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2010 DC BY-LAW AMENDMENT – DRAFT BACKGROUND STUDY

Pursuant to the *Development Charges Act, 1997*, the Regional Finance and Administration Committee held a public meeting to consider an amendment to the Region-wide development charges by-law for the Water, Sewer and Roads components.

The Finance and Administration Committee recommends:

1. Receipt of the presentation by Kelly Strueby, Director, Business Planning & Budget;
2. Receipt of the following deputations:
 1. Maurice Stevens, Building Industry and Land Development Association (BILD)
 2. Audrey Jacob, IBI Group
 3. Sal Crimi, S. C. Land Management Corporation
 4. Marco Filice, Liberty Development
 5. Myer Godfrey, Yorkwood Investments Limited, Chair of Rescon (Residential Construction Council of Ontario)
3. Receipt of the following communications:
 1. Danielle Chin, Municipal Government Advisor, Building Industry and Land Development Association (BILD), April 29, 2010
 2. John Taglieri, Planner, Lormel Homes, April 29, 2010
 3. Vince Santino, Director, Land Planning & Operations, Minto Communities (Toronto) Inc., April 29, 2010
 4. Frank Marchio, Director of Land Development, Majorwood Developments Inc., April 28, 2010
 5. M. Filice, Vice-President & Counsel, Liberty Development, April 29, 2010
 6. John McGovern, Vice President, Development, Rice Commercial Group, April 29, 2010
 7. Ted Nickerson, Malone Given Parsons, April 29, 2010, on behalf of Valley King Developments Limited, King Dufferin

Developments CR Inc., King North Developments CR Inc., King Rocks Developments CR Inc., King Green Developments CR Inc., and Jane King Holdings Inc.

- 8. Ian MacLeod, Pemberton Group, April 29, 2010**
 - 9. Fraser Nelson, General Manager, Metrus Development Inc., April 29, 2010**
 - 10. Augusto Nalli, Brookvalley Developments, April 29, 2010**
 - 11. Blair Wolk, Director of Development, Orlando Corporation, April 29, 2010**
 - 12. Lloyd Cherniak, Executive Vice President, Lebovic Enterprises, April 30, 2010**
 - 13. David Woods, Vice President, Tricap Properties Inc., May 3, 2010**
 - 14. Lynda J. Townsend, Townsend and Associates, on behalf of Mattamy Group of Companies, May 4, 2010**
 - 15. Sal Crimi, S. C. Land Management Corporation on behalf of Country Wide Homes at Victoria Square Ltd., May 4, 2010**
 - 16. Susan Zuccherro, Manager, Land Development, Fandor Homes, May 4, 2010**
 - 17. Nik Mracic, Vice President, Metrus Development Inc., and A.S.O., Wismer Markham Developments Inc., May 5, 2010**
 - 18. Nik Mracic, Vice President, Metrus Development Inc., and A.S.O., 1473092 Ontario Ltd., May 5, 2010, and**
 - 19. Luka Kot, Cortel Group, May 5, 2010**
- 4. Adoption of the recommendations contained in the following report dated March 5, 2010, from the Commissioner of Finance.**

1. RECOMMENDATIONS

It is recommended that:

- 1. Council approve the Draft 2010 Development Charge Background Study (Attachment 1) to be used as the basis for the statutory Public Meeting to be held**

May 6, 2010 in accordance with the Development Charges Act, 1997.

2. That a report be brought forward to the June 10, 2010 Finance and Administration Committee recommending rates and timing based upon the input received.
3. Council defer the annual indexing of the general service components of the Regional Development Charge until June 25, 2010 to coincide with the implementation of any proposed Region-wide roads, water and sewer charges.

2. PURPOSE

The Region is currently undertaking a review of the Roads, Water and Sewer Region-wide Development Charge (DC”) By-law. A Statutory Public Meeting in accordance with the *Development Charges Act, 1997* has been scheduled for May 6, 2010. In accordance with provincial legislation a supporting background study must be available two weeks prior to the public meeting. The Background Study was made available on April 21, 2010. This report tables the draft 2010 Development Charge Background Study and a proposed timetable for enactment of the DC By-law.

3. BACKGROUND

As part of the approval of the 2007 by-law Council directed that development charge rates were to be revisited upon completion of the Master Plans

When the 2007 Development Charge By-law was passed, Council directed that “Within six months of the adoption of the Master Plans by Council, a report be brought forward outlining the development charge impacts and if the roads, transit, water and wastewater impacts are greater than 5%, those elements of the Development Charge be updated at that time.” The purpose of this direction was to review the impacts of both the Provincial *Places to Grow* growth forecast as well as the infrastructure requirements to service that growth. With the adoption of the Master Plans in November 2009, the Region has reviewed the impact on development charge rates.

Current review includes the preparation of a revised background study

On April 22, 2010 Council formally approved a recommendation from the Finance & Administration Committee directing staff to proceed with a review of the hard service components (roads, water and sewer) in an effort to enact a revised DC By-law for these components in June 2010. In accordance with the *Development Charges Act, 1997*, a DC Background Study supporting the DC By-law and associated policies must be completed. The background study provides the basis for the quantum of the development charge.

A comparison to development charge rates in other municipalities was requested during the April Finance & Administration Committee. This has been included in the draft background study in section one.

Transit and General Services not affected by this review

This review does not include any proposed adjustments to the Transit DC. The Transit DC is subject to a ten-year historical service level that limits the amount of development charges that the Region collects. Since this is merely an amendment to the existing by-law, the service level for transit does not change.

This review does not include the general service components of the Region-wide By-law nor does it include a review of either the Nobleton Area-specific sewer charge or the GO Transit charge. The current Nobleton Area-specific charge is governed by a separate by-law which expires on September 20, 2011. The GO Transit charge is governed by a separate by-law which expires on December 31, 2010.

4. ANALYSIS AND OPTIONS

An estimated \$8.9 billion in infrastructure will be required for growth

It is estimated that \$8.9 billion of infrastructure will be required to service growth within York Region to 2031 for roads, water and sewer capital programs. This compares to \$6.8 billion included in the 2007 DC Background Study for these service areas as outlined in Table 1.

Table 1
Infrastructure Capital Costs

Category	2007 DC Background Study 2007 – 2031 (2007 dollars)	2010 DC Background Study 2010 – 2031 (2010 dollars)
Water	\$861.7 M	\$1,765.8 M
Sewer *	\$1,913.3 M	\$2,256.6 M
Roads	\$3,654.9 M	\$4,843.8 M
Total	\$6,429.9 M	\$8,866.2 M

The above capital costs reflect both the new infrastructure requirements as identified in the Transportation and Water and Wastewater Master Plans as well as cost increases for various existing projects. The increased costs are a result of new projects identified in the Master Plans, increases in cost to projects previously identified, and cost increases related to third party construction projects (Peel & Toronto water and wastewater projects).

Development Charge rate increases are required to meet new Master Plan infrastructure

The current residential Region-wide development charges are at full cost recovery levels. The non-residential Region-wide development charges are scheduled to be at full cost recovery levels with the next phase-in scheduled for June 18, 2010. The current development charge rates are as outlined in Tables 2 and 3.

Table 2
Current Residential Regional Development Charges
(\$/unit)

Rate Component	Single & Semi-Detached	Multiple Unit Dwelling	Apartments	
			2 or more bedroom	Less than 2 bedrooms
Water	\$4,364	\$3,615	\$2,726	\$1,758
Sewer ¹	9,533	7,900	5,957	3,842
Roads	7,403	6,136	4,627	2,983
Subtotal	\$21,300	\$17,651	\$13,310	\$8,583
Transit	452	361	266	183
Subway	1,401	1,161	875	564
General Services	722	579	426	291
GO Transit	306	241	177	111
Total	\$24,181	\$19,993	\$15,054	\$9,732

¹ Rates do not apply to the Nobleton community.

Table 3
Current Non-Residential Regional Development Charges

Rate Component	\$ Per Square foot of GFA		\$ Per Square Metre of GFA	
	Industrial / Office / Institutional	Retail	Industrial / Office / Institutional	Retail
Water	\$1.98 ²	\$2.68	\$21.68 ²	\$28.85
Sewer ¹	3.52 ²	5.33	37.89 ²	57.37
Roads	3.21 ²	10.23 ²	34.55 ²	110.12 ²
Transit	0.20	0.68	2.15	7.32
Subway	0.64	2.16	6.89	23.25
General	0.25	0.36	2.70	3.88
Total	\$9.80	\$21.44	\$105.49	\$230.79

Notes:

- 1: Rates do not apply to the Nobleton community.
- 2: Rates currently scheduled to be at full cost recovery as of June 18, 2010.

In 2007 Council approved a phase-in to full cost recovery for non-residential development charge rates. The last stage of that phase-in is currently scheduled to occur on June 18, 2010.

Tables 4 and 5 are summaries of the draft revised residential and non-residential development charge rates for the roads, water and sewer components. These rates were developed on a full cost recovery basis.

Table 4
Proposed Residential Regional Development Charges
(\$/unit)

Rate Component	Single & Semi-Detached	Multiple Unit Dwelling	Apartments	
			2 or more bedroom	Less than 2 bedrooms
Water	\$7,615	\$6,310	\$4,758	\$3,068
Sewer ¹	\$11,999	\$9,943	\$7,497	\$4,835
Roads	\$10,008	\$8,293	\$6,253	\$4,032
Total	\$29,622	\$24,546	\$18,508	\$11,935

¹ Rates do not apply to the Nobleton community.

Table 5
Proposed Non-Residential Regional Development Charges

Rate Component	\$ Per Square foot of GFA		\$ Per Square Metre of GFA	
	Industrial / Office / Institutional	Retail	Industrial / Office / Institutional	Retail
Water	\$4.03	\$4.07	\$43.38	\$43.81
Sewer ¹	\$6.33	\$6.49	\$68.14	\$69.89
Roads	\$4.42	\$14.93	\$47.58	\$160.71
Total	\$14.78	\$25.49	\$159.10	\$274.38

¹ Rates do not apply to the Nobleton community.

Details regarding the calculation of the above rates can be found in the attached Draft Background Study.

Increased rates are proposed to be effective as of June 25, 2010

The current Region-wide development charges for roads, water, sewer and all of the general service components with the exception of the GO Transit charge are due to be indexed on June 18, 2010. In addition, the last phase-in to full cost recovery of the non-residential development charges is scheduled to occur on that date. Staff recommends that the rate changes scheduled for June 18, 2010 be deferred until June 25, 2010 and be made together with any changes to the rates from this review.

Consultation with the development industry to date has identified a number of concerns on their part

An initial consultation was held with BILD representatives on April 14, 2010 to discuss the DC by-law amendment and to confirm the timeline for further consultation. Several consultation meetings have been scheduled into early June to provide industry representatives with detailed information on infrastructure projects and costs as well as the rationale for key assumptions such as post-period benefit. Regional staff are committed to working with BILD to provide the necessary information and facilitate dialogue regarding the issues and concerns.

Development charges were also an agenda item discussed at the BILD Breakfast meeting hosted by Regional staff on April 26, 2010. Industry representatives raised various concerns regarding the proposed amendment. Some of the points raised included the following:

- Concern about the time available to review the background study information
- A general concern about the magnitude of the proposed increase and the impact on future development.
- A desire to defer approval of the rate increases until September 2010
- A concern that while the DC prepayment option approved by Council in April assists High Rise and In-fill developments, it does not assist developers of greenfields subdivisions.
- Concern about the magnitude of the rate increase for the non-residential sector, which already faced significant increases upon elimination of discounting in the 2007 by-law.
- Concern about the compatibility of proposed non-residential rate increases with the policy goals of supporting intensification.

Other issues will be addressed with the next full update of the DC By-law

This review has been limited to a review of the implications of the *Places to Grow* forecast on the Region's infrastructure requirements in addition to any significant cost changes for existing projects. All other issues will be reviewed when the full Region-wide DC By-law, which expires in June 2012, is updated.

5. FINANCIAL IMPLICATIONS

It is estimated that approximately \$8.0 billion of infrastructure will be required to service growth within York Region to the year 2031 to support the *Places to Grow* growth forecast. Development charges are a major source of the capital funding for the Region's growth-related capital program. The proposed increases are necessary to ensure that the

growth-related capital costs are borne by the development creating the need for these works.

