



2019 Development Charges Background Study

Municipality of Middlesex Centre

Office Consolidation

Consolidates 2019 Development Charges Background Study (May 17, 2019) and
Addendum to: 2019 Development Charges Background Study (July 5, 2019)

August 15, 2019

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Table of Contents

	Page
1. Introduction.....	1-1
1.1 Purpose of this Document.....	1-1
1.2 Summary of the Process.....	1-2
2. Municipality of Middlesex Centre Current D.C. Policy	2-1
2.1 By-law Enactment.....	2-1
2.2 Services Covered	2-1
2.3 Timing of D.C. Calculation and Payment	2-2
2.4 Redevelopment Credit	2-3
2.5 Exemptions	2-3
3. Anticipated Development in the Municipality of Middlesex Centre	3-1
3.1 Requirement of the Act	3-1
3.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast	3-1
3.3 Summary of Growth Forecast	3-2
4. Approach to the Calculation of the Charge.....	4-1
4.1 Introduction.....	4-1
4.2 Services Potentially Involved	4-1
4.3 Increase in Need for Service.....	4-1
4.4 Local Service Policy.....	4-7
4.5 Capital Forecast.....	4-7
4.6 Treatment of Credits	4-8
4.7 Eligible Debt and Committed Excess Capacity	4-8
4.8 Existing Reserve Funds	4-9
4.9 Deductions.....	4-9
5. D.C. Eligible Cost Analysis by Service	5-2
5.1 Introduction.....	5-2



Table of Contents (Cont'd)

	Page
5.2 Service Levels and 10-Year Capital Costs for Municipal-wide D.C. Calculation	5-2
5.3 Service Levels and 17-Year Capital Costs for Municipal-wide D.C. Calculation	5-9
5.4 Service Levels and Urban Buildout Capital Costs for Area-Specific D.C. Calculation	5-13
6. D.C. Calculation	6-1
7. D.C. Policy Recommendations and D.C. Policy Rules	7-1
7.1 Introduction	7-1
7.2 D.C. By-law Structure	7-1
7.3 D.C. By-law Rules	7-2
7.4 Other D.C. By-law Provisions	7-4
7.5 Other Recommendations	7-5
8. Asset Management Plan	8-1
8.1 Introduction	8-1
9. By-Law Implementation	9-1
9.1 Public Consultation	9-1
9.2 Anticipated Impact of the Charge on Development	9-2
9.3 Implementation Requirements	9-3
Appendix A Background Information on Residential and Non-Residential Growth Forecast	A-1
Appendix B Historical Level of Service Calculations	B-1
Appendix C Long-Term Capital and Operating Cost Examination	C-1
Appendix D Local Service Policy	D-1
Appendix E Uniform Non-Residential D.C. Calculations (Option 2)	E-1
Appendix F Proposed D.C. By-Law	F-1



List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
A.M.P.	Asset Management Plan
D.C.	Development charge
D.C.A.	Development Charges Act, 1997
G.F.A.	Gross floor area
L.P.A.T.	Local Planning Appeal Tribunal
N.A.I.C.S.	North American Industry Classification System
N.F.P.O.W.	No Fixed Place of Work
O.M.B.	Ontario Municipal Board
O.P.A.	Official Plan Amendment
O.Reg.	Ontario Regulation
P.O.A.	Provincial Offences Act
P.P.U.	Persons per unit
S.D.E.	Single detached equivalent
S.D.U.	Single detached unit
s.s.	Subsection
sq.ft.	square foot
sq.m.	square metre



Development Charges Background Study



Chapter 1

Introduction



1. Introduction

1.1 Purpose of this Document

This background study has been prepared pursuant to the requirements of the Development Charges Act (D.C.A.), 1997 (s.10), and accordingly, recommends new Development Charges (D.C.s) and policies for the Municipality of Middlesex Centre (Municipality).

The Municipality retained Watson & Associates Economists Ltd. (Watson) to undertake the D.C. study process in 2019. Watson worked with senior staff of the Municipality in preparing this D.C. analysis and the policy recommendations.

This D.C. background study, containing the proposed D.C. by-law, will be distributed to members of the public in order to provide interested parties with sufficient background information on the legislation, the study's recommendations, and an outline of the basis for these recommendations.

This report has been prepared, in the first instance, to meet the statutory requirements applicable to the Municipality's D.C. background study, as summarized in Chapter 4. It also addresses the forecast amount, type, and location of growth (Chapter 3), the requirement for "rules" governing the imposition of the charges (Chapter 7), and the proposed by-law to be made available as part of the approval process (Appendix F).

In addition, the report is designed to set out sufficient background on the legislation, the Municipality's current D.C. policy (Chapter 2) and the policies underlying the proposed by-law, to make the exercise understandable to interested parties. Finally, the D.C. background study addresses post-adoption implementation requirements (Chapter 9) which are critical to the successful application of the new policy.

The chapters in the report are supported by Appendices containing the data required to explain and substantiate the calculation of the charge. A full discussion of the statutory requirements for the preparation of a background study and calculation of a D.C. is provided herein.



1.2 Summary of the Process

As required under Section 12 of the D.C.A., 1997, a Public Meeting has been scheduled for June 5, 2019. Its purpose is to present the study to the public and to solicit public input on the proposed D.C. by-law. The meeting is also being held to answer any questions regarding the study's purpose, methodology, and the proposed modifications to the Municipality's D.C. by-law. Table 1-1 outlines the proposed schedule to be followed with respect to the D.C. by-law adoption process.

In accordance with the legislation, the D.C. background study and proposed D.C. by-law will be available for public review on May 17, 2019.

The process to be followed in finalizing the report and recommendations includes:

- consideration of responses received prior to, at or immediately following the public meeting; and
- finalization of the study and Council consideration of the by-law.

Table 1-1
Schedule of Key D.C. Process Dates

Process Steps	Dates
1. Project initiation meetings with Municipal staff	February 4, 2019
2. Data collection, staff interviews, preparation of D.C. calculations	February 2019 - March 2019
3. Preparation of draft D.C. background study and review of draft findings with Municipal staff	April 2019
4. Presentation of findings to Development Industry	May 7, 2019
5. Council workshop presentation	May 8, 2019
6. D.C. background study and proposed D.C. by-law available to public	May 17, 2019



Process Steps	Dates
7. Statutory notice of Public Meeting advertisement placed in newspaper(s)	20 days prior to public meeting
8. Public Meeting of Council	June 5, 2019
9. Amendment to the D.C. Background Study	July 5, 2019
10. Council considers adoption of D.C. background study and passage of by-law	July 17, 2019
11. Newspaper notice given of by-law passage	By 20 days after passage
12. Last day for by-law appeal	40 days after passage
13. Municipality makes available D.C. pamphlet	By 60 days after in force date



Chapter 2

Municipality of Middlesex Centre Current D.C. Policy



2. Municipality of Middlesex Centre Current D.C. Policy

2.1 By-law Enactment

On July 23, 2014, the Municipality passed and enacted By-law 2014-069, as amended, under the D.C.A, 1997. The by-law imposes uniform Municipal-wide charges for all services, with the exception of water and wastewater services. D.C.s for water and wastewater services are imposed on an area-specific within the municipal urban service areas. By-law 2014-069 was later amended by by-laws 2017-045 and 2017-133. By-law 2014-045 provides an exemption from the payment of development charges for greenhouse developments. By-law 2017-133 provided for updates to the underlying capital cost estimates identified in the Municipality's 2014 D.C. Background Study, as amended, to determine the updated charges for Fire, Roads, Public Works, Parks and Recreation, Administration, Water, and Wastewater services. Changes in the capital cost estimates arose from the completion of various studies and environmental assessments, the Municipality's updated capital project plans, and updated cost data based on the actual costs incurred to complete some of the projects identified in the 2014 D.C. Background Study.

2.2 Services Covered

The following services are covered under By-law 2014-069, as amended:

Municipal-wide Services

- Roads;
- Public Works;
- Fire Protection;
- Parks and Recreation;
- Library;
- Administration – Studies

Area-Specific – Water and Sewer Service Areas

- Water Services; and
- Wastewater Services.



The by-law provides for mandatory annual indexing of the charges on January 1st of each year. Table 2-1 and Table 2-2 and provide the charges currently in effect, for residential and non-residential development types respectively, as well as the breakdown of the charges by service.

2.3 Timing of D.C. Calculation and Payment

D.C.s are due and payable in full to the Municipality on the date the first building permit approving the construction of a foundation is issued for any land, buildings, or structures affected by the applicable D.C. The By-law also allows the Municipality to enter into alternative payment agreements with owners.

Table 2-1
Municipality of Middlesex Centre
Schedule of Residential D.C.s (as of January 1, 2019)

Service	Residential (per Dwelling Unit)			
	Single & Semi Detached Dwelling	Other Multiples	Apartments 2 Bedrooms +	Apartments Bachelor and 1 Bedroom
Municipal Wide Services				
Roads	\$ 2,277	\$ 1,596	\$ 1,291	\$ 957
Public Works	\$ 586	\$ 410	\$ 331	\$ 246
Protection Services	\$ 1,392	\$ 976	\$ 789	\$ 586
Parks & Recreation	\$ 2,273	\$ 1,593	\$ 1,289	\$ 956
Library Services	\$ 71	\$ 50	\$ 40	\$ 31
Administration Studies	\$ 317	\$ 223	\$ 181	\$ 134
Total Municipal Wide Services	\$ 6,916	\$ 4,848	\$ 3,921	\$ 2,910
Area Specific Services				
Water Services	\$ 1,698	\$ 1,191	\$ 963	\$ 714
Wastewater Services	\$ 10,870	\$ 7,619	\$ 6,163	\$ 4,573
Total - Water and Sewer Service Area (incl. Delaware)	\$ 19,484	\$ 13,658	\$ 11,047	\$ 8,197
Total - Unserved	\$ 6,916	\$ 4,848	\$ 3,921	\$ 2,910
Total - Partially Served (Water Only)	\$ 8,614	\$ 6,039	\$ 4,884	\$ 3,624



Table 2-2
Municipality of Middlesex Centre
Schedule of Non-Residential D.C.s (as of January 1, 2019)

Service	Non-residential (per Square Metre of Gross Floor Area)		
	Other Non-residential	Agricultural Use	Industrial
Municipal Wide Services			
Roads	\$ 11.47	\$ 1.94	\$ 4.60
Public Works	\$ 2.94	\$ -	\$ 1.18
Protection Services	\$ 6.92	\$ 1.74	\$ 2.77
Parks & Recreation	\$ 3.79	\$ -	\$ 1.51
Library Services	\$ 0.12	\$ -	\$ 0.04
Administration Studies	\$ 1.58	\$ -	\$ 0.63
Total Municipal Wide Services	\$ 26.82	\$ 3.68	\$ 10.73
Area Specific Services			
Water Services	\$ 4.53	\$ -	\$ 1.81
Wastewater Services	\$ 29.01	\$ -	\$ 11.60
Total - Water and Sewer Service Area (incl. Delaware)	\$ 60.36	\$ 3.68	\$ 24.14
Total - Unserviced	\$ 26.82	\$ 3.68	\$ 10.73
Total - Partially Serviced (Water Only)	\$ 31.35	\$ 3.68	\$ 12.54

2.4 Redevelopment Credit

The by-law provides for D.C. credits for residential and non-residential redevelopments for structures to be demolished or converted from one principal use to another. The credit for demolition of residential buildings or structures requires that a building permit have been issued within five (5) years from the date the demolition permit was issued. The amount of the credit provided cannot exceed the total development charge that would otherwise be payable.

2.5 Exemptions

The Municipality's existing D.C. by-laws include statutory exemptions from payment of D.C.s with respect to:

- Industrial additions of up to and including 50% of the existing gross floor area (G.F.A.) of the building – for industrial additions which exceed 50% of the existing G.F.A., only the portion of the addition in excess of 50% is subject to D.C.s;
- Land used for Municipal or Board of Education purposes; and



- Residential development that results in only the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (as specified by O.Reg. 82/98).

The D.C. by-laws also provide non-statutory exemptions from payment of D.C.s with respect to:

- Full exemption for greenhouse developments;
- Partial exemption for industrial development, with the amount payable calculated at 40% of the calculated Non-Residential charge; and
- Partial exemption for non-residential agricultural uses, with the amount payable calculated at 17% of the Roads Services charge and 25% of the Fire Protection Services charge.



Chapter 3

Anticipated Development in the Municipality of Middlesex Centre



3. Anticipated Development in the Municipality of Middlesex Centre

3.1 Requirement of the Act

Chapter 4 provides the methodology for calculating a D.C. as per the D.C.A. Figure 4-1 presents this methodology graphically. It is noted in the first box of the schematic that in order to determine the D.C. that may be imposed, it is a requirement of Section 5 (1) of the D.C.A. that “the anticipated amount, type and location of development, for which development charges can be imposed, must be estimated.”

The growth forecast contained in this chapter (with supplemental tables in Appendix A) provides for the anticipated development for which the Municipality of Middlesex Centre will be required to provide services, over a 10-year (mid-2019 to mid-2029), a longer term (mid-2019 to mid-2036) and urban buildout time horizon.

3.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast

The D.C. growth forecast has been derived from the Population Projections for Middlesex County, July 17, 2018. In preparing the growth forecast, the following additional information sources were consulted to further assess the residential and non-residential development potential for the Municipality of Middlesex Centre over the forecast period, including:

- The Municipality of Middlesex Centre Development Charges Background Study, Watson & Associates Economists Ltd., July 2, 2014;
- Estimated population by settlement area as provided by the Municipality of Middlesex Centre Planning and Building Services Department February 20, 2019;
- County of Middlesex Employment Land Needs Strategy, April 30, 2012;
- 2006, 2001 and 2016 population, household and employment Census data;
- Historical residential and non-residential building permit data over the 2009 to 2018 period;
- Residential supply (in the development process) as provided by the Municipality of Middlesex Centre Planning and Building Services Department; and



- Discussions with Middlesex Centre staff regarding anticipated residential and non-residential development in the Municipality of Middlesex Centre, specifically in Kilworth and Komoka.

3.3 Summary of Growth Forecast

A detailed analysis of the residential and non-residential growth forecasts is provided in Appendix A and the methodology employed is illustrated in Figure 3-1. The discussion provided herein summarizes the anticipated growth for Middlesex Centre and describes the basis for the forecast. The results of the residential growth forecast analysis are summarized in Table 3-1 below, and *Schedule 1* in Appendix A.

As identified in Table 3-1 and Appendix A, *Schedule 1*, the Municipality's population is anticipated to reach approximately 21,770 by mid-2029 and 24,150 by mid-2036, resulting in an increase of 3,600 and 5,980 persons, respectively, over the 10-year and 2019 to 2036 forecast periods.¹

Provided below is a summary of the key assumptions and findings regarding the Municipality of Middlesex Centre D.C. growth forecast:

1. Housing Unit Mix (Appendix A – Schedules 1, 6 and 7)
 - The housing unit mix for Middlesex Centre was derived from a detailed review of historical development activity (as per Schedule 7), as well as active residential development applications (as per Schedule 6) and discussions with Municipal staff regarding anticipated development trends for Ilderton, Kilworth, Komoka, and Delaware.
 - Based on the above indicators, the 2019 to 2029 household growth forecast is comprised of a unit mix of 77% low density (single detached and semi-detached), 6% medium density (multiples except apartments) and 17% high density (bachelor, 1-bedroom and 2-bedroom apartments).

¹ The population figures used in the calculation of the 2019 D.C. exclude the net Census undercount, which is estimated at approximately 3.5%.



Figure 3-1
Population and Household Forecast Model

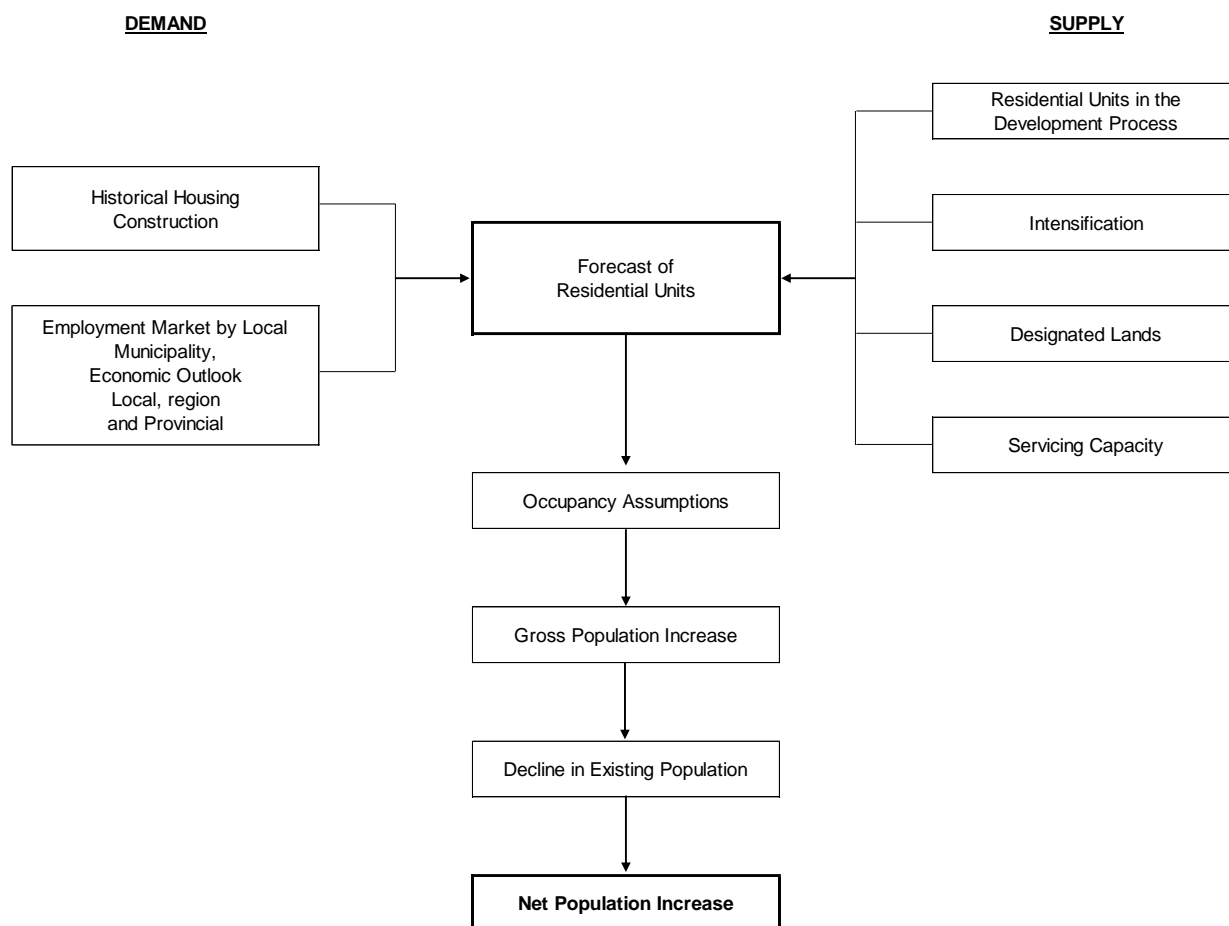




Table 3-1
Municipality of Middlesex Centre
Residential Growth Forecast Summary

Year		Population (Including Census Undercount) ¹	Excluding Census Undercount			Housing Units					Person Per Unit (P.P.U.): Total Population/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	
Historical	Mid 2006	16,130	15,589	479	15,110	4,830	300	85	25	5,240	2.975
	Mid 2011	17,060	16,487	347	16,140	5,412	148	90	4	5,654	2.916
	Mid 2016	17,870	17,262	367	16,895	5,715	135	125	5	5,980	2.887
Forecast	Mid 2019	18,800	18,169	388	17,781	6,004	193	125	5	6,327	2.872
	Mid 2029	22,530	21,765	465	21,300	7,112	285	365	5	7,767	2.802
	Mid 2036	24,990	24,147	513	23,634	7,909	377	396	5	8,687	2.780
	Buildout	26,690	25,787	624	25,163	8,309	552	450	5	9,316	2.768
Incremental	Mid 2006 - Mid 2011	930	898	-132	1,030	582	-152	5	-21	414	
	Mid 2011 - Mid 2016	810	775	20	755	303	-13	35	1	326	
	Mid 2016 - Mid 2019	930	907	21	886	289	58	0	0	347	
	Mid 2019 - Mid 2029	3,730	3,596	77	3,519	1,108	92	240	0	1,440	
	Mid 2019 - Mid 2036	6,190	5,978	125	5,853	1,905	184	271	0	2,360	
	Mid 2019 - Buildout	7,890	7,618	236	7,382	2,305	359	325	0	2,989	

Source: Population Projections for Middlesex County, July 17, 2018. Buildout derived from Middlesex Housing Inventory, March 8, 2019.

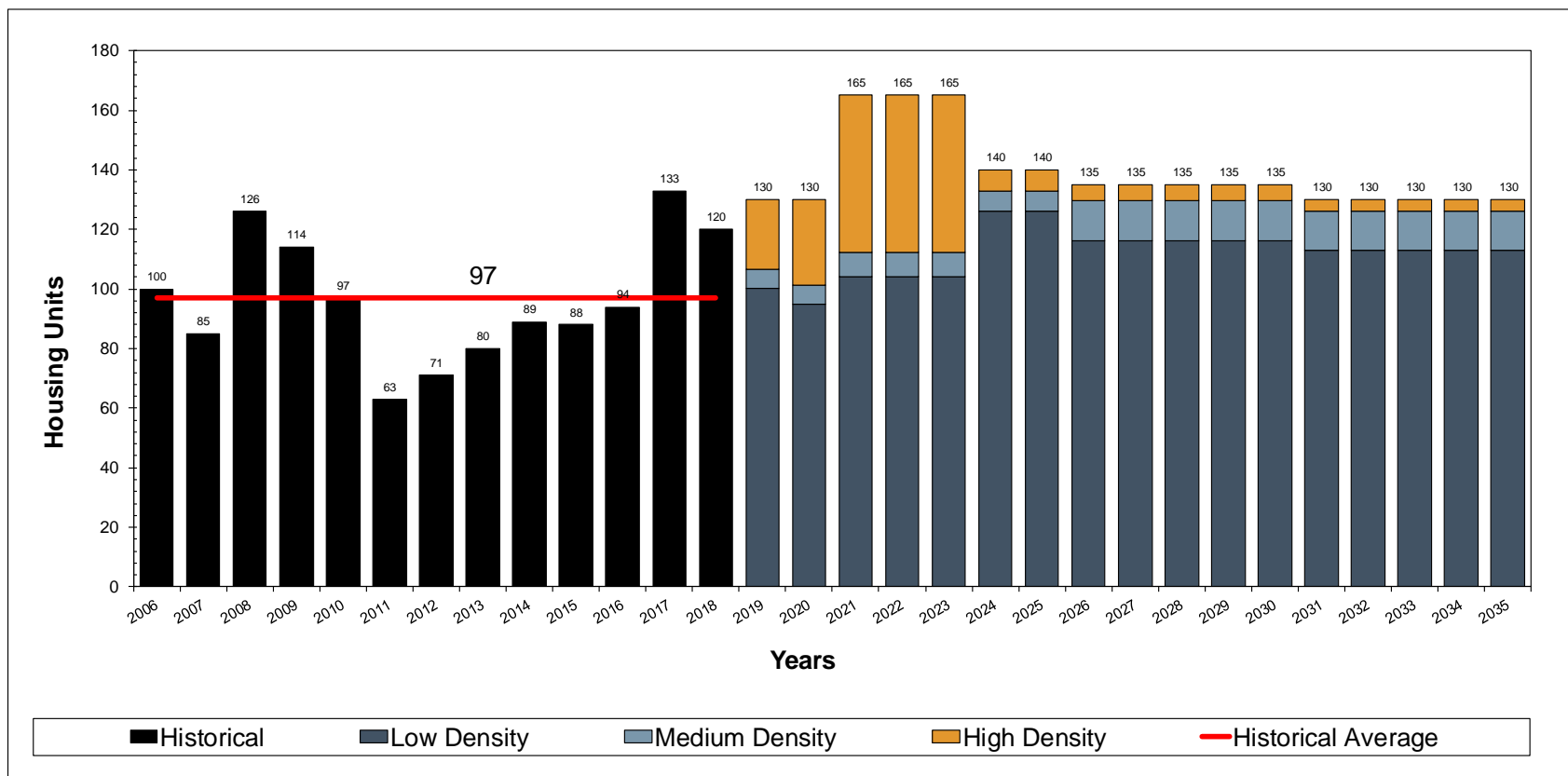
¹ Census undercount estimated at approximately 3.5%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1-bedroom and 2-bedroom+ apartments.



