

Development Charges Background Study

Proposed Amendment

Roads and Recoveries DC By-Law (224-04)

**February 29, 2008
(Updated April 21, 2008)**

The Works Department is responsible for the design, construction and maintenance of the City's extensive network of public roads.

This summary provides a brief outline of the Engineering services which include roads, structures, sidewalks, streetlights, intersection improvements, landscaping, traffic signals, and so on. The growth-related projects are required in order to maintain the transportation network service levels as the City develops to the year 2013.

In order to reflect the costing-only mandate, while recognizing that the capital forecast has changed since passage of the 2004 DC by-law, staff have reflected the Council endorsed capital program for the years 2008-2013. These years correspond with the remaining years of the 2004 DC study's forecast period.

Two DC calculations have been included in this document. The capital forecast DC calculations have been included and reflect what roads development charge rates would be supported by the Council endorsed capital forecast. The costing update DC calculations have been included as these are the figures that support the recommended update to the roads DC rates. These rates, which are lower than those calculated from the Council endorsed capital forecast, represent the increase in costs for the remaining forecast years (2008-2013) within the current Roads DC by-law.

A listing of projects, for the period 2008-2013, from the Council endorsed capital forecast has been included as a reference.

The following sections describe service level analysis, growth/non-growth cost sharing assumptions, costing assumptions and cost estimates that were used by Works staff in their road costing update.

A. SERVICE LEVEL ANALYSIS

Service level calculations have not been performed as part of the amended DC background study. As this amendment constitutes an update of the costing contained within the 2004 by-law (as amended by OMB order) we rely on the service level calculations from the 2004 DC background study.

B. GROWTH/NON-GROWTH COST SHARING

Even though all roads and related projects have been determined to be 100% growth related in the service level analysis, certain portions of future projects have a non-growth component representing benefits to existing residents. For all urban and rural road widenings and reconstructions, costs have been allocated as they were in the 2004 Background Study to prior growth as a non-growth share (i.e. non-development funding requirement). These non-growth shares reflect costs associated with improvements to the existing roadway.

C. COSTING ASSUMPTIONS

The costing of future road related needs is based on the costing assumptions on the following pages.

1. Unit Prices

| Items | Unit | Unit Prices (City, 2007) |
|----------------------------------|----------------|-----------------------------|
| Maintenance Hole Installation | each | \$5,000.00 |
| Maintenance Hole Removal | each | \$635.00 |
| Adjust Maintenance Hole | each | \$800.00 |
| Catchbasins Installation | each | \$1,800.00 |
| Catchbasin Removal | each | \$350.00 |
| Catchbasin Leads | linear meter | \$202.00 |
| Adjust Catchbasin | each | \$800.00 |
| Storm Sewers (Pipe up to 600 mm) | linear meter | \$390.00 |
| Subdrains | linear meter | \$15.00 |
| Excavation | m ³ | \$9.85 |
| Curb + Gutter Installation | linear meter | \$50.00 |
| Curb + Gutter Removal | linear meter | \$9.32 |
| Gran "B" | tonne | \$17.50 |
| Gran "A" | tonne | \$16.00 |
| Removal of sidewalks | m ² | \$11.00 |
| Sidewalk Installation | m ² | \$49.34 |
| Removal of asphalt | m ² | \$3.82 |
| Asphalt | tonne | \$71.00 |
| Grinding - 40 mm depth | m ² | \$11.50 |

2. Costing Assumptions

| ITEM | UNIT | COST PER UNIT |
|---|----------------------|---------------|
| Urban Environment | | |
| NC2 (2- lane urban new construction) | per km | \$1,470,000 |
| NC4 (4- lane urban new construction) | per km | \$2,031,000 |
| NC6 (6- lane urban new construction) | per km | \$2,591,000 |
| RW2-4 (2 to 4 lane urban new widening) | per km | \$1,004,000 |
| RW2-6 (2 to 6 lane urban new widening) | per km | \$1,283,000 |
| RW4-6 (4 to 6 lane urban new widening) | per km | \$1,187,000 |
| R & P2-2 (2-lane reconstruction and repavement) | per km | \$706,912 |
| New Intersection | each | \$287,500 |
| Intersection Improvement | per km | \$375,000 |
| New Signal Cost | per intersection | \$125,000 |
| Signal Relocation Cost | per intersection | \$140,000 |
| Utility Relocation Cost | per km (two sides) | \$250,000 |
| Structure Widening | per sq. m | \$3,000 |
| New Structure | per sq. m | \$3,000 |
| Street Lighting Relocation | per km (two sides) | \$260,000 |
| New Street Lighting | per km (two sides) | \$226,000 |
| Trees | per km (two sides) | \$57,000 |
| New sidewalk Construction | per km (two sides) | \$150,000 |
| Sidewalk Removal & Reconstruction | per km (two sides) | \$183,000 |
| Bike Path (on Road) | per km (two sides) | \$174,850 |
| Bike Path (off Road) | per km (two sides) | \$106,158 |
| Acoustical Walls | per km | \$1,200,000 |
| Que Jump Lanes (QJL) (one side) | per intersection | \$180,000 |
| Transit Signal Priority (TSP) (Additional to the basic signal cost) | per intersection | \$21,000 |
| HOV lane (Signing & pavement marking retrofit) | per km | \$29,000 |
| EA Cost For road Widening | per km | \$200,000 |
| Patterned Concrete | per km | \$96,260 |

D. COST ESTIMATES

The proposed DC roads program is identified from the City's 2008-2017 Capital Forecast. In preparing a costing only update to the DC by-law, only the works contained within the period 2008-2013 (the remaining forecast period under the current by-law) have been included in this review.

E. ROADS PROJECTS TOTAL \$531 MILLION

The capital program includes road widenings, grade separations, intersection signalizations, utility costs, property acquisition requirements, landscaping costs, sidewalks, intersection improvements, and streetlights. Items such as bike paths

have been included to the extent that they are supported by our historical service level.