6. LOCAL MUNICIPAL IMPACT

Development charges are a significant source of funding for the Region's growth-related capital programs. The completion of these capital infrastructure works facilitates the co-ordinated build-out of proposed developments within the local municipalities.

7. CONCLUSION

The Draft 2010 DC Background Study has been prepared in accordance with the *Development Charges Act, 1997*, and will form the basis of the statutory Public Meeting to be held May 6, 2010. It is recommended that Council approve the Draft 2010 Development Charge Background Study and the Development Charge rates calculated on the basis outlined in the Draft Background Study and that a by-law be presented to Council to give effect to these recommendations to be enacted on June 25, 2010.

It is also recommended that Council defer the annual indexing of the general service components of the Regional Development Charge be deferred until June 25, 2010 to coincide with the implementation of the proposed Region-wide roads, water and sewer charges.

For more information on this report, please contact Kelly Strueby, Director Business Planning & Budgets at Ext. 1611.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause was included in the agenda for the May 6, 2010 meeting.)

The Regional Municipality of York Development Charges



REGIONAL MUNICIPALITY OF
YORK



DRAFT 2010 DEVELOPMENT CHARGE
BY-LAW AMENDMENT
BACKGROUND STUDY

April 21, 2010



2010 DC By-Law Amendment Background Study





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Executive Summary

When the current Development Charge By-law was enacted in June 2007 the Region had not yet adopted the Province's *Places to Grow* forecast nor had the Region updated either the Transportation or Water and Wastewater Master Plans to reflect the infrastructure required to support the *Places to Grow* population and employment forecast. When the Development Charge By-law was passed in May of 2007 Council directed that once the Master Plans were adopted by Council, a "...a report be brought forward outlining the DC impacts and if the roads, transit, water and wastewater impacts are greater than 5%, those elements of the DC By-law be updated at that time."

This analysis has been completed and the results indicate that an amendment to the Roads, Water and Wastewater components of the Development Charge By-law is required. The Transit component is not being updated at this time due to the historical service level restrictions that currently cap the Development Charges for Transit at approximately \$57.7 million. This Background Study has been prepared in accordance with the *Development Charges Act*, 1997 to support the calculation of new rates to be an amendment to the existing Region-wide Development Charge By-law, to be enacted for June 25, 2010.

Development Charge Cost Summary

The following summarizes the capital costs provided for in the Development Charge ("DC") Background Study.

Infrastructure Capital Costs

There have been significant increases in infrastructure costs due to:

- Increased infrastructure requirements to support the approximately 95,000 additional people and the approximately additional 32,000 jobs that are forecast as part of *Places to Grow*"; and
- Significant cost increases in some of the Region's major Water and Wastewater projects.

It is estimated that \$8.9 billion of infrastructure will be required to service growth within York Region to the year 2031 for Roads, Water and Sewer. This compares to the \$6.5 billion included in the 2007 Background Study for water, sewer and Regional roads.

Capital Infrastructure – Gross Costs:

Category	2007 Background Study 2007 to 2031 (2007 dollars)	2010 Background Study 2010 to 2031 (current dollars)
Transportation - Roads	\$3,654.9 M	\$4,843.8 M
Sewer	\$1,913.3 M	\$2,256.6 M
Water	\$861.7 M	\$1,765.8 M
Total	\$6,429.9 M	\$8,866.2 M

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Once the 2010 figures are adjusted to exclude capital grants, subsidies, other contributions that will be made to York Region towards infrastructure capital costs, the total capital costs attributable to development for these services are \$6.1 billion.

Water Supply Infrastructure Costs

With the update to the Water Master Plan, the need for a significant amount of infrastructure to support the *Places to Grow* population and employment forecast has been identified. It is estimated that \$1,765.8 million of water supply infrastructure will be required to service growth within York Region to the year 2031, compared to \$861.7 million included in the 2007 DC By-law. Once costs associated with post-period benefit of an estimated \$325.2 million are deducted, a net of \$1,440.6 million growth-related capital costs form the basis for the new 2010 DC By-law rates for water.

The following compares the gross costs included in the 2007 DC By-law with the new 2010 DC By-law.

	2007 DC By-law Gross Capital Costs (2007 dollars)	2010 Background Study 2010 to 2031 (2010 dollars)
Pumping	\$15.0 M	\$70.4 M
Storage	\$92.8 M	\$272.7 M
Wells	\$37.1 M	\$11.9 M
Transmission	\$135.4 M	\$359.0 M
Treatment	\$22.6 M	\$15.7 M
Third Party Capital	\$548.6 M	\$933.1 M
Planning / Studies	\$0.0 M	\$6.4 M
Other	\$10.1 M	\$96.6 M
Total Capital Costs	\$861.7 M	\$1,765.8 M

Sewage Servicing Infrastructure Costs

With the update to the Wastewater Master Plan, the need for additional infrastructure to support the *Places to Grow* population and employment forecast has been identified. It is estimated that \$2,256.6 million of sewer infrastructure will be required to service growth within York Region to the year 2031, compared to \$1.9 billion included in the 2007 DC By-law. Once costs associated with both benefit to existing and post-period benefit of an estimated \$376.4 million are deducted, a net of \$1,880.2 million growth-related capital costs form the basis for the new 2010 DC By-law rates for sewer.

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The following compares the gross costs included in the 2007 with costs to be included in the 2010 DC By-law.

	2007 DC By-law Gross Capital Costs (2007 dollars)	2010 Background Study 2010 to 2031 (2010 dollars)
Planning / Studies	\$0.0 M	\$28.9 M
Pumping	\$41.7 M	\$64.0 M
Trunk Sewers	\$1,091.3 M	\$1,650.5 M
Treatment	\$87.3 M	\$401.1 M
Third Party Capital	\$657.9 M	\$112.0 M
Other	\$35.2 M	\$0.0 M
Total Capital Costs	\$1,913.3 M	\$2,256.6 M

Transportation Infrastructure Costs

With the update to the Transportation Master Plan, the need for a significant amount of infrastructure to support the *Places to Grow* population and employment forecast has been identified. It is estimated that \$4,843.8 million of transportation (roads) infrastructure will be required to service growth within York Region to the year 2031, compared to \$3.7 billion included in the 2007 DC By-law. Once costs associated with benefit to the existing population of an estimated \$661.8 million and an estimated \$1,354.0 million in grants and subsidies are deducted, a net of \$2.8 billion growth-related capital costs form the basis for the new 2010 DC By-law rates for roads.

The following is a comparison of transportation gross capital costs included in the 2007 by-law and the proposed DC By-law.

	2007 DC By-law Gross Capital Costs (2007 dollars)	2010 Background Study 2010 to 2031 (2010 dollars)
Roads	\$3,654.9 M	\$4,843.8 M

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Full Cost Development Charge Rates

The following are the proposed revised development charge rates for Roads, Water and Sewer.

Residential Development Charges – Hard Service Component Rates per Unit

	Single and Semi-Detached	Multiple Unit Dwelling	Apartments	
			2 or more Bedroom	Less than 2 Bedrooms
<u>Hard Services</u>				
Water	\$7,615	\$6,310	\$4,758	\$3,068
Sewer *	\$11,999	\$9,943	\$7,497	\$4,835
Roads	\$10,008	\$8,293	\$6,253	\$4,032
Subtotal – Hard	\$29,622	\$24,546	\$18,508	\$11,935
<u>General Services **</u>				
Transit	\$452	\$361	\$266	\$183
Subway	\$1,401	\$1,161	\$875	\$564
Police	\$296	\$236	\$174	\$119
EMS	\$63	\$50	\$37	\$26
Growth Studies	\$32	\$26	\$19	\$14
Long Term Care	\$199	\$160	\$118	\$80
Public Health	\$57	\$46	\$33	\$22
Public Works	\$75	\$61	\$45	\$30
Subtotal - General	\$2,575	\$2,101	\$1,567	\$1,038
GO Transit **	\$306	\$241	\$177	\$111
Total	\$32,503	\$26,888	\$20,252	\$13,084

* Rates do not apply to the Nobleton community.

** Not subject to this review.

Note: The General Services and GO Transit rates are those in effect as of April 1, 2010.

Non-Residential Development Charge Rates – Full Cost Recovery per Square Foot of GFA

	Industrial / Office / Institutional	Retail
Water	\$4.03	\$4.07
Sewer*	\$6.33	\$6.49
Roads	\$4.42	\$14.93
Transit**	\$0.20	\$0.68
Subway**	\$0.64	\$2.16
General**	\$0.25	\$0.36
Total	\$ 15.87	\$ 28.69

* Rates do not apply to the Nobleton community.

** Not subject to this review.

Note: The Transit, Subway and General services rates are those in effect as of as of April 1, 2010.



Updates

As part of this DC By-law amendment, revisions to the 2007 DC By-law have been limited to the Roads, Water and Sewer DC components only. This DC By-law amendment also sees the elimination of the last remaining non-residential DC discounts. The non-residential discounts that had been in place prior to the 2007 DC By-law were eliminated with the final phase-in of full cost recovery rates scheduled for June 2010. The amendments as part of this Background Study replace the last phase-in that was to occur on June 18, 2010.

The other change as part of this DC By-law review is as follows.

- Population / Employment Projections – Updated to reflect the Province of Ontario's population and employment projections to the year 2031 contained in the *Places to Grow Act*. Details regarding the growth forecast assumptions can be found in Section 3.

This DC By-law amendment does not include a review of the capital costs for the general service components of the Region-wide DC By-law.

It should be noted that in November 2001 Council enacted a separate DC By-law to recover York Region's share of growth-related capital costs associated with GO Transit services. As the GO Transit DC By-law does not expire until December 2010, this DC By-law amendment will not include a review of GO Transit capital costs.





1. Introduction

Purpose of this Background Study

York Region covers 1,776 square kilometres from Lake Simcoe in the north to Steeles Avenue in the south. It borders Simcoe County and Peel Region in the west and Durham Region in the east. York Region's landscape includes farmlands, wetlands and kettle lakes, the Oak Ridges Moraine and over 2,257 hectares of Regional forest. York Region is one of the fastest growing municipalities in Ontario.

With the adoption of the Province of Ontario's *Places to Grow Act, 2006* the forecast of the additional population and employment that is expected to be in York Region by 2031 has increased over the forecast used to develop the 2007 Development Charge Background Study. The Region used this new forecast as the basis for the review of the Master Plans for Transportation, Water and Wastewater that were approved by Regional Council in November 2009. In order to service this additional growth, additional infrastructure is required. York Region's infrastructure is at or near capacity in many areas, and without spending to accommodate forecasted growth, York Region's infrastructure will reach critical limits.

Current Development Charges - Regional Municipality of York

Residential development charges effective November 9, 2009 to June 17, 2010:

	Single & Semi-detached	Multiple Unit Dwelling	Apartments - 2 + Bedrooms	Apartments - < 2 bedrooms
Water	\$4,364	\$3,615	\$2,726	\$1,758
Sewer *	\$9,533	\$7,900	\$5,957	\$3,842
Roads	\$7,403	\$6,136	\$4,627	\$2,983
Subtotal	\$21,300	\$17,651	\$13,310	\$8,583
Transit	\$452	\$361	\$266	\$183
Subway	\$1,401	\$1,161	\$875	\$564
General Services	\$722	\$579	\$426	\$291
GO Transit	\$306	\$241	\$177	\$111
Total	\$24,181	\$19,993	\$15,054	\$9,732
Nobleton Sewer	\$8,206	\$7,356	\$5,148	\$3,545

* Rates do not apply to the Nobleton community. Nobleton Area-specific charge applies instead of the Region-wide charge.

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Non-residential development charges effective June 18, 2009 to June 17, 2010

	Per Square Foot of Gross Floor Area		Per Square Metre of Gross Floor Area	
	Industrial / Office / Institutional	Retail	Industrial / Office / Institutional	Retail
Water	\$1.98	\$2.68	\$21.31	\$28.85
Sewer *	\$3.52	\$5.33	\$37.89	\$57.37
Roads	\$3.21	\$10.23	\$34.55	\$110.12
Transit	\$0.20	\$0.68	\$2.15	\$7.32
General Services	\$0.25	\$0.36	\$2.70	\$3.88
Total	\$9.80	\$21.44	\$105.49	\$230.79
Nobleton Sewer	\$5.60	\$5.60	\$60.28	\$60.28

* Rates do not apply to the Nobleton community. Nobleton Area-specific charge applies instead of the Region-wide charge.

