



 **Watson
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ECONOMISTS LTD.

Addendum #1 to the April 23, 2019 Development Charges Background Study

Region of Waterloo

May 8, 2019

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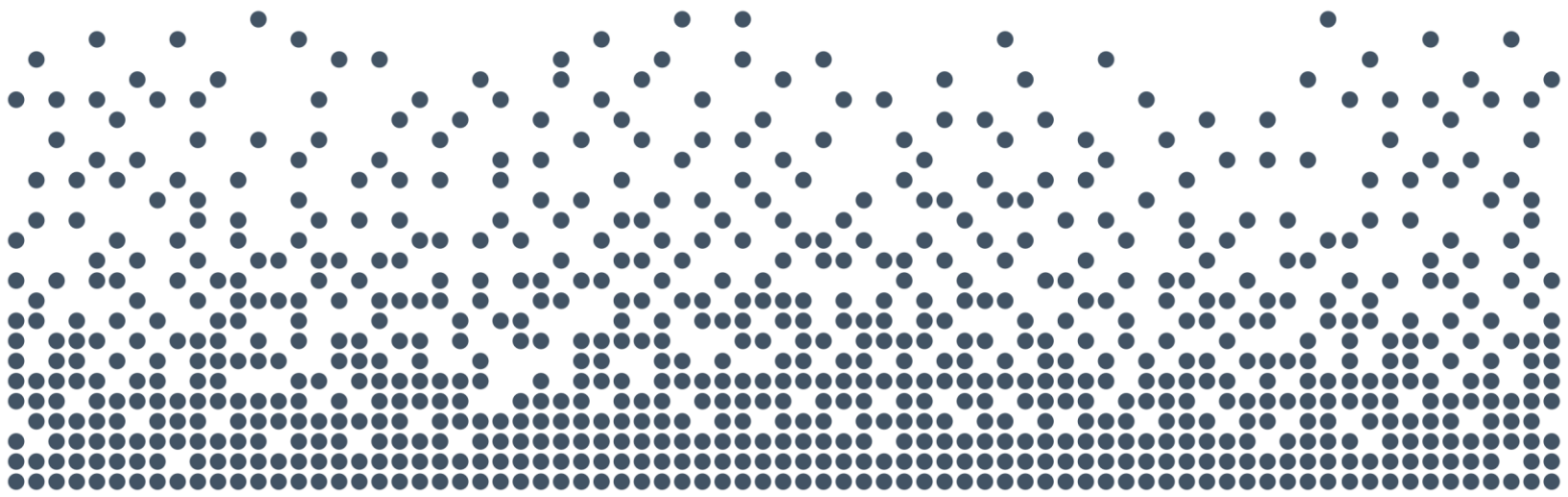
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List of Acronyms and Abbreviations

| Acronym | Full Description of Acronym |
|----------------|------------------------------------|
| D.C. | Development Charges |
| D.C.A. | Development Charges Act |
| sq.ft. | Square Foot |
| sq.m. | Square Metres |



Addendum Report to
the April 23, 2019
Development
Charges Background
Study



1. Background

Commensurate with the provisions of the Development Charges Act, 1997, as amended (D.C.A.), the Region has undertaken a Development Charges (D.C.) Background Study and released the study in accordance with the D.C.A. The following provides a summary of the key dates in the development charge by-law process:

April 11 & 25, 2019 – Stakeholder Meetings

April 23, 2019 – Release of the D.C. Background Study and draft by-law

May 8, 2019 – Addendum to April 23rd report released

May 8, 2019 – Public Meeting of Council

June 26, 2019 – Passage of Development Charges By-law

As per discussions at the Stakeholder meeting on April 25, 2019, staff presented an overview of the D.C. Background Study including the calculated charges and the non-residential development charge options that were provided in Appendix I of the background study. The options included the following differentiated charges:

- 1) One Uniform Non-Residential Charge;
- 2) Industrial vs. Non-Industrial;
- 3) Retail vs. Non-Retail; and
- 4) Industrial vs. Commercial vs. Institutional (I.C.I.).

Through discussions with the stakeholders, a fifth non-residential rate calculated was requested to be provided. This fifth option was to differentiate the non-residential charges into Industrial vs. Institutional vs. Retail Commercial vs. Non-Retail Commercial. Further, it was recognized that there was a minor calculation error in options three (3), Retail vs. Non-Retail, as provided in the background study, this calculation has been updated as part of this addendum report.

Since the release of the Background Study, the Province has introduced Bill 108, an Act to amend various statutes with respect to housing, other development and various other matters, which includes proposed amendments to the D.C.A. One of the proposed amendments includes removal of “soft” services (e.g. library, paramedic, airport, etc.) from the D.C.A. As a result and in anticipation of the possible changes to the D.C.A., this addendum report has split the General Government studies into two categories, Engineering Studies which include those service studies which will continue under the



D.C.A. and Community Based Studies which would subsequently be considered under the Community Benefit Charge.

These refinements will form part of the D.C. background study provided prior to by-law adoption.

2. Discussion

This section of the addendum report provides an explanation for the above-noted refinements. It is noted that the refinements have calculated residential and non-residential development charges based on additional differentiated categories.

2.1 Refinements to Appendix I Non-Residential Calculations

As noted in Appendix I of the Background Study, the method to calculate the Non-residential D.C.s are to take the non-residential portion of the net D.C.-eligible costs and divide these costs by the respective non-residential gross floor area for each forecast period (i.e. 10-year Region-wide, 10-year Cities (for Transit), 10-year Townships (for Library), Region-wide longer term, and Region-wide Urban Longer Term). With respect to the four scenarios, the non-residential costs and the associated gross floor area for each of the scenarios will be separated into each respective type of development based on employment.

The same methodology will be used to calculate the fifth option by separating the charges into Industrial vs. Retail Commercial vs. Non-Retail Commercial vs. Institutional development. This option is similar to option four (4), with the commercial category being further broken down.