The Council endorsed growth-related capital program totals \$531 million of which \$32 million is identified as a benefit to the existing population. There is no identified benefit beyond the current 6-year forecast period. There is no requirement to deduct 10% of the capital costs relating to the roads program. When the benefit beyond period is taken into account a DC eligible capital program of \$499 million remains. An opening reserve balance of \$1.66 million has been included in the calculation of the development charge.

The population and employment forecast used for this amendment are taken from the 2004 DC study and were used in preparation of the 2004 DC by-law (as amended by OMB order).

Based on population/employment growth split and a further split of employment growth into industrial and non-industrial types, 68.4% of the program is supported by residential development, 22.5% is supported by industrial development and 9.2% is supported by non-industrial development. In dollar terms, \$359.9 million of the growth capital is charged to forecasted residential development, \$118.2 million is charged to forecasted industrial development and \$48.3 million is charged to forecasted non-industrial development.

Allocation of growth capital according to the Council endorsed Capital Program of \$531 million results in the following charges based on development type:

| | |
|---|--------------------|
| <i>Small Apartment (per unit) -</i> | <i>\$5,001.92</i> |
| <i>Large Apartment (per unit) -</i> | <i>\$9,619.08</i> |
| <i>Other Residential (per unit) -</i> | <i>\$13,081.95</i> |
| <i>Industrial and Office(per m²) -</i> | <i>\$62.05</i> |
| <i>Non-Industrial, Non-Office (per m²) -</i> | <i>\$85.00</i> |

The above rates are provided for informational purposes only and are not being recommended for Council approval in this background study.

Allocation of growth capital according to the Costing Update (Capital Program of \$480 million) results in the following **proposed** charges based on development type:

| | |
|--|-------------|
| Small Apartment (per unit) - | \$4,418.11 |
| Large Apartment (per unit) - | \$8,496.37 |
| Other Residential (per unit) - | \$11,555.07 |
| Industrial and Office(per m ²) - | \$34.71 |
| Non-Industrial, Non-Office (per m ²) - | \$75.07 |

ROADS

ASSUMPTIONS - Costing Update & Capital Program Update

BASE CASE DESCRIPTION:

BASE YEAR : 2008

FINANCIAL ASSUMPTIONS:

| | | |
|-----------------|------|---|
| Inflation Rate: | 2.0% | Source: Bank of Canada Inflation Band Mid-Point |
| Discount Rate: | 5.0% | City of Brampton Target Earnings Rate |
| Financing | 5.0% | City of Brampton Target Earnings Rate |
| Investment | 5.0% | City of Brampton Target Earnings Rate |

ALLOCATION ASSUMPTIONS:

| | | |
|----------------------|--------|--|
| Residential Share | 68.38% | 10-year % Population/Employment Growth |
| Industrial Share | 22.45% | 10-year % Ind Employment Growth |
| Non-Industrial Share | 9.18% | 10-year % Non-Ind Employment |

BALANCE AVAILABLE FOR CASH FLOW:

\$1,658,015 DC Reserve Statement

PROPOSED

PROGRAM SUMMARY - Costing Update

(NOMINAL - YR \$2008)

| | |
|---|--------------------|
| TOTAL GROSS EXPENDITURES 2008-2013 | 480,378,131 |
| LESS: BENEFIT BEYOND PERIOD | 0 |
| LESS: PRIOR GROWTH | 0 |
| LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH) | -49,645,619 |
| LESS: 10% DISCOUNT | 0 |
| ELIGIBLE GROWTH EXPENDITURES | 430,732,512 |
| LESS: CARRY FORWARD RESERVE BALANCE | -1,658,015 |
| TOTAL ELIGIBLE GROWTH EXPENDITURES | 429,074,497 |

INFORMATIONAL ONLY

PROGRAM SUMMARY - Capital Program Update

(NOMINAL - YR \$2008)

| | |
|---|--------------------|
| TOTAL GROSS EXPENDITURES 2008-2013 | 530,684,000 |
| LESS: BENEFIT BEYOND PERIOD | 0 |
| LESS: PRIOR GROWTH | 0 |
| LESS: BENEFIT TO EXISTING POPULATION (NON-GROWTH) | -31,639,000 |
| LESS: 10% DISCOUNT | 0 |
| ELIGIBLE GROWTH EXPENDITURES | 499,045,000 |
| LESS: CARRY FORWARD RESERVE BALANCE | -1,658,015 |
| TOTAL ELIGIBLE GROWTH EXPENDITURES | 497,386,985 |

PROPOSED
ROADS - Costing Update
ELIGIBLE GROWTH EXPENDITURES (INFLATED):

| | TOTAL | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|--------------------|--------------------|-------------------|-------------------|--------------------|-------------------|-------------------|
| RESIDENTIAL: | | | | | | | |
| Gross Eligible Growth Capital Cost | 305,557,860 | \$ 80,662,379 | \$ 47,932,506 | \$ 54,804,134 | \$ 80,761,778 | \$ 32,318,033 | \$ 9,079,030 |
| INDUSTRIAL: | | | | | | | |
| Gross Eligible Growth Capital Cost | 100,319,818 | \$ 26,482,825 | \$ 15,737,053 | \$ 17,993,125 | \$ 26,515,459 | \$ 10,610,557 | \$ 2,980,799 |
| NON-INDUSTRIAL: | | | | | | | |
| Gross Eligible Growth Capital Cost | 41,005,625 | \$ 10,824,828 | \$ 6,432,505 | \$ 7,354,672 | \$ 10,838,167 | \$ 4,337,055 | \$ 1,218,399 |
| TOTAL GROSS ELIGIBLE GROWTH COST | 446,883,303 | 117,970,032 | 70,102,064 | 80,151,931 | 118,115,405 | 47,265,645 | 13,278,228 |