Neighbouring Municipalities

- The City of Toronto, Durham Region, Peel Region, Halton Region and Simcoe County all have development charge by-laws currently in effect.
- Of the neighbouring municipalities, the City of Toronto does not currently impose development charges on industrial, office or institutional development and Durham Region partially exempts industrial development from the payment of development charges. These exemptions are made in order to encourage these types of development.
- There are variances between and within municipalities in terms of the categories for applying development charges and the services for which they apply. A number of municipalities have area-specific charges in addition to Region-wide charges.
- The following are development charge rates in effect in neighbouring municipalities as of April 1, 2010.

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Current Development Charges

Residential & Non-Residential

As of April 1, 2010

	Residential				Non-Residential (\$ / square foot)	
	Apartments				Industrial / Office / Institutional	Retail
	Single / Semi	Multiple Unit Dwelling (\$ / unit)	2 or more bedrooms	Less than 2 bedrooms		
York Region	\$ 24,181	\$ 19,993	\$ 15,054	\$ 9,732	\$ 9.80	\$ 21.44
Aurora	\$ 14,670	\$ 11,577	\$ 8,891	\$ 6,670	\$ 2.27	\$ 2.27
East Gwillimbury (urban)	\$ 10,822	\$ 8,955	\$ 6,280	\$ 4,347	\$ 3.95	\$ 3.95
Georgina	\$ 4,370	\$ 4,224	\$ 3,009	\$ 2,073	\$1.57	\$1.57
King (no water & sewer)	\$ 11,620	\$ 9,886	\$ 6,591	\$ 4,552	\$ 3.99	\$ 3.99
Markham	\$ 18,320	\$ 14,397	\$ 11,330	\$ 6,806	\$ 2.41	\$ 2.47
Newmarket	\$ 12,877	\$ 9,302	\$ 7,150	\$ 4,378	\$ 1.57	\$ 1.57
Richmond Hill	\$ 11,433	\$ 9,248	\$ 6,902	\$ 4,903	\$ 3.73	\$ 6.03
Vaughan	\$ 12,480	\$ 10,566	\$ 7,410	\$ 7,410	\$ 1.76	\$ 1.76
Whitchurch-Stouffville	\$ 11,549	\$ 9,065	\$ 7,675	\$ 5,519	\$ 3.86	\$ 7.65
Region of Durham	\$ 18,521	\$ 15,179	\$ 10,829	\$ 6,803	\$ 2.31	\$ 8.78
Ajax	\$ 11,340	\$ 8,871	\$ 6,429	\$ 4,115	\$ 3.28	\$ 3.28
Brock	\$ 10,757	\$ 8,530	\$ 6,305	\$ 6,305	\$ 4.56	\$ 4.56
Clarington	\$ 13,785	\$ 12,028	\$ 9,436	\$ 5,987	\$ 2.60	\$ 4.73
Oshawa	\$ 6,775	\$ 5,227	\$ 4,882	\$ 2,667	\$ -	\$ 2.83
Pickering	\$ 9,694	\$ 6,957	\$ 5,246	\$ 3,849	\$ 3.76	\$ 3.76
Scugog	\$ 11,905	\$ 9,442	\$ 6,612	\$ 6,612	\$0 - \$3.73	\$ 5.85
Uxbridge	\$ 10,955	\$ 8,168	\$ 5,251	\$ 5,251	\$ 2.77	\$ 4.15
Whitby	\$ 10,208	\$ 8,455	\$ 7,171	\$ 3,914	\$ 3.62	\$ 3.62
Peel Region	\$ 16,755	\$ 16,755	\$ 11,968	\$ 6,223	\$ 5.81	\$ 8.32
Brampton	\$ 23,820	\$ 19,744	\$ 16,099	\$ 8,931	\$ 4.26	\$ 8.97
Caledon	\$ 16,479	\$ 16,479	\$ 11,771	\$ 6,121	\$ 5.73	\$ 8.23
Mississauga	\$ 16,755	\$ 16,755	\$ 11,968	\$ 11,968	\$ 5.48	\$ 6.57
Halton Region non HUSP	\$ 24,755	\$ 19,445	\$ 14,119	\$ 9,445	\$ 11.75	\$ 11.75
Halton Region HUSP	\$ 30,088	\$ 24,091	\$ 17,987	\$ 12,036	\$ 15.47	\$ 15.47
Burlington	\$ 7,432	\$ 5,324	\$ 3,750	\$ 3,062	\$ 3.29	\$ 3.33
Halton Hills	\$ 13,388	\$ 11,227	\$ 6,478	\$ 4,750	\$ 2.37	\$ 5.89
Milton	\$ 10,735	\$ 7,866	\$ 6,355	\$ 4,165	\$ 3.16	\$ 5.42
Oakville	\$ 21,115	\$ 16,132	\$ 13,390	\$ 7,724	\$ 8.09	\$ 8.09
Region of Waterloo	\$ 12,254	\$ 8,566	\$ 7,070	\$ 7,070	\$ 8.83	\$ 8.83
Cambridge	\$ 10,926	\$ 10,926	\$ 6,782	\$ 6,782	\$ 1.71	\$ 1.71
Kitchener	\$ 9,393	\$ 6,489	\$ 5,323	\$ 5,323	\$ 4.38	\$ 4.38
Waterloo	\$ 11,929	\$ 8,338	\$ 6,883	\$ 6,883	\$ 8.49	\$ 8.49
Toronto	\$ 12,366	\$ 9,841	\$ 8,021	\$ 4,985	\$ -	\$ 9.22
Simcoe County	\$ 3,861	\$ 3,090	\$ 2,703	\$ 2,703	\$ 0.65	\$ 1.73
City of Barrie	\$ 27,366	\$ 23,746	\$ 15,999	\$ 13,474	\$10.50, \$14.90	\$ 16.35





2. Development Charge Calculations

Overview

The *DC Act* provides that a municipality must determine the following regarding the calculation of the development charge:

- the anticipated amount, type and location of development;
- the increase in need for service attributable to growth;
- the average quality and quantity service level attained over the most recent prior 10 year period;
- the increase in capital costs (including oversized capacity);
- the portion of increased capital costs that will benefit growth; and
- the amount of any subsidies or other contributions regarding the capital costs.

In addition, the legislation requires that the Background Study include an analysis for each service of the long term capital and operating costs.

Regional staff has undertaken a comprehensive review of growth-related water, sewer and transportation (roads) capital infrastructure required for the York Region Official Plan as approved by Regional Council on December 16, 2009. This official plan reflects the Province of Ontario's *Places to Grow, 2006* forecast. This amendment to the 2007 Background Study reflects only water, sewer and transportation - roads ("hard" services). Each service area has been reviewed and costs apportioned to growth/non-growth and residential/non-residential as deemed appropriate.

Assumptions

The DC rates calculated in this background study are based on a full cost recovery methodology. That is, no discount of the residential or non-residential DC rate has been applied to the calculated DC rates.





3. Growth Forecast

One of the reasons for this review of the hard service components of the Regional Development Charge is the adoption of a new Regional Official Plan based on the Province's *Places to Grow Act, 2006*. This *Act* resulted in a new growth forecast for the Region for both residents and employment. By 2031, it is anticipated that York Region will reach 1.5 million residents, 780,000 jobs, and 510,000 households.

Population and Employment

When compared with the growth forecast used to develop the 2007 Development Charge Background Study, the new Regional Official Plan adds the following population and employment estimates to what had been previously forecast.

	2007 BG Study 2010 – 2031	2010 BG Study 2010 – 2031	Difference
Population growth	385,442	480,765	95,323
Employment	250,500	282,100	31,600

Note: The population figures included in this analysis exclude the institutional population of York Region.

REGION OF YORK 2010 DEVELOPMENT CHARGES STUDY GROWTH FORECAST

Occupied Units and Associated Population

	Number of Occupied <u>Housing Units (1)</u>	Total <u>Population (2)</u>	<u>p.p.u.</u>
1. End of 2009	308,768	1,015,731	3.29
2. Growth (occupied) 2009 to March 2019	99,764		
3. End of 2019	408,532	1,266,298	3.10
4. Growth (occupied) 2019 to Sept. 2030	101,123		
5. Mid-2031	509,655	1,496,495	2.94

Notes:

- (1) Occupied housing units based on Regional Official Plan population forecast.
- (2) Total Population - excludes institutional population.

There was no change to the long-term average p.p.u. assumptions for this analysis. Those used for the roads, water and sewer charges were as follows:

<u>Housing Type:</u>	<u>average p.p.u.'s</u>
Single / Semi	3.48
Multiple Dwelling Unit	2.88
Apartments - 2 + bedrooms	2.17
Apartments - 1 or less bedrooms	1.40
Total Apartments	1.89

2010 DC By-Law Amendment Background Study



The new Regional Official Plan forecast used to develop this Background Study for population is as follows:

REGION OF YORK 2010 DEVELOPMENT CHARGES STUDY GROWTH FORECAST

Year	Population Growth		Occupied Housing Units		Population in New Housing Units	
	End of Year (1)	Net Growth (3)	End of Year (2)	New Units (3)	2009 - 2019 p.p.u. = 3.10	2009 - Mid 2031 p.p.u. = 2.94
2001	774,161		230,803			
2002	812,301	38,140	243,277	12,474		
2003	848,787	36,486	253,687	10,410		
2004	881,832	33,045	264,366	10,679		
2005	910,992	29,160	273,358	8,992		
2006	939,789	28,797	282,843	9,485		
2007	969,570	29,781	293,345	10,502		
2008	996,423	26,853	302,366	9,021		
2009	1,015,731	19,308	308,768	6,402		
1 2010	1,034,840	19,109	316,768	8,000	24,797	23,490
2 2011	1,059,340	24,500	325,268	8,500	26,347	24,958
3 2012	1,085,210	25,870	335,676	10,408	32,261	30,561
4 2013	1,111,079	25,870	346,084	10,408	32,261	30,561
5 2014	1,136,949	25,870	356,492	10,408	32,261	30,561
6 2015	1,162,819	25,870	366,900	10,408	32,261	30,561
7 2016	1,188,689	25,870	377,308	10,408	32,261	30,561
8 2017	1,214,559	25,870	387,716	10,408	32,261	30,561
9 2018	1,240,428	25,870	398,124	10,408	32,261	30,561
10 2019	1,266,298	25,870	408,532	10,408	32,261	30,561
11 2020	1,292,168	25,870	418,940	10,408		30,561
12 2021	1,315,079	22,912	429,348	10,408		30,561
13 2022	1,335,033	19,953	438,371	9,023		26,494
14 2023	1,354,986	19,953	447,394	9,023		26,494
15 2024	1,374,939	19,953	456,417	9,023		26,494
16 2025	1,394,892	19,953	465,440	9,023		26,494
17 2026	1,414,032	19,139	473,921	8,482		24,905
18 2027	1,432,357	18,325	481,862	7,941		23,316
19 2028	1,450,682	18,325	489,803	7,941		23,316
20 2029	1,469,007	18,325	497,744	7,941		23,316
21 2030	1,487,333	18,325	505,685	7,941		23,316
22 Mid 2031	1,496,495	9,163	509,655	3,970		11,658

Growth Summary

1. Ten Year DC 2009 - 2019	250,567	99,764
2. 2009 to Mid 2031	480,765	200,887

Notes:

- (1) York Region Planning Department based on ROP forecast with an interpolation between the years 2011 and 2021;
Includes population living in private households
- (2) Occupied Housing Forecast based on ROP population forecast and ROP persons per unit forecast
- (3) Net Growth - change from previous year-end to the end of the particular year.



Development

Residential

With the adoption of the new Regional Official Plan, the housing mix used to determine the new Roads, Water and Sewer Development Charge rates is as follows.

Housing Mix Growth

Year End 2009 to mid 2031	Singles / Semis	Rows	Apartments	Total
Total New Units	78,349	36,035	86,503	200,887
Mix	39.0%	17.9%	43.1%	100%

Non-residential

The distribution of non-residential development by type remains unchanged with the new Regional Official Plan. It is as follows:

Industrial	34%
Office	34%
Institutional	8%
Retail	24%
Total	100 %

This distribution is consistent with that used for the previous development charge By-law.

