 586,520	\$ -	\$ 586,520	\$ -
2.3.5 By-Law 2017-258 - Principal	2024 - 2033	\$ 4,730,407	\$ -	\$ 4,730,407	0%	\$ -	\$ 4,730,407	\$ -	\$ 4,730,407	\$ -
2.3.6 By-Law 2017-258 - Interest	2024 - 2033	\$ 6,745,600	\$ -	\$ 6,745,600	0%	\$ -	\$ 6,745,600	\$ -	\$ 6,745,600	\$ -
2.3.7 Confederation Line - Principal	2024 - 2033	\$ 28,830,892	\$ -	\$ 28,830,892	0%	\$ -	\$ 28,830,892	\$ -	\$ 28,830,892	\$ -
2.3.8 Confederation Line - Interest	2024 - 2033	\$ 72,264,610	\$ -	\$ 72,264,610	0%	\$ -	\$ 72,264,610	\$ -	\$ 72,264,610	\$ -
2.3.9 Stage 2 LRT - RTG MOU - Principal	2024 - 2033	\$ 23,233,194	\$ -	\$ 23,233,194	0%	\$ -	\$ 23,233,194	\$ -	\$ 23,233,194	\$ -
2.3.10 Stage 2 LRT - RTG MOU - Interest	2024 - 2033	\$ 33,150,000	\$ -	\$ 33,150,000	0%	\$ -	\$ 33,150,000	\$ -	\$ 33,150,000	\$ -
2.3.11 Transitway Corridor Protection - Principal	2024 - 2033	\$ 1,887,823	\$ -	\$ 1,887,823	0%	\$ -	\$ 1,887,823	\$ -	\$ 1,887,823	\$ -
2.3.12 Transitway Corridor Protection - Interest	2024 - 2033	\$ 846,000	\$ -	\$ 846,000	0%	\$ -	\$ 846,000	\$ -	\$ 846,000	\$ -
2.3.13 2012 Park and Ride Facilities - Principal	2024 - 2033	\$ 25,837	\$ -	\$ 25,837	0%	\$ -	\$ 25,837	\$ -	\$ 25,837	\$ -
2.3.14 2012 Park and Ride Facilities - Interest	2024 - 2033	\$ 20,532	\$ -	\$ 20,532	0%	\$ -	\$ 20,532	\$ -	\$ 20,532	\$ -
2.3.15 Stage 2 LRT-Preliminary Plan-Procurement - Principal	2024 - 2033	\$ 151,508,167	\$ -	\$ 151,508,167	0%	\$ -	\$ 151,508,167	\$ -	\$ 151,508,167	\$ -
2.3.16 Stage 2 LRT-Preliminary Plan-Procurement - Interest	2024 - 2033	\$ 208,604,748	\$ -	\$ 208,604,748	0%	\$ -	\$ 208,604,748	\$ -	\$ 208,604,748	\$ -
2.3.17 Transit Priority Corridor 2012 - Principal	2024 - 2033	\$ 6,082	\$ -	\$ 6,082	0%	\$ -	\$ 6,082	\$ -	\$ 6,082	\$ -
2.3.18 Transit Priority Corridor 2012 - Interest	2024 - 2033	\$ 10,050	\$ -	\$ 10,050	0%	\$ -	\$ 10,050	\$ -	\$ 10,050	\$ -
2.3.19 Light Rail Transit Office - Principal	2024 - 2033	\$ 2,091	\$ -	\$ 2,091	0%	\$ -	\$ 2,091	\$ -	\$ 2,091	\$ -
2.3.20 Light Rail Transit Office - Interest	2024 - 2033	\$ 3,455	\$ -	\$ 3,455	0%	\$ -	\$ 3,455	\$ -	\$ 3,455	\$ -
2.3.21 Transit Priority Measures 2012 - Principal	2024 - 2033	\$ 4,942	\$ -	\$ 4,942	0%	\$ -	\$ 4,942	\$ -	\$ 4,942	\$ -

APPENDIX B
TABLE B-1

CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC TRANSIT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE Share (%)	Replacement & BTE Shares (\$)		Prior Growth	2026 - 2035	Post 2035
PUBLIC TRANSIT										
2.3.22 Transit Priority Measures 2012 - Interest	2024 - 2033	\$ 8,166	\$ -	\$ 8,166	0%	\$ -	\$ 8,166	\$ -	\$ 8,166	\$ -
2.3.23 Western Transitway (Bayshore-Moodie) - Principal	2024 - 2033	\$ 570,203	\$ -	\$ 570,203	0%	\$ -	\$ 570,203	\$ -	\$ 570,203	\$ -
2.3.24 Western Transitway (Bayshore-Moodie) - Interest	2024 - 2033	\$ 942,201	\$ -	\$ 942,201	0%	\$ -	\$ 942,201	\$ -	\$ 942,201	\$ -
2.3.25 Additional Stage 2 LRT Debt - Principal	2025 - 2033	\$ 58,655,439	\$ -	\$ 58,655,439	0%	\$ -	\$ 58,655,439	\$ -	\$ 58,655,439	\$ -
2.3.26 Additional Stage 2 LRT Debt - Interest	2025 - 2033	\$ 194,850,000	\$ -	\$ 194,850,000	0%	\$ -	\$ 194,850,000	\$ -	\$ 194,850,000	\$ -
2.3.27 Authorized (not issued) - Principal	2025 - 2033	\$ 7,513,651	\$ -	\$ 7,513,651	0%	\$ -	\$ 7,513,651	\$ -	\$ 7,513,651	\$ -
2.3.28 Authorized (not issued) - Interest	2025 - 2033	\$ 18,304,320	\$ -	\$ 18,304,320	0%	\$ -	\$ 18,304,320	\$ -	\$ 18,304,320	\$ -
2.3.29 Current Debt Payments Post-2033 Principal	2033 - 2033	\$ 414,026,171	\$ -	\$ 414,026,171	0%	\$ -	\$ 414,026,171	\$ -	\$ 56,592,108	\$ 357,434,063
2.3.30 Current Debt Payments Post-2033 Interest	2033 - 2033	\$ 716,079,510	\$ -	\$ 716,079,510	0%	\$ -	\$ 716,079,510	\$ -	\$ 97,878,955	\$ 618,200,555
Subtotal - Current Debt Payments - Principle & Interest		\$ 1,957,291,672	\$ -	\$ 1,957,291,672		\$ -	\$ 1,957,291,672	\$ -	\$ 981,657,054	\$ 975,634,618
TOTAL - PUBLIC TRANSIT		\$ 10,236,160,444	\$ 7,710,166,440	\$ 2,525,994,003		\$ 185,939,728	\$ 2,340,054,275	\$ -	\$ 1,266,536,998	\$ 1,073,517,277