REVENUES (INFLATED):

| | | | | | | | |
|--------------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| RESIDENTIAL: | | | | | | | |
| Charge per Person | | 3,398.55 | 3,466.52 | 3,535.85 | 3,606.57 | 3,678.70 | 3,752.27 |
| Population Growth | 87,788 | 15,038 | 15,077 | 15,108 | 14,468 | 14,221 | 13,876 |
| TOTAL RESIDENTIAL REVENUE | 313,351,487 | 51,105,994 | 52,266,036 | 53,418,293 | 52,180,467 | 52,313,580 | 52,067,117 |
| INDUSTRIAL | | | | | | | |
| Net Charge Per m2 | | 54.81 | 55.90 | 57.02 | 58.16 | 59.32 | 60.51 |
| Industrial Area Forecast (m2) | 1,787,302 | 309,022 | 309,010 | 309,099 | 315,496 | 289,533 | 255,142 |
| TOTAL NON-RESIDENTIAL REVENUE | 102,798,344 | 16,936,024 | 17,274,074 | 17,624,630 | 18,349,171 | 17,175,952 | 15,438,492 |
| NON-INDUSTRIAL | | | | | | | |
| Net Charge Per m2 | | 75.07 | 76.58 | 78.11 | 79.67 | 81.26 | 82.89 |
| Non-Industrial Area Forecast (m2) | 533,314 | 91,134 | 91,134 | 91,134 | 95,013 | 87,916 | 76,983 |
| TOTAL NON-RESIDENTIAL REVENUE | 42,033,856 | 6,841,860 | 6,978,697 | 7,118,271 | 7,569,676 | 7,144,344 | 6,381,010 |
| TOTAL REVENUE | 458,183,687 | 74,883,878 | 76,518,806 | 78,161,194 | 78,099,313 | 76,633,876 | 73,886,619 |

FINANCING CALCULATION:

| | | | | | | | |
|---|---------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------------|
| RESIDENTIAL: | | | | | | | |
| Beginning of Year Balance | | 1,133,673 | -29,104,938 | -26,118,317 | -28,844,719 | -59,582,800 | -42,066,504 |
| Net Annual Difference (Total Revenues-Net Expenditures) | | -29,556,385 | 4,333,530 | -1,385,841 | -28,581,312 | 19,995,547 | 42,988,087 |
| Sub-Total | | -29,556,385 | 4,333,530 | -1,385,841 | -28,581,312 | 19,995,547 | 42,988,087 |
| Financing/Investment Adjustment In Year | 194,841 | -738,910 | 108,338 | -34,646 | -714,533 | 499,889 | 1,074,702 |
| Financing/Investment Adjustment Opening Balance | | 56,684 | -1,455,247 | -1,305,916 | -1,442,236 | -2,979,140 | -2,103,325 |
| Sub-Total | | -682,226 | -1,346,909 | -1,340,562 | -2,156,769 | -2,479,251 | -1,028,623 |
| End of Year Cumulative Balance | | -29,104,938 | -26,118,317 | -28,844,719 | -59,582,800 | -42,066,504 | -107,400 |
| INDUSTRIAL: | | | | | | | |
| Beginning of Year Balance | | 372,204 | -9,394,656 | -8,288,943 | -9,081,097 | -17,905,597 | -12,071,347 |
| Net Annual Difference (Total Revenues-Net Expenditures) | | -9,546,800 | 1,537,021 | -368,495 | -8,166,288 | 6,565,395 | 12,457,693 |
| Sub-Total | | -9,174,596 | -7,857,635 | -8,657,438 | -17,247,385 | -11,340,202 | 386,346 |
| Financing/Investment Adjustment In Year | 61,963 | -238,670 | 38,426 | -9,212 | -204,157 | 164,135 | 311,442 |
| Financing/Investment Adjustment Opening Balance | | 18,610 | -469,733 | -414,447 | -454,055 | -895,280 | -603,567 |
| Sub-Total | | -220,060 | -431,307 | -423,660 | -658,212 | -731,145 | -292,125 |
| End of Year Cumulative Balance | | -9,394,656 | -8,288,943 | -9,081,097 | -17,905,597 | -12,071,347 | 94,221 |
| NON-INDUSTRIAL: | | | | | | | |
| Beginning of Year Balance | | 152,138 | -3,922,798 | -3,559,091 | -3,979,356 | -7,528,528 | -5,027,483 |
| Net Annual Difference (Total Revenues-Net Expenditures) | | -3,982,968 | 546,192 | -236,401 | -3,268,492 | 2,807,289 | 5,162,611 |
| Sub-Total | | -3,830,830 | -3,376,606 | -3,795,492 | -7,247,848 | -4,721,239 | 135,128 |
| Financing/Investment Adjustment In Year | 25,706 | -99,574 | 13,655 | -5,910 | -81,712 | 70,182 | 129,065 |
| Financing/Investment Adjustment Opening Balance | | 7,607 | -196,140 | -177,955 | -198,968 | -376,426 | -251,374 |
| Sub-Total | | -91,967 | -182,485 | -183,865 | -280,680 | -306,244 | -122,309 |
| End of Year Cumulative Balance | | -3,922,798 | -3,559,091 | -3,979,356 | -7,528,528 | -5,027,483 | 12,819 |
| TOTAL CUMULATIVE BALANCE | | -42,422,392 | -37,966,350 | -41,905,173 | -85,016,925 | -59,165,335 | -0 |

INFORMATIONAL ONLY

ROADS - Updated Capital Program

ELIGIBLE GROWTH EXPENDITURES (INFLATED):

| | TOTAL | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| RESIDENTIAL: | | | | | | | |
| Gross Eligible Growth Capital Cost | 359,869,820 | \$ 39,557,170 | \$ 61,457,373 | \$ 65,051,848 | \$ 59,103,372 | \$ 65,795,606 | \$ 68,904,450 |
| INDUSTRIAL: | | | | | | | |
| Gross Eligible Growth Capital Cost | 118,151,354 | \$ 12,987,289 | \$ 20,177,496 | \$ 21,357,623 | \$ 19,404,638 | \$ 21,601,811 | \$ 22,622,498 |
| NON-INDUSTRIAL: | | | | | | | |
| Gross Eligible Growth Capital Cost | 48,294,248 | \$ 5,308,541 | \$ 8,247,531 | \$ 8,729,907 | \$ 7,931,626 | \$ 8,829,719 | \$ 9,246,923 |
| TOTAL GROSS ELIGIBLE GROWTH COST | 526,315,422 | 57,853,000 | 89,882,400 | 95,139,378 | 86,439,636 | 96,227,137 | 100,773,871 |