Industrial/Retail Commercial//Non-Retail Commercial/Institutional Calculations

Using this method, the Region-wide total non-residential recovery amount has been divided in the proportionate share of industrial development vs. retail commercial development vs. non-retail commercial vs. institutional development based on employment within those categories. The forecasted non-residential gross floor area has also been separated into these categories and provides the following recovery (Table 5 to Appendix I):



Table 5
Industrial/Retail Commercial/Non-Retail Commercial/Institutional Calculations

| SERVICE | 2019\$ D.C.-Eligible Cost | | | | 2019\$ D.C.-Eligible Cost | | | | | | | |
|---|---------------------------|---------------------|-----------------------|----------------------|---------------------------|-----------------------------|---------------------------------|-------------------------|-----------------------|------------------------------|----------------------------------|--------------------------|
| | Industrial | Commercial Retail | Commercial Non-Retail | Institutional | Industrial per sq.m. | Commercial Retail per sq.m. | Commercial Non-Retail per sq.m. | Institutional per sq.m. | Industrial per sq.ft. | Commercial Retail per sq.ft. | Commercial Non-Retail per sq.ft. | Institutional per sq.ft. |
| | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Urban-wide Services Longer Term | \$42,716,248 | \$47,653,988 | \$57,300,664 | \$87,893,985 | \$40.12 | \$77.17 | \$86.27 | \$74.13 | \$3.72 | \$7.17 | \$8.02 | \$6.89 |
| Region-wide Services Longer Term | 35,950,092 | 26,436,790 | 70,248,911 | 86,556,254 | \$42.72 | \$83.83 | \$95.53 | 82.15 | \$3.97 | \$7.78 | \$8.88 | 7.63 |
| Region-wide Services 10 Year | 2,442,570 | 1,410,403 | 5,158,992 | 5,881,079 | \$6.39 | \$12.53 | \$14.28 | 12.28 | \$0.60 | \$1.16 | \$1.32 | 1.14 |
| TOTAL REGION-WIDE | \$81,108,909 | \$75,501,181 | \$132,708,567 | \$180,331,318 | \$89.23 | \$173.53 | \$196.08 | \$168.56 | \$8.29 | \$16.11 | \$18.22 | \$15.66 |
| City Specific Services 10 Year | 3,044,960 | 1,835,482 | 8,226,407 | 9,874,306 | 12.17 | 23.71 | 25.97 | 21.86 | 1.13 | 2.20 | 2.41 | 2.03 |
| Township Specific Services 10 Year | 49,965 | 25,867 | 36,231 | 22,076 | 0.38 | 0.74 | 0.81 | 0.81 | 0.04 | 0.07 | 0.08 | 0.08 |
| TOTAL CITIES | \$84,153,869 | \$77,336,664 | \$140,934,974 | \$190,205,624 | \$101.40 | \$197.24 | \$222.05 | \$190.42 | \$9.42 | \$18.31 | \$20.63 | \$17.69 |
| TOTAL TOWNSHIPS | \$81,158,874 | \$75,527,048 | \$132,744,797 | \$180,353,393 | \$89.61 | \$174.27 | \$196.89 | \$169.37 | \$8.33 | \$16.18 | \$18.30 | \$15.74 |



2.2 Correction to Non-Residential Calculation Option 3 – Retail vs. Non-Retail

During the stakeholder review, it was recognized that there was a minor calculation error in the third option, Retail vs. Non-Retail, based on the employment splits between these two categories. The following chart updates the Option 3 calculations provided in Appendix I of the Background Study. The impact of this correction on Retail development is a reduction of \$0.40/sq.m. (from \$197.64/sq.m. to \$197.24/sq.m.) in the Cities and a reduction of \$0.35/sq.m. (from \$174.62/sq.m. to \$174.27/sq.m.) in the Townships. The impact on the Non-Retail charges is an increase of \$0.38/sq.m. (from \$169.16/sq.m. to \$169.54/sq.m. in the Cities and a decrease of \$0.64/sq.m. (from \$149.95/sq.m. to \$149.31/sq.m.) in the Townships. The revised calculated Retail vs. Non-Retail charges are as follows (Table 3 to Appendix I):



Table 3
Retail vs. Non-Retail Calculations

| SERVICE | 2019\$ D.C.-Eligible Cost | | 2019\$ D.C.-Eligible Cost | | | |
|------------------------------------|---------------------------|----------------------|---------------------------|----------------------|-------------------|-----------------------|
| | Retail | Non-Retail | Retail per sq.m. | Non-Retail per sq.m. | Retail per sq.ft. | Non-Retail per sq.ft. |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| Urban-wide Services Longer Term | \$47,653,988 | \$187,910,897 | \$77.17 | \$64.47 | \$7.17 | \$5.99 |
| Region-wide Services Longer Term | 26,436,790 | 192,755,256 | \$83.83 | 73.28 | \$7.78 | 6.81 |
| Region-wide Services 10 Year | 1,410,403 | 13,482,640 | \$12.53 | 11.03 | \$1.16 | 1.02 |
| TOTAL REGION-WIDE | \$75,501,181 | \$394,148,794 | \$173.53 | \$148.78 | \$16.11 | \$13.82 |
| City Specific Services 10 Year | 1,835,482 | 21,145,673 | 23.71 | 20.76 | 2.20 | 1.93 |
| Township Specific Services 10 Year | 25,867 | 108,272 | 0.74 | 0.53 | 0.07 | 0.05 |
| TOTAL CITIES | \$77,336,664 | \$415,294,467 | \$197.24 | \$169.54 | \$18.31 | \$15.75 |
| TOTAL TOWNSHIPS | \$75,527,048 | \$394,257,065 | \$174.27 | \$149.31 | \$16.18 | \$13.87 |



2.3 Refinements to General Government Service

As noted in Section 1, the Province has introduced Bill 108, An Act to amend various statutes with respect to housing, other development and various other matters, which includes proposed amendments to the D.C. Act. One of the proposed amendments includes deeming “soft” services ineligible for inclusion in D.C. By-laws.

For the Region the soft services currently identified in the Background Study include library services, paramedic services, and airport, along with some studies identified under the General Government category.

If Bill 108 receives royal assent, any studies related to the “soft” services would also be deemed ineligible for inclusion in the D.C. By-law. As such, this addendum report has broken out the General Government (studies) category into “General Government - Community Based Studies”, this category will include the studies related to proposed ineligible services and “General Government - Engineering Studies”, which includes studies related to services proposed to continue as eligible.

This breakdown does not change the overall calculated rates provided for Council’s consideration.

2.4 Overall Changes in the D.C. Calculation

The above changes have been incorporated into the D.C. calculations as options for Council’s consideration. These options do not impact the calculated charges as provided for in Chapter 6 of the background study.