Residential Development Charge Calculation			
Residential Share of 2026-2035 DC Eligible Costs	79%	\$	1,002,464,994
10-Year Growth in Population in New Units			205,888
Unadjusted Per Charge per Capita		\$	4,869
Non-Residential Development Charge Calculation			
Industrial			
Industrial Share of 2026-2035 DC Eligible Costs	2%	\$	30,864,400
10-Year Growth in Square Metres			532,510
Unadjusted Per Charge per Square Metre		\$	57.96
Non-Industrial			
Non-Industrial Share of 2026-2035 DC Eligible Costs	18%	\$	233,207,605
10-Year Growth in Square Metres			1,738,020
Unadjusted Per Charge per Square Metre		\$	134.18

Transit Cost Allocations - Transit Projects		
	Ridership	Allocation
Benefit to Existing	16,100	33%
In-period	16,300	34%
Post-Period Benefit	16,200	33%
Total	48,600	100.0%

Transit Cost Allocations - Debentures		
	Ridership	Allocation
In-period	16,300	50.2%
PPB Share for Debt Payments	16,200	49.8%
Total	32,500	100.0%

Appendix B

Public Transit Technical Analysis

Appendix B.1

Transit Ridership Forecast

Public Transit Ridership Forecast

A. Transit Service Delivery in the City of Ottawa

As demonstrated in Appendix A, Ottawa has experienced steady population and employment growth which is anticipated to continue over the forecast period. The infrastructure requirements relating to the increased need for transit services arising from new development in the City have been informed by the 2013 TMP.

As the City continues to develop, so will the need to provide adequate levels of transit service. Prior to the implementation of the 2013 TMP, Council endorsed a number of transit projects including the construction of the Confederation Line and O-Train expansion, double-decker bus acquisition, PRESTO card implementation, and access to real-time customer information². The TMP also identified the implementation of the rapid transit network, including light rail transit (LRT) and bus rapid transit (BRT)³.

Importantly, the TMP also recommended the use of an “Affordable Road and Transit Network Model” (herein referred to as the “2031 Affordable Network”). The Affordable Road and Transit Network, along with further ridership analysis completed by AECOM and City staff, have been used to inform the mode share estimates and corresponding ridership forecast for this Background Study. This approach is consistent with the 2019 DC Background Study.

For the purposes of determining the “planned level of service” for Public Transit, the City’s transit service capital program has been informed by the 2013 TMP and the latest Affordability Model. The City’s Affordability Model summarizes the transit operating and capital needs over a long-range

² 2013 TMP. Section 6.0 Transform the Ottawa Transit System, page 53

³ 2013 TMP. Section 6.1 Expand the Rapid Transit and Transit Priority Network, page 54

financial planning horizon, and assesses the affordability of the capital plan within forecast sources of revenue from fares, transit taxes, and other sources. These forecasts are based on a variety of factors including population, ridership and assessment growth projections. As part of the 2024 DC Background Study, Stage 2 LRT costs continue to be included in the calculation. Stage 3 LRT costs have also been identified, although at the time of drafting the DC rate calculations it was anticipated that these costs would be fully funded from upper levels of government.

The purpose of the transit ridership forecast is to inform the allocation of development and non-development related costs for the transit development charge calculation.

B. Relevant Sections from the 2019 DC Background Study

Details on the forecast methodology and key assumptions are detailed in the 2019 Interim DC Background Study as the following pages. As stated, the assumptions have been carried forward for the purposes of this DC Background Study. It is expected that the forecast and ridership analysis will be reviewed and updated as part of subsequent DC Background Studies once the new TMP is completed.

- **Forecast Methodology and Key Assumptions**, Section C, pg. 91 – provides details on the ridership modelling assumptions.
- **Ridership Forecast**, Section D, pg. 92-96 – provides details on the BTE and post-period benefit calculations.

C. Ridership Forecast

As required by the *Development Charges Act*, the anticipated ridership forecast includes an assessment of all modes (collectively) of transit proposed to be funded by development charges over the forecast period.

The forecast includes both bus and rapid rail transit. The following provides a summary of the revised 2031 mode share estimated from the Transportation Model (unadjusted).

Figure 1: Revised 2031 Mode Share Estimates from Transportation Model (Unadjusted)

Modes of Travel	2011 Model Estimates		2031 Model Estimates	
	Person Trips	Mode Share	Person Trips	Mode Share
Walking/Cycling	65,000	13.1%	92,300	15.0%
Transit	106,100	21.5%	145,000	23.6%
Auto Person	323,200	65.4%	377,800	61.4%
Total Person Trips	494,300	100.0%	615,100	100.0%

Notes:

* Includes trips to, from, and within Ottawa (excluding external and commercial trips)

* 2011 walking/cycling demand estimated based on mode share observations from 2011 OD Survey

* 2011 forecasts based on Model Version 1.11; 2031 forecasts based on Model Version 1.13 (updated August 2018)

* 2031 walking/cycling demand estimated based on mode share targets from 2013 TMP

* 2031 forecasts correspond to TMP Affordable Road and Transit networks (plus LRT extensions)

i. Assessment of Ridership Capacity

As detailed in the 2019 Interim DC Background Study, the infrastructure included in the Transit capital program is required to achieve the total transit person trips of 145,000 and transit mode share estimate of 23.6%. A portion of the capital costs have been deemed a post-period benefitting share relating to infrastructure improvements required to achieve the planned level of service.