Figure 3-2
Municipality of Middlesex Centre
Annual Housing Forecast



Source: Historical housing activity derived from Statistics Canada building permit data for Middlesex Centre, 2006-2018.

1 Growth forecast represents calendar year.



2. Geographic Location of Residential Development (Appendix A – Schedule 2)

- Schedule 2 summarizes the anticipated amount, type and location of development for the Municipality of Middlesex Centre by development areas.
- In accordance with forecast demand and available land supply, the percentage of forecast housing growth between 2019 and 2029 by development location is summarized below.

Development Location	Percentage of Housing Growth, 2019-2029
Ilderton	32%
Kilworth and Komoka	60%
Delaware	3%
Other Areas	5%
<i>Middlesex Centre Total</i>	<i>100%</i>

3. Planning Period

- Short and longer-term time horizons are required for the D.C. process. The D.C.A. limits the planning horizon for certain services, such as parks, recreation and libraries, to a 10-year planning horizon. Services related to a highway, public works, fire, police, stormwater, water and wastewater services can utilize a longer planning period.

4. Population in New Units (Appendix A - Schedules 3, 4 and 5)

- The number of housing units to be constructed in the Municipality of Middlesex Centre during the short- and long-term periods is presented on Figure 3-2. Over the 2019 to 2029 forecast period, the Municipality is anticipated to average approximately 144 new housing units per year.



- The institutional population¹ is anticipated to grow by 77 persons between 2019 to 2029.
- Population in new units is derived from Schedules 3, 4, and 5, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit (P.P.U.) by dwelling type for new units.
- Schedules 8a and 8b summarize the P.P.U. for the new housing units by age and type of dwelling based on a 2016 custom Census data. The total calculated P.P.U. for all density types has been adjusted to account for the P.P.U. trends which has been recently experienced in both new and older units. Forecasted 20-year average P.P.U.s by dwelling type are as follows:
 - Low density: 3.167
 - Medium density: 2.079
 - High density²: 1.717

5. Existing Units and Population Change (Appendix A - Schedules 3, 4 and 5)

- Existing households for mid-2019 are based on the 2016 Census households, plus estimated residential units constructed between mid-2016 and 2019 assuming a 6-month lag between construction and occupancy (see Schedule 3).
- The decline in average occupancy levels for existing housing units is calculated in Schedules 3 through 5, by aging the existing population over the forecast period. The forecast population decline in existing households over the 2019 to 2029 forecast period is approximately 590.

6. Employment (Appendix A, Schedules 10a, 10b, 10c, 11)

- Employment projections are largely based on the activity rate method, which is defined as the number of jobs in a municipality divided by the number of residents. Key employment sectors include primary, industrial,

¹ Institutional includes special care facilities such as nursing home or residences for senior citizens. A P.P.U. of 1.100 depicts 1-bedroom and 2 or more bedroom units in these special care facilities.

² Includes bachelor, 1-bedroom and 2 or more bedroom apartments



commercial/ population-related, institutional, and work at home, which are considered individually below.

- 2016 employment data¹ (place of work) for the Municipality of Middlesex Centre is outlined in Schedule 10a. The 2019 employment base is comprised of the following sectors:
 - 279 primary (5%);
 - 1,321 work at home employment (26%);
 - 1,235 industrial (24%);
 - 1,343 commercial/population related (26%); and
 - 953 institutional (19%).
- The 2019 employment by usual place of work, including work at home, is estimated at 5,131.
- Total employment, including work at home for the Municipality of Middlesex Centre is anticipated to reach approximately 5,890 by mid-2029 and 6,505 by mid-2036. This represents an employment increase of 760 for the 10-year forecast period and 1,370 for the 2019 to 2036 forecast period.
- Schedule 10b, Appendix A, summarizes the employment forecast, excluding work at home employment, which is the basis for the D.C. employment forecast. The impact on municipal services from work at home employees has already been included in the population forecast.

7. Non-Residential Square Metre Estimates (Gross Floor Area (G.F.A.), Appendix A, Schedule 10b)

- Square metre estimates were calculated in Schedule 10b based on the following employee density assumptions:
 - 121 sq.m. per employee for industrial;
 - 51 sq.m. per employee for commercial/population-related;
 - 65 sq.m. per employee for institutional employment; and
 - 325 sq.m. per employee for primary employment.
- The Municipality-wide incremental Gross Floor Area (G.F.A.) increase is anticipated to be 46,370 sq.m. over the 10-year forecast period and

¹ 2016 employment is based on Statistics Canada 2016 Place of Work Employment dataset by Watson & Associates Economists Ltd.



84,500 sq.m over the 2019 to 2036 forecast period excluding primary G.F.A.

- In terms of percentage growth, the 2019 to 2029 incremental G.F.A. forecast by sector is broken down as follows:
 - industrial – 51%;
 - commercial/population-related – 15%; and
 - institutional – 34%.

8. Geographic Location of Non-Residential Development (Appendix A, Schedule 10c)

- Schedule 10c summarizes the anticipated amount, type and location of non-residential development for Municipality of Middlesex Centre by area.
- In accordance with forecast demand and available land supply, the percentage of forecast total non-residential growth between 2019 and 2029 by development location is summarized below.

Development Location	Percentage of Non-Residential G.F.A., 2019-2029
Ilderton	16%
Kilworth and Komoka	63%
Delaware	11%
Other Areas	10%
<i>Municipality Total</i>	<i>100%</i>



Chapter 4

Approach to the Calculation of the Charge



4. Approach to the Calculation of the Charge

4.1 Introduction

This chapter addresses the requirements of s.s.5(1) of the D.C.A., 1997 with respect to the establishment of the need for service which underpins the D.C. calculation. These requirements are illustrated schematically in Figure 4-1.

4.2 Services Potentially Involved

Table 4-1 lists the full range of municipal service categories which are provided within the Municipality.

A number of these services are defined in s.s.2(4) of the D.C.A., 1997 as being ineligible for inclusion in D.C.s. These are shown as “ineligible” on Table 4-1. In addition, two ineligible costs defined in s.s.5(3) of the D.C.A. are “computer equipment” and “rolling stock with an estimated useful life of [less than] seven years...” In addition, local roads are covered separately under subdivision agreements and related means (as are other local services). Services which are potentially eligible for inclusion in the Municipality’s D.C.s are indicated with a “Yes.”

4.3 Increase in Need for Service

The D.C. calculation commences with an estimate of “the increase in the need for service attributable to the anticipated development,” for each service to be covered by the by-law. There must be some form of link or attribution between the anticipated development and the estimated increase in the need for service. While the need could conceivably be expressed generally in terms of units of capacity, s.s.5(1)3, which requires that municipal council indicate that it intends to ensure that such an increase in need will be met, suggests that a project-specific expression of need would be most appropriate.



Figure 4-1
The Process of Calculating a D.C. under the Act

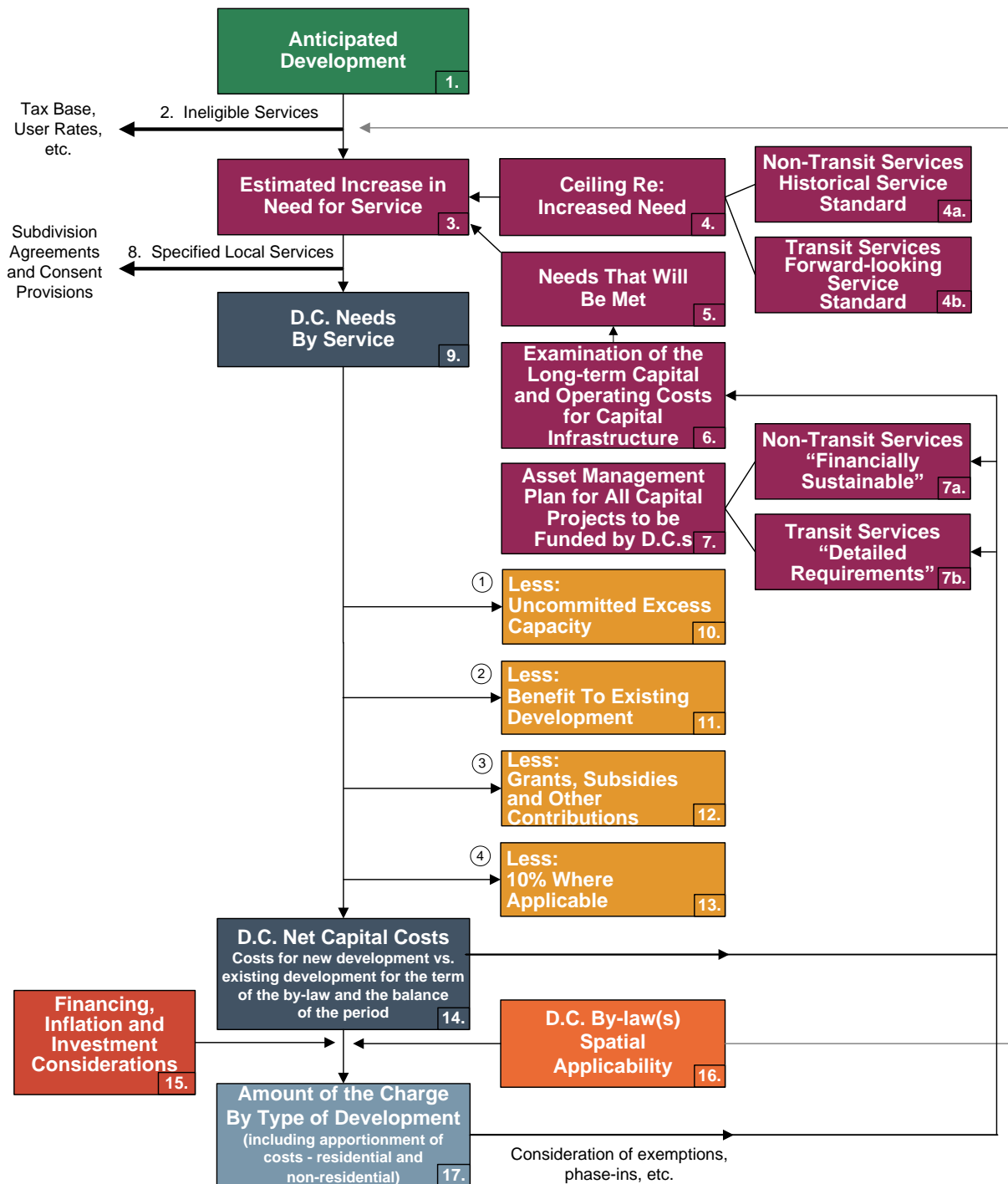




Table 4-1
Categories of Municipal Services
To Be Addressed as Part of the Calculation

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
1. Services Related to a Highway	Yes	1.1 Arterial roads	100
	Yes	1.2 Collector roads	100
	Yes	1.3 Bridges, Culverts and Roundabouts	100
	No	1.4 Local municipal roads	0
	Yes	1.5 Traffic signals	100
	Yes	1.6 Sidewalks and streetlights	100
	Yes	1.7 Active Transportation	100
2. Other Transportation Services	n/a	2.1 Transit vehicles ¹ & facilities	100
	n/a	2.2 Other transit infrastructure	100
	Yes	2.3 Municipal parking spaces - indoor	90
	Yes	2.4 Municipal parking spaces - outdoor	90
	Yes	2.5 Works Yards	100
	Yes	2.6 Rolling stock ¹	100
	n/a	2.7 Ferries	90
	n/a	2.8 Airport	90
3. Stormwater Drainage and Control Services	Yes	3.1 Main channels and drainage trunks	100
	No	3.2 Channel connections	100
	No	3.3 Retention/detention ponds	100
4. Fire Protection Services	Yes	4.1 Fire stations	100
	Yes	4.2 Fire pumpers, aerials and rescue vehicles ¹	100
	Yes	4.3 Small equipment and gear	100
5. Outdoor Recreation Services (i.e.	Ineligible	5.1 Acquisition of land for parks, woodlots and E.S.A.s	0
	Yes	5.2 Development of area municipal parks	90

¹with 7+ year life time

*same percentage as service component to which it pertains
computer equipment excluded throughout



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
Parks and Open Space)	Yes	5.3 Development of district parks	90
	Yes	5.4 Development of municipal-wide parks	90
	Yes	5.5 Development of special purpose parks	90
	Yes	5.6 Parks rolling stock ¹ and yards	90
6. Indoor Recreation Services	Yes	6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land)	90
	Yes	6.2 Recreation vehicles and equipment ¹	90
7. Library Services	Yes	7.1 Public library space (incl. furniture and equipment)	90
	Yes	7.2 Library vehicles ¹	90
	n/a	7.3 Library materials	90
8. Electrical Power Services	Ineligible	8.1 Electrical substations	0
	Ineligible	8.2 Electrical distribution system	0
	Ineligible	8.3 Electrical system rolling stock	0
9. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres	Ineligible	9.1 Cultural space (e.g. art galleries, museums and theatres)	0
	Ineligible	9.2 Tourism facilities and convention centres	0
10. Wastewater Services	Yes	10.1 Treatment plants	100
	Yes	10.2 Sewage trunks	100
	No	10.3 Local systems	0
	Yes	10.4 Vehicles and equipment ¹	100
11. Water Supply Services	Yes	11.1 Treatment plants	100
	Yes	11.2 Distribution systems	100
	No	11.3 Local systems	0
	Yes	11.4 Vehicles and equipment ¹	100
12. Waste Management Services	Ineligible	12.1 Landfill collection, transfer vehicles and equipment	0

¹with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
	Ineligible	12.2 Landfills and other disposal facilities	0
	n/a	12.3 Waste diversion facilities	90
	n/a	12.4 Waste diversion vehicles and equipment ¹	90
13. Police Services	Yes	13.1 Police detachments	100
	Yes	13.2 Police rolling stock ¹	100
	Yes	13.3 Small equipment and gear	100
14. Homes for the Aged	n/a	14.1 Homes for the aged space	90
	n/a	14.2 Vehicles ¹	90
15. Child Care	n/a	15.1 Child care space	90
	n/a	15.2 Vehicles ¹	90
16. Health	n/a	16.1 Health department space	90
	n/a	16.2 Health department vehicles ¹	90
17. Social Housing	n/a	17.1 Social Housing space	90
18. Provincial Offences Act (P.O.A.)	n/a	18.1 P.O.A. space	90
19. Social Services	n/a	19.1 Social service space	90
20. Ambulance	n/a	20.1 Ambulance station space	90
	n/a	20.2 Vehicles ¹	90
21. Hospital Provision	Ineligible	21.1 Hospital capital contributions	0
22. Provision of Headquarters for the General Administration of Municipalities and Area Municipal Boards	Ineligible	22.1 Office space	0
	Ineligible	22.2 Office furniture	0
	Ineligible	22.3 Computer equipment	0

¹with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
23. Other Services	Yes	23.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land ² and facilities, including the D.C. background study cost	0-100
	Yes	23.2 Interest on money borrowed to pay for growth-related capital	0-100

¹with a 7+ year life time

²same percentage as service component to which it pertains

Eligibility for Inclusion in the D.C. Calculation	Description
Yes	Municipality provides the service – service has been included in the D.C. calculation.
No	Municipality provides the service – service has not been included in the D.C. calculation.
n/a	Municipality does not provide the service.
Ineligible	Service is ineligible for inclusion in the D.C. calculation.



4.4 Local Service Policy

Some of the need for services generated by additional development consists of local services related to a plan of subdivision. As such, they will be required as a condition of subdivision agreements or consent conditions. The Municipality's general policy guidelines on D.C. and local service funding is detailed in Appendix D to this report.

4.5 Capital Forecast

Paragraph 7 of s.s.5(1) of the D.C.A. requires that, "the capital costs necessary to provide the increased services must be estimated." The Act goes on to require two potential cost reductions and the Regulation sets out the way in which such costs are to be presented. These requirements are outlined below.

These estimates involve capital costing of the increased services discussed above. This entails costing actual projects or the provision of service units, depending on how each service has been addressed.

The capital costs include:

- costs to acquire land or an interest therein (including a leasehold interest);
- costs to improve land;
- costs to acquire, lease, construct or improve buildings and structures;
- costs to acquire, lease or improve facilities including rolling stock (with a useful life of 7 or more years), furniture and equipment (other than computer equipment), materials acquired for library circulation, reference or information purposes;
- interest on money borrowed to pay for the above-referenced costs;
- costs to undertake studies in connection with the above-referenced matters; and
- costs of the D.C. background study.

In order for an increase in need for service to be included in the D.C. calculation, municipal council must indicate "...that it intends to ensure that such an increase in need will be met" (s.s.5(1)3). This can be done if the increase in service forms part of a Council-approved Official Plan, capital forecast or similar expression of the intention of Council (O.Reg. 82/98 s.3). The capital program contained herein reflects the



Municipality's 2014 D.C. Background Study, approved and proposed capital budgets, and master servicing/needs studies.

4.6 Treatment of Credits

Section 8 para. 5 of O.Reg. 82/98 indicates that a D.C. background study must set out, "the estimated value of credits that are being carried forward relating to the service." s.s.17 para. 4 of the same Regulation indicates that, "...the value of the credit cannot be recovered from future D.C.s," if the credit pertains to an ineligible service. This implies that a credit for eligible services can be recovered from future D.C.s. As a result, this provision should be made in the calculation, in order to avoid a funding shortfall with respect to future service needs.

The Municipality has no outstanding D.C. credit obligations for services that have been emplaced by developers on behalf of the Municipality.

4.7 Eligible Debt and Committed Excess Capacity

Section 66 of the D.C.A., 1997 states that for the purposes of developing a D.C. by-law, a debt incurred with respect to an eligible service may be included as a capital cost, subject to any limitations or reductions in the Act. Similarly, s.18 of O.Reg. 82/98 indicates that debt with respect to an ineligible service may be included as a capital cost, subject to several restrictions.

In order for such costs to be eligible, two conditions must apply. First, they must have funded excess capacity which is able to meet service needs attributable to the anticipated development. Second, the excess capacity must be "committed," that is, either before or at the time it was created, Council must have expressed a clear intention that it would be paid for by D.C.s or other similar charges. For example, this may have been done as part of previous D.C. processes.

Outstanding debt payments related to the growth-related costs of the Komoka Wellness Centre, Denfield Operations Centre, Kilworth/Komoka Wastewater Treatment Facility expansion, Ilderton (Timberwalk) Pumping Station, and Kilworth/Komoka Water Line have been included in the 2019 D.C. calculations.



4.8 Existing Reserve Funds

Section 35 of the D.C.A. states that:

“The money in a reserve fund established for a service may be spent only for capital costs determined under paragraphs 2 to 8 of subsection 5(1).”

There is no explicit requirement under the D.C.A. calculation method set out in s.s.5(1) to net the outstanding reserve fund balance as part of making the D.C. calculation; however, s.35 does restrict the way in which the funds are used in future.

The Municipality’s D.C. Reserve Funds balances, by service, are presented in Table 4-2 below. These balances have been applied against future spending requirements for all services.

Table 4-2
Municipality of Middlesex Centre
Estimated D.C. Reserve Funds Balances (as at December 31, 2018)

Service	Totals
Roads	(\$4,208,719.81)
Public Works	(\$301,931.04)
Fire Protection	(\$666,183.76)
Parks and Recreation	(\$550,517.09)
Library	\$78,623.14
Administration - Studies	(\$275,167.21)
Wastewater	(\$6,551,675.81)
Water	(\$1,264,905.11)
Total	(\$13,740,476.68)

4.9 Deductions

The D.C.A. potentially requires that five deductions be made to the increase in the need for service. These relate to:

- the level of service ceiling;
- uncommitted excess capacity;
- benefit to existing development;
- anticipated grants, subsidies and other contributions; and
- a 10% reduction for certain services.



The requirements behind each of these reductions are addressed as follows:

4.9.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need, for non-transit services, included in 4.2 does “...not include an increase that would result in the level of service (for the additional development increment) exceeding the average level of the service provided in the Municipality over the 10-year period immediately preceding the preparation of the background study...” O.Reg. 82.98 (s.4) goes further to indicate that, “...both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service.”

In many cases, this can be done by establishing a quantity measure in terms of units as floor area, land area or road length per capita, and a quality measure in terms of the average cost of providing such units based on replacement costs, engineering standards or recognized performance measurement systems, depending on circumstances. When the quantity and quality factor are multiplied together, they produce a measure of the level of service, which meets the requirements of the Act, i.e. cost per unit.

With respect to transit services, the D.C.A requires that the estimate for the increase in the need cannot exceed the planned level of service over the 10-year period immediately following the preparation of the background study. The planned level of service for transit must not include a portion of the service that is intended to benefit anticipated development after the 10-year period immediately following the preparation of the background study or excess capacity at the end of the 10-year period immediately following the preparation of the background study.

Moreover, for transit services, the background study, must also include:

- a) an assessment of ridership forecasts for all modes of transit services proposed to be funded by the D.C. 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; and



- b) an assessment of the ridership capacity for all modes of transit services proposed to be funded by the D.C. over the 10-year period immediately following the preparation of the background study.

The average service level calculation sheets for each service component in the D.C. calculation are set out in Appendix B.

4.9.2 Reduction for Uncommitted Excess Capacity

Paragraph 5 of s.s.5(1) requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Municipality's "excess capacity," other than excess capacity which is "committed" (discussed above in 4.6).

"Excess capacity" is undefined, but in this case, must be able to meet some or all of the increase in need for service, in order to potentially represent a deduction. The deduction of uncommitted excess capacity from the future increase in the need for service, would normally occur as part of the conceptual planning and feasibility work associated with justifying and sizing new facilities, e.g. if a road widening to accommodate increased traffic is not required because sufficient excess capacity is already available, then widening would not be included as an increase in need, in the first instance.

4.9.3 Reduction for Benefit to Existing Development

This step involves a further reduction to the need, by the extent to which such an increase in service would benefit existing development. The level of services cap in section 4.9.1 is related, but is not the identical requirement.

Where existing development has an adequate service level which will not be tangibly increased by an increase in service, no benefit would appear to be involved. For example, where expanding existing library facilities simply replicates what existing residents are receiving, they receive very limited (or no) benefit as a result. On the other hand, where a clear existing service problem is to be remedied, a deduction should be made accordingly.

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a municipal-wide system basis. For example, facilities of



the same type may provide different services (i.e. leisure pool vs. competitive pool), different programs (i.e. hockey vs. figure skating) and different time availability for the same service (i.e. leisure skating available on Wednesday in one arena and Thursday in another). As a result, residents will travel to different facilities to access the services they want at the times they wish to use them, and facility location generally does not correlate directly with residence location. Even where it does, displacing users from an existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.