REVENUES (INFLATED):

| | | | | | | | |
|--------------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| RESIDENTIAL: | | | | | | | |
| Charge per Person | | 3,847.63 | 3,924.59 | 4,003.08 | 4,083.14 | 4,164.80 | 4,248.10 |
| Population Growth | 87,788 | 15,038 | 15,077 | 15,108 | 14,468 | 14,221 | 13,876 |
| TOTAL RESIDENTIAL REVENUE | 354,757,755 | 57,859,141 | 59,172,470 | 60,476,987 | 59,075,594 | 59,226,297 | 58,947,267 |
| INDUSTRIAL | | | | | | | |
| Net Charge Per m2 | | 62.05 | 63.29 | 64.55 | 65.84 | 67.16 | 68.51 |
| Industrial Area Forecast (m2) | 1,787,302 | 309,022 | 309,010 | 309,099 | 315,496 | 289,533 | 255,142 |
| TOTAL NON-RESIDENTIAL REVENUE | 116,382,118 | 19,173,951 | 19,556,670 | 19,953,549 | 20,773,830 | 19,445,583 | 17,478,535 |
| NON-INDUSTRIAL | | | | | | | |
| Net Charge Per m2 | | 85.00 | 86.69 | 88.43 | 90.20 | 92.00 | 93.84 |
| Non-Industrial Area Forecast (m2) | 533,314 | 91,134 | 91,134 | 91,134 | 95,013 | 87,916 | 76,983 |
| TOTAL NON-RESIDENTIAL REVENUE | 47,588,210 | 7,745,943 | 7,900,862 | 8,058,879 | 8,569,933 | 8,088,397 | 7,224,197 |
| TOTAL REVENUE | 518,728,084 | 84,779,035 | 86,630,002 | 88,489,415 | 88,419,357 | 86,760,277 | 83,649,998 |

FINANCING CALCULATION:

| | | | | | | | |
|---|----------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------|
| RESIDENTIAL: | | | | | | | |
| Beginning of Year Balance | | 1,133,673 | 19,949,877 | 18,605,345 | 14,846,380 | 15,560,226 | 9,604,695 |
| Net Annual Difference (Total Revenues-Net Expenditures) | | 18,301,971 | -2,284,903 | -4,574,861 | -27,779 | -6,569,310 | -9,957,184 |
| Sub-Total | | 18,301,971 | -2,284,903 | -4,574,861 | -27,779 | -6,569,310 | -9,957,184 |
| Financing/Investment Adjustment In Year | -127,802 | 457,549 | -57,123 | -114,372 | -694 | -164,233 | -248,930 |
| Financing/Investment Adjustment Opening Balance | | 56,684 | 997,494 | 930,267 | 742,319 | 778,011 | 480,235 |
| Sub-Total | | 514,233 | 940,371 | 815,896 | 741,625 | 613,779 | 231,305 |
| End of Year Cumulative Balance | | 19,949,877 | 18,605,345 | 14,846,380 | 15,560,226 | 9,604,695 | -121,184 |
| INDUSTRIAL: | | | | | | | |
| Beginning of Year Balance | | 372,204 | 6,732,143 | 6,432,404 | 5,314,848 | 6,984,013 | 5,123,079 |
| Net Annual Difference (Total Revenues-Net Expenditures) | | 6,186,862 | -620,826 | -1,404,074 | 1,369,193 | -2,156,229 | -5,143,963 |
| Sub-Total | | 6,558,866 | 6,111,317 | 5,028,330 | 6,684,040 | 4,827,784 | -20,884 |
| Financing/Investment Adjustment In Year | -44,231 | 154,667 | -15,521 | -35,102 | 34,230 | -53,906 | -128,599 |
| Financing/Investment Adjustment Opening Balance | | 18,610 | 336,607 | 321,620 | 265,742 | 349,201 | 256,154 |
| Sub-Total | | 173,277 | 321,086 | 286,518 | 299,972 | 295,295 | 127,555 |
| End of Year Cumulative Balance | | 6,732,143 | 6,432,404 | 5,314,848 | 6,984,013 | 5,123,079 | 106,671 |
| NON-INDUSTRIAL: | | | | | | | |
| Beginning of Year Balance | | 152,138 | 2,658,082 | 2,435,650 | 1,869,629 | 2,617,374 | 1,988,388 |
| Net Annual Difference (Total Revenues-Net Expenditures) | | 2,437,402 | -346,669 | -671,028 | 638,306 | -741,322 | -2,022,727 |
| Sub-Total | | 2,589,540 | 2,311,412 | 1,764,622 | 2,507,935 | 1,876,053 | -34,338 |
| Financing/Investment Adjustment In Year | -17,651 | 60,935 | -8,667 | -16,776 | 15,958 | -18,533 | -50,568 |
| Financing/Investment Adjustment Opening Balance | | 7,607 | 132,904 | 121,782 | 93,481 | 130,869 | 99,419 |
| Sub-Total | | 68,542 | 124,237 | 105,007 | 109,439 | 112,336 | 48,851 |
| End of Year Cumulative Balance | | 2,658,082 | 2,435,650 | 1,869,629 | 2,617,374 | 1,988,388 | 14,513 |
| TOTAL CUMULATIVE BALANCE | | 29,340,101 | 27,473,399 | 22,030,856 | 25,161,613 | 16,716,162 | 0 |