D. Transit Development Charges Capital Program Allocations

The benefit to existing (BTE) and post-period benefit shares are consistent with those used in the 2019 DC Background Study and are calculated based on anticipated ridership from existing and planned development. A summary of the forecast is provided below:

i. Benefit to Existing Share Calculation

The benefit to existing share calculated is detailed in the city's 2019 DC Background Study based on the estimated travel demand, the calculated benefit to existing share is 33.1%. This share accounts for the benefit that will be received by existing development in achieving the identified total transit person trips and revised mode share of 23.6% (see Figure 2).

Figure 2: BTE Calculation Results

Person Trips by Mode of Travel				Proportion of New Transit Demand Allocated to Existing and New Development		
Mode of Travel	Scenario A 2019 Base	Scenario B 2019 Adjusted	Scenario C 2034 Base	Existing Development	New Development	Total
Walking/Cycling	63,800	71,600	92,300			
Transit	96,400	112,500	145,000	Scen B-Scen A	Scen C-Scen B	Scen C-Scen A
Auto Person	317,200	293,200	377,800	16,100	32,500	48,600
Total Person Trips	477,400	477,300	615,100	33%	67%	

Mode Share				Mode Share: Trips Generated by New Development		
Mode of Travel	Scenario A	Scenario B	Scenario C	Mode of Travel	Trips	Mode Share
Walking/Cycling	13.4%	15.0%	15.0%	Walking/Cycling	20,700	15.0%
Transit	20.2%	23.6%	23.6%	Transit	32,500	23.6%
Auto Person	66.4%	61.4%	61.4%	Auto Person	84,600	61.4%
Total Person Trips	100.0%	100.0%	100.0%	Total Person Trips	137,800	100.0%

ii. Post-Period Benefit Calculation

For the proposed development-related transit projects, the post-period benefit calculation is consistent with the approach and analysis contained in the 2019 DC Background Study.

Post-period benefit calculation = **33.3%** (16,200 / 48,600)

For projects with outstanding debenture payments, the post-period benefit shares were calculated based on shares of transit growth. Recognizing that only the development charge eligible costs are included in the outstanding debenture payments, no benefit to existing deductions have been made. As such, the post-period benefit calculation for these projects is as follows:

Post-period benefit calculation = **49.8%** (16,200 / 32,500)

Appendix B.2

Public Transit Cost of Growth Analysis

Public Transit Services Cost of Growth Analysis

This appendix addresses the capital, operating and asset management plan DC Background Study requirements for Public Transit services.

A. Relevant Analysis and City Documents

The City of Ottawa undertakes extensive evaluations of the fiscal impacts of capital works; these analyses include an examination of the full range of costs – initial capital, operating and the long-term repair, maintenance and replacement of infrastructure. The following are key, and interrelated, documents central to the City’s fiscal evaluation:

- City of Ottawa Financial Reports and Statements
- City of Ottawa 2017 Long Range Financial Plan (LRFP) V Transit.
Note: the City presented an update to Council in September 2023.
- Comprehensive Asset Management (CAM) Policy
- 2017 State of Assets Report (SOAR)
- 2017 Strategic Asset Management Plan (SAMP)

The key objective of these studies is to ensure the City’s financial sustainability. In addition, the City’s annual budget process implements and manages the year-to-year expenditure needs and revenue requirements.

B. Public Transit Asset Management Plan Requirements

The following provides an overview of the relevant documents and analysis that fulfills the AMP and long-term capital and operating cost requirements of the legislation.

i. Long Range Financial Plan for Public Transit Services

At the February 24, 2017 meeting of the City of Ottawa Finance and Economic Development Committee meeting, two important staff reports regarding the City's transit services were considered and approved:

1. Stage 2 Light Rail Transit Implementation – Project Definition and Procurement Plan, Report ACS2017-TSD-OTP-0001
2. Long Range Financial Plan Transit, Report ACS2017-CSD-FIN-0002⁴

For reference, report ACS2017-CSD-FIN-0002 is attached to this appendix.

The 2017 LRFP for transit specifically examines the long-term operating and capital costs associated with delivering transit services.⁵ As noted in the staff report, the LRFP – Public Transit is a financial model that “includes both operating and capital needs for the bus and light rail system over a 32-year time period to 2048, which covers the full contract period of the Confederation Line and Stage 2 of the Light Rail Transit (Stage 2 LRT).”

The City's LRFP and the separate Public Transit LRFP (sources of funding are dedicated to transit and cannot be used to fund other services) are structured to examine affordability and fiscal sustainability of transit infrastructure.

The City defines affordability from the point of view of current and future taxpayers and transit users. The parameters to determine affordability include:

- Public Transit taxes and transit fares will increase at the same rate as transit operating costs.
- Annual debt servicing will not exceed provincial and city limits.

⁴ This report is also referenced in Section B of this appendix

⁵ The City has a transit Affordability Model which is used as a tool to inform the Transit LRFP.

- Debt used to purchase an asset will be fully retired before the end of the asset's useful life.
- The city can operate, maintain in a good state of repair and expand the service to meet future needs.
- The future transit expansion as defined in the 2013 Transportation Master Plan (TMP) will be completed to service growth needs.

The results of the Public Transit LRFP determined that delivering, operating and maintaining the transit system is financially sustainable. Affordability and sustainability is based on the following key elements:

- Public Transit taxes and transit fares will increase at the same rate as transit costs.
- Contributions of two-thirds funding from other levels of government for LRT and BRT projects.
- Interest rates remain below 6 per cent.

These reports, and associated analysis, illustrate that the city, and Council, have fully evaluated and consider the full fiscal costs of undertaking the proposed transit capital program and determined that it is financial sustainable. The following sections provide an overview summary of the key components of the reports in the context of the DC Background Study.