With the above, the growth in Gross Floor Area ("GFA") for non-residential development was estimated. The GFA assumptions per employee used are based on industry standards for retail / non-retail. Non-retail is an average for industrial, office and institutional. The square foot assumptions are as follows:

	Square Foot	Distribution	Weighted Sq. Ft.
Industrial	850	44.7%	380
Office	250	44.7%	112
Institutional	600	10.5%	63
		100%	555
Retail	500	100%	500

Using the square footage growth forecast for the 2010 to 2031 timeframe, the distribution of growth is 78% Industrial / Office / Institutional and 22% retail. These percentages are used to apportion the water and sewer costs in the calculation of the development charge rates.

2010 DC By-Law Amendment Background Study



REGION OF YORK 2010 DEVELOPMENT CHARGES STUDY GROWTH FORECAST

Non-Residential Employment Forecast

Year	Employment			New Employment				
	End of Year (1)	Growth	Industrial 34%	Office 34%	Institutional 8%	Retail 24%	Total 100%	
	2001	386,600						
	2002	404,300	17,700	6,018	6,018	1,416	4,248	17,700
	2003	425,800	21,500	7,310	7,310	1,720	5,160	21,500
	2004	440,050	14,250	4,845	4,845	1,140	3,420	14,250
	2005	456,900	16,850	5,729	5,729	1,348	4,044	16,850
	2006	467,800	10,900	3,706	3,706	872	2,616	10,900
	2007	483,550	15,750	5,355	5,355	1,260	3,780	15,750
	2008	492,600	9,050	3,077	3,077	724	2,172	9,050
	2009	498,200	5,600	1,904	1,904	448	1,344	5,600
1	2010	510,700	12,500	4,250	4,250	1,000	3,000	12,500
2	2011	527,855	17,155	5,833	5,833	1,372	4,117	17,155
3	2012	547,165	19,310	6,565	6,565	1,545	4,634	19,310
4	2013	566,475	19,310	6,565	6,565	1,545	4,634	19,310
5	2014	585,785	19,310	6,565	6,565	1,545	4,634	19,310
6	2015	605,095	19,310	6,565	6,565	1,545	4,634	19,310
7	2016	624,405	19,310	6,565	6,565	1,545	4,634	19,310
8	2017	643,715	19,310	6,565	6,565	1,545	4,634	19,310
9	2018	663,025	19,310	6,565	6,565	1,545	4,634	19,310
10	2019	682,335	19,310	6,565	6,565	1,545	4,634	19,310
11	2020	701,645	19,310	6,565	6,565	1,545	4,634	19,310
12	2021	714,860	13,215	4,493	4,493	1,057	3,172	13,215
13	2022	721,980	7,120	2,421	2,421	570	1,709	7,120
14	2023	729,100	7,120	2,421	2,421	570	1,709	7,120
15	2024	736,220	7,120	2,421	2,421	570	1,709	7,120
16	2025	743,340	7,120	2,421	2,421	570	1,709	7,120
17	2026	750,240	6,900	2,346	2,346	552	1,656	6,900
18	2027	756,920	13,580	4,617	4,617	1,086	3,259	13,580
19	2028	763,600	6,680	2,271	2,271	534	1,603	6,680
20	2029	770,280	6,680	2,271	2,271	534	1,603	6,680
21	2030	776,960	6,680	2,271	2,271	534	1,603	6,680
22	mid 2031	780,300	3,340	1,136	1,136	267	802	3,340
Growth Summary								
	2009 to Mid-2031	289,000	98,260	98,260	23,120	69,360	289,000	
					Non-Retail	Retail	Total	
				21.5 year DC	219,640	69,360	289,000	

Notes:

- (1) End of Year data calculated from Regional Official Plan forecast with interpolation between 2011 and 2021
- (2) Gross Floor Area assumptions per employee are based on industry standards.
Non-Retail assumption is an average for industrial, office and institutional.

New Gross Floor Area:

The distribution of non-residential development by type remains unchanged with the new Regional Official Plan. It is as follows:

2010 DC By-Law Amendment Background Study



	Sq Ft. (2)		Weighted sq ft
Industrial	850	44.7%	380
Office	250	44.7%	112
Institutional	600	10.5%	63
		100%	555

New Gross Floor Area - Sq Ft.

SF/employee	Industrial 555	Office 555	Institutional 555	Retail 500	Total
2001					
2002	3,341,574	3,341,574	786,253	2,124,000	9,593,400
2003	4,058,974	4,058,974	955,053	2,580,000	11,653,000
2004	2,690,250	2,690,250	633,000	1,710,000	7,723,500
2005	3,181,103	3,181,103	748,495	2,022,000	9,132,700
2006	2,057,805	2,057,805	484,189	1,308,000	5,907,800
2007	2,973,434	2,973,434	699,632	1,890,000	8,536,500
2008	1,708,545	1,708,545	402,011	1,086,000	4,905,100
2009	1,057,221	1,057,221	248,758	672,000	3,035,200
2010	2,359,868	2,359,868	555,263	1,500,000	6,775,000
2011	3,238,683	3,238,683	762,043	2,058,600	9,298,010
2012	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2013	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2014	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2015	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2016	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2017	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2018	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2019	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2020	3,645,525	3,645,525	857,771	2,317,200	10,466,020
2021	2,494,853	2,494,853	587,024	1,585,800	7,162,530
2022	1,344,181	1,344,181	316,278	854,400	3,859,040
2023	1,344,181	1,344,181	316,278	854,400	3,859,040
2024	1,344,181	1,344,181	316,278	854,400	3,859,040
2025	1,344,181	1,344,181	316,278	854,400	3,859,040
2026	1,302,647	1,302,647	306,505	828,000	3,739,800
2027	2,563,761	2,563,761	603,238	1,629,600	7,360,360
2028	1,261,114	1,261,114	296,733	801,600	3,620,560
2029	1,261,114	1,261,114	296,733	801,600	3,620,560
2030	1,261,114	1,261,114	296,733	801,600	3,620,560
mid 2031	630,557	630,557	148,366	400,800	1,810,280

21.5 year DC	54,560,158	54,560,158	12,837,684	34,680,000	156,638,000
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	Non-Retail	Retail	Total
21.5 year DC	121,958,000	34,680,000	156,638,000







4. Growth-Related Capital Cost Analysis

York Region undertook an assessment of the estimated capital costs for the various services to be included in this DC By-law Background Study. The results are as follows.

Summary of Costs

Capital Cost Summary - Revised With Master Plan Updates
Hard Service Component
2010 - 2031

Service	Total Gross Costs	Less:			Costs Attributable to Development	Total Net Growth- related Costs
		Benefit to Existing Development	Post Period Benefit	Grants, Subsidies & Other		
Water Supply	\$1,765,772,463	\$0	\$325,151,176		\$1,440,621,286	\$1,440,621,286
Sewer Servicing *	\$2,256,622,468	\$10,234,224	\$366,195,395		\$1,880,192,849	\$1,880,192,849
Regional Roads	\$4,843,769,724	\$661,770,396		\$1,353,963,997	\$2,828,035,332	\$2,828,035,332
Total	\$8,866,164,655	\$672,004,620	\$691,346,571	\$1,353,963,997	\$6,148,849,467	\$6,148,849,467

* Sewer gross costs are net of subsidy and net of Durham share of Duffin Creek Phase 3.

The above costs exclude existing debt payments. These are shown in the calculations below.



Water

Water Supply Capacity

The Long Term Water and Wastewater Master Plan Update is sizing water infrastructure for 2051 demand and is based on different unit rates for each municipality. Phasing of infrastructure is based on demand. Sources of water supply for the York Water System continue to be from Peel Region, City of Toronto and Yonge Street Aquifer wells. Small communities will continue to be serviced by individual groundwater systems, with the exception of King City and Kleinburg systems which will be connected to York Water system. The water supply table provides the water supply capacity and demand in 2031 for each system.

The residential portion accounts for 65% of total demand, with employment accounting for 35% of total demand.

	Existing Capacity (ML/D)	Capacity in Persons (Existing)		Avail. Water Supply 2051 (ML/D)	Capacity in Persons (2031)		Served Population (2031)		Capacity in Persons (2051)	
<u>Supply Source</u>	Max Day	<u>Res. Portion</u>	<u>Non- Res. Portion</u>	Max Day	<u>Res. Portion</u>	<u>Non- Res. Portion</u>	<u>Res. Portion</u>	<u>Non- Res. Portion</u>	<u>Res. Portion</u>	<u>Non- Res. Portion</u>
Toronto	494			530						
Peel	111			388						
Yonge St Aquifer	62			62						
Stouffville	12			12						
King City	5			0						
Kleinburg	4			0						
York Water System	688	977,601	564,730	992	1,529,556	852,727	1,388,680	743,691	1,529,556	852,727
Lake Simcoe	30	43,101	8,810	55	76,110	26,264	63,500	19,554	76,110	26,264
Other Ground Sources	19	18,624	21,000	20	21,724	11,000	21,724	11,000	21,724	11,000
Total	736	1,039,326	594,540	1,067	1,627,391	889,991	1,472,867	774,245	1,627,391	889,991

Water Supply Capital Costs

It is estimated that \$1,765.8 million of water supply infrastructure will be required to service growth within York Region to the year 2031, compared to \$861.7 M included in the 2007 DC By-law. Once the post-period benefit costs of an estimated \$325.2 million are deducted, a net of \$1.4 billion growth-related capital costs remains. The following are the costs included in the 2010 DC By-law Amendment.



	2007 DC By-law Gross Capital Costs (2007 dollars)	2010 Background Study 2010 to 2031 (2010 dollars)
Pumping	\$15.0 M	\$70.4 M
Storage	\$92.8 M	\$272.7 M
Wells	\$37.1 M	\$11.9 M
Transmission	\$135.4 M	\$359.0 M
Treatment	\$22.6 M	\$15.7 M
Third Party Capital	\$548.6 M	\$933.1 M
Planning / Studies	\$0.0 M	\$6.4 M
Other	\$10.1 M	\$96.6 M
Total Capital Costs	\$861.7 M	\$1,765.8 M

COST INCREASES

In recent years York Region has experienced significant cost pressures as a result of legislative changes including the *Clean Water Act*, and the *Oak Ridges Moraine Act* and more recently the *Lake Simcoe Protection Act* and the proposed Intra-Basin Transfer regulation under the *Ontario Water Resources Act*.

More watermain projects are constructed by tunnelling. Increase in costs, as a result, is evident in York Region projects as well as cost-shared projects with Peel Region and City of Toronto.

Inflation continues to be a key factor in driving up both labour and material costs in the last few years.

The Water programs included in this Amendment are as follows.