2.5 Changes to the Background Report

Based upon the above, the following revisions are made to the pages within the background study (new pages are appended to this report):

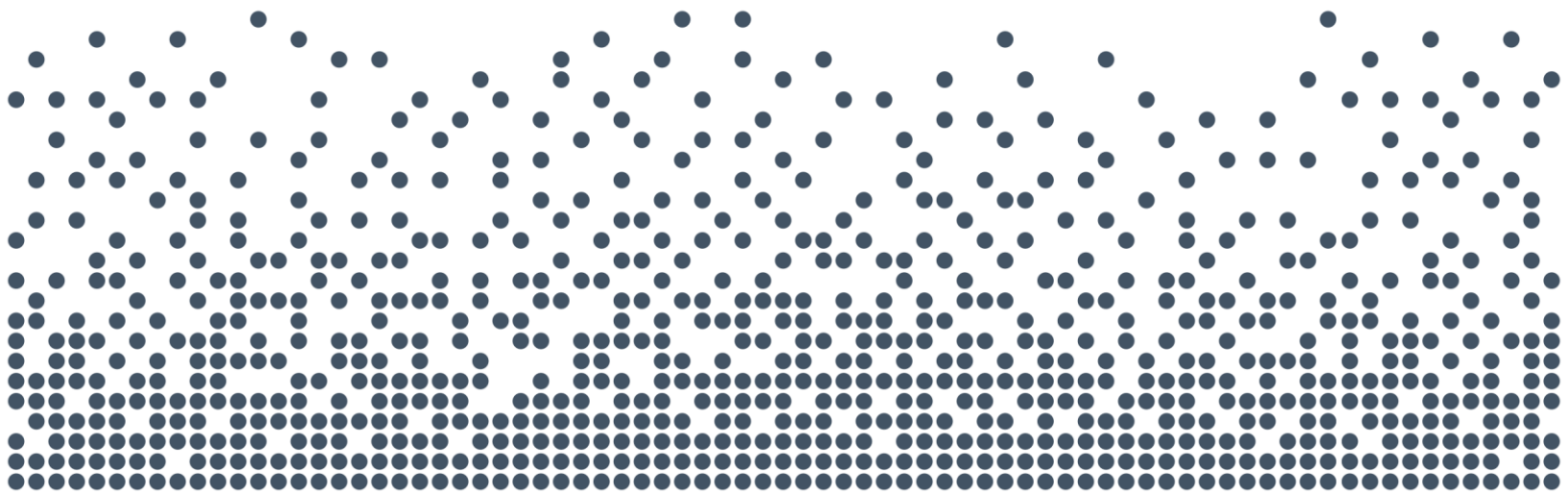


| Page Reference | Description of Revisions |
|-------------------|---|
| ES (iv) | Update to item 8 related to the options for differentiating the calculation of the non-residential charges. |
| ES (v) & (vi) | Updates to reflect the breakdown of the General Government category. |
| 1-3 | Revised Figure 1-1 to include the release of this addendum report. |
| 4-8 | Reserve Table updated to reflect the new title for General Government – Engineering Studies category. |
| 5-15 | Updates to reflect the breakdown of General Government into two categories, Engineering Studies and Community Based Studies. |
| 5-16 | Table split into two tables for the breakdown of General Government. |
| 6-3 | Table 6-3 updated to reflect the calculated charges for the two General Government categories. |
| 6-7 | Table 6-7 updated to reflect the two General Government categories. |
| 7-3 | Updates to section 7.3.2 item 2 to identify the two General Government categories. |
| 7-4 | Update to item 3 related to the additional option for differentiating the calculation of the non-residential charges. |
| 7-7 | Updated section 7.4.1 Categories for reserve funds to identify the breakdown of the General Government category into two. |
| 7-10 | Update section 7.5 to reference the addendum report in the recommendation to approve the background study, as amended. |
| Appendix C C-4 | Update Table to reflect the two General Government categories. |
| Appendix D D-4 | Update Table to reflect the two General Government categories in the example Treasurer’s annual D.C. reserve fund statement. |
| Appendix I | <p>Revised verbiage related to calculations for option 3 to correct the calculated non-residential charges for retail vs. non-retail development and to add option 5 to provide the calculated non-residential charges to be differentiated by Industrial vs. Retail Commercial vs. Non-Retail Commercial vs. Institutional developments.</p> <p>Table 3 updated for correction in calculation and Table 5 added for additional option.</p> |



3. Process for the Adoption of the Development Charges By-law

Sections 1 & 2 provide for a summary of the revisions to the Region's D.C. Background Study. If Council is satisfied with the above changes to the Background Study and based on the public submissions made at the public meeting, this addendum report #1 will be considered for approval by Council along with the Background Study.



Amended Pages



- c) Industrial/Commercial/Institutional; and
- d) Industrial/Retail Commercial/Non-Retail Commercial/Institutional.

These charges are further explained and presented in Appendix I.

The D.C.A. requires a summary be provided of the gross capital costs and the net costs to be recovered over the life of the by-law. This calculation is provided by service and is presented in Table 6-7. A summary of these costs is provided below:

| | |
|---|-----------------------|
| Total gross expenditures planned over the next five years | \$ 1,488,270,240 |
| Less: | |
| Benefit to existing development | \$ 512,541,939 |
| Post planning period benefit | \$ 248,995,102 |
| Mandatory 10% deduction for certain services | \$ 2,051,729 |
| Grants, subsidies and other contributions | \$ 2,192,000 |
| Net Costs to be recovered from development charges | \$ 722,489,469 |

This suggests that for the non-D.C. cost over the five-year D.C. by-law (benefit to existing development, mandatory 10% deduction, and the grants, subsidies and other contributions), \$516.79 million (or an annual amount of \$103.36 million) will need to be contributed from taxes and rates, or other sources. With respect to the post period benefit amount of \$248.99 million, it will be included in subsequent D.C. study updates to reflect the portion of capital that benefits growth in the post period D.C. forecasts.

Based on the above table, the Region plans to spend \$1.49 billion over the next five years, of which \$722.49 million (49%) is recoverable from D.C.s. Of this net amount, \$549.58 million is recoverable from residential development and \$172.91 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

- 9. Considerations by Council – The background study represents the service needs arising from residential and non-residential growth over the forecast periods.

The following services are calculated based on a Longer Term Region-wide Service Area Forecast:

- Water Services; and
- Wastewater Services.



- c) Industrial/Commercial/Institutional; and
- d) Industrial/Retail Commercial/Non-Retail Commercial/Institutional.

These charges are further explained and presented in Appendix I.