ROADS

| PROPOSED | | | | |
|---|---------------------|-------------------------------------|---------------------------------|--|
| DEVELOPMENT CHARGE SUMMARY - Costing Update | | | | |
| | Persons Per Unit | Unadjusted Development Charge | Adjusted Breakeven Factor | Adjusted Breakeven Development Charge |
| SMALL APARTMENT | 1.3 | 4,344.52 | 1.69% | 4,418.11 |
| LARGE APARTMENT | 2.5 | 8,354.85 | 1.69% | 8,496.37 |
| OTHER RESIDENTIAL | 3.4 | 11,362.60 | 1.69% | 11,555.07 |
| WEIGHTED CHARGE | | 11,055.81 | | 11,243.08 |
| INDUSTRIAL CHARGE (PER M2) | | 53.89 | 1.69% | 54.81 |
| NON-INDUSTRIAL CHARGE (PER M2) | | 73.82 | 1.69% | 75.07 |

| INFORMATIONAL ONLY | | | | |
|---|---------------------|-------------------------------------|---------------------------------|--|
| DEVELOPMENT CHARGE SUMMARY - Capital Program Update | | | | |
| | Persons Per Unit | Unadjusted Development Charge | Adjusted Breakeven Factor | Adjusted Breakeven Development Charge |
| SMALL APARTMENT | 1.3 | 5,036.21 | -0.68% | 5,001.92 |
| LARGE APARTMENT | 2.5 | 9,685.02 | -0.68% | 9,619.08 |
| OTHER RESIDENTIAL | 3.4 | 13,171.63 | -0.68% | 13,081.95 |
| WEIGHTED CHARGE | | 12,815.99 | | 12,728.74 |
| INDUSTRIAL CHARGE (PER M ²) | | 62.47 | -0.68% | 62.05 |
| NON-INDUSTRIAL CHARGE (PER M ²) | | 85.58 | -0.68% | 85.00 |