2010 DC By-Law Amendment Background Study



Water		2007 BG Study Gross Costs	2010 to 2031 Gross Costs	Benefit to Existing	Post Period Benefit	Net 2010 to 2031 Costs
Other:						
73950	LTWS/Summer Water Use Reduction Program	8,000	-		-	-
4600-72390	Water for Tomorrow Program	-	95,880,184		18,437,759	77,442,425
4600-75560	Joint Optimization Study	-	700,000		134,610	565,390
		8,000	96,580,184	-	18,572,369	78,007,815
Planning / Studies:						
4600-72440	Aurora/Newmarket Water Supply System Study	-	520,000		-	520,000
4600-73300	Water Master Plan Update	3,850,000	3,475,000		668,243	2,806,758
4600-77450	Kleinburg Water Servicing Study EA	-	-		-	-
4600-79670	Water System Capacity Assessment	6,200,000	2,435,073		468,265	1,966,808
		10,050,000	6,430,073	-	1,136,507	5,293,566
Pumping:						
70120	Orchard Heights PS & Kirby PS	2,388,000	8,815,000		1,695,125	7,119,876
75250	Newmarket Pressure Reduction Valve	77,000	-		-	-
4600-74220	Decommission Markham PS	215,000	245,000		-	245,000
4600-75400	PD8 West RH PS and Watermain	-	33,775,000		6,494,933	27,280,068
4600-75410	Decommission North RH PS	-	1,140,000		-	1,140,000
4600-75420	PD7 Maple PS Upgrade	-	3,500,000		673,050	2,826,950
4600-75620	Pugsley Pumping Station Upgrade	-	3,800,000		730,740	3,069,260
4600-76320	PD9 Jefferson PS Upgrades	867,000	-		-	-
4600-77390	Maple PD8 PS and PD7 South Maple PS Upgrade	11,238,000	200,000		38,460	161,540
4600-77420	Decommission East Woodbridge PS	255,000	300,000		-	300,000
4600-78120	Stouffville Zone 2 PS & Stouffville Sdrd W/M to Town	6,280,000	1,163,000		223,645	939,355
MP17	Davis Drive PS (Newmarket East)	-	7,200,000		1,384,615	5,815,385
MP25	Queensville Southeast Elevated Tank	-	341,000		65,577	275,423
MP26	Newmarket East Watermains	-	5,044,000		970,000	4,074,000
MP27	Nobleton Well #5 and watermain to Town	-	4,899,000		-	4,899,000
		21,320,000	70,422,000	-	12,276,144	58,145,856
Storage:						
70330	Wellington St. Reservoir	2,011,200	-		-	-
3	East Woodbridge ET Decommissioning	180,000	-		-	-
5	Kleinburg Reservoir	4,674,000	-		-	-
40	PD7 Bayview Ave Reservoir	1,901,400	-		-	-
161	Holland Landing Tank	2,497,200	-		-	-
4600-70320	Aurora/Newmarket PD 8 Break Pressure Tank	8,933,000	20,000		3,846	16,154
4600-71180	Queensville ET No. 1	4,996,000	6,581,465		-	6,581,465
4600-71190	Mount Albert ET	2,571,453	-		-	-
4600-71250	Queensville Sideroad Tank No. 2	4,177,000	8,700,000		1,673,010	7,026,990
4600-71260	Decommission Sharon ET	450,000	398,000		-	398,000
4600-72170	GWS-Keswick N. ET and Queensway N. W/M (Boyer's to Connecting W/M)	5,283,000	6,076,136		1,168,441	4,907,695
4600-72450	Aurora East Elevated Tank (related to project 70050)	-	9,102,000		1,750,315	7,351,685
4600-73140	Nobleton Elevated tank and watermain to Town	3,938,000	4,093,000		-	4,093,000
4600-73210	King City Elevated Tank and w/m from ET to town	3,401,000	3,650,000		-	3,650,000
4600-73310	Ansnoorveldt Water Supply System Upgrade	5,000	-		-	-
4600-74170	Decommission of Wootten Way ET	397,000	600,000		-	600,000
4600-75390	PD5 Huntington WM and Reservoir	-	45,508,000		8,751,188	36,756,812
4600-75450	Glenway Reservoir Expansion	-	9,114,000		1,752,622	7,361,378
4600-75480	Newmarket West Yonge ET and Yonge WM	-	11,608,000		2,232,218	9,375,782
4600-75500	Holland Landing ET Decommissioning	180,000	510,000		-	510,000
4600-75520	Stouffville Zone 2 ET and Watermain	2,334,000	7,460,000		1,434,558	6,025,442
4600-75530	PD7 Vaughan Watermain and Reservoir	-	17,043,000		3,277,369	13,765,631
4600-75590	Wellington Reservoir and Watermain	-	12,615,000		2,425,865	10,189,136
4600-76100	N. R.H. ET No.1, Connecting W/M, and Yonge St. W/M	6,705,000	800,000		-	800,000
4600-76300	N. Richmond Hill ET No. 2 and Yonge, Vondorf, Bloomington, Bayview W/M	19,159,000	39,739,694		7,641,943	32,097,751
4600-77460	Kleinburg Elevated Tank and watermain to Town	4,325,000	-		-	-
4600-78140	Stouffville Zone 1 ET	1,755,000	-		-	-
MP7	Queensville West Elevated Tank (Queensville / Sharon East)	-	7,583,000		1,458,269	6,124,731
MP8	North Markham Reservoir Expansion	-	12,600,000		2,423,077	10,176,923
MP9	London Road Elevated Tank Replacement (Newmarket Central)	-	7,023,000		1,350,577	5,672,423
MP11	Bayview Reservoir (PD7)	-	21,500,000		4,134,615	17,365,385
MP12	Vaughan ET & Watermain (PD9)	-	16,200,000		3,115,385	13,084,615
MP14	Schomberg Elevated Tank 2 and Watermain	-	3,898,000		-	3,898,000
MP15	Vaughan Reservoir (PD8)	-	15,000,000		2,884,615	12,115,385
MP18	Schomberg Well and Watermain	-	4,900,000		-	4,900,000
MP28	Decommission London Rd ET	-	341,000		65,577	275,423
		79,873,253	272,663,295	-	47,543,490	225,119,805

2010 DC By-Law Amendment Background Study



Water		2007 BG Study Gross Costs	2010 to 2031 Gross Costs	Benefit to Existing	Post Period Benefit	Net 2010 to 2031 Costs
Third Party:						
	Toronto Cost Shared Work - 2005 Water Supply Agreement	223,208,000	444,134,000		85,406,968	358,727,032
4600-73580	Peel Water Supply - "Buy-in" Payments	17,464,000	17,464,000		3,358,327	14,105,673
4600-73780	Peel Water Supply - Cost-Shared Work	307,974,000	471,470,183		90,663,716	380,806,467
4600-73790		548,646,000	933,068,183	-	179,429,012	753,639,171
Transmission:						
	70150 DC Credit Amounts Still to be paid	231,441	4,386,342		-	4,386,342
5130 (127-8)	Bayview W/M	2,460,000	-		-	-
75230 (136)	Leslie Street	735,000	-		-	-
	76170 DC Credit Amounts Still to be paid	2,320,000	-		-	-
	7 Highway 27 North	6,291,600	-		-	-
	8 McCowan Road	850,800	-		-	-
	43 Bayview W/M	783,000	-		-	-
	45 Dufferin St.	832,800	-		-	-
	54 Rutherford Rd.	969,000	-		-	-
	95 Leslie Avenue	1,493,400	-		-	-
	99 Wellington St. Reservoir Connection	316,800	-		-	-
	100 Wellington St. W/M	813,000	-		-	-
	119 Mt. Albert Sdrd. (2nd Conc. To Grist Mill Dr.)	422,400	-		-	-
	197 10th Line	866,400	-		-	-
	Bales Watermain	3,050,822	-		-	-
	Wellington St./Leslie St. W/M (AE PS to Davis Dr.)	12,947,000	14,587,940		2,805,261	11,782,679
4600-70050	Bathurst W/M (Orchard Heights to Newmarket W. Reservoir)	2,408,000	-		-	-
4600-70130	Yonge St. W/M (Batsan Dr. to Gladman Ave.) and Eagle St. W/M	7,387,000	200,000		38,460	161,540
4600-70360	Mount Albert Watermain (from proposed Well 3 to Town)	2,781,000	1,276,734		-	1,276,734
4600-71150	GWS - Woodbine and Ravenshoe W/M (Church St-Keswick Tank)	9,803,000	18,879,833		3,630,592	15,249,241
4600-72180	East Gwillimbury Water Meter Chambers	-	60,000		-	60,000
4600-72460	East Gwillimbury Water Meter Chambers	-	750,000		144,225	605,775
4600-73170	King City - Additional Water Supply watermain PD 6 Major Mac W/M (Kennedy to Markland St.)	6,867,000	14,404,703		2,770,024	11,634,679
4600-74080	PD 6 McCowan Rd. W/M (Major Mac Dr. to N. Markham Reservoir)	6,396,000	30,000		5,769	24,231
4600-74180	PD6 Markham Bypass	40,000	-		-	-
4600-74210	TO Supply - Kennedy WM - Milliken PS to Major Mack	11,427,000	8,914,000		1,714,162	7,199,838
4600-74260	Bathurst W/M (Clearmeadow Blvd. To Woodspring Ave.)	16,912,000	35,271,497		6,782,709	28,488,788
4600-75180	Bathurst WM	1,752,000	24,720		4,754	19,966
4600-75430	Yonge to Woodspring WM	-	23,037,000		4,430,015	18,606,985
4600-75440	Yonge Watermain- Gladman to Green Lane	-	14,461,000		2,780,850	11,680,150
4600-75460	Bathurst/Green Lane Watermain	-	14,767,000		2,839,694	11,927,306
4600-75490	Second Concession Watermain	-	8,513,000		1,637,050	6,875,950
4600-75510	Green Lane/Leslie Watermain	-	7,450,000		1,432,635	6,017,365
4600-75600	PD7 Elgin Mills (Enford to Bayview)	-	10,800,000		2,076,840	8,723,160
4600-76120	PD 6 Major Mackenzie Drive (from Pugsley to Woodbine Ave.)	5,238,000	5,400,000		1,038,420	4,361,580
4600-76240	PD7 Bayview Ave W/M (Elgin Mills to 19th Ave)	16,054,000	150,000		28,845	121,155
4600-76270	Bathurst WM (Elgin Mills Rd. to N Richmond Hill Reservoir & Gamble Rd. to Jefferson Reservoir)	2,186,000	5,611,000		1,078,995	4,532,005
4600-76290	PD7 Pugsley/Enford W/M and Major Mack Dr W/M	4,086,000	13,601,571		2,615,582	10,985,989
4600-76310	PD 8 Teston Rd. to Aurora Central Wellington Street	5,179,000	-		-	-
4600-77350		12,095,000	-		-	-
4600-77480	Kleinburg - Additional Water Supply watermain PD 7 North Maple Reservoir Connection Upgrade	4,774,000	18,306,341		3,520,309	14,786,032
4600-77520	Bloomington Water Supply	600,000	-		-	-
4600-78010	MP2 Queensville / Sharon - Various Watermains	578,000	-		-	-
	MP3 Various Watermains (PD7)	-	29,471,000		5,667,500	23,803,500
	MP4 Various Watermains (Aurora Central)	-	11,400,000		2,192,308	9,207,692
	MP5 Newmarket Central - Various Watermains	-	9,300,000		1,788,462	7,511,538
	MP6 Various watermains (PD8)	-	11,582,000		2,227,308	9,354,692
		-	15,200,000		2,923,077	12,276,923
	MP10 North Kleinburg Reservoir & Watermain (PD6)	-	42,163,000		8,108,269	34,054,731
4600-72200	GWS - Sutton Water Seving	1,750,000	19,000,000		-	19,000,000
		153,696,464	358,998,681	-	64,282,115	294,716,566

2010 DC By-Law Amendment Background Study



<u>Water</u>		2007 BG Study Gross Costs	2010 to 2031 Gross Costs	Benefit to Existing	Post Period Benefit	Net 2010 to 2031 Costs
	<u>Treatment:</u>					
4600-72140	GWS - Georgina WTP	22,645,000	-		-	-
4600-72500	ISF GWS Georgina WTP	-	5,749,369		-	5,749,369
MP22	Georgina Water Treatment Plant Expansion	-	9,940,000		1,911,538	8,028,462
		22,645,000	15,689,369	-	1,911,538	13,777,831
	<u>Wells:</u>					
4600-70030	New Production Wells	9,964,000	-		-	-
4600-71200	New Production Well-Mount Albert Well 3	1,811,000	1,708,900		-	1,708,900
4600-73150	New Production Well - Schomberg Well 4 and W/M	2,807,000	650,000		-	650,000
4600-73160	Nobleton - Additional Water Supply and W/M to Town	7,170,000	4,547,000		-	4,547,000
4600-78130	*+New Production Wells/Ground Water Investigation - Stouffville	100,000	-		-	-
4600-78170	Stouffville Zone 2 w/m on 10th Line (from prop. Wells 9&10 to Zone 2)	48,000	-		-	-
4600-78180	Ballantrae - New Production Well and W/M to Town	3,606,000	5,014,778		-	5,014,778
		25,506,000	11,920,678	-	-	11,920,678
		861,744,717	1,765,772,463	-	325,151,176	1,440,621,286



Sewer

The Long Term Water and Wastewater Master Plan Update is sizing wastewater infrastructure for 2051 demand and is based on different unit rates for each municipality. Phasing of infrastructure is based on demand. Wastewater treatment for southern York continues to be provided by the Duffin Creek Plant with the area in the west part of Vaughan serviced by Peel Region. Small community systems will continue to be serviced by their own water pollution control plants. The sewage capacity table provides the wastewater flow and treatment capacity in 2031 for each system.