The D.C.A. requires a summary be provided of the gross capital costs and the net costs to be recovered over the life of the by-law. This calculation is provided by service and is presented in Table 6-7. A summary of these costs is provided below:

| | | |
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| Mandatory 10% deduction for certain services | \$ | 2,051,729 |
| Grants, subsidies and other contributions | \$ | 2,192,000 |
| Net Costs to be recovered from development charges | \$ | 722,489,469 |

This suggests that for the non-D.C. cost over the five-year D.C. by-law (benefit to existing development, mandatory 10% deduction, and the grants, subsidies and other contributions), \$516.79 million (or an annual amount of \$103.36 million) will need to be contributed from taxes and rates, or other sources. With respect to the post period benefit amount of \$248.99 million, it will be included in subsequent D.C. study updates to reflect the portion of capital that benefits growth in the post period D.C. forecasts.

Based on the above table, the Region plans to spend \$1.49 billion over the next five years, of which \$722.49 million (49%) is recoverable from D.C.s. Of this net amount, \$549.58 million is recoverable from residential development and \$172.91 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

- 9. Considerations by Council – The background study represents the service needs arising from residential and non-residential growth over the forecast periods.

The following services are calculated based on a Longer Term Region-wide Service Area Forecast:

- Water Services; and
- Wastewater Services.



The following services are calculated based on a Longer Term Region-wide forecast:

- Services Related to a Highway; and
- Operations;

The following services are calculated based on a 10-year Region-wide forecast. These include:

- Police Services;
- Airport;
- Paramedic Services;
- Waste Diversion;
- General Government:
 - Engineering Studies; and
 - Community Based Studies.

The following services are calculated based on an area specific basis for the 10-year forecast period:

- Transit Services (based on a 10-year Cities only forecast); and
- Library Services (based on a 10-year Townships only forecast).

Council will consider the findings and recommendations provided in the report and, in conjunction with public input, approve such policies and rates it deems appropriate. These directions will refine the draft D.C. by-law which is appended in Appendix G. These decisions may include:

- adopting the charges and policies recommended herein;
- considering additional exemptions to the by-law; and
- considering reductions in the charge by class of development (obtained by removing certain services on which the charge is based and/or by a general reduction in the charge).



Rate Summary

Table ES-1

| Service | RESIDENTIAL | | | | | | | | NON-RESIDENTIAL | | | |
|--|-----------------------------------|---------------|-----------------|---------------|---------------|---------------|---------------|--------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|
| | Single and Semi-Detached Dwelling | | Other Multiples | | Apartments | | Lodging Units | | (per sq.m. of Gross Floor Area) | (per sq.m. of Gross Floor Area) | (per sq.ft. of Gross Floor Area) | (per sq.ft. of Gross Floor Area) |
| | Cities | Townships | Cities | Townships | Cities | Townships | Cities | Townships | Cities | Townships | Cities | Townships |
| Municipal Wide Services: | | | | | | | | | | | | |
| Services Related to a Highway | 11,997 | 11,997 | 8,966 | 8,966 | 6,532 | 6,532 | 4,163 | 4,163 | 73.42 | 73.42 | 6.82 | 6.82 |
| Operations | 162 | 162 | 121 | 121 | 88 | 88 | 56 | 56 | 0.99 | 0.99 | 0.09 | 0.09 |
| Police Services | 812 | 812 | 607 | 607 | 442 | 442 | 282 | 282 | 5.10 | 5.10 | 0.47 | 0.47 |
| Airport | 585 | 585 | 437 | 437 | 319 | 319 | 203 | 203 | 3.69 | 3.69 | 0.34 | 0.34 |
| General Government - Engineering Studies | 192 | 192 | 143 | 143 | 105 | 105 | 67 | 67 | 1.21 | 1.21 | 0.11 | 0.11 |
| General Government - Community Based Studies | 106 | 106 | 79 | 79 | 58 | 58 | 37 | 37 | 0.67 | 0.67 | 0.06 | 0.06 |
| Paramedic Services | 170 | 170 | 127 | 127 | 93 | 93 | 59 | 59 | 0.36 | 0.36 | 0.03 | 0.03 |
| Waste Diversion | 298 | 298 | 223 | 223 | 162 | 162 | 103 | 103 | 0.12 | 0.12 | 0.01 | 0.01 |
| Total General Services | 14,322 | 14,322 | 10,703 | 10,703 | 7,799 | 7,799 | 4,970 | 4,970 | 85.56 | 85.56 | 7.93 | 7.93 |
| Area Specific Services: | | | | | | | | | | | | |
| Transit Services | 3,072 | - | 2,296 | - | 1,673 | - | 1,066 | - | 20.97 | - | 1.95 | - |
| Library Services | - | 646 | - | 483 | - | 352 | - | 224 | - | 0.56 | - | 0.05 |
| Total Area Specific Services | 3,072 | 646 | 2,296 | 483 | 1,673 | 352 | 1,066 | 224 | 20.97 | 0.56 | 1.95 | 0.05 |
| Urban Services: | | | | | | | | | | | | |
| Wastewater Services | 6,220 | 6,220 | 4,648 | 4,648 | 3,387 | 3,387 | 2,158 | 2,158 | 38.91 | 38.91 | 3.61 | 3.61 |
| Water Services | 4,442 | 4,442 | 3,320 | 3,320 | 2,419 | 2,419 | 1,541 | 1,541 | 27.78 | 27.78 | 2.58 | 2.58 |
| Total Urban Services | 10,662 | 10,662 | 7,968 | 7,968 | 5,806 | 5,806 | 3,699 | 3,699 | 66.69 | 66.69 | 6.19 | 6.19 |
| Total Full Services - Cities | 28,056 | - | 20,967 | - | 15,278 | - | 9,735 | - | 173.22 | - | 16.07 | - |
| Total Full Services - Townships | - | 25,630 | - | 19,154 | - | 13,957 | - | 8,893 | - | 152.81 | - | 14.17 |



Figure 1-1
Schedule of Key D.C. Process Dates for the Region of Waterloo

| | |
|---|--|
| 1. Data collection, staff review, engineering work, D.C. calculations and policy work | Fall 2018 to Spring 2019 |
| 2. Stakeholder meetings | 1. April 11, 2019 2. April 25, 2019 |
| 3. Public meeting advertisement placed in newspaper(s) | April 10, 2019 and April 11, 2019 |
| 4. Background study and proposed by-law available to public | April 23, 2019 |
| 5. Addendum Report available to public | May 8, 2019 |
| 6. Public meeting of Council | May 8, 2019 |
| 7. Council considers adoption of background study and passage of by-law | June 26, 2019 |
| 8. Newspaper notice given of by-law passage | By 20 days after passage |
| 9. Last day for by-law appeal | 40 days after passage |
| 10. Region makes pamphlet available (where by-law not appealed) | By 60 days after in force date |



5.2.4 General Government

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the Region's capital works program. The Region has made provision for the inclusion of new studies undertaken to facilitate this D.C. process, as well as other studies which benefit growth (in whole or in part). With the introduction of Bill 108, it proposes that a number of services may become ineligible for inclusion in the D.C., therefore, this category is further broken down into two categories and the list of studies included for each is as follows:

Engineering Studies:

- Sub-Watershed Studies; and
- Development Charge studies.