4.9.4 Reduction for Anticipated Grants, Subsidies, and Other Contributions

This step involves reducing the capital costs necessary to provide the increased services by capital grants, subsidies and other contributions made or anticipated by Council and in accordance with various rules such as the attribution between the share related to new vs. existing development O.Reg. 82.98, s.6. Where grant programs do not allow funds to be applied to growth-related capital needs, the proceeds can be applied to the non-growth share of the project exclusively. Moreover, Gas Tax revenues are typically used to fund non-growth-related works or the non-growth share of D.C. projects, given that the contribution is not being made in respect of specific growth-related capital projects.

4.9.5 The 10% Reduction

Paragraph 8 of s.s.(1) of the D.C.A. requires that, “the capital costs must be reduced by 10 percent.” This paragraph does not apply to water supply services, wastewater services, stormwater drainage and control services, services related to a highway, police, and fire protection services. The primary services that the 10% reduction does apply to include services such as parks and recreation and libraries. The 10% is to be netted from the capital costs necessary to provide the increased services, once the other deductions have been made, as per the infrastructure cost sheets in Chapter 5.



Chapter 5

D.C. Eligible Cost Analysis by Service



5. D.C. Eligible Cost Analysis by Service

5.1 Introduction

This chapter outlines the basis for calculating D.C. eligible costs for the D.C.s to be applied on a uniform basis. The required calculation process set out in s.5(1) paragraphs 2 to 8 in the D.C.A., 1997, and described in Chapter 4, was followed in determining D.C. eligible costs.

The nature of the capital projects and timing identified in this chapter reflects Council's current intention. However, over time, municipal projects and Council priorities change and, accordingly, Council's intentions may alter and different capital projects (and timing) may be required to meet the need for services required by new growth.

5.2 Service Levels and 10-Year Capital Costs for Municipal-wide D.C. Calculation

This section evaluates the development-related capital requirements for municipal-wide services over the 10-year planning period (mid-2019 to mid-2029). Each service component is evaluated on two format sheets: the average historical 10-year level of service calculation (see Appendix B), which "caps" the D.C. amounts; and the infrastructure cost calculation, which determines the potential D.C. recoverable cost.

5.2.1 *Fire Protection Services*

There are currently five fire stations located in the Municipality, with a combined gross floor area of 21,773 square feet (sq.ft.). The Municipality also maintains 18 vehicles, 117 fully equipped firefighters, 5 sets of hydraulics, and 8 other equipment units. In total, the average level of service provided through the capital infrastructure has been \$663 per capita. In aggregate, the maximum D.C. eligible amount that could be included in the calculation of the charge for Fire Protection Services is approximately \$2.3 million.

Based on discussions with the Municipality's staff, the anticipated capital needs include the purchase of new vehicles and equipment, as well as a fire master plan, additional facility space, and the recovery of previously unfunded growth-related capital costs, including the post period amount associated with the Coldstream FireHall. The gross



capital costs for these needs total approximately \$2.7 million. Deductions of approximately \$379,000 and \$25,000 have been made to reflect post-period benefit and benefit to the existing community, respectively. In total, approximately \$2.3 in growth-related needs have been included in the calculation of the D.C.

The allocation of net growth-related costs for Fire Services between residential and non-residential development is 85% residential and 15% non-residential, based on forecast incremental population and employment growth.

5.2.2 Parks and Recreation Services

The Municipality currently maintains approximately 195 acres of developed parkland, 7.8 kilometres of trails, 18 vehicles, and 187,651 sq.ft. of indoor facility space maintained for the provision of parks and recreation services. The Municipality's level of service over the historical 10-year period averaged \$2,912 per capita. In total, the maximum D.C. eligible amount for Parks and Recreation Services over the 10-year forecast period is approximately \$10.2 million based on the established level of service.

The 10-year capital needs for Parks and Recreation Services to accommodate growth has a total gross capital cost of approximately \$11.9 million. These capital needs include development of trails and parks, design and construction costs of new indoor and outdoor recreation space, a parks and recreation master plan, repayment of debt incurred for the Wellness Centre, and the recovery of previously unfunded growth-related capital costs. Approximately \$498,000 has been deduced as a post-period benefit for the design and construction of the Civic Square, reflecting benefits to development beyond the 10-year forecast period. Moreover, deductions of \$6.8 million have been made to reflect benefit to existing development, \$364,000 for grants and other contributions attributable to new development, and \$376,000 for the statutory 10% deduction. The resulting net growth-related capital costs for inclusion in the D.C. calculation total approximately \$3.9 million.

As the predominant users of Parks and Recreation Services tend to be residents of the Municipality, the forecast growth-related costs have been allocated 95% to residential and 5% to non-residential.



5.2.3 Library Services

The Municipality's Library Services are provided through four branches, which provide a combined total 11,607 sq.ft. of library space. The average level of service over the past 10 years was approximately \$184 per capita. Based on the application of this level of service to the incremental forecast growth, the Municipality would be eligible to collect approximately \$648,000 from D.C.s for library services over the forecast period.

The capital needs required to accommodate growth have a total gross capital cost estimate of \$107,000. These costs include the design costs for the library section of the planned Ilderton Recreation Facility. A deduction of approximately \$86,000 for the benefit to existing development has been applied, reflective of the space that would be replaced at the current Ilderton Library. The statutory 10% deduction required for library services totals approximately \$2,000. Lastly, approximately \$19,000 has been deducted from the calculation of the charge in recognition of the funds collected from prior development charges and available in the D.C. reserve fund. Resultantly, no growth-related costs have been included in the calculation of the charge for the 10-year forecast period.

5.2.4 Administration Studies

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the Municipality's capital works program and to support the preparation of future D.C. background studies. The Municipality has made provisions for the inclusion of two future D.C. background studies, an Official Plan and an update to the Official Plan, two Zoning By-law reviews, an asset management plan, and the recovery of previously unfunded growth-related capital costs.

The costs of these projects total approximately \$957,000 over the 10-year forecast period, including unfunded D.C. recoverable capital costs incurred previously totaling \$275,200. A deduction of approximately \$342,000 for benefit to existing development has been applied. A further deduction of \$34,000 is provided to satisfy the 10% statutory deduction requirement. The resultant net growth-related capital costs included in the calculation of the charge total approximately \$581,000. These costs have been allocated 85% residential and 15% non-residential based on the incremental growth in population to employment for the 10-year forecast period.

PAGE 5-5

PAGE 5-6

PAGE 5-7



Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less: Other (e.g. 10% Statutory Deduction)	Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development			Total	Residential Share	Non-Residential Share
	2019-2029											85%	15%
1	Development Charges Study (2)	2019/2024	72,000	-		72,000	-		72,000	7,200	64,800	55,080	9,720
2	Official Plan	2019	150,000	-		150,000	75,000		75,000	7,500	67,500	57,375	10,125
3	Official Plan Update	2024	150,000	-		150,000	75,000		75,000	7,500	67,500	57,375	10,125
4	Zoning By-Law Review (2)	2020/2025	200,000	-		200,000	100,000		100,000	10,000	90,000	76,500	13,500
5	Asset Management Plan	2020	50,000	-		50,000	41,887		8,113	811	7,302	6,206	1,095
6	Asset Management Plan	2024	60,000	-		60,000	50,265		9,735	974	8,762	7,448	1,314
				-		-	-		-	-	-	-	-
	Recovery of Unfunded Capital		275,167	-		275,167	-		275,167	-	275,167	233,892	41,275
				-		-	-		-	-	-	-	-
				-		-	-		-	-	-	-	-
				-		-	-		-	-	-	-	-
				-		-	-		-	-	-	-	-
				-		-	-		-	-	-	-	-
				-		-	-		-	-	-	-	-
				-		-	-		-	-	-	-	-
	Total		957,167	-	-	957,167	342,152	-	615,015	33,985	581,031	493,876	87,155



5.3 Service Levels and 17-Year Capital Costs for Municipal-wide D.C. Calculation

This section evaluates the development-related capital requirements for select services related to the 17-year planning period (mid-2019 to mid-2036). Each service component is evaluated on two format sheets: the average historical 10-year level of service calculation (see Appendix B), which “caps” the D.C. amounts; and the infrastructure cost calculation, which determines the potential D.C. recoverable cost.

5.3.1 Roads

The Municipality has 475 centreline-kilometres of asphalt, tar and chip, and gravel roadways, excluding local roads. This total inventory of assets over the past 10-years results in an invested average historical level of service of \$11,835 per capita. When applied to the municipal-wide forecast population growth to buildout, a maximum D.C. eligible cost of approximately \$69.3 million could be expected to meet the future increase in needs for service.

Review of the Municipality’s roads needs for the forecast period identified approximately \$17.6 million in gross capital costs, including \$4.2 in unfunded D.C. recoverable costs previously incurred. These costs include various road reconstruction projects, as well as a anticipated road needs studies every 5-years over the forecast period.

Recognizing the benefit to existing development through the resurfacing and replacement of existing infrastructure at the time of addressing growth needs, \$8.5 million has been deducted from the gross capital costs. As a result, approximately \$9.1 million in growth-related needs have been included in the calculation of the D.C.

The allocation of net growth-related costs for Roads between residential and non-residential development is 84% residential and 16% non-residential, based on forecast incremental population and employment growth over the 17-year period.

5.3.2 Public Works

The Municipality provides public works services through the provision of approximately 75,020 square feet of facility space and 53 vehicles and pieces of equipment. The Municipality’s level of service over the historical 10-year period averaged \$1,268 per



capita. In total, the maximum D.C. eligible amount for Public Works over the 10-year forecast period is approximately \$7.4 million based on the established level of service.

The capital needs required to accommodate growth have a total gross capital cost estimate of \$7.4 million. These capital needs include the purchase of new vehicles, additional storage space, repayment of debt incurred for the Operations Centre, and the recovery of previously unfunded growth-related capital costs. A deduction of approximately \$3.0 million for the benefit to existing development has been applied. The resulting net growth-related capital costs for inclusion in the D.C. calculation total approximately \$4.4 million.

The allocation of net growth-related costs for Public Works between residential and non-residential development is 84% residential and 16% non-residential, based on forecast incremental population and employment growth over the 17-year period.



Infrastructure Costs Covered in the D.C. Calculation – Roads

Prj .No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 84%	Non-Residential Share 16%
	2019-2036										
1	Ilderton George St. and King St. Intersection	2025	41,000	-		41,000	-		41,000	34,440	6,560
2	Kilworth-Komoka Oxbow Dr. W Rural (Amiens to 2000m east)	2020-2022	191,800	-		191,800	115,080		76,720	64,445	12,275
3	Oxbow Dr. W Urban (Komoka Rd to 375m west)	2020-2022	448,300	-		448,300	268,980		179,320	150,629	28,691
4	Oxbow Dr. E Rural (Union to Coldstream)	2020-2022	2,959,000	-		2,959,000	2,367,200		591,800	497,112	94,688
5	Westbrook Dr (Stephen Moore to Kilworth Park Dr)	2024	1,500,000	-		1,500,000	900,000		600,000	504,000	96,000
6	Jefferies Rd (Glendon to South Extent) - Upgrade from T&C to Paved	2024	1,000,000	-		1,000,000	600,000		400,000	336,000	64,000
7	Coldstream Rd (Oxbow Dr to Glendon Dr)	2027	2,000,000	-		2,000,000	1,200,000		800,000	672,000	128,000
8	Glendon Drive (2 to 4 lanes, sidewalks, EA)	2025	4,993,824	-		4,993,824	2,996,294		1,997,530	1,677,925	319,605
9	Road Needs Study	2019, 2024, 2029, 2034	240,000	-		240,000	58,476		181,524	152,480	29,044
	Recovery of Unfunded Capital		4,208,720	-		4,208,720	-		4,208,720	3,535,325	673,395
	Total		17,582,644	-	-	17,582,644	8,506,031	-	9,076,613	7,624,355	1,452,258



Infrastructure Costs Covered in the D.C. Calculation – Public Works

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 84%	Non-Residential Share 16%
	2019-2036										
1	Operations Centre Debt Payments	2019-2032	3,646,350	-		3,646,350	2,986,900		659,451	553,938	105,512
			-	-		-	-		-	-	-
2	New Tandem Axle Truck	2025	275,000	-		275,000	-		275,000	231,000	44,000
3	New Sidewalk Plow Machine	2025	200,000	-		200,000	-		200,000	168,000	32,000
4	New 1 Ton Truck		125,000	-		125,000	-		125,000	105,000	20,000
5	New 1/2 Ton Truck		50,000	-		50,000	-		50,000	42,000	8,000
6	Additional Vehicles (7)		2,700,550	-		2,700,550	-		2,700,550	2,268,462	432,088
	Storage Shed (Denfield)	2020	100,000	-		100,000	-		100,000	84,000	16,000
			-	-		-	-		-	-	-
	Recovery of Unfunded Capital		301,931	-		301,931	-		301,931	253,622	48,309
			-	-		-	-		-	-	-
	Total		7,398,831	-	-	7,398,831	2,986,900	-	4,411,931	3,706,022	705,909



5.4 Service Levels and Urban Buildout Capital Costs for Area-Specific D.C. Calculation

This D.C. Background Study provides for the uniform application of wastewater and water charges within the municipally serviced urban area. The anticipated development-related capital requirements for these services have been considered over the urban buildout forecast period.

5.4.1 Wastewater Services

The capital plan for wastewater services largely reflects updated capital cost estimates for projects previously contained in the 2014 D.C. Background Study. A number of additional projects have been identified, including an upgrade of the forcemain and sanitary lines in Komoka/Kilworth and pump station capacity and condition assessment in Ilderton. Furthermore, the capital plan includes a recovery of previously unfunded amounts, and updated financing costs.

In total, the gross capital cost estimates amount to \$41.9 million, including \$6.6 million in unfunded D.C. recoverable costs previously incurred and \$4.4 million in additional financing costs for D.C. recoverable capital costs. Approximately \$9.1 million has been deducted as post period benefit reflecting the oversized capacity relative to the growth forecast estimates for wastewater services. A further deduction of \$4.2 million for benefit to existing development has been provided. The net capital costs identified for inclusion in the calculation total approximately \$28.6 million.

These costs have been allocated 92% residential and 8% non-residential, based on contributing equivalent-population flows underlying the capital needs.

5.4.2 Water Services

Similar to wastewater services, the capital plan for water services largely reflects updated capital cost estimates for projects previously contained in the 2014 D.C. Background Study. A number of additional projects have been identified, including a study to consider servicing option for Arva, and an assessment of pump capacity due to future development in Komoka. Furthermore, the capital plan includes a recovery of previously unfunded amounts, and financing costs for D.C. recoverable capital costs.



In total, the gross capital cost estimates amount to \$10.2 million, including \$1.3 million in unfunded D.C. recoverable costs previously incurred and \$0.6 million in additional financing costs for D.C. recoverable capital costs. Approximately \$3.7 million has been deducted as post period benefit reflecting the oversized capacity relative to the growth forecast estimates for wastewater services. Deductions of \$2.6 million for benefit to existing development and \$0.1 million for anticipated grants has been observed. The net capital costs identified for inclusion in the calculation total approximately \$3.9 million.

These costs have been allocated 92% residential and 8% non-residential, based on contributing equivalent-population flows underlying the capital costs.



Infrastructure Costs Covered in the D.C. Calculation – Wastewater Services

Prj.No	Increased Service Needs Attributable to Anticipated Development	Service Area	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2019-Urban Buildout										92%	8%
1	Existing Komoka WWTF Costs-unfunded	Kilworth/Komoka	2019	131,250	-		131,250	100,120		31,130	28,639	2,490
2	Phase I WWTF Upgrades & Studies	Kilworth/Komoka	2019-2038	8,282,641	-		8,282,641	-		8,282,641	7,620,029	662,611
3	Phase II WWTF Upgrades	Delaware	2026	3,904,500	970,986		2,933,514	-		2,933,514	2,698,833	234,681
4	Komoka Pumping Station Upgrades	Kilworth/Komoka	2021	400,000	-		400,000	228,960		171,040	157,357	13,683
5	Komoka Forcemain and Sanitary Sewers		2021	1,500,000	429,874		1,070,126	858,600		211,526	194,603	16,922
6	Kilworth Sanitary Sewers (trunk and gravity)	Kilworth/Komoka	2021	400,000	-		400,000	118,480		281,520	258,998	22,522
7	Kilworth Storm Sewers	Kilworth/Komoka	2022	378,400	-		378,400	-		378,400	348,128	30,272
8	Komoka PS Upgrades Design Studies	Kilworth/Komoka	2021	350,000	-		350,000	200,340		149,660	137,687	11,973
9	Kilworth Pumping Station and Forcemain	Kilworth/Komoka	2019	1,887,846	-		1,887,846	396,448		1,491,398	1,372,086	119,312
10	Delaware PS & Forcemain	Delaware	2026	3,990,100	1,588,367		2,401,733	1,995,050		406,683	374,149	32,535
11	Misc. Wastewater Trunk Sewers	Delaware	2026	99,500	79,217		20,283	-		20,283	18,660	1,623
12	Drainage Study - unfunded	Delaware	2014	50,000	-		50,000	-		50,000	46,000	4,000
13	WWTF and Expansion - unfunded	Ilderton	2014	1,923,386	-		1,923,386	-		1,923,386	1,769,515	153,871
14	WWTF Expansion - Phase 1 (unfunded)	Ilderton	2019	100,000	-		100,000	-		100,000	92,000	8,000
15	WWTF Expansion - Phase 2	Ilderton		4,290,000	4,290,000		-	-		-	-	-
16	Ilderton West Pumping Station and Forcemain	Ilderton West	2015	1,044,895	-		1,044,895	342,725		702,169	645,996	56,174
17	WWC Pump Station Capacity and Condition Assessment - EA study	Ilderton	2020-2022	300,000	-		300,000	-		300,000	276,000	24,000
18	Glendon Drive Wastewater Main (Highway 402 E to W of Komoka Rd)			1,695,000	1,695,000		-	-		-	-	-
19	Arva WWTF EA	Arva	2019	300,000	-		300,000	-		300,000	276,000	24,000
	Recovery of Unfunded Amounts			6,551,676	-		6,551,676	-		6,551,676	6,027,542	524,134
	Financing Costs			4,362,162	-		4,362,162	-		4,362,162	4,013,189	348,973
	Total			41,941,354	9,053,444	-	32,887,910	4,240,723	-	28,647,187	26,355,412	2,291,775



Infrastructure Costs Covered in the D.C. Calculation – Water Services

Prj.No	Increased Service Needs Attributable to Anticipated Development	Service Area	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
2019-Urban Buildout												
1	Kilworth/Komoka Water Line - Debt Repayment (growth share)	Kilworth/Komoka and Delaware		1,700,612	328,497		1,372,115	-		1,372,115	1,262,346	109,769
2	On-Line B.P.S.	Delaware	2019	649,945	258,728		391,217	324,972		66,244	60,945	5,300
3	Delaware / Komoka Interchange : New watermain transmission Line install between Delaware & Komoka	Delaware	2019	1,535,330	611,179		924,151	767,665		156,485	143,967	12,519
4	Delaware / Komoka Interchange: Delaware standpipe (storage)	Delaware	2019	2,014,300	845,140		1,169,160	952,771	104,622	111,767	102,826	8,941
5	Delaware / Komoka Interchange: Pressure Zone Separation from Arva Reservior and Delaware Re-chlorination station	Delaware	2019	456,100	181,563		274,537	228,050		46,487	42,768	3,719
6	Pumping Station Pump Upgrades - unfunded	Ilderton		146,819	-		146,819	-		146,819	135,073	11,746
7	Undertake Class EA or Development Study to detemine servicing option	Arva	2020	300,000	-		300,000	300,000		-	-	-
8	Development study or Master Servicing Plan to see the need for pump capacity due to development Northwest & Southwest	Komoka	2021	454,100	304,344		149,756	-		149,756	137,776	11,981
9	Glendon Drive Water Main (Highway 402 E to W of Komoka Rd)			1,130,000	1,130,000		-	-		-	-	-
	Recovery of Unfunded Amounts			1,264,905	-		1,264,905	-		1,264,905	1,163,713	101,192
	Financing Costs			554,935	-		554,935	-		554,935	510,540	44,395
	Total			10,207,045	3,659,451	-	6,547,595	2,573,459	104,622	3,869,514	3,559,953	309,561



Chapter 6

D.C. Calculation



6. D.C. Calculation

This chapter presents the calculation of the development charge for residential and non-residential types of development. Table 6-1 to Table 6-3 calculate the proposed D.C. for the growth-related capital costs identified in Chapter 5. Table 6-1 presents the Area-Specific D.C. calculation for Wastewater and Water-related services over the urban buildout planning horizon. Table 6-2 presents the Municipal-wide D.C. calculation for Roads and Public Works over the 17-year period. Table 6-3 presents the Municipal-wide D.C. calculation for all remaining services over the 10-year planning horizon.

As provided in the Chapter 2, the Municipality currently imposes residential charges by dwelling unit types, with charges differentiated by occupancy and built form. However, for non-residential development, the Municipality calculated a uniform non-residential charge and provided partial exemptions for industrial and agricultural development from the payment of this charge. As a result of this policy the Municipality is obligated to fund the D.C. exemptions for industrial development (\$36.33/sq.mt.) and agricultural development (\$23.14/sq.mt.) types from non-D.C. sources (i.e. general levy or user fees).

As part of the undertaking, Watson considered alternative calculation methodologies to address the exemption funding implications. As a result, two calculation methodologies have been considered in the D.C. Background Study for Council's consideration. The first option, as provided in this Chapter, calculates separate D.C.s for Agricultural, Industrial, and Other Non-residential (i.e. commercial and institutional) development types, based on the anticipated capital needs and development densities. The second option, which maintains the uniform rate calculation methodology for all non-residential developments is provided in detail in Appendix E. The results of these two calculation options and impacts are summarized in this chapter.

The calculation for residential development is generated on a per capita basis and is based upon four forms of housing types (single and semi-detached, apartments 2+ bedrooms, bachelor and 1-bedroom apartments, and other multiples). As noted above, the non-residential development charge has been calculated on a per square metre of gross floor area basis for Agricultural, Industrial, and Other Non-Residential development.



Table 6-4 summarizes the calculated schedule of charges, reflecting the maximum D.C.s by residential dwelling type and per sq.m. of G.F.A. for non-residential development.

Table 6-5 compares the Municipality's existing residential charges to the charges proposed herein (Table 6-4). The calculated charges are \$21,788 for a single detached residential dwelling unit in the urban area, which corresponds to a 12% (\$2,304) increase relative to the current charge of \$19,484.

Table 6-6 compares the Municipality's existing non-residential charges per square metre of G.F.A. to the calculated differentiated charges (Option 1), and calculated uniform charges (Option 2) per square metre of G.F.A.

Under Option 1 for the non-residential charges, the calculated charge for "Other Non-residential" developments would be \$87.00 per square metre, which represents an increase of \$26.64 per square metre, or 44% relative to current rates. The calculated charge for an industrial development would be \$45.23, which represents an increase of \$21.09 per square metre or an increase of 87% relative to current rates. The calculated charge for an agricultural development would be \$10.28, which represents an increase of \$6.60 per square metre or an increase of 179% relative to current rates. These charges reflect full cost recovery of the D.C. recoverable costs (i.e. no exemption funding from non-D.C. sources).

Under Option 2 for the non-residential charges, the calculated uniform charge per square metre of all non-residential G.F.A. would be \$65.64, which represents an increase of \$5.28 per square metre, or 9% relative to current rates. The D.C.s provided for industrial and agricultural development would maintain the 2014 D.C. By-law partial exemptions. These exemptions would have to be funded from non-D.C. sources over the duration of the by-law (i.e. 5 years). If this practice was to be maintained, the estimated amount of exemption funding that the Municipality would need to provide from non-D.C. sources would total approximately \$118,000 annually.