Road Improvements - Capital Program Update

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|--|----------------------------|--------------|-------------------|--------------|---------------------------------|----------------------------------|
| 2008 | | | | | | | |
| | Acceleride/BRT | | | | \$4,000,000 | \$4,000,000 | \$0 |
| | Environmental Assessments | Citywide | | | \$125,000 | \$125,000 | \$0 |
| | Environmental Assessments | Intermodal Dr. | Airport Rd. | CN Rail Bridge | \$400,000 | \$400,000 | \$0 |
| | Environmental Assessments | Financial Dr. | Steeles Ave. | South City limits | \$350,000 | \$350,000 | \$0 |
| | Environmental Assessments | Sandalwood Pkwy. | Dixie Rd. | Airport Rd. | \$600,000 | \$600,000 | \$0 |
| | Environmental Assessments | Clark Blvd. | Highway 410 | Dixie Rd. | \$450,000 | \$450,000 | \$0 |
| | Intersection Reconstruction | Spar Dr. & Ward Rd. | | | \$90,000 | \$85,000 | \$5,000 |
| | Intersection Reconstruction (Regional Projects) | Bramalea Rd. & Bovaird Dr. | | | \$75,000 | \$71,000 | \$4,000 |
| | Intersection Reconstruction (Regional Projects) | Torbram Rd. & Bovaird Dr. | | | \$410,000 | \$389,000 | \$21,000 |
| | Land Acquisitions | Various Locations | | | \$8,000,000 | \$8,000,000 | \$0 |
| | New Road Construction - 4 Lanes | Humberwest Pkwy. | Airport Rd. | Castlemore Rd. | \$2,000,000 | \$2,000,000 | \$0 |
| | New Road Construction - 4 Lanes | Cottrelle Blvd. | Goreway Dr. | McVean Dr. | \$2,660,000 | \$2,660,000 | \$0 |
| | New Road Construction - 4 Lanes | Cottrelle Blvd. | The Gore Rd. | Highway 50 | \$2,450,000 | \$2,450,000 | \$0 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|------|----------------------------------|-------------------|------------------|------------------|--------------|---------------------------------|----------------------------------|
| | New Road Construction - 4 Lanes | Cottrelle Blvd. | Airport Rd. | Humberwest Pkwy. | \$1,150,000 | \$1,150,000 | \$0 |
| | Noise Walls | City wide | | | \$75,000 | \$0 | \$75,000 |
| | Pre-Engineering | Various Locations | | | \$750,000 | \$750,000 | \$0 |
| | Project Design for 2009 Projects | Countryside Dr. | Bramalea Rd. | Torbram Rd. | \$600,000 | \$600,000 | \$0 |
| | Project Design for 2009 Projects | Queen St. | Centre St. | Highway 410 | \$900,000 | \$900,000 | \$0 |
| | Project Design for 2009 Projects | McVean Dr. | Queen St. | Castlemore Rd. | \$950,000 | \$950,000 | \$0 |
| | Project Design for 2009 Projects | Intermodal Dr. | Airport Rd. | CNR | \$300,000 | \$300,000 | \$0 |
| | Project Design for 2009 Projects | Wanless Dr. | McLaughlin Rd. | Creditview Rd. | \$750,000 | \$750,000 | \$0 |
| | Project Design for 2009 Projects | Williams Pkwy. | McLaughlin Rd. | North Park Dr. | \$850,000 | \$850,000 | \$0 |
| | Project Design for 2009 Projects | Humberwest Pkwy. | Goreway Dr. | Williams Pkwy. | \$450,000 | \$450,000 | \$0 |
| | Project Design for 2009 Projects | Cottrelle Blvd. | Humberwest Pkwy. | Goreway Dr. | \$100,000 | \$100,000 | \$0 |
| | Project Design for 2009 Projects | Financial Dr. | Highway 407 | Steeles Ave. | \$450,000 | \$450,000 | \$0 |
| | Road Widening - 2 to 6 Lanes | Kennedy Rd. | First Gulf Blvd. | South City Limit | \$9,600,000 | \$9,120,000 | \$480,000 |
| | Road Widening - 2 to 4 Lanes | Torbram Rd. | Countryside Dr. | Sandalwood Pkwy. | \$5,500,000 | \$5,225,000 | \$275,000 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|------|------------------------------------|--|-------------------------|--------------------------|--------------|---------------------------------|----------------------------------|
| | Road Widening - 2 to 4 Lanes | Bramalea Rd. | Countryside Dr. | Sandalwood Pkwy. | \$9,200,000 | \$6,580,000 | \$2,620,000 |
| | | Heritage Rd. | Steeles Ave. | South City Limit | \$5,000,000 | \$4,750,000 | \$250,000 |
| | Sidewalks | Torbram Rd. | Bovaird Dr. | North Park Dr. | \$115,000 | \$115,000 | \$0 |
| | Sidewalks | Walker Dr. | Clark Blvd. to Existing | S/W South of Clark (W/S) | \$110,000 | \$110,000 | \$0 |
| | Sidewalks | Summerlea Dr. | Clark Blvd. to Existing | S/W South of Clark (W/S) | \$110,000 | \$110,000 | \$0 |
| | Sidewalks (Region of Peel Project) | Airport Rd. | Countryside Dr. | Mayfield Rd. | \$205,000 | \$185,000 | \$20,000 |
| | Sidewalks (Region of Peel Project) | Airport Rd. | Steeles Ave. | Driver Rd. | \$55,000 | \$55,000 | \$0 |
| | Intersection Reconstruction | Torbram Rd. & Blue Diamond Dr. | | | \$235,000 | \$223,000 | \$12,000 |
| | Traffic Signalization | Harold St. & McLaughlin Rd. | | | \$120,000 | \$90,000 | \$30,000 |
| | Traffic Signalization | Cassie Campbell/Fidelity Ave. & Sandalwood Pkwy. | | | \$120,000 | \$120,000 | \$0 |
| | Traffic Signalization | Chinguacousy Rd. & Grovewood Dr. | | | \$100,000 | \$100,000 | \$0 |
| | Traffic Signalization | Countryside Dr. & Heart Lake Rd | | | \$100,000 | \$100,000 | \$0 |
| | Traffic Signalization | Van Kirk Dr. & Wanless Rd. (Above Ground) | | | \$100,000 | \$100,000 | \$0 |
| | Traffic Signalization | Ebenezer Rd. & McVean Dr. (Temporary) | | | \$70,000 | \$70,000 | \$0 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|---------------------------------------|------------------------------------|------------------|------------------|--------------|---------------------------------|----------------------------------|
| | Traffic Signalization | North Park Dr. & North Hampton St. | | | \$90,000 | \$90,000 | \$0 |
| | Utility Relocation | Countryside Dr. | Dixie Rd. | Bramalea Rd. | \$450,000 | \$450,000 | \$0 |
| | Utility Relocation | Castlemore Rd. | The Gore Rd. | Highway 50 | \$450,000 | \$450,000 | \$0 |
| | Utility Relocation | Cottrelle Blvd. | Humberwest Pkwy. | Goreway Dr. | \$100,000 | \$100,000 | \$0 |
| | Utility Relocation | Various Locations | | | \$500,000 | \$500,000 | \$0 |
| | Road Widening - 2 to 4 Lanes | Williams Pkwy. | Pertosa Dr. | Chinguacousy Rd. | \$380,000 | \$380,000 | \$0 |
| | | | | Total | \$61,645,000 | \$57,853,000 | \$3,792,000 |
| 2009 | | | | | | | |
| | Acceleride/BRT: Roadway Intersections | | | | \$2,300,000 | \$2,300,000 | \$0 |