The cost of these studies, including the reserve fund deficit of \$2,292,222 is \$6,524,222. Under the current legislation, the Development Charge Studies require a mandatory 10% deduction, thus the net growth-related capital cost is \$6,457,022. This amount has been included in the D.C.

Community Based Studies:

- Municipal Comprehensive Review; and
- Development Application Database.

The cost of these studies is \$4,548,000, of which \$577,800 is attributable to existing benefit. The net growth-related capital cost, after the mandatory 10% deduction, is \$3,573,180 and has been included in the D.C.

These costs have been allocated 75% residential and 25% non-residential based on the incremental growth in population to employment for the 10-year forecast period.



Infrastructure Costs Covered in the D.C. Calculation

Region of Waterloo

Service: General Government - Engineering Studies

| Item Number | Project Number | 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: | Potential D.C. Recoverable Cost | | |
|-------------|----------------|---|---------------|--------------------------------------|---------------------|------------------|------------------|---------------------------------|---|------------------|--------------------------------------|---------------------------------|-------------------|-----------------------|
| | | | | | | | | Benefit to Existing Development | Grants, Subsidies and Other Contributions Attributable to New Development | | Other (e.g. 10% Statutory Deduction) | Total | Residential Share | Non-Residential Share |
| | | 2019-2028 | | | | | | | | | | | 75% | 25% |
| 1 | 60005 | Development Charge By-law Review | 2019 | 192,000 | - | | 192,000 | - | | 192,000 | 19,200 | 172,800 | 129,600 | 43,200 |
| 2 | 60005 | Development Charge By-law Review | 2023 | 180,000 | - | | 180,000 | - | | 180,000 | 18,000 | 162,000 | 121,500 | 40,500 |
| 3 | 60005 | Development Charge By-law Review | 2024 | 120,000 | - | | 120,000 | - | | 120,000 | 12,000 | 108,000 | 81,000 | 27,000 |
| 4 | 60005 | Development Charge By-law Review | 2028 | 180,000 | - | | 180,000 | - | | 180,000 | 18,000 | 162,000 | 121,500 | 40,500 |
| 5 | 22021 | Sub-Watershed Studies | 2019-2028 | 3,560,000 | - | | 3,560,000 | - | | 3,560,000 | - | 3,560,000 | 2,670,000 | 890,000 |
| 6 | | Reserve Fund Adjustment | Reserve | 2,292,222 | - | | 2,292,222 | - | | 2,292,222 | | 2,292,222 | 1,719,167 | 573,056 |
| | | Total | | 6,524,222 | - | - | 6,524,222 | - | - | 6,524,222 | 67,200 | 6,457,022 | 4,842,767 | 1,614,256 |

Infrastructure Costs Covered in the D.C. Calculation

Region of Waterloo

Service: General Government - Community Based Studies

| Item Number | Project Number | 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: | Potential D.C. Recoverable Cost | | |
|-------------|----------------|---|---------------|--------------------------------------|---------------------|------------------|------------------|---------------------------------|---|------------------|--------------------------------------|---------------------------------|-------------------|-----------------------|
| | | | | | | | | Benefit to Existing Development | Grants, Subsidies and Other Contributions Attributable to New Development | | Other (e.g. 10% Statutory Deduction) | Total | Residential Share | Non-Residential Share |
| | | 2019-2028 | | | | | | | | | | | 75% | 25% |
| 1 | 22007 | Municipal Comprehensive Review | 2019-2028 | 3,748,000 | - | | 3,748,000 | - | | 3,748,000 | 374,800 | 3,373,200 | 2,529,900 | 843,300 |
| 2 | 22038 | Development Application Database | 2019-2021 | 800,000 | - | | 800,000 | 577,800 | | 222,200 | 22,220 | 199,980 | 149,985 | 49,995 |
| | | Total | | 4,548,000 | - | - | 4,548,000 | 577,800 | - | 3,970,200 | 397,020 | 3,573,180 | 2,679,885 | 893,295 |



Table 6-3
Region of Waterloo
Development Charge Calculation
2019-2028
Region-Wide

| SERVICE | 2019\$ D.C.-Eligible Cost | | 2019\$ D.C.-Eligible Cost | | |
|--|---------------------------|---------------------|---------------------------|----------------|---------------|
| | Residential | Non-Residential | SDU | per sq.m. | per sq.ft. |
| | \$ | \$ | \$ | \$ | \$ |
| 5. Police Services | | | | | |
| 5.1 Police facilities, vehicles and equipment | 20,495,546 | 6,831,849 | 812 | 5.10 | 0.47 |
| | 20,495,546 | 6,831,849 | 812 | 5.10 | 0.47 |
| 6. Airport | | | | | |
| 6.1 Airport facilities, Vehicles, Equipment & Other Infrastructure | 14,769,080 | 4,923,027 | 585 | 3.69 | 0.34 |
| | 14,769,080 | 4,923,027 | 585 | 3.69 | 0.34 |
| 7A. General Government - Engineering Studies | | | | | |
| 7A.1 Studies | 4,842,767 | 1,614,256 | 192 | 1.21 | 0.11 |
| | 4,842,767 | 1,614,256 | 192 | 1.21 | 0.11 |
| 7B. General Government - Community Based Studies | | | | | |
| 7B.1 Studies | 2,679,885 | 893,295 | 106 | 0.67 | 0.06 |
| | 2,679,885 | 893,295 | 106 | 0.67 | 0.06 |
| 8. Paramedic Services | | | | | |
| 8.1 Paramedics facilities and Vehicles | 4,292,008 | 476,890 | 170 | 0.36 | 0.03 |
| | 4,292,008 | 476,890 | 170 | 0.36 | 0.03 |
| 9. Waste Diversion | | | | | |
| 9.1 Waste diversion facilities, vehicles, equipment and other | 7,532,658 | 153,728 | 298 | 0.12 | 0.01 |
| | 7,532,658 | 153,728 | 298 | 0.12 | 0.01 |
| TOTAL | \$54,611,943 | \$14,893,043 | \$2,163 | \$11.15 | \$1.02 |
| D.C.-Eligible Capital Cost | \$54,611,943 | \$14,893,043 | | | |
| 10-Year Gross Population/GFA Growth (sq.m.) | 79,998 | 1,335,274 | | | |
| Cost Per Capita/Non-Residential GFA (sq.m.) | \$682.67 | \$11.15 | | | |
| By Residential Unit Type | P.P.U. | | | | |
| Single and Semi-Detached Dwelling | 3.170 | \$2,163 | | | |
| Apartments | 1.726 | \$1,178 | | | |
| Other Multiples | 2.369 | \$1,617 | | | |
| Lodging Units | 1.100 | \$751 | | | |