Table 6-1
Area-Specific Services D.C. Calculation
2019-Buildout (Urban)

SERVICE	2019\$ D.C.-Eligible Cost			2019\$ D.C.-Eligible Cost		
	Residential	Non-Residential		S.D.U.	per m ²	
		Industrial	Other Non-Residential		Industrial	Other Non-Residential
1. Wastewater	\$ 26,355,412	\$ 783,930	\$ 1,507,845	\$ 10,385	\$ 15.51	\$ 31.50
2. Water	\$ 3,559,953	\$ 105,889	\$ 203,672	\$ 1,403	\$ 2.10	\$ 4.25
Total D.C.-Eligible Capital Cost	\$ 29,915,365	\$ 889,819	\$ 1,711,517	\$ 11,788	\$ 17.61	\$ 35.75
Buildout Gross Population/GFA Growth (sq.ft.)	8,037	50,530	47,878			
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$ 3,722.21	\$ 17.61	\$ 35.75			
<u>By Residential Unit Type</u>	<u>P.P.U.</u>					
Single and Semi-Detached Dwelling	3.167	\$ 11,788				
Apartments - 2 Bedrooms +	2.028	\$ 7,549				
Apartments - Bachelor and 1 Bedroom	1.278	\$ 4,757				
Other Multiples	2.079	\$ 7,738				



Table 6-2
Municipal-wide Services D.C. Calculation
2019-2036

SERVICE	2019\$ D.C.-Eligible Cost			2019\$ D.C.-Eligible Cost		
	Residential	Non-Residential		S.D.U.	per m ²	
		Industrial	Other Non-Residential		Industrial	Other Non-Residential
3. Roads	\$ 7,624,355	\$ 495,656	\$ 956,602	\$ 3,509	\$ 11.49	\$ 23.11
4. Public Works	\$ 3,706,022	\$ 240,927	\$ 464,982	\$ 1,705	\$ 5.59	\$ 11.24
Total D.C.-Eligible Capital Cost	\$ 11,330,377	\$ 736,583	\$ 1,421,584	\$ 5,214	\$ 17.08	\$ 34.35
17-Year Gross Population/GFA Growth (sq.m.)	6,882	43,116	41,388			
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$ 1,646.38	\$ 17.08	\$ 34.35			
<u>By Residential Unit Type</u>	<u>P.P.U.</u>					
Single and Semi-Detached Dwelling	3.167	\$ 5,214				
Apartments - 2 Bedrooms +	2.028	\$ 3,339				
Apartments - Bachelor and 1 Bedroom	1.278	\$ 2,104				
Other Multiples	2.079	\$ 3,423				



Table 6-3
Municipal-wide Services D.C. Calculation
2019-2029

SERVICE	2019\$ D.C.-Eligible Cost			2019\$ D.C.-Eligible Cost		
	Residential	Non-Residential		S.D.U.	per m ²	
		Industrial	Other Non-Residential		Industrial	Other Non-Residential
5. Fire Protection	\$ 1,983,162	\$ 118,685	\$ 231,284	\$ 1,528	\$ 5.04	\$ 10.14
6. Parks and Recreation	\$ 3,736,610	\$ 99,888	\$ 96,775	\$ 2,878	\$ 4.24	\$ 4.24
7. Library	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8. Administration - Studies	\$ 493,876	\$ 29,557	\$ 57,598	\$ 380	\$ 1.26	\$ 2.52
Total D.C.-Eligible Capital Cost	\$ 6,213,648	\$ 248,130	\$ 385,657	\$ 4,786	\$ 10.54	\$ 16.90
10-Year Gross Population/GFA Growth (sq.ft.)	4,112	23,551	22,817			
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$ 1,511.10	\$ 10.54	\$ 16.90			
<u>By Residential Unit Type</u>	<u>P.P.U.</u>					
Single and Semi-Detached Dwelling	3.167	\$ 4,786				
Apartments - 2 Bedrooms +	2.028	\$ 3,065				
Apartments - Bachelor and 1 Bedroom	1.278	\$ 1,931				
Other Multiples	2.079	\$ 3,142				



Table 6-4
Schedule of Calculated D.C.s

Service	RESIDENTIAL				NON-RESIDENTIAL (per m ² of Gross Floor Area)		
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Other Non-residential	Agricultural Use	Industrial
Municipal Wide Services:							
Roads	\$ 3,509	\$ 2,247	\$ 1,416	\$ 2,304	\$ 23.11	\$ 4.28	\$ 11.49
Public Works	\$ 1,705	\$ 1,092	\$ 688	\$ 1,119	\$ 11.24	\$ 2.08	\$ 5.59
Fire Protection	\$ 1,528	\$ 978	\$ 617	\$ 1,003	\$ 10.14	\$ 1.88	\$ 5.04
Parks and Recreation	\$ 2,878	\$ 1,843	\$ 1,161	\$ 1,889	\$ 4.24	\$ 1.58	\$ 4.24
Library	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration - Studies	\$ 380	\$ 243	\$ 153	\$ 249	\$ 2.52	\$ 0.47	\$ 1.26
Total Municipal Wide Services	\$ 10,000	\$ 6,403	\$ 4,035	\$ 6,564	\$ 51.25	\$ 10.28	\$ 27.62
Urban Services							
Wastewater	\$ 10,385	\$ 6,650	\$ 4,191	\$ 6,817	\$ 31.50	\$ -	\$ 15.51
Water	\$ 1,403	\$ 898	\$ 566	\$ 921	\$ 4.25	\$ -	\$ 2.10
Total Urban Services	\$ 11,788	\$ 7,548	\$ 4,757	\$ 7,738	\$ 35.75	\$ -	\$ 17.61
GRAND TOTAL RURAL AREA	\$ 10,000	\$ 6,403	\$ 4,035	\$ 6,564	\$ 51.25	\$ 10.28	\$ 27.62
GRAND TOTAL URBAN AREA	\$ 21,788	\$ 13,951	\$ 8,792	\$ 14,302	\$ 87.00	\$ 10.28	\$ 45.23



Table 6-5
Comparison of Current and Calculated D.C.s

Service	Single and Semi-Detached Dwelling		Apartments - 2 Bedrooms +		Apartments - Bachelor and 1 Bedroom		Other Multiples	
	Current	Calculated	Current	Calculated	Current	Calculated	Current	Calculated
Municipal Wide Services:								
Roads	2,277	3,509	1,291	2,247	957	1,416	1,596	2,304
Public Works	586	1,705	331	1,092	246	688	410	1,119
Fire Protection	1,392	1,528	789	978	586	617	976	1,003
Parks and Recreation	2,273	2,878	1,289	1,843	956	1,161	1,593	1,889
Library	71	-	40	-	31	-	50	-
Administration - Studies	317	380	181	243	134	153	223	249
Total Municipal Wide Services	6,916	10,000	3,921	6,403	2,910	4,035	4,848	6,564
Area Specific Services:								
Wastewater	10,870	10,385	6,163	6,650	4,573	6,817	7,619	6,817
Water	1,698	1,403	963	898	714	921	1,191	921
Total Area Specific Services	12,568	11,788	7,126	7,548	5,287	7,738	8,810	7,738
Grand Total - Urban Area	19,484	21,788	11,047	13,951	8,197	11,773	13,658	14,302



Table 6-6
Comparison of Current and Calculated D.C.s

Service	Other Non-residential			Agricultural Use			Industrial		
	Current	Calculated Uniform (Option 2)	Calculated Differentiated (Option 1)	Current	Calculated Uniform (with partial exemption) (Option 2)	Calculated Differentiated (Option 1)	Current	Calculated Uniform (with partial exemption) (Option 2)	Calculated Differentiated (Option 1)
Municipal Wide Services:									
Roads	\$ 11.47	\$ 17.19	\$ 23.11	\$ 1.95	\$ 2.92	\$ 4.28	\$ 4.59	\$ 6.88	\$ 11.49
Public Works	\$ 2.94	\$ 8.35	\$ 11.24	\$ -	\$ -	\$ 2.08	\$ 1.18	\$ 3.34	\$ 5.59
Fire Protection	\$ 6.92	\$ 7.55	\$ 10.14	\$ 1.73	\$ 1.89	\$ 1.88	\$ 2.77	\$ 3.02	\$ 5.04
Parks and Recreation	\$ 3.79	\$ 4.24	\$ 4.24	\$ -	\$ -	\$ 1.58	\$ 1.52	\$ 1.70	\$ 4.24
Library	\$ 0.12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.05	\$ -	\$ -
Administration - Studies	\$ 1.58	\$ 1.88	\$ 2.52	\$ -	\$ -	\$ 0.47	\$ 0.63	\$ 0.75	\$ 1.26
Total Municipal Wide Services	\$ 26.82	\$ 39.21	\$ 51.25	\$ 3.68	\$ 4.81	\$ 10.28	\$ 10.73	\$ 15.68	\$ 27.62
Area Specific Services:									
Wastewater	\$ 29.01	\$ 23.28	\$ 31.50	\$ -	\$ -	\$ -	\$ 11.60	\$ 9.31	\$ 15.51
Water	\$ 4.53	\$ 3.15	\$ 4.25	\$ -	\$ -	\$ -	\$ 1.81	\$ 1.26	\$ 2.10
Total Area Specific Services	\$ 33.54	\$ 26.43	\$ 35.75	\$ -	\$ -	\$ -	\$ 13.42	\$ 10.57	\$ 17.61
Grand Total - Urban Area	\$ 60.36	\$ 65.64	\$ 87.00	\$ 3.68	\$ 4.81	\$ 10.28	\$ 24.14	\$ 26.26	\$ 45.23



Chapter 7

D.C. Policy Recommendations and D.C. By-Law Rules



7. D.C. Policy Recommendations and D.C. Policy Rules

7.1 Introduction

This chapter outlines the D.C. policy recommendations and by-law rules.

s.s.5(1)9 states that rules must be developed:

“...to determine if a development charge is payable in any particular case and to determine the amount of the charge, subject to the limitations set out in subsection 6.”

Paragraph 10 of subsection 5(1) goes on to state that the rules may provide for exemptions, phasing in and/or indexing of D.C.s.

s.s.5(6) establishes the following restrictions on the rules:

- the total of all D.C.s that would be imposed on anticipated development must not exceed the capital costs determined under 5(1) 2-8 for all services involved;
- if the rules expressly identify a type of development, they must not provide for it to pay D.C.s that exceed the capital costs that arise from the increase in the need for service for that type of development; however, this requirement does not relate to any particular development;
- if the rules provide for a type of development to have a lower D.C. than is allowed, the rules for determining D.C.s may not provide for any resulting shortfall to be made up via other development; and
- with respect to “the rules,” subsection 6 states that a D.C. by-law must expressly address the matters referred to above re s.s.5(1) para. 9 and 10, as well as how the rules apply to the redevelopment of land.

7.2 D.C. By-law Structure

It is recommended that:

- the Municipality impose a uniform municipal-wide D.C. calculation for all municipal services, except for water and wastewater services



- D.C.s for water and wastewater services be imposed in the municipal serviced area only; and
- one municipal D.C. by-law be used for all services.

7.3 D.C. By-law Rules

The following sets out the recommended rules governing the calculation, payment and collection of D.C.s in accordance with subsection 6 of the D.C.A., 1997.

It is recommended that the following provides the basis for the D.C.s:

7.3.1 *Payment in any Particular Case*

In accordance with the D.C.A., 1997, s.2(2), a D.C. be calculated, payable and collected where the development requires one or more of the following:

- a) the passing of a zoning by-law or of an amendment to a zoning by-law under Section 34 of the *Planning Act*;
- b) the approval of a minor variance under Section 45 of the *Planning Act*;
- c) a conveyance of land to which a by-law passed under Section 50(7) of the *Planning Act* applies;
- d) the approval of a plan of subdivision under Section 51 of the *Planning Act*;
- e) a consent under Section 53 of the *Planning Act*;
- f) the approval of a description under Section 50 of the *Condominium Act*; or
- g) the issuing of a building permit under the *Building Code Act* in relation to a building or structure.

7.3.2 *Determination of the Amount of the Charge*

The following conventions be adopted:

1. Costs allocated to residential uses will be assigned to different types of residential units based on the average occupancy for each housing type constructed during the previous 10 years. Costs allocated to non-residential uses will be assigned to industrial, agricultural, and other non-residential uses based on the G.F.A. constructed.



2. Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance. These are summarized in Chapter 5 herein.

7.3.3 Application to Redevelopment of Land (Demolition and Conversion)

If a development involves the demolition and replacement of a building or structure on the same site, or the conversion from one principal use to another, the developer shall be allowed a credit equivalent to:

- the number of dwelling units demolished/converted multiplied by the applicable residential D.C. in place at the time the D.C. is payable; and/or
- the G.F.A. of the building demolished/converted multiplied by the current non-residential D.C. in place at the time the D.C. is payable.

The demolition credit is allowed only if the land was improved by occupied structures and if the demolition permit related to the site was issued less than five (5) years prior to the issuance of a building permit.

No credit shall be given with respect to the redevelopment, conversions, demolition, or change of use of a building or structure or part thereof where the existing building or structure or part thereof would have been exempt from D.C.s in accordance with the active by-law. The credit can, in no case, exceed the amount of D.C.s that would otherwise be payable.

7.3.4 Exemptions (full or partial)

Statutory exemptions

- Industrial building additions of up to and including 50% of the existing G.F.A. (defined in O.Reg. 82/98, s.1) of the building; for industrial building additions which exceed 50% of the existing G.F.A., only the portion of the addition in excess of 50% is subject to D.C.s (s.4(3));
- Buildings or structures owned by and used for the purposes of any Municipality, local board or Board of Education (s.3); and



- Residential development that results in only the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (based on prescribed limits set out in s.2 of O.Reg. 82/98).

Non-statutory exemptions

- Partial exemption for industrial development, with the amount payable calculated at 40% of the calculated Other Non-Residential charge; and
- Partial exemption for non-residential agricultural uses, with the amount payable calculated at 11.29% of the Roads Services charge and 23.05% of the Fire Protection Services charge.

The proposed D.C. By-law will come into effect at the time of By-law passage, and no transition policy has been proposed.

7.3.5 Timing of Collection

The D.C.s for all services are payable upon issuance of a building permit for each dwelling unit, building, or structure, subject to early or late payment agreements entered into by the Municipality and an owner under s.27 of the D.C.A., 1997.

7.3.6 Indexing

All D.C.s will be subject to mandatory indexing annually on January 1st of each year, in accordance with provisions under the D.C.A.

7.4 Other D.C. By-law Provisions

7.4.1 Categories of Services for Reserve Fund and Credit Purposes

It is recommended that the Municipality's D.C. collections be contributed into eight (8) separate reserve funds, including: Roads, Public Works; Fire Protection; Parks and Recreation; Library; Administration; Water; and Wastewater.

7.4.2 By-law In-force Date

The proposed by-law under D.C.A., 1997 will come into force on the date of by-law passage.



7.4.3 Minimum Interest Rate Paid on Refunds and Charged for Inter-Reserve Fund Borrowing

The minimum interest rate is the Bank of Canada rate on the day on which the by-law comes into force (as per s.11 of O.Reg. 82/98).

7.5 Other Recommendations

It is recommended that Council:

“Approve the capital project listing set out in Chapter 5 of the D.C. Background Study dated May 17, 2019 (as amended), subject to further annual review during the capital budget process;”

“Approve the D.C. Background Study dated May 17, 2019 (as amended)”

“Determine that no further public meeting is required;” and

“Approve the D.C. By-law as set out in Appendix F.”



Chapter 8

Asset Management Plan



8. Asset Management Plan

8.1 Introduction

The changes to the D.C.A. (new section 10(c.2)) in 2016 require that the background study must include an Asset Management Plan (A.M.P) related to new infrastructure. Section 10 (3) of the D.C.A. provides:

The A.M.P. 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 the prescribed manner.**

In regard to the above, subsection 8(3) of the Regulations was amended to include specific detailed requirements for transit services A.M.P.s. As contained in this subsection there are specific requirements to the content of the A.M.P., particularly the state of local infrastructure, proposed level of service, asset management strategy, and financial strategy. For all services except transit, there are no prescribed requirements at this time, thus requiring municipalities to define the approach to include within the background study.

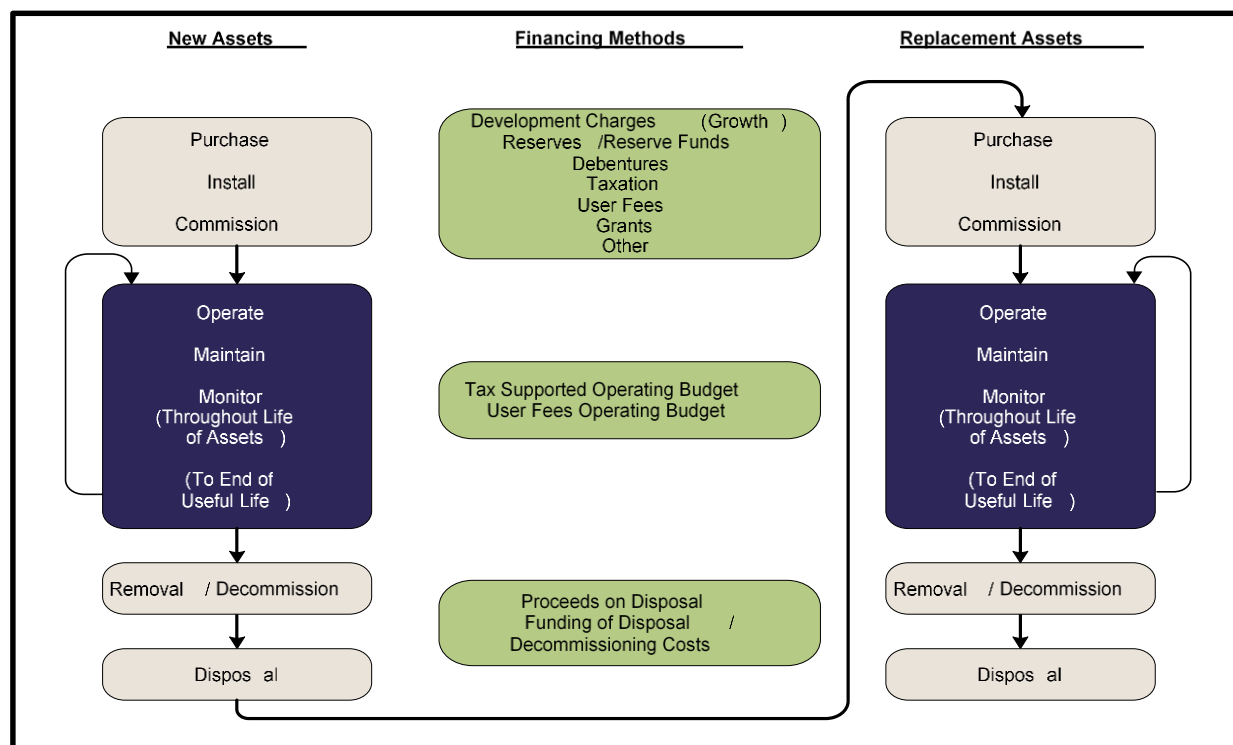
At a broad level, the A.M.P. provides for the long-term investment in an asset over its entire useful life along with the funding. The schematic below identifies the costs for an asset through its entire lifecycle. For growth-related works, the majority of capital costs will be funded by the D.C. Non-growth-related expenditures will then be funded from non-D.C. revenues as noted below. During the useful life of the asset, there will be minor maintenance costs to extend the life of the asset along with additional program related expenditures to provide the full services to the residents. At the end of the life of the asset, it will be replaced by non-D.C. financing sources.

In 2012, the Province developed Building Together: Guide for Municipal Asset Management Plans which outlines the key elements for an A.M.P., as follows:



State of local infrastructure: asset types, quantities, age, condition, financial accounting valuation and replacement cost valuation.

Desired levels of service: defines levels of service through performance measures and discusses any external trends or issues that may affect expected levels of service or the municipality's ability to meet them (for example, new accessibility standards, climate change impacts).



Asset management strategy: the asset management strategy is the set of planned actions that will seek to generate the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.

Financing strategy: having a financial plan is critical for putting an A.M.P. into action. By having a strong financial plan, municipalities can also demonstrate that they have made a concerted effort to integrate the A.M.P. with financial planning and municipal budgeting, and are making full use of all available infrastructure financing tools.

The above provides for the general approach to be considered by Ontario municipalities. At this time, there is not a mandated approach for municipalities hence leaving discretion to individual municipalities as to how they plan for the long-term



replacement of their assets. In 2013, the Municipality completed an A.M.P. for all assets. The 2013 A.M.P. is now outdated and the Municipality is in the process of updating the plan, with anticipated completion by April/May 2020. As a result, the asset management requirement for this D.C. has been undertaken independently of the 2013 A.M.P.

In recognition to the schematic in Section 8.1, the following table (presented in 2019\$) has been developed to provide the annualized expenditures and revenues associated with new growth. Note that the D.C.A. does not require an analysis of the non-D.C. capital needs or their associated operating costs so these are omitted from the table below. Furthermore, the following does not represent a fiscal impact assessment (including future tax/rate increases) but provides insight into the potential affordability of the new assets:

1. The non-D.C. recoverable portion of the projects which will require financing from municipal financial resources (i.e. taxation, rates, fees, etc.). This amount has been presented on an annual debt charge amount based on 20-year financing, totalling \$2.2 million.
2. Lifecycle costs for the 2019 D.C. capital works have been presented based on a sinking fund basis. The assets have been considered over their estimated useful lives.
3. Incremental operating costs for the D.C. services (only) have been included.
4. Total incremental costs attributable to the growth-related expenditures (i.e. annual lifecycle costs and incremental operating costs) total approximately \$1.0 million.
5. The resultant total annualized expenditures are approximately \$3.2 million.
6. Consideration was given to the potential new taxation and user fee revenues which will be generated as a result of new growth. These revenues will be available to finance the expenditures above. The new operating revenues are \$9.2 million. This amount, totalled with the existing operating revenues of \$42.3 million, provide annual revenues of approximately \$51.5 million by the end of the forecast period.



7. The incremental operating revenues of \$9.2 million will adequately cover the incremental growth-related expenditures of approximately \$1.0 million and \$2.2 million of non-D.C. recoverable expenditures.
8. In consideration of the above, the capital plan is deemed to be financially sustainable.

Table 8-1
Municipality of Middlesex Centre
Asset Management – Future Expenditures and Associated Revenues (2019\$)

	Buildout (Total)
Expenditures (Annualized)	
Annual Debt Payment on Non-Growth Related Capital ¹	1,234,960
Annual Debt Payment on Post Period Capital ²	950,533
Annual Lifecycle - Municipal-wide Services	501,363
Annual Lifecycle - Area Specific Services	153,221
Incremental Operating Costs (for D.C. Services)	\$386,630
Total Expenditures	\$3,226,707
Revenue (Annualized)	
Total Existing Revenue ³	\$42,284,247
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)	\$9,180,398
Total Revenues	\$51,464,645

¹ Non-Growth Related component of Projects including 10% mandatory deduction on soft services

² Interim Debt Financing for Post Period Benefit

³ As per Sch. 10 of FIR



Chapter 9

By-Law Implementation



9. By-Law Implementation

9.1 Public Consultation

This chapter addresses the mandatory, formal public consultation process (subsection 9.1.2), as well as the optional, informal consultation process (subsection 9.1.3). The latter is designed to seek the co-operation and involvement of those involved, in order to produce the most suitable policy. Section 9.2 addresses the anticipated impact of the D.C. on development, from a generic viewpoint.