| | Acceleride/BRT: Property | | | | \$4,000,000 | \$4,000,000 | \$0 |
| | Bridge Widening | Financial Dr. | Highway 407 | Steeles Ave. | \$2,592,000 | \$2,592,000 | \$0 |
| | BRT Line | Queen St. | Centre St. | Highway 410 | \$4,800,000 | \$3,600,000 | \$1,200,000 |
| | Environmental Assessments | Various Locations | | | \$1,800,000 | \$1,800,000 | \$0 |
| | Intersection Reconstruction | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|------|----------------------------------|-------------------|------------------|------------------|--------------|---------------------------------|----------------------------------|
| | Land Acquisitions | Various Locations | | | \$10,000,000 | \$10,000,000 | \$0 |
| | New Road Construction - 4 Lanes | Cottrelle Blvd. | McVean Rd. | Mid Concession | \$4,600,000 | \$4,600,000 | \$0 |
| | New Road Construction - 4 Lanes | Cottrelle Blvd. | Humberwest Pkwy. | Goreway Dr. | \$12,000,000 | \$12,000,000 | \$0 |
| | Pre-Engineering | Various Locations | | | \$750,000 | \$750,000 | \$0 |
| | Project Design for 2010 Projects | Various Locations | | | \$5,000,000 | \$5,000,000 | \$0 |
| | Road Widening - 2 to 4 Lanes | Intermodal Dr. | Airport Rd. | CN Rail Bridge | \$14,745,000 | \$13,270,000 | \$1,475,000 |
| | Road Widening - 4 to 6 Lanes | Queen St. East | Centre St. | Highway 410 | \$7,829,000 | \$7,046,000 | \$783,000 |
| | Road Widening - 4 to 6 Lanes | Castlemore Rd. | The Gore Rd. | Highway 50 | \$9,959,000 | \$8,963,000 | \$996,000 |
| | Road Widening - 2 to 4 Lanes | Countryside Dr. | Dixie Rd. | Bramalea Rd. | \$4,872,000 | \$4,385,000 | \$487,000 |
| | Road Widening - 2 to 4 Lanes | Wanless Dr. | McLaughlin Rd. | Chinguacousy Rd. | \$4,549,000 | \$4,094,000 | \$455,000 |
| | Sidewalks | Various Locations | | | \$300,000 | \$300,000 | \$0 |
| | Traffic Signalization | Various Locations | | | \$1,420,000 | \$1,420,000 | \$0 |
| | Utility Relocation | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |
| | | | | Total | \$93,516,000 | \$88,120,000 | \$5,396,000 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|---------------------------------------|-------------------|------------------|-------------------------------|--------------|---------------------------------|----------------------------------|
| 2010 | | | | | | | |
| | Acceleride/BRT: Roadway Intersections | | | | \$9,913,000 | \$9,913,000 | \$0 |
| | Acceleride/BRT: Property | | | | \$2,000,000 | \$2,000,000 | \$0 |
| | Environmental Assessments | Various Locations | | | \$1,800,000 | \$1,800,000 | \$0 |
| | Intersection Reconstruction | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |
| | Land Acquisitions | Various Locations | | | \$10,000,000 | \$10,000,000 | \$0 |
| | New Road Construction - 4 Lanes | Financial Dr. | South City Limit | Steeles Ave. | \$3,539,000 | \$3,539,000 | \$0 |
| | Pre-Engineering | Various Locations | | | \$750,000 | \$750,000 | \$0 |
| | Project Design for 2011 Projects | Various Locations | | | \$5,000,000 | \$5,000,000 | \$0 |
| | Road Widening - 2 to 4 Lanes | McVean Dr. | Queen St. | Cottrelle Blvd. | \$4,523,000 | \$4,071,000 | \$452,000 |
| | Road Widening - 4 to 6 Lanes | Chinguacousy Rd. | Steeles Ave. | Queen St. W. | \$15,680,000 | \$14,112,000 | \$1,568,000 |
| | Road Widening - 4 to 6 Lanes | Chinguacousy Rd. | Queen St. | Bovaird Dr. | \$15,731,000 | \$14,158,000 | \$1,573,000 |
| | Road Widening - 4 to 6 Lanes | Williams Pkwy. | McLaughlin Rd. | North Park Dr. / Howden Blvd. | \$13,642,000 | \$12,278,000 | \$1,364,000 |
| | Road Widening - 2 to 4 Lanes | McLaughlin Rd. | South City Limit | Steeles Ave. | \$11,227,000 | \$10,104,000 | \$1,123,000 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|----------------------------------|-------------------|-----------------|-----------------|--------------|---------------------------------|----------------------------------|
| | Sidewalks | Various Locations | | | \$300,000 | \$300,000 | \$0 |
| | Traffic Signalization | Various Locations | | | \$1,420,000 | \$1,420,000 | \$0 |
| | Utility Relocation | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |
| | | | | Total | \$97,525,000 | \$91,445,000 | \$6,080,000 |
| 2011 | | | | | | | |
| | Acceleride/BRT: Property | | | | \$2,000,000 | \$2,000,000 | \$0 |
| | Environmental Assessments | Various Locations | | | \$1,800,000 | \$1,800,000 | \$0 |
| | Intersection Reconstruction | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |
| | Land Acquisitions | Various Locations | | | \$10,000,000 | \$10,000,000 | \$0 |
| | Merging Lanes | Hwy 10 at Hwy 410 | | | \$1,363,000 | \$1,363,000 | \$0 |
| | New Road Construction - 4 Lanes | Financial Dr. | Mississauga Rd. | Heritage Rd. | \$3,021,000 | \$2,719,000 | \$302,000 |
| | New Road Construction - 4 Lanes | Financial Dr. | Steeles Ave. | Mississauga Rd. | \$3,359,000 | \$3,023,000 | \$336,000 |
| | Pre-Engineering | Various Locations | | | \$750,000 | \$750,000 | \$0 |
| | Project Design for 2012 Projects | Various Locations | | | \$5,000,000 | \$5,000,000 | \$0 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|------------------------------|-------------------|-----------------|------------------|---------------------|--|---|
| | Realignment and Paving | Ken Whillans Dr. | Church St. | Nelson St. | \$3,500,000 | \$3,325,000 | \$175,000 |
| | Realignment and Paving | Creditview Rd. | Highway 7 | Queen St. | \$3,000,000 | \$2,850,000 | \$150,000 |
| | Realignment and Paving | Creditview Rd. | Highway 7 | Sandalwood Pkwy. | \$1,631,000 | \$1,468,000 | \$163,000 |
| | Realignment and Paving | Wanless Dr. | Creditview Rd. | Chinguacousy Rd. | \$1,603,000 | \$1,443,000 | \$160,000 |
| | Road Widening - 2 to 4 Lanes | McVean Dr. | Cottrelle Blvd. | Castlemore Rd. | \$4,528,000 | \$4,075,000 | \$453,000 |
| | Road Widening - 4 to 6 Lanes | Humberwest Pkwy. | Queen St. | Williams Pkwy. | \$5,118,000 | \$4,606,000 | \$512,000 |
| | Road Widening - 4 to 6 Lanes | Castlemore Rd. | Airport Rd. | Goreway Dr. | \$4,937,000 | \$4,443,000 | \$494,000 |