Section F of this appendix references the requirements of the DCA and the Regulations and the various sections of this Background Study and source documents.

Since the release of the ACS2017-CSD-FIN-0002 report, the City has completed an update to the Transit Affordability Model to reflect the increased scope of work and costs associated with the Stage 2 LRT infrastructure as announced in February 2019. On March 6, 2019, City Council received a report entitled LRFP Transit Update which provided an update to the 2017 analysis. This report was further updated and presented to Council on September 18, 2023.

ii. Gross Capital Costs Have Been Used for the Purposes of the AMP Analysis

It is important to note that the Public Transit LRFP and related Affordability Model include the total cost of all transit infrastructure including development charge eligible and ineligible costs.

iii. Public Transit Assets: Condition Ratings & Useful Lives

Section 8(3) of the Regulations deal with the types of assets used to deliver the transit services and the state of existing local infrastructure. This section of the Regulations also address the principles, policies and approaches used by the municipality in asset management planning.

The City's Comprehensive Asset Management (CAM) address all of these issues fully. The CAM is an integrated business approach involving the different disciplines of planning, finance, engineering, maintenance and operations to effectively manage existing and new infrastructure. The objective of this integrated approach to infrastructure management are to maximize benefits, reduce risk and provide safe and reliable levels of service to community users in a socially, culturally, environmentally and economically conscious manner.

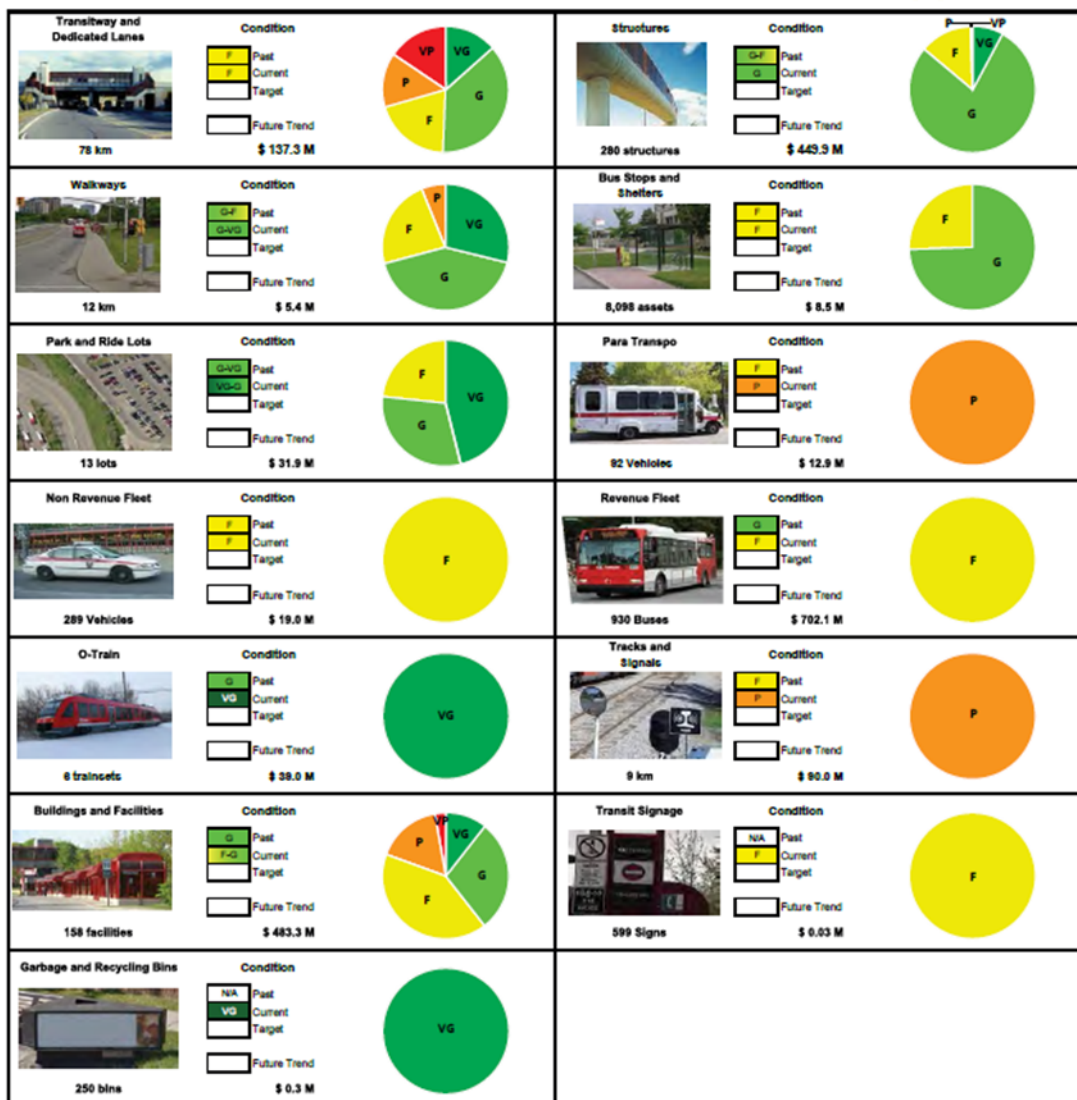
As noted on the City's website, the CAM Program encompasses all aspects of the management of each asset through its lifecycle in that it:

- Integrates with the Corporate Planning Framework to complement the strategic objectives of the City, other key business systems, legislation, and regulations;
- Creates a framework that establishes the mechanism for a clear line of sight between our AMP program and corporate objectives and strategies; and
- Commits to providing approved levels of service for present and future customers and communities, in the most effective and efficient way, through the planning, design, construction, acquisition, operation and maintenance, renewal, and disposal of assets.