Sewage Capacity Summary

Wastewater Treatment Facility	Existing Capacity (ML/D)	Expanded Capacity in 2031 (ML/D)	Expanded Capacity in 2051 (ML/D)	Existing Capacity (persons)	Serviced Population (2031)	Capacity Population (2031)	Capacity Population (2051)
Duffin Creek WPCP	305.0	515.0	763.0	826,877	1,381,000	1,381,000	1,976,271
Peel Diversion	36.5	53.2	53.2				
Keswick WPCP	12.1	24.0	24.0	33,000	50,000	66,000	66,000
Sutton WPCP	3.4	6.2	6.2	7,500	13,500	13,500	13,500
Kleinburg WPCP	1.2	2.8	2.8	4,100	7,500	7,500	7,500
Schomberg WPCP**	2.1	2.1	2.1	3,444	3,444	3,444	3,444
Mount Albert WPCP	2.0	2.0	2.0	6,000	6,000	6,000	6,000
Holland Landing WPCP	1.3	0.0		4,200	0	0	0
Nobleton WPCP	0.0	2.9	2.9	4,800	6,500	6,500	6,500
Total	363.6	608.3	856.2	889,921	1,467,944	1,478,731	2,079,215

** Schomberg WPCP capacity includes some industrial high water users

Sewer Capital Costs

It is estimated that \$2,256.6 million of sewage servicing infrastructure will be required to service growth within York Region to the year 2031, compared to \$1.9 billion included in the 2007 DC By-law.



	2007 DC By-law Gross Capital Costs (2007 dollars)	2010 Background Study 2010 to 2031 (2010 dollars)
Planning / Studies	\$0.0 M	\$28.9 M
Pumping	\$41.7 M	\$64.0 M
Trunk Sewers	\$1,091.3 M	\$1,650.5 M
Treatment	\$87.3 M	\$401.1 M
Third Party Capital	\$657.9 M	\$112.0 M
Other	\$35.2 M	\$0.0 M
Total Capital Costs	\$1,913.3 M	\$2,256.6 M

COST INCREASES

In recent years York Region has experienced significant cost pressures as a result of legislative changes including the *Clean Water Act*, and the *Oak Ridges Moraine Act* and more recently the *Lake Simcoe Protection Act* and the proposed Intra-Basin Transfer regulation under the *Ontario Water Resources Act*.

Along with new legislative regulations, increasingly stringent conditions of regulatory approvals also contribute to higher project costs. Stringent odour control and effluent criteria necessitate the use of state-of-the-art technology for the design of water pollution control plants. For sewer projects, York Region is conducting considerably more extensive environmental assessments and experiencing longer time to obtain approvals than in the past. York Region is also subject to more mandatory monitoring requirements before, during and after construction. Increasingly, York Region is required to explore new technology and innovation solutions in delivering sewage projects that has greatly impacted on the costs of these works.

Inflation continues to be a key factor in driving up both labour and material costs in the last few years.

The Wastewater programs included in this Amendment are as follows.

2010 DC By-Law Amendment Background Study



Wastewater		2007 BG Study	2010 to 2031	Benefit to Existing	Post Period Benefit	Net Costs 2010 to 2031
4400-79780	DC Credits still to be paid	3,467,750	-		-	-
Planning / Studies:						
4400-73640	Wastewater System Capacity Assessment	30,781,000	25,124,979		4,831,533	20,293,446
4400-79100	Wastewater Master Plan Update	4,392,000	3,822,273		735,023	3,087,250
		35,173,000	28,947,252	-	5,566,557	23,380,695
Pumping:						
4400-#####	High Street Pumping Station	1,070,000	-		-	-
4400-70340	Aurora Sewage Equalization Tank	15,759,000	88,926		-	88,926
4400-72230	Joe Dales Forcemains & PS Upgrades	5,183,000	17,227,393		3,312,828	13,914,565
4400-73020	King City PS and Forcemain	50,000	-		-	-
4400-73050	Nobleton Hub Centre	550,000	-		-	-
4400-75170	Newmarket EQ Tank & Newmarket PS Upgrade	5,874,000	-		-	-
4400-75260	Greenlane Pumping Station Upgrade	1,270,000	96,441		-	96,441
4400-75270	Bogart Creek PS Upgrade	1,400,000	-		-	-
4400-75340	East Queensville Pumping Station and Forcemain		16,001,000		3,076,992	12,924,008
4400-75360	Newmarket Pumping Station Forcemain		7,495,000		1,441,289	6,053,712
4400-77290	YDSS Black Creek PS	2,580,000	-		-	-
4400-77400	Pine Valley Wastewater Pumping Station	4,633,094	1,524,644		-	1,524,644
4400-79890	YDSS-Leslie PS Upgrade	3,876,160	13,571,000		2,609,703	10,961,297
MP1	Queensville Pumping Station		-		-	-
MP2	Leslie Street Pumping Station		8,000,000		1,538,462	6,461,538
		42,245,254	64,004,404	-	11,979,273	52,025,131
Third Party Capital:						
4400-#####	Duffin Creek Outstanding Debt	42,075,000	-		-	-
4400-72360	Duffin Creek WPCP Outfall / Effluent Strategy	53,300,000	68,231,969		16,989,760	51,242,209
4400-79740	Peel System Cost Shared Works	51,540,000	43,799,000		8,422,548	35,376,452
		146,915,000	112,030,969	-	25,412,308	86,618,661
Treatment:						
4400-71070	Mt. Albert WPCP Expansion	6,179,893	5,467,576		-	5,467,576
4400-71230	Holland Landing Lagoons Decommissioning	1,860,000	609,601		-	609,601
4400-72240	Keswick WPCP Expansion	28,957,000	61,284,365	1,000,000	-	60,284,365
4400-73060	Schomberg WPCP Expansion	16,054,000	693,219		-	693,219
4400-73720	YDSS Duffin Creek WPCP (Phase 3) Expansion	380,223,865	100,372,000	9,234,224	-	91,137,776
TBD	YDSS Duffin Creek Phase 1&2 Upgrade		94,400,000		-	94,400,000
4400-77470	Kleinburg WPCP Expansion/Extension of YDSS	15,551,000	19,219,299		-	19,219,299
4400-78110	Decommissioning of Stouffville WPCP and SPS	1,375,000	12,269		-	12,269
4400-79570	Sutton WPCP	16,750,000	33,670,000		-	33,670,000
4400-79870	YDSS Duffin Creek WPCP Optimization	5,740,000	-		-	-
MP4	Keswick Water Pollution Control Plant Expansion		58,000,000		11,153,846	46,846,154
MP5	Duffin-Creek Water Pollution Control Plant Stage 4	125,000,000	-		-	-
MP6	Jane Rutherford Improvements		1,200,000		230,769	969,231
MP7	North Markham Collector (Elgin Mills Rd. to 19th Ave.)		26,181,048		5,034,817	21,146,231
		597,690,758	401,109,378	10,234,224	16,419,432	374,455,721
Trunk Sewer:						
4400-70260	East Holland Trunk	7,636,279	1,360,274		-	1,360,274
4400-71220	Queensville / HL / S YDSS Connection	40,917,000	66,564,955		12,800,441	53,764,514
4400-72350	Weldrick Relief Sewer	2,110,000	-		-	-
4400-72410	Temp Flow Control System on YDSS		2,059,182		-	2,059,182
4400-74030	YDSS 16th Ave Trunk (Stone Mason-Woodbine)	20,548,000	1,474,455		283,538	1,190,917
4400-74040	YDSS Southeast Collector	497,990,000	491,813,661		94,575,767	397,237,894
4400-74270	Upper York Sewage Solutions	324,810,000	505,700,000		97,246,110	408,453,890
4400-75290	North Markham Trunk Sewer		31,725,000		6,100,718	25,624,283
4400-75300	West Vaughan Sewage Servicing		164,982,960		31,726,223	133,256,737
4400-75310	East Vaughan Trunk Sewer		161,784,480		31,111,156	130,673,324
4400-75320	Primary Trunk Sewer Study		2,803,000		539,017	2,263,983
4400-75330	Green Lane Sewer Diversion		3,186,000		612,668	2,573,332
4400-75350	Sharon Trunk Sewer		7,497,000		1,441,673	6,055,327
4400-75370	Bogart Creek Pumping Station Connection to UYSS		17,596,000		3,383,711	14,212,289
4400-76050	YDSS Interceptor Sewer (Lower Leslie/19th Ave.)	92,600,000	50,000		9,615	40,385
4400-77090	YDSS Langstaff Trunk	33,749,072	11,307,941		-	11,307,941
4400-77100	YDSS Bathurst Collector (Phases 1 & 2)	43,126,000	18,629,871		-	18,629,871
4400-77310	West Rainbow Trunk Sewer	5,050,000	4,333,558		833,343	3,500,215
4400-78050	9th Line Trunk Sewer Extension to Stouffville	19,300,259	21,662,129		-	21,662,129
MP3	Primary Trunk Second Pipe		136,000,000		26,153,846	109,846,154
		1,087,836,610	1,650,530,466	-	306,817,825	1,343,712,641
		1,913,328,371	2,256,622,468	10,234,224	366,195,395	1,880,192,849

2010 DC By-Law Amendment Background Study



Roads

It is estimated that \$4.8 billion of transportation (roads) infrastructure will be required to service growth within York Region to the year 2031 as compared with \$3.7 billion of infrastructure including in the 2007 DC By-law.

The transportation capital costs to be included in this updated DC By-law are as follows.

	Roads
Gross Capital Cost	\$4,843.8 M
Benefit to Existing	(\$661.8M)
Grants, subsidies & other	(\$1,354.0 M)
Net Capital Costs	\$2,828.0 M

The Transportation – Roads programs included in this DC By-law are as follows.