9.1.1 Public Meeting of Council

Section 12 of the D.C.A., 1997 indicates that before passing a D.C. by-law, Council must hold at least one public meeting, giving at least 20 clear days' notice thereof, in accordance with the Regulation. Council must also ensure that the proposed by-law and background report are made available to the public at least two weeks prior to the (first) meeting.

Any person who attends such a meeting may make representations related to the proposed by-law.

If a proposed by-law is changed following such a meeting, the Council must determine whether a further meeting (under this section) is necessary. For example, if the by-law which is proposed for adoption has been changed in any respect, the Council should formally consider whether an additional public meeting is required, incorporating this determination as part of the final by-law or associated resolution. It is noted that Council's decision, once made, is final and not subject to review by a Court or the Local Planning Appeal Tribunal (L.P.A.T.) (formerly the Ontario Municipal Board (O.M.B.)).

9.1.2 Other Consultation Activity

There are three broad groupings of the public who are generally the most concerned with municipal D.C. policy:

1. The residential development community, consisting of land developers and builders, who are typically responsible for generating the majority of the D.C. revenues. Others, such as realtors, are directly impacted by D.C. policy. They are, therefore, potentially interested in all aspects of the charge, particularly the



quantum by unit type, projects to be funded by the D.C. and the timing thereof, and municipal policy with respect to development agreements, D.C. credits and front-ending requirements.

2. The second public grouping embraces the public at large and includes taxpayer coalition groups and others interested in public policy (e.g. in encouraging a higher non-automobile modal split).
3. The third grouping is the industrial/commercial/institutional development sector, consisting of land developers and major owners or organizations with significant construction plans, such as hotels, entertainment complexes, shopping centres, offices, industrial buildings and institutions. Also involved are organizations such as Industry Associations, the Chamber of Commerce, the Board of Trade and the Economic Development Agencies, who are all potentially interested in municipal D.C. policy. Their primary concern is frequently with the quantum of the charge, G.F.A. exclusions such as basement, mechanical or indoor parking areas, or exemptions and phase-in or capping provisions in order to moderate the impact.

9.2 Anticipated Impact of the Charge on Development

The establishment of sound D.C. policy often requires the achievement of an acceptable balance between two competing realities. The first is that high non-residential D.C.s can, to some degree, represent a barrier to increased economic activity and sustained industrial/commercial growth, particularly for capital intensive uses. Also, in many cases, increased residential D.C.s can ultimately be expected to be recovered via higher housing prices and can impact project feasibility in some cases (e.g. rental apartments).

On the other hand, D.C.s or other municipal capital funding sources need to be obtained in order to help ensure that the necessary infrastructure and amenities are installed. The timely installation of such works is a key initiative in providing adequate service levels and in facilitating strong economic growth, investment and wealth generation.



9.3 Implementation Requirements

Once the Municipality has calculated the charge, prepared the complete background study, carried out the public process, and passed a new by-law, the emphasis shifts to implementation matters.

These include notices, potential appeals and complaints, credits, front-ending agreements, subdivision agreement conditions, and finally the collection of revenues and funding of projects.

The following provides an overview of the requirements in each case.

9.3.1 *Notice of Passage*

In accordance with s.13 of the D.C.A., when a D.C. by-law is passed, the municipal clerk shall give written notice of the passing and of the last day for appealing the by-law (the day that is 40 days after the day it was passed). Such notice must be given not later than 20 days after the day the by-law is passed (i.e. as of the day of newspaper publication or the mailing of the notice).

Section 10 of O.Reg. 82/98 further defines the notice requirements which are summarized as follows:

- Notice may be given by publication in a newspaper which is (in the Clerk's opinion) of sufficient circulation to give the public reasonable notice, or by personal service, fax or mail to every owner of land in the area to which the by-law relates;
- s.s.10 (4) lists the persons/organizations who must be given notice; and
- s.s.10 (5) lists the eight items which the notice must cover.

9.3.2 *By-law Pamphlet*

In addition to the “notice” information, the Municipality must prepare a “pamphlet” explaining each D.C. by-law in force, setting out:

- a description of the general purpose of the D.C.s;
- the “rules” for determining if a charge is payable in a particular case and for determining the amount of the charge;



- the services to which the D.C.s relate; and
- a general description of the general purpose of the Treasurer's statement and where it may be received by the public.

Where a by-law is not appealed to the L.P.A.T., the pamphlet must be readied within 60 days after the by-law comes into force. Later dates apply to appealed by-laws.

The Municipality must give one copy of the most recent pamphlet, without charge, to any person who requests one.

9.3.3 Appeals

Sections 13 to 19 of the D.C.A., 1997 set out requirements relative to making and processing a D.C. by-law appeal and an L.P.A.T. Hearing in response to an appeal. Any person or organization may appeal a D.C. by-law to the L.P.A.T. by filing a notice of appeal with the municipal clerk, setting out the objection to the by-law and the reasons supporting the objection. This must be done by the last day for appealing the by-law, which is 40 days after the by-law is passed.

9.3.4 Complaints

A person required to pay a D.C., or his agent, may complain to municipal council imposing the charge that:

- the amount of the charge was incorrectly determined;
- the credit to be used against the D.C. was incorrectly determined; or
- there was an error in the application of the D.C.

Sections 20 to 25 of the D.C.A., 1997 set out the requirements that exist, including the fact that a complaint may not be made later than 90 days after a D.C. (or any part of it) is payable. A complainant may appeal the decision of municipal council to the L.P.A.T.

9.3.5 Credits

Sections 38 to 41 of the D.C.A., 1997 set out a number of credit requirements, which apply where a municipality agrees to allow a person to perform work in the future that relates to a service in the D.C. by-law.



These credits would be used to reduce the amount of D.C.s to be paid. The value of the credit is limited to the reasonable cost of the work which does not exceed the average level of service. The credit applies only to the service to which the work relates, unless the Municipality agrees to expand the credit to other services for which a D.C. is payable.

9.3.6 *Front-Ending Agreements*

The Municipality and one or more landowners may enter into a front-ending agreement which provides for the costs of a project which will benefit an area in the Municipality to which the D.C. by-law applies. Such an agreement can provide for the costs to be borne by one or more parties to the agreement who are, in turn, reimbursed in future by persons who develop land defined in the agreement.

Part III of the D.C.A., 1997 (Sections 44 to 58) addresses front-ending agreements and removes some of the obstacles to their use which were contained in the D.C.A., 1989. Accordingly, the Municipality assesses whether this mechanism is appropriate for its use, as part of funding projects prior to municipal funds being available.

9.3.7 *Severance and Subdivision Agreement Conditions*

Section 59 of the D.C.A., 1997 prevents a municipality from imposing directly or indirectly, a charge related to development or a requirement to construct a service related to development, by way of a condition or agreement under s.51 or s.53 of the Planning Act, except for:

- “local services, related to a plan of subdivision or within the area to which the plan relates, to be installed or paid for by the owner as a condition of approval under Section 51 of the Planning Act;”
- “local services to be installed or paid for by the owner as a condition of approval under Section 53 of the Planning Act.”

It is also noted that s.s.59(4) of the D.C.A., 1997 requires that the municipal approval authority for a draft plan of subdivision under s.s.51(31) of the Planning Act, use its power to impose conditions to ensure that the first purchaser of newly subdivided land is informed of all the D.C.s related to the development, at the time the land is transferred.



In this regard, if the municipality in question is a commenting agency, in order to comply with subsection 59(4) of the D.C.A., 1997 it would need to provide to the approval authority, information regarding the applicable municipal D.C.s related to the site.

If the municipality is an approval authority for the purposes of Section 51 of the *Planning Act*, it would be responsible to ensure that it collects information from all entities which can impose a D.C.

The most effective way to ensure that purchasers are aware of this condition would be to require it as a provision in a registered subdivision agreement, so that any purchaser of the property would be aware of the charges at the time the title was searched prior to closing a transaction conveying the lands.



Appendices



Appendix A

Background Information on Residential and Non- Residential Growth Forecast



Schedule 1
Municipality of Middlesex Centre
Residential Growth Forecast Summary

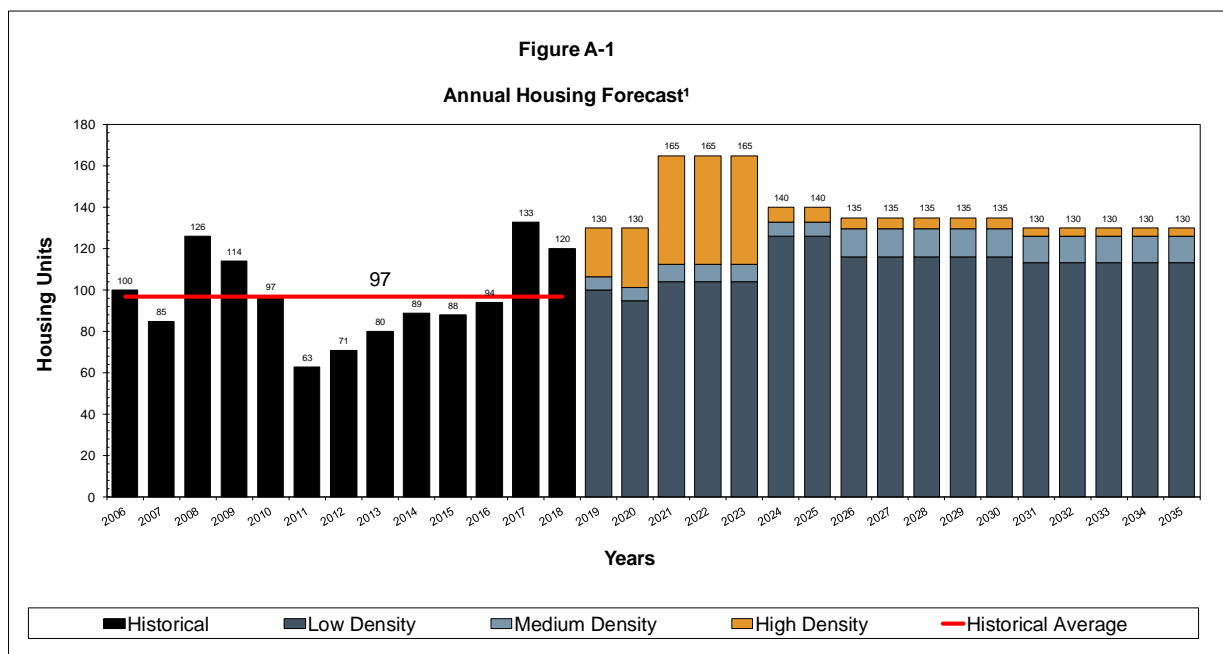
	Year	Population (Including Census Undercount) ¹	Excluding Census Undercount			Housing Units					Person Per Unit (P.P.U.): Total Population/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	
Historical	Mid 2006	16,130	15,589	479	15,110	4,830	300	85	25	5,240	2.975
	Mid 2011	17,060	16,487	347	16,140	5,412	148	90	4	5,654	2.916
	Mid 2016	17,870	17,262	367	16,895	5,715	135	125	5	5,980	2.887
Forecast	Mid 2019	18,800	18,169	388	17,781	6,004	193	125	5	6,327	2.872
	Mid 2029	22,530	21,765	465	21,300	7,112	285	365	5	7,767	2.802
	Mid 2036	24,990	24,147	513	23,634	7,909	377	396	5	8,687	2.780
	Buildout	26,690	25,787	624	25,163	8,309	552	450	5	9,316	2.768
Incremental	Mid 2006 - Mid 2011	930	898	-132	1,030	582	-152	5	-21	414	
	Mid 2011 - Mid 2016	810	775	20	755	303	-13	35	1	326	
	Mid 2016 - Mid 2019	930	907	21	886	289	58	0	0	347	
	Mid 2019 - Mid 2029	3,730	3,596	77	3,519	1,108	92	240	0	1,440	
	Mid 2019 - Mid 2036	6,190	5,978	125	5,853	1,905	184	271	0	2,360	
	Mid 2019 - Buildout	7,890	7,618	236	7,382	2,305	359	325	0	2,989	

Source: Population Projections for Middlesex County, July 17, 2018. Buildout derived from Middlesex Housing Inventory, March 8, 2019.

¹ Census undercount estimated at approximately 3.5%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1-bedroom and 2-bedroom+ apartments.



Source: Historical housing activity derived from Statistics Canada building permit data for Middlesex Centre, 2006-2018.

¹ Growth forecast represents calendar year.



**Municipality of Middlesex Centre
Estimate of the Anticipated Amount, Type and Location of
Residential Development for Which Development Charges can be Imposed**

Development Location	Timing	Single & Semi-Detached	Multiples ¹	Apartments ²	Total Residential Units	Gross Population In New Units	Existing Unit Population Change	Net Population Increase, Excluding Institutional	Institutional Population	Net Population Including Institutional
Ilderton	2019 - 2029	412	44	0	456	1,397	(171)	1,226	22	1,248
	2019 - 2036	429	122	0	550	1,611	(297)	1,314	36	1,350
	2019 - Buildout	432	184	0	616	1,751	(337)	1,413	68	1,481
Kilworth & Komoka	2019 - 2029	605	32	226	864	2,372	(226)	2,146	29	2,175
	2019 - 2036	1,332	41	253	1,625	4,737	(392)	4,344	48	4,392
	2019 - Buildout	1,668	131	291	2,090	6,055	(446)	5,609	90	5,699
Delaware	2019 - 2029	48	0	0	48	150	(77)	73	10	83
	2019 - 2036	66	0	0	66	209	(134)	75	16	91
	2019 - Buildout	73	0	0	73	231	(153)	79	31	109
Other Areas	2019 - 2029	43	16	14	72	193	(118)	74	15	90
	2019 - 2036	79	21	18	118	325	(206)	119	25	144
	2019 - Buildout	132	44	34	210	515	(234)	281	47	328
Municipality of Middlesex Centre	2019 - 2029	1,108	92	240	1,440	4,112	(593)	3,519	77	3,596
	2019 - 2036	1,905	184	271	2,360	6,882	(1,029)	5,853	125	5,978
	2019 - Buildout	2,305	359	325	2,989	8,552	(1,170)	7,382	236	7,618

Source: Population Projections for Middlesex County, July 17, 2018. Buildout derived from Middlesex Housing Inventory, March 8, 2019.

1. Includes townhouses and apartments in duplexes.

2. Includes accessory apartments, bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



Schedule 3
Municipality of Middlesex Centre
Current Year Growth Forecast
Mid 2016 to Mid 2019

		Population
Mid 2016 Population		17,262
Occupants of New Housing Units, Mid 2016 to Mid 2019	<i>Units (2)</i>	347
	<i>multiplied by P.P.U. (3)</i>	3.274
	<i>gross population increase</i>	1,136
Occupants of New Equivalent Institutional Units, Mid 2016 to Mid 2019	<i>Units</i>	19
	<i>multiplied by P.P.U. (3)</i>	1.100
	<i>gross population increase</i>	20
Decline in Housing Unit Occupancy, Mid 2016 to Mid 2019	<i>Units (4)</i>	5,980
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.042
	<i>total decline in population</i>	-249
Population Estimate to Mid 2019		18,169
Net Population Increase, Mid 2016 to Mid 2019		907

- (1) 2016 population based on Statistics Canada Census unadjusted for Census undercount.
- (2) Estimated residential units constructed, Mid-2016 to the beginning of the growth period assuming a six-month lag between construction and occupancy.
- (3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.468	83%	2.888
<i>Multiples (6)</i>	2.308	17%	0.386
<i>Apartments (7)</i>	1.721	0%	0.000
Total		100%	3.274

¹ Based on 2016 Census custom database

² Based on Building permit/completion activity

- (4) 2016 households taken from Statistics Canada Census.
- (5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.
- (6) Includes townhouses and apartments in duplexes.
- (7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



**Schedule 4a
Municipality of Middlesex Centre
Ten Year Growth Forecast
Mid 2019 to Mid 2029**

		Population
Mid 2019 Population		18,169
Occupants of New Housing Units, Mid 2019 to Mid 2029	<i>Units (2)</i>	1,440
	<i>multiplied by P.P.U. (3)</i>	2,856
	<i>gross population increase</i>	4,112
Occupants of New Equivalent Institutional Units, Mid 2019 to Mid 2029	<i>Units</i>	70
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	77
Decline in Housing Unit Occupancy, Mid 2019 to Mid 2029	<i>Units (4)</i>	6,327
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.094
	<i>total decline in population</i>	-593
Population Estimate to Mid 2029		21,765
Net Population Increase, Mid 2019 to Mid 2029		3,596

(1) Mid 2019 Population based on:

2016 Population (17,262) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period $(347 \times 3.274 = 1,136) + (19 \times 1.1 = 20) + (5,980 \times -0.042 = -249) = 18,169$

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.167	77%	2.436
<i>Multiples (6)</i>	2.079	6%	0.133
<i>Apartments (7)</i>	1.717	17%	0.286
<i>one bedroom or less</i> 1.278			
<i>two bedrooms or more</i> 2.028			
Total		100%	2.856

¹ Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Mid 2019 households based upon 2016 Census (5,980 units) + Mid 2016 to Mid 2019 unit estimate (347 units) = 6,327 units.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



**Schedule 4b
Municipality of Middlesex Centre
Twenty Year Growth Forecast
Mid 2019 to Mid 2036**

		Population
Mid 2019 Population		18,169
Occupants of New Housing Units, Mid 2019 to Mid 2036	<i>Units (2)</i>	2,360
	<i>multiplied by P.P.U. (3)</i>	2,916
	<i>gross population increase</i>	6,882
Occupants of New Equivalent Institutional Units, Mid 2019 to Mid 2036	<i>Units</i>	114
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	125
Decline in Housing Unit Occupancy, Mid 2019 to Mid 2036	<i>Units (4)</i>	6,327
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.163
	<i>total decline in population</i>	-1,029
Population Estimate to Mid 2036		24,147
Net Population Increase, Mid 2019 to Mid 2036		5,978

(1) Mid 2019 Population based on:

2016 Population (17,262) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period $(347 \times 3.274 = 1,136) + (19 \times 1.1 = 20) + (5,980 \times -0.042 = -249) = 18,169$

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.167	81%	2.557
<i>Multiples (6)</i>	2.079	8%	0.162
<i>Apartments (7)</i>	1.717	11%	0.197
<i>one bedroom or less</i> 1,278			
<i>two bedrooms or more</i> 2,028			
Total		100%	2.916

¹ Persons per unit based on Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Mid 2019 households based upon 2016 Census (5,980 units) + Mid 2016 to Mid 2019 unit estimate (347 units) = 6,327 units.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



**Schedule 5
Municipality of Middlesex Centre
Mid 2019 to Buildout**

		Population
Mid 2019 Population		18,169
Occupants of New Housing Units, Mid 2019 to Mid 2039	<i>Units (2)</i>	2,989
	<i>multiplied by P.P.U. (3)</i>	2,861
	<i>gross population increase</i>	8,552
Occupants of New Equivalent Institutional Units, Mid 2019 to Mid 2039	<i>Units</i>	214
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	236
Decline in Housing Unit Occupancy, Mid 2019 to Mid 2039	<i>Units (4)</i>	6,327
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.185
	<i>total decline in population</i>	-1,170
Population Estimate to Mid 2039		25,787
Net Population Increase, Mid 2019 to Mid 2039		7,618

(1) Mid 2019 Population based on:

2016 Population (17,262) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period (347 x = 1,136) + (5,980 x - 0.0383 = -229) = 18,169

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.167	75%	2.388
<i>Multiples (6)</i>	2.079	14%	0.290
<i>Apartments (7)</i>	1.717	11%	0.183
<i>one bedroom or less</i> 1.278			
<i>two bedrooms or more</i> 2.028			
Total		100%	2.861

¹ Persons per unit based on Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Mid 2019 households based upon 5,980 (2016 Census) + 347 (Mid 2016 to Mid 2019 unit estimate) = 6,327

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



Schedule 6
Municipality of Middlesex Centre
Summary of Vacant Land Supply Housing Potential as of 2016
Municipality of Middlesex Centre

Geography	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Vacant lands designated for Residential				
<i>Ilderton</i>	432	184	0	616
<i>% Share</i>	19%	51%	0%	21%
<i>Kilworth & Komoka</i>	1,668	131	291	2,090
<i>% Share</i>	72%	36%	90%	70%
<i>Delaware</i>	73	0	0	73
<i>% Share</i>	3%	0%	0%	2%
<i>Other Areas</i>	132	44	34	210
<i>% Share</i>	6%	12%	10%	7%
Middlesex Centre	2,305	359	325	2,989
% Breakdown	77%	12%	11%	100%

Source: Residential housing inventory data provided by Middlesex Centre Planning Department, March 8, 2019.

¹ Includes townhomes and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 7
Municipality of Middlesex Centre
Historical Residential Building Permits
Years 2007 to 2017

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ¹	Apartments ²	Total
2007	79	6	0	85
2008	99	6	21	126
2009	97	17	0	114
2010	97	0	0	97
2011	63	0	0	63
Sub-total	435	29	21	485
Average (2007 - 2011)	87	6	4	97
% Breakdown	89.7%	6.0%	4.3%	100.0%
2012	71	0	0	71
2013	80	0	0	80
2014	85	4	0	89
2015	82	6	0	88
2016	69	25	0	94
Sub-total	387	35	0	422
Average (2012 - 2016)	77	7	0	84
% Breakdown	91.7%	8.3%	0.0%	100.0%
2017	116	17	0	133
2018	104	16	0	120
Sub-total	220	33	0	253
% Breakdown	87.0%	13.0%	0.0%	100.0%
2007 - 2018				
Total	1,042	97	21	1,160
Average	87	8	2	97
% Breakdown	89.8%	8.4%	1.8%	100.0%

Derived from Middlesex Centre annual Planning and Development Services –Year End Summary reports.

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



**Schedule 8a - 20 Year Average
Municipality of Middlesex Centre
Persons Per Unit By Age and Type of Dwelling
(2016 Census)**

Age of Dwelling	Singles and Semi-Detached						20 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	-	3.379	3.769	3.468	
6-10	-	-	-	3.173	4.909	3.319	
11-15	-	-	-	3.247	-	3.257	
16-20	-	-	-	3.105	3.615	3.051	3.167
20-25	-	-	-	2.796	-	2.869	
25-35	-	-	-	2.840	3.476	2.915	
35+	-	1.583	1.955	2.696	3.234	2.610	
Total	-	1.438	2.010	2.902	3.664	2.880	

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

³ Adjusted based on 2001-2016 historical trends.

Note: Does not include Statistics Canada data classified as 'Other'

P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.