In 2012 the City completed its first comprehensive report on the state of the City's physical assets, referred to as the 2012 State of Assets Report (SOAR). In 2017, the City completed an update to this document which is referenced in Section B of this report.

The 2017 SOAR (beginning on page 16) identified that the transit infrastructure has a replacement value of approximately \$1.98 billion (\$2017) with the majority of the assets rated as being in good or fair condition. Figure 1 shown below provides an excerpt from the 2017 SOAR which identifies the conditions of transit assets.

Figure 1: 2017 SOAR Condition of Transit Assets (pg. 17)



A summary of the future City-owned assets and estimated useful life assumptions considered under this Background Study is outlined in Table 1 for various types of transit assets. Although all capital assets considered in this Background Study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some exceptions apply and the justification is as follows:

- Some projects do not relate to the emplacement of a tangible capital asset– some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as “not infrastructure” in the table.

It should be noted that the capital cost estimates prepared for each of the projects identified in this Background Study include grouped costs of various individual elements, which, as a stand-alone item, may have its own useful life (i.e. new buildings include: HVAC, structural elements, roof, etc.). Accordingly, the average useful life assumptions noted below are applicable to all project components.

Table 1 – Summary of Conventional Assets Considered and Useful Life Assumptions

Estimated Useful Life	Type of Assets
Not Infrastructure	Land, Studies
15 years	Vehicles, including buses but excluding LRT vehicles
20 years	LRT Vehicles
30 years	LRT rail and related infrastructure, Park and Ride facilities
50 years	Transit way stations, maintenance facilities
75 years	Overpasses, underpasses, bridges and other similar structures including Transitway infrastructure

iv. Summary of Capital Program

Table 2 provides a summary of future the transit projects identified in the capital program. The capital costs and 2024-2033 development charge recoverable shares are based on the analysis included in Appendix B.2.

Table 2 – Summary of Development Related Capital Program

Capital Project Description	Gross Cost	2024-2033 Development Charge Recoverable
Recovery of Negative DC Reserve Fund Balance	\$122.8 million	\$122.8 million
Transit Projects ¹	\$8.9 billion	\$321.1 million
Current Debt Payments – Principal and Interest	\$1.9 billion	\$981.7 million
Total	\$11.0 billion	\$1.4 billion

1) Capital costs do not include financing costs

v. Annual Provision

Table 3 provides a summary of the calculated annual reserve fund contributions based on the identified useful lives of the various assets and projects. As shown in the table below, the total DC recoverable 2034 contribution is \$37.93 million. The year 2034 has been included to calculate the annual contribution for the 2024-2033 period as the expenditures in 2033 will not trigger asset management contributions until 2034.

Table 3 – Summary of Calculated Full Life cycle Annual Contributions (\$Millions) at 2034

Capital Project Description	Gross Cost 2030 Contribution	2024-2033 DC Recoverable 2034 Contributions
Recovery of Negative DC Reserve Fund Balance	\$0.00	\$0.00
Transit Projects	\$8,620.3	\$321.1
Current Debt Payments – Principal and Interest	\$0.00	\$0.00
Total	\$8,620.3	\$321.1

It should be noted that the City's Transit Affordability Model is used as a tool to inform the Transit LRFP. The Affordability Model is a highly integrated fiscal impact model that incorporates the full range of operating, capital and life-cycle costs. The Affordability Model includes an analysis of a long-term planning horizon to from 2030 to 2048.

C. Transit Long-Term Capital and Operating Impacts

This section provides a brief examination of the long-term operating costs for the capital facilities and infrastructure to be included in the Development Charges By-law for Public Transit services. This examination is a requirement of the DCA. Similar to the AMP analysis, the operating cost impacts for transit infrastructure has been addressed through the outputs of the City's Public Transit LRFP analysis and related Affordability Model and is discussed below.

i. Forecasted Revenue and Operating Costs

As stated in the Finance and Economic Development Committee Report ACS2017-CSD-FIN-0002:

“Transit operations are primarily funded from two sources, fares and taxes. Additionally, some revenues are received from advertising and provincial gas tax revenue is applied towards operations annually. It is assumed that transit fares and transit tax rates will increase in keeping with the assumed 2.5% increase in transit costs. The model reflects the recent Provincial announcement to double gas tax contributions from \$35 million in 2017 to \$70 million by 2021 and is held constant thereafter. In the model, \$16 million of the annual provincial gas tax is applied to operating costs and the remainder is used as capital funding” (page 9)

Based on growth in assessment, ridership and inflationary increases to taxes and fares, the model also accounts for anticipated revenue. Table 4 below provides an excerpt of the forecast revenue and costs related to transit infrastructure over the 2011-2031 and 2032-2048 planning periods as identified in the staff report.

Table 4 – Summary of Forecasted Revenue and costs (\$billions)

	Period 1 (2011-2031)	Period 2 (2032-2048)	Total
Total Funds Available	\$10.4	\$20.7	\$31.1
Bus Costs	\$5.2	\$9.7	\$14.9
Rail Costs	\$2.1	\$5.5	\$7.6
All Other Costs	\$1.7	\$2.9	\$4.6
Total Operating Costs	\$9.0	\$18.1	\$27.1
Total Tax and Fare Revenue Available for Capital	\$1.4	\$2.6	\$4.0

Source: Report ACS2017-CSD-FIN-0002 page 13

ii. Capital Revenue Sources and Assumptions

Public Transit infrastructure in the City of Ottawa is funded from a number of different sources including property taxes, federal and provincial funding, federal and provincial gas tax and development charges. Details of the assumed capital revenue sources is provided in pages 13-15 of staff report ACS2017-CSD-FIN-0002.

iii. Use of Debt

The City's Public Transit LRFP includes debenture assumptions where the cost of capital investment exceeds the amount of funds available from other revenue sources. Criteria including the useful life of the asset and debt servicing limits are used in the determination of the amount and term of the debt. The City will continue to utilize long-term debt to finance transit capital needs when deemed efficient and within the financial policies of the city.