Roads - 2010 DC Analysis	2007 BG Study	2010 to 2031 Gross	Benefit to Existing	Net 2010 to 2031
3900-80590 Leslie St. - Wellington to 500m northerly	539,000	\$ 500,000	\$ 50,000	\$ 450,000
3900-80610 Bathurst St - King Rd to Wellington St	457,323	\$ 150,000	\$ 15,000	\$ 135,000
3900-80620 Bathurst St - Wellington St to Mulock Drive	7,894,914	\$ 1,878,000	\$ 187,800	\$ 1,690,200
3900-80630 #Bathurst St - Mulock Dr to Hwy 9	2,776,511	\$ 269,000	\$ 26,900	\$ 242,100
3900-80660 Ninth Line - N of Major Mackenzie Dr to Stouffville M	7,757,000	\$ -	\$ -	\$ -
3900-80670 Bayview Ave - 19th Ave to Stouffville Rd (Phase 1)	3,352,000	\$ 7,531,656	\$ 753,166	\$ 6,778,490
3900-80680 # Bayview Ave - Elgin Mills Rd to 19th Ave (Phase 1)	4,836,510	\$ 11,867,610	\$ 1,186,761	\$ 10,680,849
3900-80710 Donald Cousens Parkway - Phase 3 - Hwy 7 to 16th	6,390,777	\$ -	\$ -	\$ -
3900-80720 Donald Cousens Parkway - Major Mackenzie Dr to H	14,773,566	\$ 15,810,089	\$ 1,581,009	\$ 14,229,080
3900-80730 Teston Rd - 550m west of Jane to Keele St - COMPLE	8,262,898	\$ -	\$ -	\$ -
3900-80750 Teston Rd - Dufferin St to Bathurst St	325,080	\$ 6,567,652	\$ 656,765	\$ 5,910,887
3900-80790 14th Ave from Reesor Rd to York Durham Line	7,160,000	\$ 7,160,000	\$ 716,000	\$ 6,444,000
3900-81320 Major Mackenzie Dr - Hwy 27 to Weston Road (Phase 1)	9,202,000	\$ 13,979,490	\$ 1,397,949	\$ 12,581,541
3900-81330 Pine Valley - Rutherford Rd to Major Mackenzie Dr	4,357,817	\$ 15,520,132	\$ 1,552,013	\$ 13,968,118
3900-81350 Jane St - Steeles Ave to Hwy 7	14,160,000	\$ -	\$ -	\$ -
3900-81360 Hwy 427 Arterial Extension to Zenway Blvd	239,908	\$ -	\$ -	\$ -
3900-81390 Bathurst St - North of Hwy 7 to Rutherford Rd (Phase 1)	6,375,000	\$ 11,970,000	\$ 1,197,000	\$ 10,773,000
3900-81400 Major Mackenzie Dr - Leslie St to Woodbine Ave	5,971,000	\$ -	\$ -	\$ -
3900-81410 Leslie St - Hwy 7 to Hwy 407	1,431,000	\$ -	\$ -	\$ -
3900-81420 Bayview Ave - Hwy 7 to John St	5,120,000	\$ 28,092,176	\$ 2,809,218	\$ 25,282,958
3900-81430 Cedar Ave Ext. - Langstaff Rd to High Tech Rd	2,745,000	\$ 9,200,000	\$ 920,000	\$ 8,280,000
3900-81480 Weston Rd - Steeles Ave to Highway 7	5,271,000	\$ 28,138,761	\$ 2,813,876	\$ 25,324,884
3900-81800 Davis Drive from Prospect St to west of Main St	1,630,380	\$ -	\$ -	\$ -
3900-81810 Highway 50 from Highway 7 to Rutherford Rd	7,157,739	\$ 15,790,000	\$ 1,579,000	\$ 14,211,000
3900-81820 * Weston Rd from Major Mackenzie Dr to Teston Rd	1,623,385	\$ 7,230,846	\$ 723,085	\$ 6,507,761
3900-81830 Stouffville Rd - Warden Rd to Hwy 48	10,022,000	\$ 9,002,597	\$ 900,260	\$ 8,102,337
3900-82660 Yonge St from Mulock Dr to Davis Dr	6,152,698	\$ -	\$ -	\$ -
3900-82670 Vaughan Corp. Centre-Hwy 400/Applewood Crossing	1,674,386	\$ 20,000,000	\$ 2,000,000	\$ 18,000,000
3900-82680 Hwy 404 Crossing north of Hwy 7 (Phase 1)	5,106,065	\$ 19,600,000	\$ 1,960,000	\$ 17,640,000
3900-82688 Hwy 404 Crossing north of Hwy 7 (Phase 2)		\$ -	\$ -	\$ -
3900-82690 Vaughan Corp. Centre-Hwy 400/Hwy 7 Interchange (Phase 1)	3,175,000	\$ 3,953,143	\$ 395,314	\$ 3,557,829
3900-82700 16th Ave - Woodbine Ave to Warden Ave	6,428,000	\$ 14,112,000	\$ 1,411,200	\$ 12,700,800
3900-82730 Dufferin St - Major Mackenzie Dr to Teston Rd	5,655,000	\$ 5,655,000	\$ 565,500	\$ 5,089,500
3900-82740 Bayview Ave - 16th Ave to Major Mackenzie Dr (Phase 1)	7,388,000	\$ 12,444,000	\$ 1,244,400	\$ 11,199,600
3900-82840 Hwy 407 Crossing at Rodick Rd - COMPLETE	333,300	\$ -	\$ -	\$ -
3900-82860 Bathurst St from Rutherford Rd to Major Mackenzie Dr (Phase 1)	5,482,000	\$ 9,259,735	\$ 925,974	\$ 8,333,762
3900-83020 King Rd from E of Greenside Dr to Hwy 400 (Phase 1)	11,910,000	\$ 7,140,000	\$ 714,000	\$ 6,426,000

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Roads - 2010 DC Analysis	2007 BG Study	2010 to 2031 Gross	Benefit to Existing	Net 2010 to 2031
3900-83340 Bathurst St - Centre St to Hwy 407	8,640,000	\$ 4,610,000	\$ 461,000	\$ 4,149,000
3900-83360 Leslie St from Hwy 7 to 16th Ave	6,100,000	\$ 4,505,000	\$ 450,500	\$ 4,054,500
3900-83370 Leslie Street from 16th Ave to Major Mackenzie Dr	5,890,000	\$ 8,940,000	\$ 894,000	\$ 8,046,000
3900-83380 Markham Rd - Steeles Ave to Hwy 407 incl. Grade Sep.	10,423,000	\$ -	\$ -	\$ -
3900-83390 16th Ave from Warden Ave to Kennedy Rd	10,557,000	\$ 14,276,000	\$ 1,427,600	\$ 12,848,400
3900-83400 Birchmount Rd at Hwy 407	1,131,000	\$ 18,700,000	\$ 1,870,000	\$ 16,830,000
3900-83450 Major Mackenzie Dr from Hwy 50 to CPR (Phase 1)	14,255,000	\$ 20,690,000	\$ 6,207,000	\$ 14,483,000
3900-83890 Hwy 50 - Rutherford Rd to Nashville Rd (Phase 1)	4,520,776	\$ 3,523,000	\$ 1,056,900	\$ 2,466,100
3900-83900 Hwy 50 - Countryside Dr/Nashville Rd to Mayfield Rd (Phase 1)	2,094,358	\$ 5,718,000	\$ 1,715,400	\$ 4,002,600
3900-84120 Keele Street - Hwy 7 to Langstaff Rd	9,635,000	\$ 14,015,000	\$ 1,401,500	\$ 12,613,500
3900-84150 Bathurst St - Major Mackenzie Dr to Elgin Mills	4,770,000	\$ -	\$ -	\$ -
3900-84160 Hwy 404 Mid Block Cross. N of Major Mackenzie Dr	17,035,000	\$ 7,100,000	\$ 710,000	\$ 6,390,000
3900-84170 16th Avenue - Kennedy Rd to McCowan Rd	6,755,000	\$ 13,028,000	\$ 1,302,800	\$ 11,725,200
3900-84180 Leslie Street - Wellington to St. John's	4,570,000	\$ 6,430,000	\$ 643,000	\$ 5,787,000
3900-84190 Leslie Street - St John's to Mulock	6,795,000	\$ 6,905,000	\$ 690,500	\$ 6,214,500
3900-84200 Doane Road Re-alignment (Phase 1)	1,700,000	\$ 23,930,000	\$ 2,393,000	\$ 21,537,000
3900-85580 Rutherford - Dufferin St to Bathurst St (Phase 1)		\$ 10,300,000	\$ 1,874,922	\$ 8,425,078
3900-85590 Carrville Rd - Bathurst St to Yonge St (Phase 1)		\$ 9,935,000	\$ 1,808,480	\$ 8,126,520
3900-85600 16th Ave Yonge St to Bayview Ave		\$ 16,947,000	\$ 3,084,884	\$ 13,862,116
3900-85610 16th Ave - Leslie St to Hwy 404		\$ 6,534,900	\$ 653,490	\$ 5,881,410
3900-85630 Keele Street - Langstaff to Rutherford Rd		\$ 14,324,000	\$ 1,432,400	\$ 12,891,600
3900-85640 King Rd from Hwy 27 to E of Greenside Dr		\$ 1,773,000	\$ 177,300	\$ 1,595,700
3900-85650 Major Mackenzie Dr from CPR to Hwy 27 (Phase 1)		\$ 25,708,000	\$ 4,679,659	\$ 21,028,341
3900-85780 Jog elimination at 9th Line & Stouffville Rd (Phase 1)		\$ 9,975,000	\$ 1,815,762	\$ 8,159,238
3900-8578B Jog elimination at 9th Line & Stouffville Rd (Phase 2)		\$ -		
3900-88170 Islington Ave - Langstaff Rd to Rutherford Rd - COMPLETE	2,418,121	\$ -	\$ -	\$ -
3900-91100 York/Durham Line - Steeles Ave to Hwy 7	10,321,922	\$ 20,821,264	\$ 2,082,126	\$ 18,739,138
3900-91120 Metro Rd - Morton Ave to Old Homestead Rd	6,279,000	\$ 6,836,000	\$ 3,418,000	\$ 3,418,000
3900-93230 Jane Street - Rutherford Rd to Major Mackenzie Dr	5,170,000	\$ -	\$ -	\$ -
3900-94010 Major Mackenzie Dr West - Weston Rd to Hwy 400	4,921,952	\$ -	\$ -	\$ -
3900-94200 Ninth Line - Hwy 407 to the Markham Bypass	1,634,265	\$ -	\$ -	\$ -
3900-95140 Woodbine Ave and Old Homestead Rd - COMPLETE		\$ -	\$ -	\$ -
3900-96020 Bathurst St - Green Lane West to Yonge Street (Phase 1)	9,744,132	\$ 12,371,709	\$ 3,711,513	\$ 8,660,196
3900-96540 Ravenshoe Rd - Prout Rd to Weir's Sdrd	8,667,342	\$ -	\$ -	\$ -
3900-96550 St. John's Sdrd - Yonge St to Bayview Ave	10,488,194	\$ -	\$ -	\$ -
3900-96660 * Bayview Ave - Wellington St to Mulock Dr	8,915,242	\$ 1,167,697	\$ -	\$ 1,167,697
3900-96680 Weston Rd - Rutherford Rd to Major Mackenzie Dr -COMPLETE	8,254,647	\$ -	\$ -	\$ -
3900-96700 Woodbine Ave - Ravenshoe Rd to Morton Ave	11,865,603	\$ 18,415,094	\$ 1,841,509	\$ 16,573,585
3900-96770 Keele St - Steeles Ave to Hwy 407 (Phase 1)	4,950,087	\$ 10,559,851	\$ 1,055,985	\$ 9,503,866
3900-96780 Warden Ave - McPherson to Hwy 407	3,412,750	\$ -	\$ -	\$ -
3900-96790 Dufferin St - Rutherford Rd to Major Mackenzie Dr	3,402,114	\$ -	\$ -	\$ -
3900-97000 Bayview Ave - Hwy 407 to 16th Ave (Phase 1)	2,696,239	\$ 9,059,130	\$ 905,913	\$ 8,153,217
3900-97010 Bloomington Rd - Yonge St to Bayview Ave	4,273,679	\$ 11,327,673	\$ 1,132,767	\$ 10,194,906
3900-97060 Dufferin St - Steeles to Glen Shields North	7,786,287	\$ -	\$ -	\$ -
3900-97080 Bloomington Rd - Bayview Ave to Hwy 404	5,108,381	\$ 15,702,556	\$ 1,570,256	\$ 14,132,300
3900-97100 St John's Sdrd - Bayview Ave to Woodbine Ave (Phase 1)	5,210,000	\$ 11,187,209	\$ 5,593,605	\$ 5,593,605
3900-97120 Stouffville Rd - Hwy 404 to Warden Ave	3,830,331	\$ 8,079,149	\$ 807,915	\$ 7,271,234
3900-97150 Leslie St - Bethesda Sdrd to Bloomington Rd (Phase 1)	4,632,745	\$ 8,710,454	\$ 7,839,409	\$ 871,045
3900-97260 Langstaff - Islington to Weston	10,659,309	\$ -	\$ -	\$ -
3900-98170 Hwy 7 - Rouge River to Warden Ave	5,285,521	\$ -	\$ -	\$ -
3900-98180 Hwy 7 - Warden Ave to Sciberras (Phase 1)	5,220,000	\$ 11,754,725	\$ 1,175,473	\$ 10,579,253
3900-98210 14th Ave - 9th Line to Reesor Rd incl. Connect to Markham Scarb. Link	10,597,000	\$ 11,097,000	\$ 1,109,700	\$ 9,987,300
3900-98320 Leslie St from Green Lane to Mount Albert Rd	6,758,186	\$ 6,975,186	\$ 697,519	\$ 6,277,667
3900-98330 ISF Gamble Sdrd - Yonge Street to Bathurst Street	5,025,503	\$ -	\$ -	\$ -
3900-98340 19th Ave - Yonge St to Bayview Ave	851,500	\$ 10,684,672	\$ 1,068,467	\$ 9,616,205
3900-98570 Langstaff - Hwy 50 to Hwy 27	8,055,891	\$ 14,312,896	\$ 1,431,290	\$ 12,881,606
3900-98600 Major Mackenzie Dr - Woodbine Ave to Kennedy Rd	2,904,479	\$ -	\$ -	\$ -
3900-98610 Teston Rd - Weston Rd to 550m west of Jane St. Incl. Hwy 400 I/C	15,336,644	\$ -	\$ -	\$ -