Table 6-7
Region of Waterloo
Development Charge Calculation
Gross Expenditure and Sources of Revenue Summary for Costs to be Incurred over the life of the By-law

| Service | Total Gross Cost | Sources of Financing | | | | | | | |
|---|------------------------|-----------------------------------|----------------------|--------------------|--------------------|----------------------|--------------------------|----------------------|--|
| | | Tax Base or Other Non-D.C. Source | | | | Legislated Reduction | Post D.C. Period Benefit | D.C. Reserve Fund | |
| | | Other Deductions | Benefit to Existing | Other Funding | Residential | | | Non-Residential | |
| 1. Wastewater Services 1.1 Treatment plants & Sewers | 366,448,411 | 0 | 183,374,037 | 0 | 0 | 0 | 140,967,267 | 42,107,106 | |
| 2. Water Services 2.1 Treatment, storage and distribution systems | 300,303,429 | 0 | 164,831,493 | 0 | 0 | 0 | 104,313,390 | 31,158,545 | |
| 3. Services Related to a Highway 3.1 Roads and Related | 320,922,976 | 0 | 7,601,433 | 2,167,000 | 0 | 0 | 233,365,907 | 77,788,636 | |
| 4. Operations 4.1 Facilities and Fleet | 61,398,900 | 0 | 46,051,679 | 0 | 0 | 0 | 11,510,415 | 3,836,805 | |
| 5. Police Services 5.1 Police facilities, vehicles and equipment | 68,185,104 | 0 | 31,338,099 | 0 | 0 | 17,075,285 | 14,828,789 | 4,942,930 | |
| 6. Airport 6.1 Airport facilities, Vehicles, Equipment & Other Infrastructure | 35,658,260 | 0 | 4,407,843 | 0 | 905,973 | 20,615,767 | 7,296,508 | 2,432,169 | |
| 7A. General Government - Engineering Studies 7A.1 Studies | 2,152,000 | 0 | 0 | 0 | 37,200 | 0 | 1,586,100 | 528,700 | |
| 7B. General Government - Community Based Studies 7B.1 Studies | 2,674,000 | 0 | 577,800 | 0 | 209,620 | 0 | 1,414,935 | 471,645 | |
| 8. Paramedic Services 8.1 Paramedics facilities and Vehicles | 18,449,613 | 0 | 12,444,000 | 0 | 307,230 | 2,399,575 | 2,968,927 | 329,881 | |
| 9. Waste Diversion 9.1 Waste diversion facilities, vehicles, equipment and other | 13,363,057 | 0 | 8,918,239 | 0 | 444,482 | 0 | 3,920,329 | 80,007 | |
| 10. Transit Services 10.1 Transit facilities, vehicles and other infrastructure | 297,039,047 | 0 | 52,905,115 | 0 | 0 | 208,904,476 | 26,069,798 | 9,159,659 | |
| 11. Library Services 11.1 Library facilities, materials and vehicles | 1,675,444 | 0 | 92,200 | 25,000 | 147,224 | 0 | 1,340,469 | 70,551 | |
| Total Expenditures & Revenues | \$1,488,270,240 | \$0 | \$512,541,939 | \$2,192,000 | \$2,051,729 | \$248,995,102 | \$549,582,836 | \$172,906,633 | |



- 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 decade. Costs allocated to non-residential uses will be assigned based on the amount of square feet of gross floor area constructed for eligible uses (i.e. industrial, commercial and institutional).
- 2) Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance, e.g.
 - for General Government – Engineering Studies, General Government – Community Based Studies, Airport, and Police Services, the costs have been based on a population vs. employment growth ratio (75%/25%) for residential and non-residential, respectively over the 10-year forecast period;
 - for Waste Diversion, a 98% residential/2% non-residential attribution has been made to recognize the tonnage collected from residential vs. non-residential properties;
 - for Paramedic Services, a 10% no-residential attribution has been made to recognize use by the non-residential sector;
 - for Library services, a 5% non-residential attribution has been made to recognize use by the non-residential sector;
 - for Transit services, the costs have been based on a population vs. employment growth ratio (74%/26%) for residential and non-residential, respectively over the 10-year forecast period for Cities only;
 - for Services Related to a Highway and Operations, a 75% residential/25% non-residential attribution has been made based on a population vs. employment growth ratio over the longer-term forecast period; and



- for Water and Wastewater services a 77% residential/23% non-residential allocation has been made based on population vs. employment growth over the urban longer term forecast period.
- 3) Four options for differentiating the combined non-residential charges (as calculated in Chapter 6) have been provided in Appendix I for Council's consideration. The four options included are:
- a. Retail vs. Non-Retail
 - b. Industrial vs. Non-Industrial
 - c. Industrial vs. Commercial vs. Institutional
 - d. Industrial vs. Retail Commercial vs. Non-Retail Commercial vs. Institutional

7.3.3 Application to Redevelopment of Land (Demolition and Conversion)

If a development involves the demolition of 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:

- 1) 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
- 2) the gross floor area 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 12 months prior to the issuance of a building permit. The credit can, in no case, exceed the amount of D.C.s that would otherwise be payable.

Staff are currently reviewing the timeframe for credits and will be determined after consultation with Council.

7.3.4 Exemptions (full or partial)

- a) Statutory exemptions



- Library services – the full residential and non-residential charge will be imposed on all Township lands within the Region;
- Water and Wastewater – the full residential and non-residential charge will be imposed on the urban service areas of the Region.