D. Summary

In summary, the analysis completed through the city’s Public Transit LRFP demonstrates that the City can afford to invest and operate transit infrastructure over the 10-year and long-term planning period.

Through the Public Transit LRFP analysis, it was concluded that the transit system will continue to be affordable if the following assumptions are built into the model and maintained going forward:

- Public Transit taxes and transit fares will increase at the same rate as transit costs at 2.5% (page 9 of Report ACS2017-CSD-FIN-0002).
- Contributions of two-thirds funding from other levels of government for LRT and BRT projects.
- Interest rates remain below 6%.

E. AMP Checklist

The following checklist provides an overview of how the AMP analysis for Public Transit services, as required by the provisions of the DCA has been addressed.

O.Reg. 82/98 Public Transit DC Requirement

Background Study

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
1. The calculations that were used to prepare the estimate for the planned level of service for the transit services, as mentioned in subsection 5.2 (3) of the Act.	Appendix B provides details on this calculation. The City’s transit planned level of service is the provision of a higher order transit system (bus and light rail transit), integrated with the existing, which is to be expanded, as well as a bus transit system for the residents and businesses of the City of Ottawa.

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
<p>2. An identification of the portion of the total estimated capital cost relating to the transit services that would benefit,</p> <ul style="list-style-type: none"> i. the anticipated development over the 10-year period immediately following the preparation of the background study, or ii. the anticipated development after the 10-year period immediately following the preparation of the background study. 	<p>Appendix A provides details on the anticipated development over the 10-year planning period.</p> <p>Appendix B.1 provides details as it relates to transit ridership over the 10-year planning period.</p>
<p>3. An identification of the anticipated excess capacity that would exist at the end of the 10-year period immediately following the preparation of the background study.</p>	<p>Appendix B.1 provides details on the excess capacity calculation.</p> <p>The analysis arising from the ridership forecast is applied to the Public Transit development charge calculations is contained in Appendix B.2.</p>
<p>4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecasted ridership will be from existing or planned development.</p>	<p>Appendix B.1 provides details on the excess capacity calculation.</p> <p>The analysis arising from the ridership forecast is applied to the Public Transit development charge calculations is contained in Appendix B.</p>
<p>5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study. O. Reg. 428/15, s. 4.</p>	<p>Appendix B.2 provides details on the ridership capacity calculation.</p>

Assessment Management Plan

8. (3) If a council of a municipality proposes to impose a development charge in respect of transit services, the asset management plan referred to in subsection 10 (2) (c.2) of the Act shall include the following in respect of those services:

1. A section that sets out the state of local infrastructure and that sets out,

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
i. the types of assets and their quantity or extent	<p>Appendix B.3 provides a discussion of the AMP requirements and how they are met.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City of Ottawa Financial Reports and Statements ▪ City of Ottawa 2017 Long Range Financial Plan (LRFP) V Transit ▪ Comprehensive Asset Management (CAM) Policy ▪ 2017 State of Assets Report (SOAR) ▪ 2017 Strategic Asset Management Plan (SAMP)
ii. the financial accounting valuation and replacement cost valuation for all assets,	
iii. the asset age distribution and asset age as a proportion of expected useful life for all assets, and	
iv. the asset condition based on standard engineering practices for all assets	

2. A section that sets out the proposed level of service and that,

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
i. defines the proposed level of service through timeframes and performance measures,	<p>Appendix B.1 and B.2 provide details on the proposed level of service in the City of Ottawa and current ridership performance relatives to targets.</p> <p>Relevant City documents that also address these requirements include:</p>
ii. discusses any external trends or issues that may affect the proposed level of service or the municipality's ability to meet it, and	

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
<p>iii. shows current performance relative to the targets set out.</p>	<p>City’s Public Transit Long Range Financial Plan.</p> <p>The City’s Affordability Model is used to analysis external trends such as changes in the rate of development, transportation mode shares and fiscal/financing changes.</p> <p>The transit system is part of the City’s overall transportation planning. The provision of the planned transit infrastructure and service is a critical component of achieving the City’s growth management targets. Investment in transit infrastructure, together with other strategies, is required to reduce private automobile usage, increase use of public transit, and encourage more active transportation options.</p>

3. An asset management strategy that,

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
<p>i. sets out planned actions that will enable the assets to provide the proposed level of service in a sustainable way, while managing risk, at the lowest life cycle cost,</p>	<p>Appendix B.3 provide details on the actions to implement a sustainable transit system.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City’s Public Transit Long Range Financial Plan
<p>ii. is based on an assessment of potential options to achieve the proposed level of service, which assessment compares,</p> <ol style="list-style-type: none"> A. life cycle costs, B. all other relevant direct and indirect costs and benefits, and C. the risks associated with the potential options, 	<p>Appendix B.3 provide details on the actions to implement a sustainable transit system.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City’s Public Transit Long Range Financial Plan

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
<p>iii. contains a summary of, in relation to achieving the proposed level of service,</p> <ul style="list-style-type: none"> A. non-infrastructure solutions B. maintenance activities, C. renewal and rehabilitation activities, D. replacement activities, E. disposal activities, and F. expansion activities, 	<p>Appendix B.3 provide details on the actions to implement a sustainable transit system.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City’s Public Transit Long Range Financial Plan <p>In particular, disposal activities are addressed through vehicles replacement/management – no revenue is generated from vehicles that are disposed of.</p> <p>Appendix B provides details on expansion plans.</p>
<p>iv. discusses the procurement measures that are intended to achieve the proposed level of service</p>	<p>Appendix B.3 (including report ACS2017-CSD-FIN-0002) provides details on the procurement measures for Stage 2 LRT infrastructure.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City’s annual budget ▪ RFP policies and practices
<p>v. includes an overview of the risks associated with the strategy and any actions that will be taken in response to those risks</p>	<p>Appendix B.3 provides details on the Public Transit Long Range Financial Plan and Affordability Model analysis.</p> <p>Ottawa uses an Affordability Model to guide capital program decision and to ensure that projects are financial sustainable. The model summarizes transit operating and capital needs over a long-range financial planning horizon, and assesses the affordability of the capital plan within forecast sources of revenue from fares, transit taxes, and other sources. These forecasts are based on a variety of factors including population, ridership and assessment growth projections. This allows the City to mitigate financial risks. The model is also updated regularly and allows for staff/Council to make informed capital program decisions.</p>