Schedule 8b
Middlesex County
Persons Per Unit By Age and Type of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached						20 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	1.918	3.083	4.343	3.094	
6-10	-	-	1.960	3.208	4.458	3.256	
11-15	-	-	1.794	3.150	4.295	3.125	
16-20	-	-	1.867	2.999	3.857	2.969	3.073
20-25	-	-	1.963	2.866	3.623	2.884	
25-35	-	-	1.873	2.806	3.469	2.830	
35+	-	1.437	1.792	2.574	3.360	2.484	
Total	1.900	1.457	1.813	2.759	3.669	2.703	

Age of Dwelling	Multiples ¹						20 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	1.810	2.481	-	2.308	
6-10	-	-	1.725	2.324	-	2.124	
11-15	-	1.333	1.688	2.401	-	2.081	
16-20	-	-	1.690	2.575	-	2.296	2.079
20-25	-	-	1.813	2.725	3.364	2.491	
25-35	-	1.571	1.982	2.778	-	2.601	
35+	-	1.313	1.846	2.717	2.952	2.370	
Total	-	1.328	1.827	2.666	3.269	2.383	

Age of Dwelling	Apartments ²						20 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	1.329	1.940	2.914	-	1.721	
6-10	-	1.299	1.944	2.609	-	1.686	
11-15	-	1.331	1.977	2.118	-	1.733	
16-20	-	1.227	2.118	3.000	-	1.837	1.717
20-25	-	1.193	1.875	3.125	-	1.687	
25-35	0.778	1.221	1.877	2.678	-	1.635	
35+	1.077	1.175	1.898	2.641	2.240	1.582	
Total	1.060	1.206	1.914	2.685	2.074	1.630	

Age of Dwelling	All Density Types						20 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	1.350	1.928	2.980	4.373	2.602	
6-10	-	1.301	1.908	3.081	4.393	2.716	
11-15	-	1.331	1.857	3.048	4.227	2.722	
16-20	-	1.245	1.963	2.911	3.821	2.567	
20-25	-	1.215	1.863	2.828	3.579	2.433	
25-35	1.000	1.229	1.895	2.794	3.498	2.402	
35+	1.115	1.201	1.851	2.594	3.296	2.217	
Total	1.152	1.225	1.871	2.742	3.620	2.360	

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

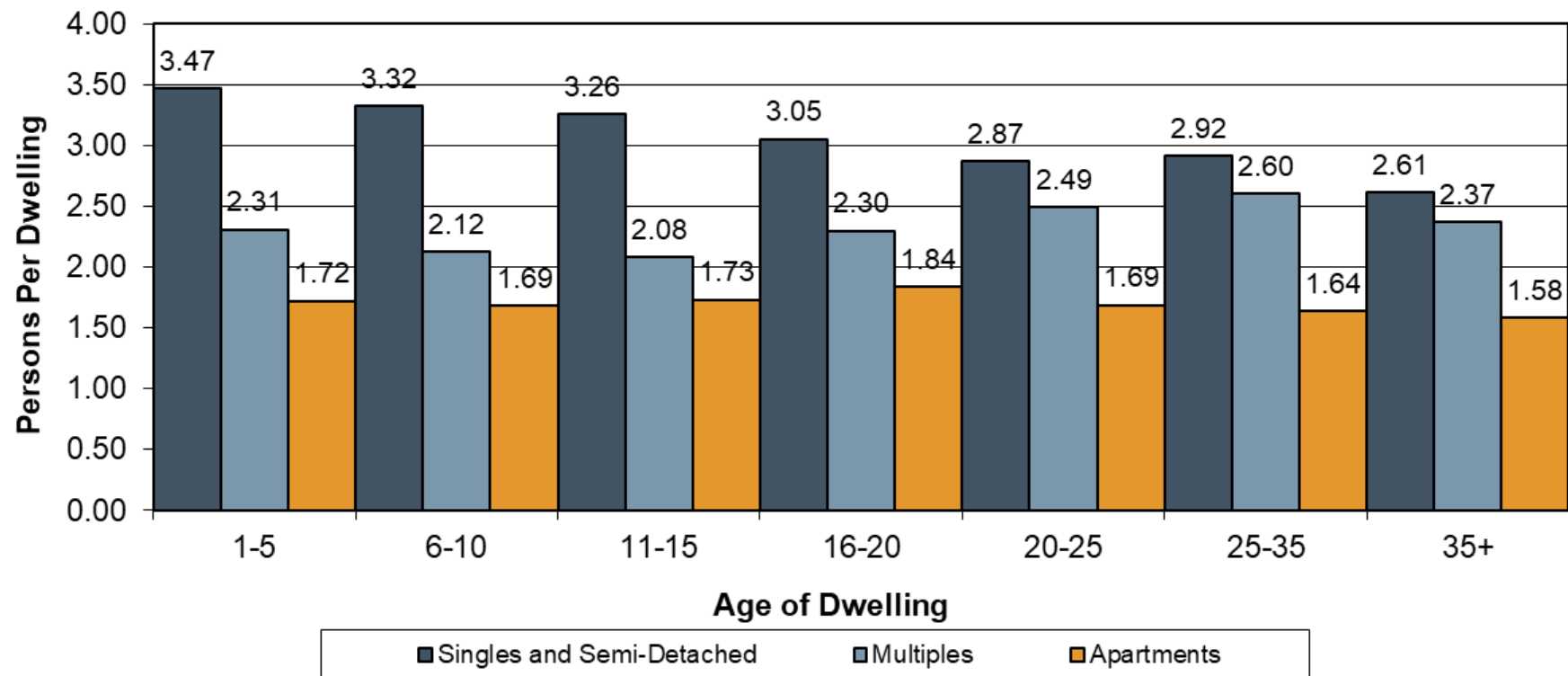
³ Adjusted based on 2001-2016 historical trends.

Note: Does not include Statistics Canada data classified as 'Other'

P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.



Schedule 9
Municipality of Middlesex Centre
Persons Per Unit By Structural Type and Age of Dwelling
(2016 Census)



Multiple and Apartment P.P.U.s are based on Middlesex County.



**Schedule 10a
Municipality of Middlesex Centre
2019 Employment Forecast**

Period	Population	Activity Rate						Employment						Employment Total (Excluding Work at Home)
		Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	
Mid 2006	15,589	0.016	0.078	0.071	0.060	0.058	0.283	250	1,220	1,108	933	900	4,410	3,190
Mid 2011	16,487	0.014	0.074	0.066	0.052	0.045	0.252	235	1,215	1,085	865	750	4,150	2,935
Mid 2016	17,262	0.015	0.073	0.069	0.071	0.052	0.280	265	1,255	1,185	1,225	900	4,830	3,575
Mid 2019	18,169	0.015	0.073	0.068	0.074	0.052	0.282	279	1,321	1,235	1,343	953	5,131	3,810
Mid 2029	21,765	0.014	0.068	0.066	0.068	0.055	0.271	305	1,478	1,430	1,479	1,197	5,889	4,411
Mid 2036	24,147	0.014	0.066	0.066	0.066	0.058	0.269	338	1,590	1,592	1,588	1,397	6,505	4,915
Buildout ¹	25,787	0.014	0.066	0.066	0.066	0.058	0.269	350	1,700	1,700	1,700	1,490	6,940	5,240
Incremental Change														
Mid 2006 - Mid 2011	898	-0.002	-0.005	-0.005	-0.007	-0.012	-0.031	-15	-5	-23	-68	-150	-260	-255
Mid 2011 - Mid 2016	775	0.0011	-0.0010	0.0028	0.0185	0.0066	0.0281	30	40	100	360	150	680	640
Mid 2016 - Mid 2019	907	0.0000	0.0000	-0.0007	0.0030	0.0003	0.0026	14	66	50	118	53	301	235
Mid 2019 - Mid 2029	3,596	-0.0014	-0.0048	-0.0023	-0.0060	0.0025	-0.0118	26	157	195	136	244	758	601
Mid 2019 - Mid 2036	5,978	-0.0014	-0.0069	-0.0020	-0.0082	0.0054	-0.0130	59	269	357	245	444	1,374	1,105
Mid 2019 - Buildout ¹	7,618	-0.0018	-0.0068	-0.0020	-0.0080	0.0053	-0.0133	71	379	465	357	537	1,809	1,430
Annual Average														
Mid 2006 - Mid 2011	180	-0.00036	-0.00091	-0.00105	-0.00147	-0.00245	-0.00624	-3	-1	-5	-14	-30	-52	-51
Mid 2011 - Mid 2016	155	0.0002	-0.0002	0.0006	0.0037	0.0013	0.0056	6	8	20	72	30	136	128
Mid 2016 - Mid 2019	302	0.0000	0.0000	-0.0002	0.0010	0.0001	0.0009	5	22	17	39	18	100	78
Mid 2019 - Mid 2029	360	-0.00014	-0.00048	-0.00023	-0.00060	0.00025	-0.00118	3	16	20	14	24	76	60
Mid 2019 - Mid 2036	352	-0.00008	-0.00040	-0.00012	-0.00048	0.00032	-0.00077	3	16	21	14	26	81	65
Mid 2019 - Buildout ¹	381	-0.00009	-0.00034	-0.00010	-0.00040	0.00027	-0.00066	4	19	23	18	27	90	72

Historical data derived from custom order Statistics Canada Place of Work Data 2006, 2011, 2016.

Source: Watson & Associates Economists Ltd., 2019. Derived from County of Middlesex Employment Land Needs Strategy, April 30, 2012. Millier Dickinson Blais, Watson & Associates Economists Ltd.

¹ Buildout refers to the employment growth associated within the urban residential buildout time horizon.



Schedule 10b
Municipality of Middlesex Centre
Employment & Gross Floor Area (G.F.A) Forecast, 2019 to Buildout

Period	Population	Employment					Gross Floor Area in Square Meters (Estimated) ¹				
		Primary	Industrial	Commercial/ Population Related	Institutional	Total	Primary	Industrial	Commercial/ Population Related	Institutional	Total ³
Mid 2006	15,589	250	1,108	933	900	3,190					
Mid 2011	16,487	235	1,085	865	750	2,935					
Mid 2016	17,262	265	1,185	1,225	900	3,575					
Mid 2019	18,169	279	1,235	1,343	953	3,810					
Mid 2029	21,765	305	1,430	1,479	1,197	4,411					
Mid 2036	24,147	338	1,592	1,588	1,397	4,915					
Buildout ⁴	25,787	350	1,700	1,700	1,490	5,240					
Incremental Change											
Mid 2006 - Mid 2011	898	-15	-23	-68	-150	-255					
Mid 2011 - Mid 2016	775	30	100	360	150	640					
Mid 2016 - Mid 2019	907	14	50	118	53	235	4,524	6,039	6,029	3,447	15,515
Mid 2019 - Mid 2029	3,596	26	195	136	244	601	8,389	23,551	6,949	15,868	46,368
Mid 2019 - Mid 2036	5,978	59	357	245	444	1,105	19,231	43,116	12,514	28,874	84,505
Mid 2019 - Buildout ⁴	7,618	71	465	357	537	1,430	23,114	56,144	18,273	34,924	109,341

Historical data derived from custom order Statistics Canada Place of Work Data 2006, 2011, 2016.

Source: Watson & Associates Economists Ltd., 2019. Derived from County of Middlesex Employment Land Needs Strategy, April 30, 2012. Millier Dickinson Blais, Watson & Associates Economists Ltd.

¹ Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.

² Square Meter Per Employee Assumptions

Industrial	121
Commercial/ Population Related	51
Institutional*	65
Primary	325

* Reflects Mid 2019 to Mid 2036 forecast period

³ Excludes Primary G.F.A

⁴ Buildout refers to the employment growth associated within the urban residential buildout time horizon.

Note: Numbers may not add to totals due to rounding.



Schedule 10c
Estimate of the Anticipated Amount, Type and Location of
Non-Residential Development for Which Development Charges can be Imposed

Development Location	Timing	Primary G.F.A. S.M. ¹	Industrial G.F.A. S.M. ¹	Commercial G.F.A. S.M. ¹	Institutional G.F.A. S.M. ¹	Total Non-Residential G.F.A. S.M.	Employment Increase ²
Ilderton	2019 - 2029	-	589	2,050	4,681	7,320	117
	2019 - 2036	-	2,156	3,692	8,518	14,365	221
	2019 - Buildout ³	-	2,807	5,390	10,303	18,500	287
Kilworth & Komoka	2019 - 2029	-	18,664	3,204	7,315	29,183	330
	2019 - 2036	-	33,846	5,769	13,311	52,926	598
	2019 - Buildout ³	-	44,073	8,424	16,100	68,597	777
Delaware	2019 - 2029	-	1,943	1,001	2,285	5,229	71
	2019 - 2036	-	2,803	1,802	4,158	8,762	122
	2019 - Buildout ³	-	3,649	2,631	5,029	11,310	159
Other Areas	2019 - 2029	8,389	2,355	695	1,587	4,637	83
	2019 - 2036	19,231	4,312	1,251	2,887	8,450	164
	2019 - Buildout ³	23,114	5,614	1,827	3,492	10,934	207
Municipality of Middlesex Centre	2019 - 2029	8,389	23,551	6,949	15,868	46,368	601
	2019 - 2036	19,231	43,116	12,514	28,874	84,505	1,105
	2019 - Buildout ³	23,114	56,144	18,273	34,924	109,341	1,430

Derived from County of Middlesex Employment Land Needs Strategy, April 30, 2012. Millier Dickinson Blais, Watson & Associates Economists Ltd.

¹ Employment Increase does not include No Fixed Place of Work.

² Square meter per employee assumptions:

Industrial	121
Commercial/ Population Related	51
Institutional*	65
Primary	325

* Reflects Mid 2019 to Mid 2036 forecast period

³ Buildout refers to the employment growth associated within the urban residential buildout time horizon.

Note: Numbers may not add to totals due to rounding.



Schedule 11

Municipality of Middlesex Centre

Employment to Population Ratio by Major Employment Sector, 2006 to 2016

Employment to Population Ratio by Major Employment Sector, 2006 to 2016							
NAICS	Employment & Gross Floor Area (G.F.A) Forecast, 2016 To Buildout	Year			Change		Comments
		2006	2011	2016	06-11	11-16	
Employment by industry							Categories which relate to local land-based resources
	<u>Primary Industry Employment</u>						
11	Agriculture, forestry, fishing and hunting	760	645	665	-115	20	
21	Mining and oil and gas extraction	0	0	0	0	0	
Sub-total		760	645	665	-115	20	
<u>Industrial and Other Employment</u>							Categories which relate primarily to industrial land supply and demand
22	Utilities	15	40	25	25	-15	
23	Construction	340	225	480	-115	255	
31-33	Manufacturing	415	565	500	150	-65	
41	Wholesale trade	310	180	220	-130	40	
48-49	Transportation and warehousing	190	250	115	60	-135	
56	Administrative and support	93	63	108	-30	45	
Sub-total		1,363	1,323	1,448	-40	125	
44-45	<u>Population Related Employment</u>						Categories which relate primarily to population growth within the municipality
	Retail trade	240	150	265	-90	115	
51	Information and cultural industries	45	45	40	0	-5	
52	Finance and insurance	55	130	150	75	20	
53	Real estate and rental and leasing	55	55	90	0	35	
54	Professional, scientific and technical services	245	225	315	-20	90	
55	Management of companies and enterprises	15	0	0	-15	0	
56	Administrative and support	93	63	108	-30	45	
71	Arts, entertainment and recreation	240	235	300	-5	65	
72	Accommodation and food services	155	120	195	-35	75	
81	Other services (except public administration)	165	255	260	90	5	
Sub-total		1,308	1,278	1,723	-30	445	
	<u>Institutional</u>						
61	Educational services	415	350	460	-65	110	
62	Health care and social assistance	495	425	405	-70	-20	
91	Public administration	70	130	130	60	0	
Sub-total		980	905	995	-75	90	
Total Employment		4,410	4,150	4,830	-260	680	
Population		15,589	16,487	17,262	898	775	
<u>Employment to Population Ratio</u>							
Industrial and Other Employment		0.09	0.08	0.08	-0.01	0.00	
Population Related Employment		0.08	0.08	0.10	-0.01	0.02	
Institutional Employment		0.06	0.05	0.06	-0.01	0.00	
Primary Industry Employment		0.05	0.04	0.04	-0.01	0.00	
Total		0.28	0.25	0.28	-0.03	0.03	

Source: Statistics Canada Employment by Place of Work

Note: 2006-2016 employment figures are classified by North American Industry Classification System (NAICS) Code



Appendix B

Historical Level of Service Calculations



Service: Fire Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Arva Fire Hall	3,630	3,630	3,630	3,630	3,630	3,630	3,630	3,630	3,630	3,630	\$284	\$332
Delaware Fire Hall	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	\$313	\$365
Coldstream Fire Hall (old)	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	-	\$197	\$231
Coldstream Fire Hall (new)	-	-	-	-	-	-	-	-	-	9,843	\$376	\$438
Ilderton Fire Hall	3,900	3,900	3,900	3,900	3,900	3,900	3,900	3,900	3,900	3,900	\$294	\$343
Bryanston Fire Hall	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	\$508	\$590
Total	14,380	14,380	14,380	14,380	14,380	14,380	14,380	14,380	14,380	21,773		

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard	0.8924	0.8812	0.8722	0.8666	0.8596	0.8513	0.8420	0.8330	0.8225	1.2199

10 Year Average	2009-2018
Quantity Standard	0.8941
Quality Standard	\$353
Service Standard	\$315

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$315
Eligible Amount	\$1,109,259



Service: Fire Vehicles
Unit Measure: No. of vehicles

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Arva Pumper	1	1	1	1	1	1	1	1	1	1	\$425,000
Arva Rescue Van	1	1	1	1	1	1	1	1	1	1	\$280,000
Arva Tanker	1	1	1	1	1	1	1	1	1	1	\$400,000
Bryanston Pumper	1	1	1	1	1	1	1	1	1	1	\$425,000
Bryanston Pumper/Tanker	-	-	-	-	-	-	-	-	1	1	\$400,000
Coldstream Pumper	1	1	1	1	1	1	1	1	1	1	\$425,000
Coldstream Rescue (F-250)	-	-	-	-	-	-	-	-	-	1	\$65,000
Coldstream Tanker	1	1	1	1	1	1	1	1	1	1	\$400,000
Coldstream Rescue	1	1	1	1	1	1	1	1	1	1	\$280,000
Delaware Pumper	1	1	1	1	1	1	1	1	1	1	\$425,000
Delaware Rescue (F-150)	-	-	-	-	-	1	1	1	1	1	\$50,000
Delaware Tanker	1	1	1	1	1	1	1	1	1	1	\$400,000
Ilderton Pumper/Tanker	1	1	1	1	1	1	1	1	1	1	\$425,000
Ilderton Rescue (F-150)	-	-	-	-	-	1	1	1	1	1	\$50,000
Ilderton Tanker	1	1	1	1	1	1	1	1	1	1	\$400,000
Chiefs Dodge 1500 (Car 1)	1	1	1	1	1	1	1	1	1	1	\$50,000
Rescue Boat and Trailer	1	1	1	1	1	1	1	1	1	1	\$30,000
Rehab Trailer	1	1	1	1	1	1	1	1	1	1	\$20,000
Total	14	14	14	14	14	16	16	16	17	18	

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard (per 1,000 population)	0.87	0.86	0.85	0.84	0.84	0.95	0.94	0.93	0.97	1.01

10 Year Average	2009-2018
Quantity Standard (per 1,000 population)	0.9048
Quality Standard	\$295,966
Service Standard	\$268

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$268
Eligible Amount	\$942,353



Service: Fire Small Equipment and Gear
Unit Measure: No. of equipment and gear

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Fire Fighters	117	117	117	117	117	117	117	117	117	117	\$2,845
Arva FD Hydraulics	1	1	1	1	1	1	1	1	1	1	\$30,000
Bryanston FD Hydraulics	1	1	1	1	1	1	1	1	1	1	\$30,000
Coldstream FD Hydraulics	1	1	1	1	1	1	1	1	1	1	\$30,000
Delaware FD Hydraulics	1	1	1	1	1	1	1	1	1	1	\$30,000
Ilderton FD Hydraulics	1	1	1	1	1	1	1	1	1	1	\$30,000
Thermal Imaging Cameras	5	5	5	5	5	5	5	5	5	5	\$35,000
Cascade System for Filling Air Bottles	1	1	1	1	1	1	1	1	1	1	\$75,000
FD Fit Test Equipment	1	1	1	1	1	1	1	1	1	1	\$16,398
SCBA Systems (incl. Bottles)	1	1	1	1	1	1	1	1	1	1	\$600,000
Total	130	130	130	130	130	130	130	130	130	130	

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard (per 1,000 population)	8.07	7.97	7.89	7.83	7.77	7.70	7.61	7.53	7.44	7.28

10 Year Average	2009-2018
Quantity Standard (per 1,000 population)	7.7083
Quality Standard	\$10,378
Service Standard	\$80

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$80
Eligible Amount	\$281,520



Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Acre)
Weldon Park (Arva)	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	\$31,900
Heritage Park (including Skatepark) (Ilderton)	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	\$31,900
Denfield Park (Denfield)	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	\$31,900
Poplar Hill Park (Poplar Hill)	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	\$31,900
Komoka Park (Komoka)	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	\$31,900
Westbrook Park (including Splashpad) (Kilworth)	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	\$31,900
Municipal Park (Delaware)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	\$31,900
Tiffany Park (Delaware)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	\$31,900
Lions Park (Delaware)	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	\$31,900
Ilderton Estates (Deer Haven)	13.1	13.1	13.1	13.1	13.0	13.0	13.0	13.0	13.0	13.0	\$31,900
Ilderton Meadowcreek Park	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	\$31,900
Kilworth Optimist	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	\$31,900
Junction	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	\$31,900
Pleasant	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	\$31,900
Prince Andrew School	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	\$31,900
Kilworth Flats	-	-	-	9.1	9.1	9.1	9.1	9.1	9.1	9.1	\$31,900
Kilworth River's Edge	-	-	-	7.4	7.4	7.4	7.4	7.4	7.4	7.4	\$31,900
Caverhill Park (Komoka)	-	-	-	-	-	-	-	2.0	2.0	2.0	\$31,900
Total	176.2	176.2	176.2	192.7	192.6	192.6	192.6	194.6	194.6	194.6	

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard	0.0109	0.0108	0.0107	0.0116	0.0115	0.0114	0.0113	0.0113	0.0111	0.0109

10 Year Average	2009-2018
Quantity Standard	0.0112
Quality Standard	\$31,771
Service Standard	\$356

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$356
Eligible Amount	\$1,252,166



Service: Parkland Trails
Unit Measure: Linear Metres of Paths and Trails

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/ Linear Metre)
Weldon Park Trail	1,778	1,778	1,778	1,778	1,778	1,778	1,778	1,778	1,778	1,778	\$100
Ilderton Rail Trail	3,104	3,104	3,104	3,104	3,104	3,104	3,104	3,104	3,104	3,104	\$100
Deer Haven Optimist Trail	233	233	233	233	233	233	233	233	233	233	\$100
Poplar Hill Park Trail	66	66	66	66	66	66	66	66	66	66	\$100
Westbrook Park Trail	112	112	112	112	112	112	112	112	112	112	\$100
Komoka Park Trail	119	119	119	119	119	119	119	119	119	119	\$100
Komoka Park Trail - Tertiary Trail	-	-	-	-	-	-	1,800	1,800	1,800	1,800	\$61
Komoka Wellness Centre Trail	563	563	563	563	563	563	563	563	563	563	\$100
Total	5,975	5,975	5,975	5,975	5,975	5,975	7,775	7,775	7,775	7,775	

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard	0.3708	0.3661	0.3624	0.3601	0.3572	0.3537	0.4552	0.4504	0.4447	0.4356

10 Year Average	2009-2018
Quantity Standard	0.3956
Quality Standard	\$94
Service Standard	\$37

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$37
Eligible Amount	\$131,294



Service: Parks Vehicles and Equipment
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
2009 GMC	1	1	1	1	1	1	1	1	1	1	\$28,100
2010 Dodge	1	1	1	1	1	1	1	1	1	1	\$26,600
2007 Ford	1	1	1	1	1	1	1	1	1	1	\$25,100
1988 Kubota (Mower)	1	1	1	-	-	-	-	-	-	-	\$16,900
2002 Kubota	1	1	1	1	1	1	1	1	1	1	\$16,900
2003 Kubota	1	1	1	1	1	1	1	1	1	1	\$16,900
John Deere Tractor	1	1	1	1	1	1	1	1	1	1	\$46,400
2008 John Deere	1	1	1	1	1	1	1	1	1	1	\$15,300
Farm King Mower	1	1	1	1	1	1	1	1	1	1	\$16,400
2009 Kubota Loader	1	1	1	1	1	1	1	1	1	1	\$20,300
2011 Kubota	-	-	1	1	1	1	1	1	1	1	\$15,000
Olympia Ice Resurfacer	1	1	1	1	1	1	1	1	1	1	\$87,800
Zamboni Ice Resurfacer	-	-	2	2	2	2	2	2	2	2	\$87,800
Float Trailer Tri-Axle Dump	-	-	-	-	-	-	1	1	1	1	\$5,200
Diamond Groomer	-	-	-	-	-	-	-	-	-	1	\$3,800
2014 Tractor (mower)	-	-	-	-	-	1	1	1	1	1	\$16,300
2013 Zero Turn Mower	-	-	-	-	1	1	1	1	1	1	\$17,800
2016 Kubota Zero Turn Mower	-	-	-	-	-	-	-	1	1	1	\$12,200
Total	11	11	14	13	14	15	16	17	17	18	