| | Road Widening - 4 to 6 Lanes | Sandalwood Pkwy. | Dixie Rd. | Bramalea Rd. | \$2,394,000 | \$2,155,000 | \$239,000 |
| | Road Widening - 2 to 4 Lanes | Bramalea Rd. | Countryside Dr. | Mayfield Rd. | \$4,218,000 | \$3,796,000 | \$422,000 |
| | Road Widening - 2 to 4 Lanes | Countryside Dr. | Bramela Rd. | Torbram Rd. | \$6,712,000 | \$6,041,000 | \$671,000 |
| | Road Widening - 2 to 4 Lanes | Countryside Dr. | Torbram Rd. | Goreway Dr. | \$7,748,000 | \$6,973,000 | \$775,000 |
| | Sidewalks | Various Locations | | | \$300,000 | \$300,000 | \$0 |
| | Traffic Signalization | Various Locations | | | \$1,440,000 | \$1,440,000 | \$0 |
| | Utility Relocation | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|----------------------------------|-------------------|--------------------------|-------------------------|--------------|---------------------------------|----------------------------------|
| | Road Widening - 4 to 6 Lanes | Williams Pkwy. | McLaughlin Rd. | Kennedy Rd. | \$10,982,000 | \$9,884,000 | \$1,098,000 |
| | | | | Total | \$87,404,000 | \$81,454,000 | \$5,950,000 |
| 2012 | | | | | | | |
| | Acceleride/BRT: Property | | | | \$1,000,000 | \$1,000,000 | \$0 |
| | Environmental Assessments | Various Locations | | | \$1,800,000 | \$1,800,000 | \$0 |
| | Intersection Reconstruction | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |
| | Land Acquisitions | Various Locations | | | \$10,000,000 | \$10,000,000 | \$0 |
| | Sidewalks | Various Locations | | | \$300,000 | \$300,000 | \$0 |
| | New Road Construction - 4 Lanes | Clarkway Dr. | North of Cottrelle Blvd. | Castlemore Rd. | \$1,667,000 | \$1,667,000 | \$0 |
| | New Road Construction - 4 Lanes | Sandalwood Pkwy. | Creditview Rd. | Mississauga Rd. | \$2,970,000 | \$2,970,000 | \$0 |
| | New Road Construction - 4 Lanes | Financial Dr. | Heritage Rd. | Winston Churchill Blvd. | \$3,254,000 | \$3,254,000 | \$0 |
| | Pre-Engineering | Various Location | | | \$750,000 | \$750,000 | \$0 |
| | Project Design for 2013 Projects | Various Locations | | | \$5,000,000 | \$5,000,000 | \$0 |
| | Realignment and Paving | Clarkway Dr. | Countryside Dr. | Mayfield Rd. | \$1,072,000 | \$965,000 | \$107,000 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|------------------------------|-------------------|------------------|-------------------------------|---------------------|--|---|
| | Realignment and Paving | Finley Rd. | | | \$1,056,000 | \$1,056,000 | \$0 |
| | Realignment and Paving | Heritage Rd. | Embleton Rd. | Bramwest Pkwy. | \$3,500,000 | \$3,150,000 | \$350,000 |
| | Realignment and Paving | Heritage Rd. | Bramwest Pkwy. | Highway 7 | \$1,847,000 | \$1,662,000 | \$185,000 |
| | Realignment and Paving | Wanless Dr. | Mississauga Rd. | Creditview Rd. | \$1,458,000 | \$1,313,000 | \$145,000 |
| | Road Widening - 4 to 6 Lanes | Clark Blvd. | Highway 410 | Dixie Rd. | \$5,223,000 | \$4,701,000 | \$522,000 |
| | Road Widening - 2 to 4 Lanes | Creditview Rd. | Sandalwood Pkwy. | Wanless Dr. | \$4,249,000 | \$3,824,000 | \$425,000 |
| | Road Widening - 4 to 6 Lanes | Torbram Rd. | South City Limit | Queen St. | \$22,447,000 | \$20,252,000 | \$2,195,000 |
| | Realignment and Paving | Torbram Rd. | Countryside Dr. | Mayfield Rd. | \$1,953,000 | \$1,758,000 | \$195,000 |
| | Road Widening - 4 to 6 Lanes | Castlemore Rd. | Goreway Dr. | McVean Dr. | \$7,415,000 | \$6,673,000 | \$742,000 |
| | Road Widening - 4 to 6 Lanes | Sandalwood Pkwy. | Bramalea Rd. | Torbram Rd. | \$3,905,000 | \$3,514,000 | \$391,000 |
| | Road Widening - 4 to 6 Lanes | Williams Pkwy. | Kennedy Rd. | North Park Dr. / Howden Blvd. | \$6,769,000 | \$6,092,000 | \$677,000 |
| | Realignment and Paving | Heritage Rd. | Steeles Ave. | Embleton Rd. | \$4,053,000 | \$3,648,000 | \$405,000 |
| | Traffic Signalization | Various Locations | | | \$1,550,000 | \$1,550,000 | \$0 |
| | Utility Relocation | Various Location | | | \$1,000,000 | \$1,000,000 | \$0 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|----------------------------------|--|------------------------|-------------------------|--------------|---------------------------------|----------------------------------|
| | | | | Total | \$95,238,000 | \$88,899,000 | \$6,339,000 |
| 2013 | | | | | | | |
| | Acceleride/BRT: Property | | | | \$2,000,000 | \$2,000,000 | \$0 |
| | Environmental Assessments | Various Locations | | | \$1,800,000 | \$1,800,000 | \$0 |
| | Grade Separation | Goreway Dr. | | | \$4,293,000 | \$4,293,000 | \$0 |
| | Intersection Reconstruction | Various Locations | | | \$1,000,000 | \$1,000,000 | \$0 |
| | Land Acquisitions | Various Locations | | | \$10,000,000 | \$10,000,000 | \$0 |
| | Sidewalks | Various Locations | | | \$300,000 | \$300,000 | \$0 |
| | New Road Construction - 4 Lanes | New East/West Road - Major MacKenzie Extension | Highway 50 @ Coloraine | The Gore Rd. | \$6,281,000 | \$6,281,000 | \$0 |
| | New Road Construction - 2 Lanes | New Road A | Financial Dr. | Winston Churchill Blvd. | \$19,985,000 | \$19,985,000 | \$0 |
| | Pre-Engineering | Various Locations | | | \$750,000 | \$750,000 | \$0 |
| | Project Design for 2014 Projects | Various Locations | | | \$5,000,000 | \$5,000,000 | \$0 |
| | Road Widening - 4 to 6 Lanes | Goreway Dr. | South City Limit | Highway 407 | \$3,854,000 | \$3,469,000 | \$385,000 |
| | Road Widening - 4 to 6 Lanes | Sandalwood Pkwy. | McLaughlin Rd. | Heart Lake Rd. | \$32,002,000 | \$28,802,000 | \$3,200,000 |

| Year | Required Improvement | Road | From | To | Project Cost | Development Charge Contribution | Tax-Based Contribution and Other |
|-------------|------------------------------|-------------------|-------------|--------------------|---------------------|--|---|
| | Road Widening - 4 to 6 Lanes | Williams Pkwy. | Torbram Rd. | Humberwest Pkwy. | \$4,971,000 | \$4,474,000 | \$497,000 |
| | Traffic Signalization | Various Locations | | | \$2,120,000 | \$2,120,000 | \$0 |
| | Utility Relocation | Various | | | \$1,000,000 | \$1,000,000 | \$0 |
| | | | | Total | 95,356,000 | 91,274,000 | 4,082,000 |
| | | | | Grand Total | 530,684,000 | 499,045,000 | 31,639,000 |