4. A financial strategy that,

O.Reg. 82/98 Sections	Comments and Relevant Sections of this DC Background Study
<p>i. shows the yearly expenditure forecasts that are proposed to achieve the proposed level of service, categorized by,</p> <ul style="list-style-type: none"> A. non-infrastructure solutions, B. maintenance activities, C. renewal and rehabilitation activities, D. replacement activities, E. disposal activities, and F. expansion activities, 	<p>Appendix B.3 provide details on the relevant expenditure forecasts, where applicable.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City’s Public Transit Long Range Financial Plan ▪ Corporate Asset Management Plan <p>In particular, disposal activities are addressed through the Corporate Asset Management and are generally minimal.</p>
<p>ii. provides actual expenditures in respect of the categories set out in sub-subparagraphs i A to F from the previous two years, if available, for comparison purposes,</p>	<p>This information is not available and has not been provided.</p>
<p>iii. gives a breakdown of yearly revenues by source</p>	<p>Appendix B.3 (Table 4) provide details on the yearly revenues.</p> <p>Relevant City documents that also address this requirement includes:</p> <ul style="list-style-type: none"> ▪ City’s Public Transit Long Range Financial Plan
<p>iv. discusses key assumptions and alternative scenarios where appropriate, and</p>	<p>Alternative scenarios have not been examined and is therefore not applicable.</p>
<p>v. identifies any funding shortfall relative to financial requirements that cannot be eliminated by revising service levels, asset management or financing strategies, and discusses the impact of the shortfall and how the impact will be managed.</p>	<p>Appendix B.3 provides details on funding sources.</p> <p>The City’s Affordability Model is intended to address revenue shortfalls. This analysis is then used to inform the findings of the City’s LRFP.</p> <p>Relevant City documents that also address these requirements include:</p> <ul style="list-style-type: none"> ▪ City’s Public Transit Long Range Financial Plan

8 (4) For the purposes of subsection (3), the proposed level of service may relate to a time after the 10-year period immediately following the preparation of the background study. O. Reg. 428/15, s. 4.

Appendix C

Land Acquisition Technical Appendix

Land Acquisition Technical Appendix

Recent legislative changes through Bill 60 require the creation of distinct category of service for land acquisition costs. A Land Acquisition capital program has been developed and included as part of this DC update.

A. Historical Service Levels

There is no requirement to establish historical service levels for Land Acquisition as a category of service.

B. Development-Related Capital Program

A gross capital program of \$82.0 million is identified for Land Acquisition needs for the period 2026 to 2035 (Table C-1). Benefit to existing and replacement shares of \$3.7 million are identified and removed from the DC rate calculation.

A total of \$78.3 million is included in the development charge calculation. These costs are allocated 75 per cent to residential development (or \$58.8 million), which yields an unadjusted development charge rate of \$399.95 per capita.

The non-residential share is allocated 3 per cent (or \$2.3 million) to industrial development and 22 per cent (or \$17.2 million) to non-industrial development. This results in unadjusted DC rates of \$4.22 per square metre and \$10.62 per square metre, respectively.

**TABLE C-1
CITY OF OTTAWA
DEVELOPMENT-RELATED CAPITAL PROGRAM
LAND ACQUISITION**

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			Benefitting Area
					BTE Share (%)	Replacement & BTE Shares (\$)		Prior Growth ⁽¹⁾	2026 - 2035	Post 2035	
LAND ACQUISITION											
3.1 Land Acquisition Needs											
3.1.1 Land Acquisition Needs	2035 - 2037	\$ 81,960,000	\$ -	\$ 81,960,000	4%	\$ 3,683,785	\$ 78,276,215	\$ -	\$ 78,276,215	\$ -	City-wide
Subtotal - Land Acquisition Needs		\$ 81,960,000	\$ -	\$ 81,960,000		\$ 3,683,785	\$ 78,276,215	\$ -	\$ 78,276,215	\$ -	
TOTAL - LAND ACQUISITION		\$ 81,960,000	\$ -	\$ 81,960,000		\$ 3,683,785	\$ 78,276,215	\$ -	\$ 78,276,215	\$ -	

⁽¹⁾ Prior growth funds are adjusted through the cost allocation analysis shown below

City-wide Cost Allocations (Residential & Non-Residential)				
		Total Cost	Reserve Adjust.	DC Rate
Residential Calculation				
Residential Share of DC Eligible Costs (2026-2035)	75%	\$ 58,790,175	\$ -	\$ 58,790,175
10-Year Population Growth		146,995		146,995
Unadjusted Per Charge per Capita		\$ 399.95	\$	399.95
Non-Residential Calculation				
Non-Residential Share of DC Eligible Costs (2026-2035)	25%	\$ 19,486,040	\$ -	\$ 19,486,040
Industrial				
Industrial Share of DC Eligible Costs (2026-2035)	3%	\$ 2,290,754	\$ -	\$ 2,290,754
10-Year Non-Residential Growth in GFA (m2)		542,630		542,630
Unadjusted Per Charge per Square Metre		\$ 4.22	\$	4.22
Non-Industrial				
Non-Industrial Share of DC Eligible Costs (2026-2035)	22%	\$ 17,195,286	\$ -	\$ 17,195,286
10-Year Non-Residential Growth in GFA (m2)		1,619,628		1,619,628
Unadjusted Per Charge per Square Metre		\$ 10.62	\$	10.62

Appendix D

Local Service Policy

Road-Related

The guidelines below outline the road-related infrastructure that is included in the Development Charges Background Study as a development charge project, versus infrastructure that is considered as a local service, to be delivered separately by landowners, pursuant to a development agreement.