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard (per 1,000 population)	0.6826	0.6741	0.8492	0.7834	0.8369	0.8880	0.9368	0.9848	0.9724	1.0085

10 Year Average	2009-2018
Quantity Standard (per 1,000 population)	0.8617
Quality Standard	\$33,051
Service Standard	\$28

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$28
Eligible Amount	\$100,221



Service: Indoor Recreation Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Bryanston Community Centre	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	\$259	\$289
Ilderton Community Centre	5,750	5,750	5,750	5,750	5,750	5,750	5,750	5,750	5,750	5,750	\$176	\$198
Ilderton Arena and Curling Club	49,000	49,000	49,000	49,000	49,000	49,000	49,000	49,000	49,000	49,000	\$291	\$324
Coldstream Community Centre	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	\$159	\$179
Komoka Community Centre	10,520	10,520	10,520	10,520	10,520	10,520	10,520	10,520	10,520	10,520	\$161	\$181
Delaware Community Centre	12,536	12,536	12,536	12,536	12,536	12,536	12,536	12,536	12,536	12,536	\$149	\$168
Tri-Township (43%)	12,900	12,900	-	-	-	-	-	-	-	-	\$173	\$194
Wellness Centre	-	-	99,633	99,633	99,633	99,633	99,633	99,633	99,633	99,633	\$209	\$234
Denfield Operations Centre	-	-	4,012	4,012	4,012	4,012	4,012	4,012	4,012	4,012	\$194	\$218
Total	96,906	96,906	187,651	187,651	187,651	187,651	187,651	187,651	187,651	187,651		

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard	6.0138	5.9382	11.3818	11.3084	11.2178	11.1095	10.9873	10.8708	10.7334	10.5139

10 Year Average	2009-2018
Quantity Standard	10.0075
Quality Standard	\$249
Service Standard	\$2,490

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$2,490
Eligible Amount	\$8,763,471



**Municipality of Middlesex Centre
Service Standard Calculation Sheet**

Service: Library Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Delaware Library	640	640	640	640	640	640	640	640	640	640	\$781	\$865
Ilderton Library	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	\$357	\$397
Coldstream Library	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$59	\$69
Komoka Library	1,250	1,250	7,367	7,367	7,367	7,367	7,367	7,367	7,367	7,367	\$223	\$249
Total	5,490	5,490	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607		

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard	0.3407	0.3364	0.7040	0.6995	0.6939	0.6872	0.6796	0.6724	0.6639	0.6503

10 Year Average	2009-2018
Quantity Standard	0.6128
Quality Standard	\$301
Service Standard	\$184

D.C. Amount (before deductions)	10 Year
Forecast Population	3,519
\$ per Capita	\$184
Eligible Amount	\$648,235



Service: Depots and Domes
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Arva	12,500	12,500	-	-	-	-	-	-	-	-	\$105	\$119
Coldstream	6,136	6,136	-	-	-	-	-	-	-	-	\$204	\$229
Denfield Operations Centre	-	-	28,086	28,086	28,086	28,086	28,086	28,086	28,086	28,086	\$140	\$158
Denfield Sand/Salt Storage Structure	-	-	13,735	13,735	13,735	13,735	13,735	13,735	13,735	13,735	\$140	\$158
Delaware Operations Centre	7,000	7,000	23,200	23,200	23,200	23,200	23,200	23,200	23,200	23,200	\$194	\$218
Delaware Sand/Salt Storage Structure	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	\$140	\$158
Total	35,636	35,636	75,020	75,020	75,020	75,020	75,020	75,020	75,020	75,020		

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard	2.2115	2.1837	4.5503	4.5209	4.4847	4.4414	4.3926	4.3460	4.2911	4.2033

10 Year Average	2009-2018
Quantity Standard	3.9626
Quality Standard	\$176
Service Standard	\$696

D.C. Amount (before deductions)	17 Year
Forecast Population	5,853
\$ per Capita	\$696
Eligible Amount	\$4,073,629



Service: Roads and Related Vehicles
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Grader	5	5	5	5	5	5	5	5	5	5	\$500,000
Tandem	8	8	8	8	8	8	8	8	8	8	\$382,700
Single Axle	4	4	4	4	4	4	4	4	4	4	\$382,700
Backhoe	2	3	3	3	3	3	3	3	3	3	\$178,500
Loader	2	2	2	2	2	2	2	2	2	2	\$242,400
1/2 ton truck	1	2	2	2	2	2	3	5	5	7	\$50,000
3/4 ton truck	-	-	-	-	1	1	1	-	-	-	\$103,700
1 ton truck	3	3	3	3	3	4	4	4	4	4	\$125,000
Single Axle Truck	-	-	-	-	-	-	1	1	1	1	\$241,654
Ditch Witch FX60 "VAC Trailer"	-	-	-	-	-	1	1	1	1	1	\$150,000
Electric Car	-	-	-	-	-	-	-	-	-	2	\$45,000
Van	-	-	-	-	-	-	-	-	1	1	\$25,000
Tri Axle	-	-	-	-	-	-	-	-	1	1	\$400,000
Car	-	-	-	-	-	-	1	1	1	1	\$20,000
Sidewalk Plow	-	-	-	-	-	-	-	-	1	1	\$200,000
Case Tractor 95U	1	1	1	1	1	1	1	1	1	1	\$91,559
Road Widener Attachment	-	-	-	-	-	-	-	-	-	1	\$53,390
McCloskey Aggregate Stacker 30x60D	1	1	1	1	1	1	1	1	1	1	\$94,344
FINN T30 HydroSeeder	-	-	-	-	-	-	1	1	1	1	\$40,525
Canada Trailer SD28-20KD	-	1	1	1	1	1	1	1	1	1	\$17,200
Vermeer Wood Chipper 1800XL	1	1	1	1	1	1	1	1	1	1	\$93,153
Entyre Chipspreader	-	1	1	1	1	1	1	1	1	1	\$208,827
Bomag Roller	-	-	1	1	1	1	1	1	1	1	\$90,597
Turkstra Trailers - 16'x8' Construction Site Trailer	-	-	-	-	-	1	1	1	1	1	\$17,200
Tridem Dump Trailer	-	-	-	-	-	-	-	-	1	1	\$74,531
CAT CS54B Steel Drum Roller	-	-	-	-	-	-	-	-	1	1	\$161,192
Trout River 48' Livebottom Trailer	-	-	-	-	-	-	-	-	-	1	\$119,077
Total	28	32	33	33	34	37	41	42	47	53	

Population	16,114	16,319	16,487	16,594	16,728	16,891	17,079	17,262	17,483	17,848
Per Capita Standard (per 1,000 population)	1.74	1.96	2.00	1.99	2.03	2.19	2.40	2.43	2.69	2.97

10 Year Average	2009-2018
Quantity Standard (per 1,000 population)	2.2403
Quality Standard	\$255,524
Service Standard	\$572

D.C. Amount (before deductions)	17 Year
Forecast Population	5,853
\$ per Capita	\$572
Eligible Amount	\$3,350,550



Appendix C

Long-Term Capital and Operating Cost Examination



Appendix C: Long-Term Capital and Operating Cost Examination

As a requirement of the D.C.A., 1997 under subsection 10(2)(c), an analysis must be undertaken to assess the long-term capital and operating cost impacts for the capital infrastructure projects identified within the D.C. As part of this analysis, it was deemed necessary to isolate the incremental operating expenditures directly associated with these capital projects, factor in cost savings attributable to economies of scale or cost sharing where applicable, and prorate the cost on a per unit basis (i.e. sq.ft. of building space, per vehicle, etc.). This was undertaken through a review of the Municipality's 2017 Financial Information Return.

In addition to the operational impacts, over time the initial capital projects will require replacement. This replacement of capital is often referred to as lifecycle cost. By definition, lifecycle costs are all the costs which are incurred during the life of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. The method selected for lifecycle costing is the sinking fund method which provides that money will be contributed annually and invested, so that those funds will grow over time to equal the amount required for future replacement.

Table C-1 depicts the annual operating impact resulting from the proposed gross capital projects at the time they are all in place. It is important to note that, while municipal program expenditures will increase with growth in population, the costs associated with the new infrastructure (i.e. facilities) would be delayed until the time these works are in place.



Table C-1
Operating and Capital Expenditure Impacts for Future Capital Expenditures

SERVICE	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
Roads	142,195	40,365	182,560
Public Works	243,828	174,698	418,525
Fire Protection	67,943	31,329	99,272
Parks and Recreation	47,397	19,788	67,185
Library	-	-	-
Administration - Studies	-	-	-
Wastewater	142,031	112,762	254,793
Water	11,190	7,688	18,878
Total	654,584	386,630	1,041,214



Appendix D

Local Service Policy



Appendix D: Local Service Policy

Purpose:

The purpose of the proposed Local Service Policy is to provide guidance to the Municipality and developers in identifying developer responsibility for the installation of local municipal services as identified under section 59 of the Development Charges Act, 1997, as amended (D.C.A.) and section 51 of the Planning Act.

The D.C.A. provides the following legislative direction with respect to "local services":

- "s. 59 (1) A municipality shall not, by way of a condition or agreement under section 51 or 53 of the Planning Act, impose directly or indirectly a charge related to a development or a requirement to construct a service related to development except as allowed in subsection (2).
- (2) A condition or agreement referred to in subsection (1) may provide for,
- (a) local services, related to a plan of subdivision or within the area to which the plan relates, to be installed or paid for by the owner as a condition of approval under section 51 of the Planning Act;
 - (b) local services to be installed or paid for by the owner as a condition of approval under section 53 of the Planning Act."

Further, the D.C.A. prohibits development charges being used as a funding source for local services as follows:

- "s. 2 (5) A development charge by-law may not impose development charges with respect to local services described in clauses 59(2) (a) and (b)."

Specifically, the local servicing guidelines are to:

- identify direct developer responsibilities in the provision of municipal services for new residential development;
- identify those types of services where significant additional costs may be incurred by the developer to accommodate the servicing of lands not owned by the developer;
- provide the basis of establishing eligibility for cost sharing if required and the method of calculation of "oversizing" costs;



- develop appropriate methods of cost recovery for additional costs related to "oversizing."

Services to be Included in Local Service Policy:

Roads, Sidewalks, Street Lighting

Roads, sidewalks and street lighting are generally developer responsibility with little or no oversizing applications within the Municipality. There are no planned major roadways through developments within the Municipality which would require a roadway of greater size or capacity than the municipal standard for local roads.

All road linkages or connections extending from the development area to existing municipal roads are the responsibility of the developer and are to be constructed to full municipal standards including all services where appropriate.

Sidewalks are required in accordance with municipal standards. Sidewalk linkages/connections to tie into existing pathway systems, parks or adjacent arterial or collector roads are developer responsibilities.

Street lighting is required in accordance with municipal standards. Street lighting along linkages/connections to existing roads are the developer's responsibilities.

Sanitary Sewers

The sizing and servicing limits of all local sanitary sewers are to be identified by the developer's professional engineer. All external service areas are to be identified and the impact on the sizing and depth of local services determined as part of the normal engineering design and approvals.

Should more detailed area master servicing plans be required to address the servicing of new growth areas, such studies shall be undertaken either directly by the municipality or under the direction of the municipality and will be eligible for funding from development charges in accordance with requirements of the Act.

All local sanitary sewers up to and including 250 mm diameter are to be the developer's responsibility. Local sanitary sewers greater than 250 mm diameter will be eligible for cost sharing funded from development charges in accordance with these guidelines provided that:

- oversizing is required to service designated future development areas external to the development; and
- the subject internal sewer has been identified as a trunk sewer in a council approved master servicing plan.



Generally, there will be no compensation for the deepening of sanitary sewers to accommodate external areas. Consideration for additional compensation funded from development charges may be given where the depth of eligible sewers needs to be increased more than 2.0 m in order to accommodate external areas or where the additional depth will have a significant impact on construction methods (i.e. dewatering).

Sanitary Pumping Stations

Sanitary pumping stations are to be reviewed on a case by case basis. Generally, sanitary pumping stations and connecting works servicing a single development or part of a single development with no area wide benefit will be deemed a local service and will be the developer's responsibility.

Pumping stations identified as having an area wide benefit must be identified in a council approved master servicing study with eligible costs being funded from development charges.

Watermains

The servicing limits and sizing of local watermains are to be identified by the developer's professional engineer.

All local watermains up to and including 250 mm diameter are the developer's responsibility. Watermains over 250 mm diameter which have been oversized to provide fire protection within a development are deemed a local service and are the developer's responsibility.

Local watermains greater than 250 mm diameter will be eligible for cost sharing funded from development charges in accordance with these guidelines provided that:

- oversizing is required to service designated future development areas external to the development; and
- the subject internal watermain has been identified as a trunk main in a council-approved master servicing plan.

Storm Sewers

The sizing and servicing limits of all local storm sewers are to be identified by the developer's professional engineer. External service areas are to be identified and the impact on the sizing and depth of local storm sewers determined as part of the normal engineering design and approvals.

Should more detailed area master servicing plans be required to address the servicing of new growth areas, such studies shall be undertaken either directly by the municipality



or under the direction of the municipality and will be eligible for funding from development charges in accordance with requirements of the Act.

All storm sewers up to and including 1200 mm diameter are the developer's responsibility. Storm sewers greater than 1200 mm diameter will be eligible for cost sharing funded from development charges in accordance with these guidelines provided that:

- oversizing is required to service designated future development areas external to the development; and
- the subject sewer has been identified as a trunk sewer in a council approved master servicing plan.

Generally, there will be no compensation for the deepening of storm sewers to accommodate external areas. Consideration for additional compensation may be given where the depth of eligible sewers needs to be increased more than 2.0 m in order to accommodate external areas or where the additional depth will have a significant impact on construction methods (i.e. dewatering).

Stormwater Management

Stormwater management is generally considered on an area by area basis. Therefore, stormwater management is excluded from development charges unless specific circumstances have been identified and allowed for within the development charges calculations.

Definitions for Relevant Terms

local services:	Roadworks, sidewalks, streetlighting, storm sewers, sanitary sewers, watermains and appurtenances necessary to provide services within a plan of subdivision and which are generally of local benefit as outlined above. May also include linkages or connections to existing municipal infrastructure.
external service area:	The servicing limits for a proposed work beyond the subject development. External areas could be comprised of either new growth areas or areas of existing development or a combination of the two.
oversizing:	The difference between the maximum size identified within these guidelines for a local service (storm sewer, sanitary sewer or watermain) and the size of service required to service areas external to the subject development.



trunk services: Significant sanitary sewers, storm sewers or watermains which service more than one development area and which are larger than the maximum sizes identified within these guidelines or are identified within a Master Servicing Study as a trunk service. Trunk services would typically be eligible for funding from development charges in accordance with the Act.

Oversizing Cost Recovery

Oversizing costs to be reimbursed through development charges are to be based on the net increase in cost for materials and installation of the sewer or watermain in accordance with Municipal benchmark costs. Oversizing costs do not include costs of restoration, engineering costs or federal or provincial taxes.

Note: The above policy guidelines represent the general principles by which staff will be guided in considering development applications. However, each application will be considered on its own merits having regard to, among other factors, the nature, type and location of the development, any existing and proposed development in the surrounding area, these policy guidelines, and subsection 59(2) of the Development Charges Act, 1997, as amended.



Appendix E

Uniform Non-Residential D.C. Calculations (Option 2)



As presented herein, two options of structuring the non-residential D.C.s have been discussed with Municipal staff and have been included in this study for Council's consideration. This chapter presents the calculations of determining the charge for the second option, uniform charges for non-residential developments, based on the growth-related capital costs identified in Chapter 5.



Table E-1
Area-Specific Services D.C. Calculation
2019-Buildout (Urban)

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per m²
1. Wastewater	\$ 26,355,412	\$ 2,291,775	\$ 10,385	\$ 23.28
2. Water	\$ 3,559,953	\$ 309,561	\$ 1,403	\$ 3.15
Total D.C.-Eligible Capital Cost	\$ 29,915,365	\$ 2,601,336	\$ 11,788	\$ 26.43
Buildout Gross Population/GFA Growth (sq.ft.)	8,037	98,407		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$ 3,722.21	\$ 26.43		
<u>By Residential Unit Type</u>	<u>P.P.U.</u>			
Single and Semi-Detached Dwelling	3.167	\$ 11,788		
Apartments - 2 Bedrooms +	2.028	\$ 7,549		
Apartments - Bachelor and 1 Bedroom	1.278	\$ 4,757		
Other Multiples	2.079	\$ 7,738		



Table E-2
Municipal-wide Services D.C. Calculation
2019-2036

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per m²
3. Roads	\$ 7,624,355	\$ 1,452,258	\$ 3,509	\$ 17.19
4. Public Works	\$ 3,706,022	\$ 705,909	\$ 1,705	\$ 8.35
Total D.C.-Eligible Capital Cost	\$ 11,330,377	\$ 2,158,167	\$ 5,214	\$ 25.54
17-Year Gross Population/GFA Growth (sq.m.)	6,882	84,505		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$ 1,646.38	\$ 25.54		
<u>By Residential Unit Type</u>	<u>P.P.U.</u>			
Single and Semi-Detached Dwelling	3.167	\$ 5,214		
Apartments - 2 Bedrooms +	2.028	\$ 3,339		
Apartments - Bachelor and 1 Bedroom	1.278	\$ 2,104		
Other Multiples	2.079	\$ 3,423		



Table E-3
Municipal-wide Services D.C. Calculation
2019-2029

SERVICE	2019\$ D.C.-Eligible Cost		2019\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per m ²
5. Fire Protection	\$ 1,983,162	\$ 349,970	\$ 1,528	\$ 7.55
6. Parks and Recreation	\$ 3,736,610	\$ 196,664	\$ 2,878	\$ 4.24
7. Library	\$ -	\$ -	\$ -	\$ -
8. Administration - Studies	\$ 493,876	\$ 87,155	\$ 380	\$ 1.88
Total D.C.-Eligible Capital Cost	\$ 6,213,648	\$ 633,789	\$ 4,786	\$ 13.67
10-Year Gross Population/GFA Growth (sq.ft.)	4,112	46,368		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$ 1,511.10	\$ 13.67		
<u>By Residential Unit Type</u>	<u>P.P.U.</u>			
Single and Semi-Detached Dwelling	3.167	\$ 4,786		
Apartments - 2 Bedrooms +	2.028	\$ 3,065		
Apartments - Bachelor and 1 Bedroom	1.278	\$ 1,931		
Other Multiples	2.079	\$ 3,142		



Appendix F

Proposed D.C. By-Law



MUNICIPALITY OF MIDDLESEX CENTRE

BY-LAW NUMBER 2019-XX

BEING A BY-LAW TO ESTABLISH DEVELOPMENT CHARGES AND TO REPEAL BY-LAWS 2014-069, 2017-045, and 2017-133

WHEREAS subsection 2(1) of the *Development Charges Act, 1997, S.O. 1997 c. 27* (hereinafter called “the Act”) provides that the council of a municipality may pass By-laws for the imposition of development charges against land for increased capital costs required because of the need for services arising from development in the area to which the by-law applies;

AND WHEREAS the Council of Municipality of Middlesex Centre has given Notice in accordance with Section 12 of the *Development Charges Act, 1997, S.O. 1997, c. 27* of its intention to pass a by-law under Section 2 of the said Act;

AND WHEREAS the Council of the Municipality of Middlesex Centre has heard all persons who applied to be heard either in objection to, or in support of, the development charge proposal at a public meeting held on June 5, 2019;

AND WHEREAS the Council of the Municipality of Middlesex Centre had before it a report entitled 2019 Development Charge Background Study dated May 17, 2019, prepared by Watson & Associates Economists Ltd., wherein it is indicated that the development of any land within the Municipality of Middlesex Centre will increase the need for services as defined herein;

AND WHEREAS the Council of the Municipality of Middlesex Centre on July 17, 2019 approved the Development Charge Background Study dated May 17, 2019, in which certain recommendations were made relating to the establishment of a development charge policy for the Municipality of Middlesex Centre pursuant to the *Development Charges Act, 1997, S.O., 1997, c. 27*.

AND WHEREAS the Council of the Municipality of Middlesex Centre has determined that no further public meeting is required in accordance with subsection 12(3) of the Act.



NOW THEREFORE BE IT ENACTED as a By-law of the Municipality of Middlesex Centre as follows:

DEFINITIONS

1. In this by-law,
 - (1) “Act” means the Development Charges Act, 1997, S.O. 1997, c.27;
 - (2) “Accessory use” means a use of land, buildings or structures which is incidental and subordinate to the principal use of the lands and buildings;
 - (3) “Agricultural use” means a farming business as defined by the Farmland Property Tax Program of the Farm Registration and Farm Organizations Funding Act, 1993;
 - (4) “Apartment dwelling” means any dwelling unit within a building containing more than four dwelling units where the units are connected by an interior corridor;
 - (5) “Area-Specific Services” means municipal water and wastewater services as defined in Schedule “A”;
 - (6) “Bedroom” means a habitable room larger than seven square metres, including a den, study, or other similar area, but does not include a living room, dining room or kitchen;
 - (7) “Board of education” means a board defined in s.s. 1(1) of the Education Act; R.S.O. 1990, c.E.2, as amended;
 - (8) “Building Code Act” means the Building Code Act, 1992, S.O. 1992, c.23, as amended;
 - (9) “Capital cost” means costs incurred or proposed to be incurred by the municipality or a local board thereof directly or by others on behalf of, and as authorized by, the municipality or local board,
 - (a) to acquire land or an interest in land, including a leasehold interest;



- (b) to improve land;
- (c) to acquire, lease, construct or improve buildings and structures;
- (d) to acquire, lease, construct or improve facilities including (but not limited to),
 - (i) rolling stock with an estimated useful life of seven years or more,
 - (ii) furniture and equipment, other than computer equipment, and
 - (iii) materials acquired for circulation, reference or information purposes by a library board as defined in the Public Libraries Act, R.S.O. 1990, c.P. 44, as amended, and
- (e) to undertake studies in connection with any of the matters referred to in clauses (a) to (d);
- (f) to complete the development charge background study under Section 10 of the Act;
- (g) interest on money borrowed to pay for costs in (a) to (d);

required for provision of services designated in this by-law within or outside the municipality;

- (10) “Council” means the Council of the Municipality of Middlesex Centre;
- (11) “Development” means any activity or proposed activity in respect of land that requires one or more of the actions referred to in section 4 of this by-law and including the redevelopment of land or the redevelopment, expansion, extension or alteration of a use, building or structure except interior alterations to an existing building or structure which do not change or intensify the use of land;
- (12) “Development charge” means a charge imposed pursuant to this By-law;



- (13) “Dwelling unit” means a room or suite of rooms used, or designed or intended for use by, one person or persons living together, in which culinary and sanitary facilities are provided for the exclusive use of such person or persons;
- (14) “Farm building” means that part of a bona fide farm operation encompassing barns, silos and other ancillary development to an agricultural use, but excluding a residential use;
- (15) “Greenhouse” shall mean a building or structure that is used for the growing, storage and/or processing of fruits, vegetables, flowers, plants shrubs, trees or similar horticultural products in regulated temperatures and humidity.
- (16) “Grade” means the average level of finished ground adjoining a building or structure at all exterior walls;
- (17) “Gross floor area” means,
 - (a) in the case of a residential building or structure, or in the case of a mixed-use building or structure with respect to the residential portion thereof, the total area of all floors above grade of a dwelling unit measured between the outside surfaces of exterior walls or between the outside surfaces of exterior walls and the centre line of party walls dividing the dwelling unit from another dwelling unit or other portion of a building;
 - (b) in the case of a non-residential building or structure, or in the case of a mixed-use building or structure in respect of the non-residential portion thereof, the total area of all building floors above or below grade measured between the outside surfaces of the exterior walls, or between the outside surfaces of exterior walls and the centre line of party walls dividing a non-residential use and a residential use;
- (18) “Industrial” means industrial uses as permitted by the Municipality of Middlesex Centre’s Zoning By-laws, as amended or replaced from time to time;



- (19) “Local board” means public library board, local board of health, or any other board, commission, committee or body or local authority established or exercising any power or authority under any general or special Act with respect to any of the affairs or purposes of the municipality or any part or parts thereof other than a board defined in section 1(1) of the Education Act, R.S.O, 1990, c.E.2, as amended;
- (20) “Local services” means those services or facilities which are under the jurisdiction of the municipality and are related to a plan of subdivision or consent or within the area to which the plan relates, required as a condition of approval under s.51 or s.53 of the Planning Act, 1990, R.S.O, 1990 c.P.13, as amended;
- (21) “Multiple dwelling” means all dwellings other than single detached dwellings, semi-detached dwellings, and apartment dwellings;
- (22) “Municipality” means the Municipality of Middlesex Centre;
- (23) “Non-residential uses” means a building or structure used for other than a residential use;
- (24) “Owner” means the owner of land or a person who has made application for an approval for the development of land upon which a development charge is imposed;
- (25) “Planning Act” means the Planning Act, 1990, R.S.O. 1990, c.P.13, as amended;
- (26) “Regulation” means any regulation made pursuant to the Act;
- (27) “Residential uses” means lands, buildings or structures or portions thereof used, or designed or intended for use as a home or residence of one or more individuals, and shall include a single detached dwelling, a semi-detached dwelling, a multiple dwelling, an apartment dwelling, and the residential portion of a mixed-use building or structure;
- (28) “Semi-detached dwelling” means a building divided vertically into two dwelling units each of which has a separate entrance and access to grade;



- (29) “Services” means services set out in Schedule “A” to this By-law;
- (30) “Single detached dwelling” means a completely detached building containing only one dwelling unit.