7.4 Other D.C. By-law Provisions

The following are provided for Council's consideration:

7.4.1 Categories of Services for Reserve Fund and Credit Purposes

The Region's D.C. collections are currently reserved in eleven separate reserve funds: Transportation, Operations, Police Services, Transit Services, Library Services, General Government, Paramedic Services, Airport, Waste Diversion, Water Services and Wastewater Services. Appendix D outlines the reserve fund policies that the Region is required to follow as per the D.C.A. It is recommended to rename the General Government reserve fund to General Government – Engineering Services and add a new reserve fund for General Government – Community Based Services.

7.4.2 By-law In-force Date

A by-law under the D.C.A. comes into force on the day after which the by-law is passed by Council. The by-law will come into force on August 1, 2019.

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).

7.4.4 Area Rating

As noted earlier, Bill 73 introduced two new sections where Council must consider the use of area specific charges:

1. Section 2(9) of the Act requires a municipality to implement area-specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated (note that at this time, no municipalities or services are prescribed by the Regulations).



“Continue the D.C. approach to calculate the Transit charges on a Cities only basis;”

“Continue the D.C. approach to calculate the Library charges on a Townships only basis;”

“Continue the D.C. approach to calculate the charges on a uniform urban-area basis for water and wastewater services;”

“Approve the capital project listing set out in Chapter 5 of the D.C.s Background Study dated April 23, 2019, subject to further annual review during the capital budget process;”

“Approve the D.C.s Background Study dated April 23, 2019, as amended;”

“Determine that no further public meeting is required;”

“Approve the Local Service Policy as provided in Appendix E;” and

“Approve the D.C. By-law as provided under separate cover.”



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

| SERVICE | GROSS COST LESS BENEFIT TO EXISTING | ANNUAL LIFECYCLE EXPENDITURES | ANNUAL OPERATING EXPENDITURES | TOTAL ANNUAL EXPENDITURES |
|--|---|----------------------------------|-------------------------------------|------------------------------|
| 1. Wastewater Services | | | | |
| 1.1 Treatment plants & Sewers | 597,521,371 | 10,751,012 | 17,054,719 | 27,805,731 |
| 2. Water Services | | | | |
| 2.1 Treatment, storage and distribution systems | 426,673,781 | 12,365,440 | 17,646,170 | 30,011,610 |
| 3. Services Related to a Highway | | | | |
| 3.1 Roads and Related | 867,232,825 | 21,801,846 | 10,973,700 | 32,775,546 |
| 4. Operations | | | | |
| 4.1 Facilities and Fleet | 11,702,361 | 803,261 | 148,078 | 951,339 |
| 5. Police Services | | | | |
| 5.1 Police facilities, vehicles and equipment | 50,053,825 | 2,546,021 | 48,551,406 | 51,097,427 |
| 6. Airport | | | | |
| 6.1 Airport facilities, Vehicles, Equipment & Other Infrastructure | 184,993,457 | 10,841,638 | 1,106,625 | 11,948,263 |
| 7A. General Government - Engineering Studies | | | | |
| 7A.1 Studies | 6,524,222 | 0 | 0 | 0 |
| 7B. General Government - Community Based Studies | | | | |
| 7B.1 Studies | 3,970,200 | 0 | 0 | 0 |
| 8. Paramedic Services | | | | |
| 8.1 Paramedics facilities and Vehicles | 12,721,533 | 1,102,729 | 3,686,338 | 4,789,067 |
| 9. Waste Diversion | | | | |
| 9.1 Waste diversion facilities, vehicles, equipment and other | 8,567,326 | 693,211 | 2,828,745 | 3,521,956 |
| 10. Transit Services | | | | |
| 10.1 Transit facilities, vehicles and other infrastructure | 616,138,856 | 39,320,400 | 14,993,652 | 54,314,052 |
| 11. Library Services | | | | |
| 11.1 Library facilities, materials and vehicles | 2,990,554 | 337,870 | 403,357 | 741,227 |
| Total | 2,789,090,312 | 100,563,428 | 117,392,790 | 217,956,218 |



Figure 1
Annual Treasurer's Statement of Development Charge Reserve Funds

| Description | Services to which the Development Charge Relates | | | | | | | | | | | | Total | |
|---|--|------------|-----------------|------------------|---------------------|----------------|----------|--|--|--------------------|-----------------|------------------|----------|----------|
| | Non-Discounted Services | | | | | | | Discounted Services | | | | | | |
| | Services Related to a Highway | Operations | Police Services | Transit Services | Wastewater Services | Water Services | Airport | General Government - Engineering Studies | General Government - Community Based Studies | Paramedic Services | Waste Diversion | Library Services | | |
| Opening Balance, January 1, _____ | | | | | | | | | | | | | | 0 |
| Plus: | | | | | | | | | | | | | | |
| Development Charge Collections | | | | | | | | | | | | | | 0 |
| Accrued Interest | | | | | | | | | | | | | | 0 |
| Repayment of Monies Borrowed from Fund and Associated Interest ¹ | | | | | | | | | | | | | | 0 |
| Sub-Total | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Less: | | | | | | | | | | | | | | |
| Amount Transferred to Capital (or Other) Funds ² | | | | | | | | | | | | | | 0 |
| Amounts Refunded | | | | | | | | | | | | | | 0 |
| Amounts Loaned to Other D.C. Service Category for Interim Financing | | | | | | | | | | | | | | 0 |
| Credits ³ | | | | | | | | | | | | | | 0 |
| Sub-Total | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Closing Balance, December 31, _____ | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

¹ Source of funds used to repay the D.C. reserve fund

² See Attachment 1 for details

³ See Attachment 2 for details



Non-Residential Calculation Scenarios

The following non-residential calculations presented herein have been requested by Council and staff as part of their consideration as part of the D.C. process. The five scenarios provided are as follows:

- One Uniform Non-Residential Charge;
- Industrial vs. Non-Industrial;
- Retail vs. Non-Retail;
- Industrial vs. Commercial vs. Institutional (I.C.I.); and
- Industrial vs. Retail Commercial vs. Non-Retail Commercial vs. Institutional.

The method to calculate the Non-residential D.C.s are to take the non-residential portion of the Net D.C.-eligible costs and divide them into the respective non-residential gross floor area for each forecast period (i.e. 10-year Region-wide, 10-year Cities (for Transit), 10-year Townships (for Library), Region-wide longer term, and Region-wide Urban Longer Term). With respect to the four scenarios, the non-residential costs and the associated gross floor area for each of the scenarios will be separated into each respective type of development based on employment.