1. City Freeway (as defined in the Official Plan)

i. New City Freeways or the widening of existing City Freeways shall be considered development charges projects.

2. Arterial Roads (as defined in the Official Plan)

i. New Arterial Roads or the widening of existing Arterial Roads shall be considered development charges projects.

3. Major Collector Roads (as defined in the Official Plan)

i. The first 11 m of motor vehicle road surface required for new Major Collector Roads is considered to be the developer's responsibility. Beyond the motor vehicle road surface, other elements of the right-of-way including utilities and infrastructure, landscaping (trees), pedestrian and cycling infrastructure, boulevards, and transit stop pads are also considered to be the developer's responsibility.

ii. The over-sizing costs of any additional motor vehicle road surface width (over the first 11 m) required for new Major Collector Roads is considered to be a development charges project.

iii. Widening the motor vehicle road surface of existing Major Collector Roads is considered to be a development charges project.

4. Collector Roads

i. New Collector Roads that include 11m of motor vehicle road surface or less are considered to be the developer's responsibility. Beyond the motor vehicle road surface, other elements of the right-of-way including utilities and infrastructure, landscaping (trees), pedestrian and cycling infrastructure, boulevards, and transit stop pads are also considered to be the developer's responsibility.

5. Local Roads

i. New Local Roads are considered to be the developer's responsibility.

6. Traffic Signals, Traffic Control Systems, and Intersection Modifications

i. As part of the new construction or widening of Arterial Roads or the widening of Major Collector Roads, roundabouts, intersection modifications, traffic signals and traffic control systems are considered to be development charges projects.

ii. On Arterial or Major Collector Roads, new or widened roundabouts, off-site traffic signals, traffic control systems and intersection modifications, required to meet the needs of projected development growth and resulting in increasing traffic, are considered to be development charges projects where the intersecting road is an Arterial Road, Major Collector Road or a Collector Road and subject to meeting Ontario Ministry of Transportation warrants.

iii. On Arterial or Major Collector Roads, roundabouts, off-site traffic signals, traffic control systems, and intersection modifications where the intersecting road is a local road are considered to be the developer's responsibility.

iv. Temporary works that are not consistent with future projects within the Priority Networks of the Transportation Master Plan (TMP) shall be considered local services and a developer's responsibility.

v. Prioritization for the implementation or reimbursement of roundabouts, intersection modifications and traffic signals will be carried out annually through the city's capital budget process via the Intersection Control Measures Program. Priority will be a) Ontario Ministry of Transportation warranted signalized intersections with turning lanes b) Ontario Ministry of Transportation warranted turning lanes with future Ontario Ministry of Transportation warranted signalization before the year 2031 c) Ontario Ministry of Transportation warranted turning lanes but no Ontario Ministry of Transportation warranted signals before the year 2031.

vi. Intersection works as per the above will provide all required pedestrian and cycling crossings and connectivity in all directions within the limits of the intersection.

7. Streetlights

i. Streetlights on Arterial Roads and for the oversized portion of the Major Collector Roads are considered to be development charges projects.

ii. Streetlights on all other roads are considered to be the developer's responsibility.

8. Pedestrian Facilities

i. On Local and Collector roads, sidewalks are considered to be the developer's responsibility.

ii. On Arterial roads, sidewalks are considered to be the developer's responsibility where the primary frontage is on an arterial road or where pedestrian access is provided directly from a development to an arterial road to connect to adjacent destinations such as bus stops, signalized intersections, parks, or other existing/planned community amenities. Urbanization of arterial roads is not a developer responsibility; sidewalks will be provided, where feasible, without urbanization.

iii. For all road classifications, the following sidewalks are also considered to be the developer's responsibility: Sidewalks external to a development that are necessary to connect the development to an adjacent sidewalk or public space that is the lesser of one block or 50m away from the edge of the frontage.

iv. Sidewalks are required on one or both sides of roads in accordance with City policies and design guidelines.

v. Where the Transportation Master Plan Priority Network identifies a development charge project such as a road widening or urbanization along a frontage, interim pedestrian facilities are the developer's responsibility.

vi. Sidewalks and active transportation pathways that are internal to the development but outside of road allowances are considered to be the developer's responsibility if they are identified in the Official Plan, an associated Secondary Plan, or through the TIA process.

9. Cycling Facilities

i. Cycling facilities and active transportation pathways that are internal to the development but outside of road allowances are considered to be the developer's responsibility if they are identified in the Official Plan, an associated Secondary Plan, or through the TIA process.

ii. Cycling facilities and active transportation pathways along new Collector roads and Major Collector roads are considered to be the developer's responsibility.

iii. Cycling facilities along new Local roads are considered to be the developer's responsibility if they are identified in the Official Plan, an associated Secondary Plan, or through the TIA process.

iv. All other cycling facilities are considered development charges projects.

10. Noise Abatement Measures

i. On Arterial or Major Collector Roads, noise abatement measures (i.e., barriers, berms, etc.), when warranted, are considered to be the developer's responsibility where such roads precede the development, are constructed during the development or are forecast to be constructed within five years of the development's completion.

ii. Internal to a development, noise abatement measures are the developer's responsibility.

11. Bus Pads

i. When widening existing Arterial or Major Collector Roads, and when building new arterial roads, bus pads are considered to be development charges projects.

ii. On all other roads, bus pads are considered to be the developer's responsibility.

Land Acquisition for Roads

1. Road Allowances

i. Land Acquisition for Arterial or Major Collector Roads, to the widths required according to the approved engineering standards, can be provided by dedications under the Planning Act. In areas where limited or no development is anticipated and direct dedication is unlikely, the land acquisition is considered to be part of the capital cost of the related development charges project.

2. Grade Separations

i. Land Acquisition for Grade Separations (beyond normal dedication requirements) is considered to be part of the capital cost of the related development charges project.