SCHEDULE OF DEVELOPMENT CHARGES

- 2. (1) Subject to the provisions of this By-law, development charges against land shall be imposed, calculated and collected in accordance with the base rates set out in Schedule “B”, which relate to the services set out in Schedule “A”.
- (2) Notwithstanding subsection (1), for the designated lands included in Schedule “C” development charges shall be imposed, calculated and collected in accordance with the base rates set out in Schedule “B”, which relate to the Area-Specific Services set out in Schedule “A”.
- (3) Notwithstanding subsection (1), for the lands which are not included as designated lands within Schedule “C” but which are to be serviced by water services, waste water services or both services, development charges shall be imposed, calculated and collected in accordance with the rates set out in Schedule “B”, which relate to the appropriate Area Specific Service(s) set out in Schedule “A”.
- (4) This by-law does not provide for the phasing in of the schedule of the base rates in Schedule “B”.
- (5) The development charge with respect to the use of any land, buildings or structures shall be calculated as follows:
 - (a) in the case of residential development or redevelopment, or the residential portion of a mixed-use development or redevelopment, based upon the number and type of dwelling units;
 - (b) in the case of non-residential development or redevelopment, or the non-residential portion of a mixed-use development or redevelopment, based upon the gross floor area of such development.



- (6) Council hereby determines that the development or redevelopment of land, buildings or structures for residential and non-residential uses will require the provision, enlargement or expansion of the services referenced in Schedule “A”.

APPLICABLE LANDS

3. (1) Subject to subsections (2), (3), and (6), this by-law applies to all lands in the municipality, whether or not the land or use is exempt from taxation under Section 3 of the Assessment Act, R.S.O. 1990, c.A.31.
- (2) This by-law shall not apply to land that is owned by and used for the purposes of:
- (a) a board of education;
 - (b) any municipality or local board thereof; and
 - (c) the erection of temporary buildings or structures.
- (3) This by-law shall not apply to that category of exempt development described in subsection 2(3) of the Act and Section 2 of O.Reg. 82/98, namely:
- (a) the enlargement of an existing dwelling unit or the creation of one or two additional dwelling units in an existing single detached house where the total residential gross floor area of the dwelling units created does not exceed the residential gross floor area of the existing dwelling unit prior to the enlargement; or
 - (b) the creation of one additional dwelling unit in any other existing residential building provided the residential gross floor area of the additional dwelling unit does not exceed the residential gross floor area of the smallest existing dwelling unit in the case of a semi-detached house, or does not exceed the residential gross floor area of the smallest existing dwelling unit contained in any other residential building.



- (4) Notwithstanding subsection (3)(a), development charges shall be calculated and collected in accordance with Schedule “B” where the total residential gross floor area of the additional one or two dwelling units is greater than the total gross floor area of the existing single detached dwelling unit.
 - (5) Notwithstanding subsection (3)(b), development charges shall be calculated and collected in accordance with Schedule “B” where the additional dwelling unit has a residential gross floor area greater than,
 - (a) in the case of semi-detached house or multiple dwelling, the gross floor area of the smallest existing dwelling unit, and
 - (b) in the case of any other residential building, the residential gross floor area of the smallest existing dwelling unit.
 - (6) This by-law does not apply to that category of exempt development described in section 3(2) and Section 1 of O.Reg. 82/98, namely:
 - (a) the enlargement of the gross floor area of an existing industrial building, if the gross floor area is enlarged by 50 percent or less;
 - (b) for the purpose of (a) the terms “gross floor area” and “existing industrial building” shall have the same meaning as those terms have in O.Reg. 82/98 made under the Act.
 - (7) Notwithstanding subsection (6)(a), if the gross floor area of an existing industrial building is enlarged by more than 50 percent, development charges shall be calculated and collected in accordance with Schedule “B” on the amount by which the enlargement exceeds 50 percent of the gross floor area before the enlargement.
4. (1) Subject to subsection (2), development charges shall be calculated and collected in accordance with the provisions of this by-law and be imposed on land to be developed for residential and non-residential use, where, the development requires,
- (a) the passing of a zoning by-law or an amendment thereto under Section 34 of the Planning Act;



- (b) the approval of a minor variance under Section 45 of the Planning Act;
 - (c) a conveyance of land to which a by-law passed under subsection 49(7) of the Planning Act, applies;
 - (d) the approval of a plan of subdivision under Section 51 of the Planning Act;
 - (e) a consent under Section 53 of the Planning Act;
 - (f) the approval of a description under Section 50 of the Condominium Act; R.S.O. 1990, c.C.26, as amended, or
 - (g) the issuing of a permit under the Building Code Act, in relation to a building or structure.
- (2) Subsection (1) shall not apply in respect to
- (a) local services installed or paid for by the owner within a plan of subdivision or within the area to which the plan relates, as a condition of approval under Section 51 of the Planning Act;
 - (b) local services installed or paid for by the owner as a condition of approval under Section 53 of the Planning Act.

LOCAL SERVICE INSTALLATION

5. Nothing in this by-law prevents Council from requiring, as a condition of an agreement under Section 41, 51 or 53 of the Planning Act, that the owner, at his or her own expense, shall install or pay for such local services, as Council may require.

MULTIPLE CHARGES

6. (1) Where two or more of the actions described in subsection 4(1) are required before land to which a development charge applies can be developed, only one development charge shall be calculated and collected in accordance with the provisions of this by-law.



- (2) Notwithstanding subsection (1), if two or more of the actions described in subsection 4(1) occur at different times, and if the subsequent action has the effect of increasing the need for municipal services as set out in Schedule “A”, an additional development charge on the additional residential units and non-residential floor area, shall be calculated and collected in accordance with the provisions of this by-law.

SERVICES IN LIEU

7. (1) Council may authorize an owner, through an agreement under Section 38 of the Act, to substitute such part of the development charge applicable to the owner’s development as may be specified in the agreement, by the provision at the sole expense of the owner, of services in lieu. Such agreement shall further specify that where the owner provides services in lieu in accordance with the agreement, Council shall give to the owner a credit against the development charge in accordance with the agreement provisions and the provisions of Section 39 of the Act, equal to the reasonable cost to the owner of providing the services in lieu. In no case shall the agreement provide for a credit which exceeds the total development charge payable by an owner to the municipality in respect of the development to which the agreement relates.
- (2) In any agreement under subsection 7(1), Council may also give a further credit to the owner equal to the reasonable cost of providing services in addition to, or of a greater size or capacity, than would be required under this by-law.
- (3) The credit provided for in subsection (2) shall not be charged to any development charge reserve fund.

RULES WITH RESPECT TO REDEVELOPMENT

8. In the case of the demolition of all or part of a residential or non-residential building or structure:
 - (1) a credit shall be allowed, provided that the land was improved by occupied structures and a building permit was issued for the development or redevelopment within the five-year period from the date of issuance of the



demolition permit or alternative evidence of the date of the demolition satisfactory to the Municipality;

- (2) if a development or redevelopment involves the demolition of and replacement of a building or structure, or the conversion from one principal use to another, a credit shall be allowed equivalent to:
 - (a) the number of dwelling units demolished/converted on the land multiplied by the applicable residential development charge in place at the time the development charge is payable, and/or
 - (b) the non-residential gross floor area of the building(s) demolished/converted on the land multiplied by the current applicable non-residential development charge in place at the time the development charge is payable.
 - (c) notwithstanding subsection (2)(b), if the building demolished on the land is a farm building, the gross floor area of any farm building demolished on the land, and, on a one time basis, on any other lands owned by the current owner in the Municipality multiplied by the applicable non-residential development charge in place at the time the development charge is payable.
 - (d) the credit can, in no case, exceed the amount of the development charge that would otherwise be payable.

TIMING OF CALCULATION AND PAYMENT

9. (1) Development charges shall be calculated and payable in full in money or by provision of services as may be agreed upon, or by credit granted under the Act, on the date that the first building permit is issued in relation to a building or structure on land to which a development charge applies.
- (2) Where development charges apply to land in relation to which a building permit is required, the building permit shall not be issued until the development charge has been paid in full.



RESERVE FUNDS

10. (1) Monies received from payment of development charges shall be maintained in eight separate reserve funds as follows: roads; public works; fire protection, parks and recreation; library; administration; water and wastewater.
- (2) Monies received for the payment of development charges shall be used only in accordance with the provisions of Section 35 of the Act.
- (3) Where any development charge, or part thereof, remains unpaid after the due date, the amount unpaid shall be added to the tax roll and shall be collected as taxes.
- (4) Where any unpaid development charges are collected as taxes under subsection (4), the monies so collected shall be credited to the development charge reserve fund referred to in subsection (1).
- (5) The Treasurer of the Municipality shall, in each year commencing in 2020 for the 2019 year, furnish to Council a statement in respect of the reserve fund established hereunder for the prior year, containing the information set out in Section 12 of O.Reg. 82/98.

BY-LAW AMENDMENT OR APPEAL

11. (1) Where this by-law or any development charge prescribed thereunder is amended or repealed either by order of the Ontario Municipal Board or by resolution of the Municipal Council, the Treasurer shall calculate forthwith the amount of any overpayment to be refunded as a result of said amendment or repeal.
- (2) Refunds that are required to be paid under subsection (1) shall be paid with interest to be calculated as follows:
 - (a) Interest shall be calculated from the date on which the overpayment was collected to the date on which the refund is paid;
 - (b) The Bank of Canada interest rate in effect on the date of enactment of this by-law shall be used.



- (3) Refunds that are required to be paid under subsection (1) shall include the interest owed under this section.

BY-LAW INDEXING

12. The development charges set out in Schedule “B” to this by-law shall be adjusted annually on January 1, commencing in 2020, without amendment to this by-law, in accordance with the most recent available twelve month change in the Statistics Canada Quarterly, “Building Construction Price Indexes”.

BY-LAW REGISTRATION

13. A certified copy of this by-law may be registered on title to any land to which this by-law applies.

BY-LAW ADMINISTRATION

14. This by-law shall be administered by the Treasurer.

SEVERABILITY

15. In the event any provision, or part thereof, of this By-law is found, by a court of competent jurisdiction, to be ultra vires, such provision, or part thereof, shall be deemed to be severed, and the remaining portion of such provision and all other provisions of the By-law shall remain in full force and effect.

HEADINGS FOR REFERENCE ONLY

16. The headings inserted in this By-law are for convenience of reference only and shall not affect the construction or interpretation of this by-law.

SCHEDULES TO THE BY-LAW

17. The following Schedules to this by-law form an integral part of this by-law:

Schedule A - Schedule of Municipal Services

Schedule B - Schedule of Development Charges

Schedule C - Area-Specific Services Designated Lands



EXISTING BY-LAW REPEAL

18. Municipality of Middlesex Centre By-laws 2014-069, 2017-045, and 2017-133 are hereby repealed.

DATE BY-LAW EFFECTIVE

19. This By-law shall come into force and effect on July 17, 2019.

BY-LAW EXPIRY

20. This By-law shall expire on July 17, 2024.

SHORT TITLE

21. This by-law may be cited as the “Municipality of Middlesex Centre Development Charge By-law, 2019.”

READ a FIRST, SECOND and THIRD TIME and FINALLY PASSED on this 17th day of July, 2019.

Mayor

Clerk



SCHEDULE "A"

to BY-LAW NUMBER 2019-XX

Designated Municipal Services Under This By-Law

Municipal-Wide Services

- Roads
- Public Works
- Fire Protection
- Parks and Recreation
- Library
- Administration

Area-Specific Services

- Water
- Wastewater

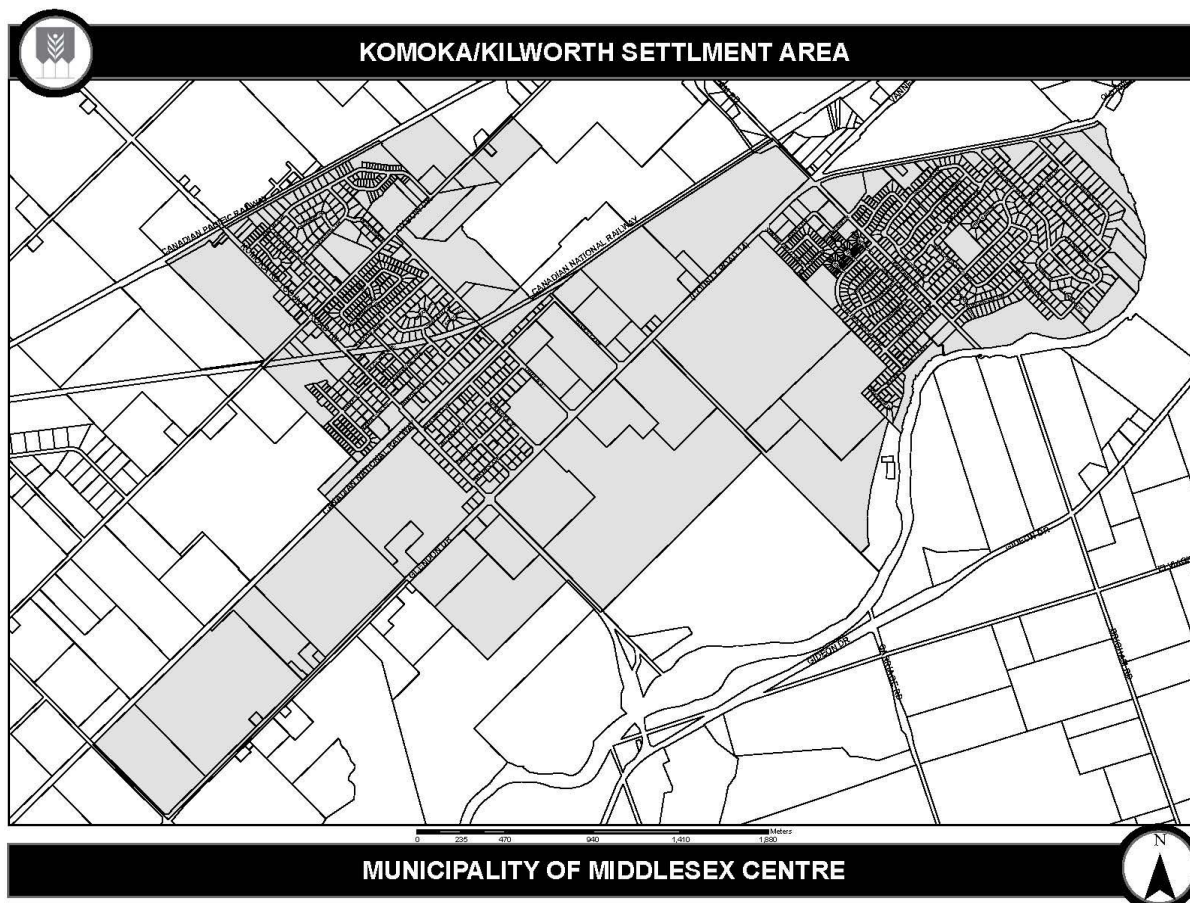


SCHEDULE “B”
to BY-LAW NUMBER 2019-XX
SCHEDULE OF DEVELOPMENT CHARGES

Service	RESIDENTIAL				NON-RESIDENTIAL (per m ² of Gross Floor Area)		
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Other Non-residential	Agricultural Use	Industrial
Municipal Wide Services:							
Roads	\$ 3,509	\$ 2,247	\$ 1,416	\$ 2,304	\$ 17.19	\$ 1.94	\$ 6.88
Public Works	\$ 1,705	\$ 1,092	\$ 688	\$ 1,119	\$ 8.35	\$ -	\$ 3.34
Fire Protection	\$ 1,528	\$ 978	\$ 617	\$ 1,003	\$ 7.55	\$ 1.74	\$ 3.02
Parks and Recreation	\$ 2,878	\$ 1,843	\$ 1,161	\$ 1,889	\$ 4.24	\$ -	\$ 1.70
Library	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration - Studies	\$ 380	\$ 243	\$ 153	\$ 249	\$ 1.88	\$ -	\$ 0.75
Total Municipal Wide Services	\$ 10,000	\$ 6,403	\$ 4,035	\$ 6,564	\$ 39.21	\$ 3.68	\$ 15.68
Urban Services							
Wastewater	\$ 10,385	\$ 6,650	\$ 4,191	\$ 6,817	\$ 23.28	\$ -	\$ 9.31
Water	\$ 1,403	\$ 898	\$ 566	\$ 921	\$ 3.15	\$ -	\$ 1.26
Total Urban Services	\$ 11,788	\$ 7,548	\$ 4,757	\$ 7,738	\$ 26.43	\$ -	\$ 10.57
GRAND TOTAL RURAL AREA	\$ 10,000	\$ 6,403	\$ 4,035	\$ 6,564	\$ 39.21	\$ 3.68	\$ 15.68
GRAND TOTAL URBAN AREA	\$ 21,788	\$ 13,951	\$ 8,792	\$ 14,302	\$ 65.64	\$ 3.68	\$ 26.26

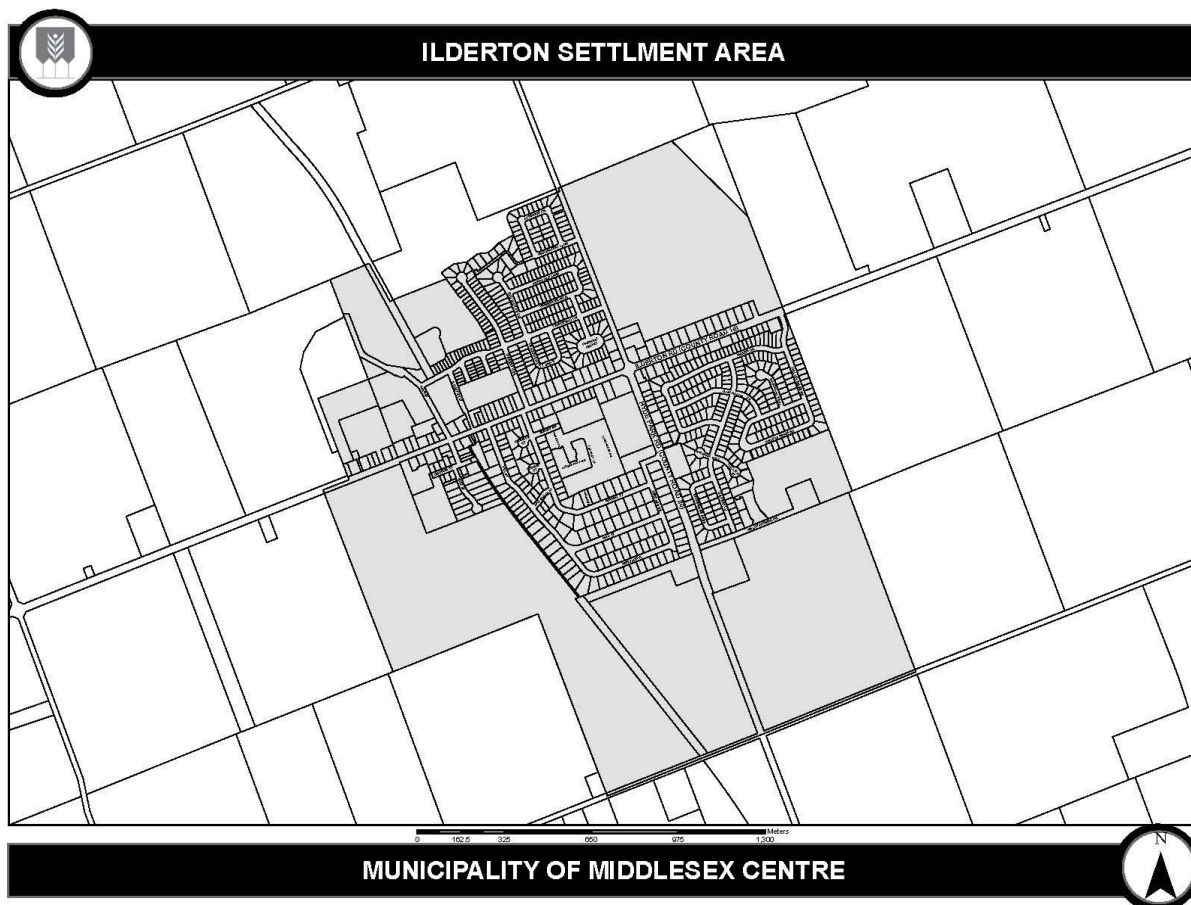


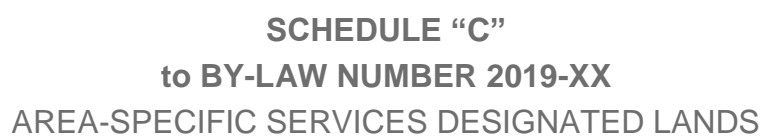
SCHEDULE "C"
to BY-LAW NUMBER 2019-XX
AREA-SPECIFIC SERVICES DESIGNATED LANDS





SCHEDULE "C"
to BY-LAW NUMBER 2019-XX
AREA-SPECIFIC SERVICES DESIGNATED LANDS







SCHEDULE "C"
to BY-LAW NUMBER 2019-XX
AREA-SPECIFIC SERVICES DESIGNATED LANDS