One Uniform Non-Residential Charge

Using this method, the Region-wide total non-residential recovery amount will be divided by the Region's combined non-residential gross floor area. This provides the following recovery:



Retail vs. Non-Retail

Using this method, the Region-wide total non-residential recovery amount has been divided in the proportionate share of retail development vs. non-retail development based on employment within those categories. The forecasted non-residential gross floor area has also been separated into retail vs. non-retail and provides the following recovery:

Table 3
Retail vs. Non-Retail Calculations

| SERVICE | 2019\$ D.C.-Eligible Cost | | 2019\$ D.C.-Eligible Cost | | | |
|---|---------------------------|----------------------|---------------------------|----------------------|-------------------|-----------------------|
| | Retail | Non-Retail | Retail per sq.m. | Non-Retail per sq.m. | Retail per sq.ft. | Non-Retail per sq.ft. |
| Urban-wide Services Longer Term | \$47,653,988 | \$187,910,897 | \$77.17 | \$64.47 | \$7.17 | \$5.99 |
| Region-wide Services Longer Term | 26,436,790 | 192,755,256 | \$83.83 | 73.28 | \$7.78 | 6.81 |
| Region-wide Services 10 Year | 1,410,403 | 13,482,640 | \$12.53 | 11.03 | \$1.16 | 1.02 |
| TOTAL REGION-WIDE | \$75,501,181 | \$394,148,794 | \$173.53 | \$148.78 | \$16.11 | \$13.82 |
| City Specific Services 10 Year | 1,835,482 | 21,145,673 | 23.71 | 20.76 | 2.20 | 1.93 |
| Township Specific Services 10 Year | 25,867 | 108,272 | 0.74 | 0.53 | 0.07 | 0.05 |
| TOTAL CITIES | \$77,336,664 | \$415,294,467 | \$197.24 | \$169.54 | \$18.31 | \$15.75 |
| TOTAL TOWNSHIPS | \$75,527,048 | \$394,257,065 | \$174.27 | \$149.31 | \$16.18 | \$13.87 |

Based on Table 3, the Region's non-residential charge for retail development is \$197.24 per sq.m. (\$18.31 per sq.ft.) for Cities, and \$174.27 per sq.m. (\$16.18 per sq.ft.) for Townships.

Alternatively, the non-retail charges are \$169.54 per sq.m. (\$15.75 per sq.ft.) for Cities, and \$149.31 per sq.m. (\$13.87 per sq.ft.) for Townships.



Industrial/Retail Commercial/Non-Retail Commercial/Institutional Calculations

Using this method, the Region-wide total non-residential recovery amount has been divided in the proportionate share of industrial development vs. retail commercial development vs. non-retail commercial development vs. institutional development based on employment within those categories. The forecasted non-residential gross floor area has also been separated into these four categories and provides the following recovery:

Table 5
Industrial/Retail Commercial/Non-Retail Commercial/Institutional Calculations

| SERVICE | 2019\$ D.C.-Eligible Cost | | | | 2019\$ D.C.-Eligible Cost | | | | | | | |
|------------------------------------|---------------------------|---------------------|-----------------------|----------------------|---------------------------|-----------------------------|---------------------------------|-------------------------|-----------------------|------------------------------|----------------------------------|--------------------------|
| | Industrial | Commercial Retail | Commercial Non-Retail | Institutional | Industrial per sq.m. | Commercial Retail per sq.m. | Commercial Non-Retail per sq.m. | Institutional per sq.m. | Industrial per sq.ft. | Commercial Retail per sq.ft. | Commercial Non-Retail per sq.ft. | Institutional per sq.ft. |
| Urban-wide Services Longer Term | \$42,716,248 | \$47,653,988 | \$57,300,664 | \$87,893,985 | \$40.12 | \$77.17 | \$86.27 | \$74.13 | \$3.72 | \$7.17 | \$8.02 | \$6.89 |
| Region-wide Services Longer Term | 35,950,092 | 26,436,790 | 70,248,911 | 86,556,254 | \$42.72 | \$83.83 | \$95.53 | 82.15 | \$3.97 | \$7.78 | \$8.88 | 7.63 |
| Region-wide Services 10 Year | 2,442,570 | 1,410,403 | 5,158,992 | 5,881,079 | \$6.39 | \$12.53 | \$14.28 | 12.28 | \$0.60 | \$1.16 | \$1.32 | 1.14 |
| TOTAL REGION-WIDE | \$81,108,909 | \$75,501,181 | \$132,708,567 | \$180,331,318 | \$89.23 | \$173.53 | \$196.08 | \$168.56 | \$8.29 | \$16.11 | \$18.22 | \$15.66 |
| City Specific Services 10 Year | 3,044,960 | 1,835,482 | 8,226,407 | 9,874,306 | 12.17 | 23.71 | 25.97 | 21.86 | 1.13 | 2.20 | 2.41 | 2.03 |
| Township Specific Services 10 Year | 49,965 | 25,867 | 36,231 | 22,076 | 0.38 | 0.74 | 0.81 | 0.81 | 0.04 | 0.07 | 0.08 | 0.08 |
| TOTAL CITIES | \$84,153,869 | \$77,336,664 | \$140,934,974 | \$190,205,624 | \$101.40 | \$197.24 | \$222.05 | \$190.42 | \$9.42 | \$18.31 | \$20.63 | \$17.69 |
| TOTAL TOWNSHIPS | \$81,158,874 | \$75,527,048 | \$132,744,797 | \$180,353,393 | \$89.61 | \$174.27 | \$196.89 | \$169.37 | \$8.33 | \$16.18 | \$18.30 | \$15.74 |

Based on Table 5, the Region's non-residential charge for industrial development is \$101.40 per sq.m. (\$9.42 per sq.ft.) for Cities, and \$89.61 per sq.m. (\$8.33 per sq.ft.) for Townships.

The retail commercial charges are \$197.24 per sq.m. (\$18.31 per sq.ft.) for Cities, and \$174.27 per sq.m. (\$16.18 per sq.ft.) for Townships.

The non-retail commercial charges are \$222.05 per sq.m. (\$20.63 per sq.ft.) for Cities, and \$196.89 per sq.m. (\$18.30 per sq.ft.) for Townships.

Finally, the institutional charges are \$190.42 per sq.m. (\$17.69 per sq.ft.) for Cities, and \$169.37 per sq.m. (\$15.74 per sq.ft.) for Townships.