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Roads - 2010 DC Analysis	2007 BG Study	2010 to 2031 Gross	Benefit to Existing	Net 2010 to 2031
3900-98640 Major Mackenzie Dr - Kennedy Rd to McCowan Rd	6,043,013	\$ -	\$ -	\$ -
3900-98650 Major Mackenzie Dr - Don Cousens Parkway to 9th Line	3,691,000	\$ 3,946,000	\$ 394,600	\$ 3,551,400
3900-98660 19th Ave/Gamble Sdrd - Bayview Ave to Bathurst St	8,400,000	\$ -	\$ -	\$ -
3900-98670 Warden Ave - 16th Ave to Major Mackenzie Dr	7,089,780	\$ 13,166,203	\$ 1,316,620	\$ 11,849,583
3900-98680 Woodbine Ave - Major Mackenzie Dr to 19th Ave	15,744,162	\$ 3,437,747	\$ 343,775	\$ 3,093,972
3900-98690 Bayview Ave from Stouffville Rd to Bloomington Rd	3,630,000	\$ 6,516,000	\$ 651,600	\$ 5,864,400
3900-98700 Don Cousens Parkway Extension to Morningside Ave (Phase 1)	42,719,757	\$ 41,316,077	\$ 4,131,608	\$ 37,184,469
3900-98960 Kennedy Road - Hwy 407 to Hwy 7	3,240,000	\$ -	\$ -	\$ -
3900-98990 Warden Ave - Hwy 407 to Apple Creek	437,229	\$ -	\$ -	\$ -
3900-99180 16th Ave - Bayview Ave to Leslie St	7,276,000	\$ 10,760,000	\$ 1,076,000	\$ 9,684,000
3900-99210 Bayview Ave - Bloomington Rd to Wellington St	8,085,342	\$ 10,681,342	\$ 1,068,134	\$ 9,613,208
3900-99220 Leslie St/Don Mills Rd - Steeles Ave to Hwy 407	5,690,000	\$ -	\$ -	\$ -
3900-99240 Kennedy Road - Steeles to Denison	2,600,000	\$ 3,399,792	\$ 339,979	\$ 3,059,813
3900-99510 16th Ave - Hwy 404 to Woodbine Ave	4,210,482	\$ 6,239,287	\$ 623,929	\$ 5,615,358
3900-99530 Bloomington Rd - Yonge St to Bathurst St	3,950,187	\$ 11,252,882	\$ 1,125,288	\$ 10,127,594
3900-99540 Langstaff Rd - Dufferin St to Keele St (Phase 1)	8,320,000	\$ 8,980,018	\$ 898,002	\$ 8,082,016
3900-9954B Langstaff Rd - Dufferin St to Keele St (Phase 2)		\$ -	\$ -	\$ -
3900-99550 McCowan Rd - Steeles Ave to 14th Ave	4,430,000	\$ 5,214,874	\$ 521,487	\$ 4,693,387
3900-99780 McCowan Rd - 14th Ave to Hwy 7	4,455,000	\$ 6,475,000	\$ 647,500	\$ 5,827,500
3900-99850 Ninth Line - Hwy 407 to Markham Scarborough Link	6,605,000	\$ -	\$ -	\$ -
3900-99880 Vivian Rd from Hwy 48 to York Durham line	3,239,394	\$ 4,002,529	\$ 2,001,265	\$ 2,001,265
3900-New04 Teston Road - Dufferin Street to Keele Street (190)	38,025,000	\$ 6,887,411	\$ 2,066,223	\$ 4,821,188
99520 16th Avenue New Markham Bypass to York/Durham Line - Widen to 4 lanes	6,059,000	\$ 17,566,019	\$ 1,756,602	\$ 15,809,417
83350 Bathurst Street CNR north of Steeles Ave to - Widen CNR Grade Separation to 6 lanes	15,895,000	\$ -	\$ -	\$ -
80640 Dufferin Street Highway 407 to Major Mackenzie Drive - Widen to 6 lanes	5,639,000	\$ -	\$ -	\$ -
83420 Jane Street Highway 7 to Rutherford Road - Widen to 6 lanes	12,011,000	\$ -	\$ -	\$ -
99770 Kennedy Road CNR North of Steeles Ave to - Build CNR grade separation	13,615,000	\$ 11,391,313	\$ 5,695,657	\$ 5,695,657
99760 Kennedy Road Denison St to Highway 407 - Widen to 6 lanes	5,875,000	\$ 16,460,560	\$ 1,646,056	\$ 14,814,504
98980 Leslie Street Elgin Mills Road to 1 km south of Stouffville Rd - Reconstruct to 2 paved lanes	11,967,000	\$ 8,890,991	\$ 4,445,495	\$ 4,445,495
99800 McCowan Road North of Bullock Dr to - Build CNR grade separation	16,970,000	\$ 11,148,163	\$ 5,574,081	\$ 5,574,081
99790 McCowan Road Bullock Drive to 16th Avenue - Widen to 6 lanes	3,225,000	\$ 5,477,953	\$ 547,795	\$ 4,930,158
83430 Rutherford Road Weston Road to Pine Valley Drive - Widen to 6 lanes	14,100,000	\$ 6,771,816	\$ 677,182	\$ 6,094,635
84140 Rutherford Road Dufferin St to Jane Street - Widen to 6 lanes	17,025,000	\$ 24,592,914	\$ 2,459,291	\$ 22,133,623
84130 Rutherford Road East of Keele Street to - Build CNR grade separation	7,835,000	\$ 11,376,876	\$ 5,688,438	\$ 5,688,438
201 Second Concession Green Lane to Queensville Sideroad - Reconstruct to 2 lanes	2,300,000	\$ 18,306,664	\$ 1,830,666	\$ 16,475,997
0 Sharon Area Road improvements to - Various Road Improvements	4,636,814	\$ -	\$ -	\$ -
83410 Warden Avenue Apple Creek to 16th Avenue - Widen to 6 lanes	3,525,000	\$ 6,918,323	\$ 691,832	\$ 6,226,490
82720 Weston Road Highway 7 to Rutherford Road - Widen to 6 lanes	10,435,000	\$ 12,923,443	\$ 1,292,344	\$ 11,631,099
101 General road improvements to - Intersection and misc capital improvements	106,215,932	\$ 121,829,674	\$ 12,182,967	\$ 109,646,707
102 General road improvements to - Streetscaping	30,000,000	\$ 34,410,000	\$ 13,764,000	\$ 20,646,000
0 Highway 400 Block 33 south of Teston Road to - Midblock Highway Crossings	5,696,000	\$ 15,800,000	\$ 1,580,000	\$ 14,220,000
0 Highway 400 Block 32 south of Major Mackenzie Dr to - Midblock Highway Crossings	5,696,000	\$ 19,700,000	\$ 1,970,000	\$ 17,730,000
99360 Rutherford Road added back O/S DC Credits! Weston Road to Jane Street	7,278,000	\$ 896,533	\$ 163,197	\$ 733,336
TBD Woodbine By-Pass - O/S DC Credits		\$ 9,043,438	\$ -	\$ 9,043,438
0 Urbanization Costs to -	51,562,160	\$ 59,141,798	\$ 5,914,180	\$ 53,227,618

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Roads - 2010 DC Analysis		2007 BG Study	2010 to 2031 Gross	Benefit to Existing	Net 2010 to 2031
0	Right of way along Highway 7 and Yonge to -	65,238,000	\$ -	\$ -	\$ -
0	Vaughan North-South Link to -	42,716,520	\$ -	\$ -	\$ -
0	Markham North-South Link to -	46,754,400	\$ -	\$ -	\$ -
0	Yonge St - Steeles to Highway 7 to -	120,198,000	\$ -	\$ -	\$ -
0	Yonge St - Hwy 7 to Bernard (19th) to -	148,513,333	\$ -	\$ -	\$ -
0	Yonge St - Bernard (19th) to Newmarket to -	317,722,320	\$ -	\$ -	\$ -
0	Hwy 7 - Hwy 50 to Vaughan Corporate Centre/Jane to -	190,292,836	\$ -	\$ -	\$ -
0	Hwy 7 - Vaughan Corporate Centre to Yonge Street to -	194,502,756	\$ -	\$ -	\$ -
0	Hwy 7 - Yonge Street to Markham Centre to -	186,190,556	\$ -	\$ -	\$ -
0	Hwy 7 - Markam Centre to Reesor Road to -	141,123,400	\$ -	\$ -	\$ -
106	16th Avenue McCowan Road to New Markham Bypass - Widen to 6 lanes	17,807,352	\$ 19,879,419	\$ 1,987,942	\$ 17,891,477
107	16th Ave / Carrville Rd Bathurst Street to Bayview Avenue - Widen to 6 lanes	14,623,479	\$ -	\$ -	\$ -
108	16th Avenue East of Ninth Line to New Markham Bypass - Widen to 4 lanes	4,138,607	\$ -	\$ -	\$ -
109	Baseline Road Dalton Road to Black River Road Ext - Reconstruct and urbanize	3,905,745	\$ 6,439,134	\$ 3,219,567	\$ 3,219,567
110	Bayview Avenue Major Mackenzie Drive to 19th Avenue - Widen to 6 lanes	15,758,755	\$ 17,732,577	\$ 1,773,258	\$ 15,959,319
111	Bayview Avenue Steeles Avenue to John Street - Widen to 6 lanes (incl. CNR GS)	14,804,504	\$ 15,672,188	\$ 1,567,219	\$ 14,104,969
112	Black River Road Dalton Road to Baseline Road - Construct new 2 lane road	7,105,974	\$ -	\$ -	\$ -
113a	Doane Road Yonge Street to Woodbine Avenue - Widen / Construct 4 lanes	14,384,931	\$ 15,241,953	\$ 1,524,195	\$ 13,717,758
113b	Doane Road to - Construct new Highway 404 Interchange	11,191,297	\$ 11,126,082	\$ 1,112,608	\$ 10,013,474
114	Glenwoods Ave The Queensway to Woodbine Avenue - Widen to 4 lanes	7,529,847	\$ -	\$ -	\$ -
115	Highway 27 CPR south of Rutherford to - Widen CPR Grade Separation to 6 lanes	2,375,938	\$ 2,767,328	\$ 276,733	\$ 2,490,595
116	Highway 27 Highway 7 to Rutherford Road - Widen to 6 lanes	15,624,597	\$ 17,717,848	\$ 1,771,785	\$ 15,946,063
117	Highway 27 Steeles Avenue to Highway 7 - Widen to 6 lanes (incl. CNR GS)	9,377,418	\$ 10,384,386	\$ 1,038,439	\$ 9,345,947
118	Highway 50 Steeles Avenue to Highway 7 - Widen to 6 lanes	9,629,897	\$ 28,640,249	\$ 2,864,025	\$ 25,776,224
119	Islington Avenue North of Steeles Ave to - Build CP grade separation	8,660,993	\$ 8,861,722	\$ 4,430,861	\$ 4,430,861
121	Keele Street 15th Sideroad to Lloydtown/Aurora Rd - Reconstruct to 2 paved lanes	10,225,170	\$ 10,330,120	\$ 9,297,108	\$ 1,033,012
123	Keele Street Rutherford Rd to S of Major Mackenzie Dr	5,411,615	\$ 6,071,267	\$ 607,127	\$ 5,464,140
124	Kennedy Road Aurora Road to Davis Drive - Reconstruct to 2 paved lanes	15,525,281	\$ 16,768,900	\$ 15,092,010	\$ 1,676,890
125	Kennedy Road Highway 7 to 16th Avenue - Widen to 6 lanes	12,032,081	\$ -	\$ -	\$ -
126	Kennedy Road North of Highway 7 to - Build CNR grade separation	7,752,459	\$ 7,851,684	\$ 3,925,842	\$ 3,925,842
127	Kennedy Road Old Homestead Rd to Metro Road - Reconstruct to 2 paved lanes	10,228,831	\$ 11,401,484	\$ 10,261,335	\$ 1,140,148
128	Kennedy Road Ravenshoe Rd to Old Homestead Road - Reconstruct to 2 paved lanes	11,295,091	\$ 12,541,346	\$ 11,287,211	\$ 1,254,135
129	King Road Highway 27 to York/Peel Boundary - Widen to 4 lanes	12,003,017	\$ 13,379,931	\$ 1,337,993	\$ 12,041,938
131	Leslie Street Bloomington Road to Wellington Street	8,056,422	\$ 8,932,499	\$ 8,039,249	\$ 893,250
132	Leslie Street Stouffville Rd to 1 km south	4,618,491	\$ 4,846,244	\$ 1,453,873	\$ 3,392,371
133	Major Mackenzie Drive East side of Maple to Yonge Street - Widen to 6 lanes	19,687,629	\$ -	\$ -	\$ -
134	Major Mackenzie Drive Highway 400 to McNaughton Road - Widen to 6 lanes	6,703,118	\$ 118,500,000	\$ 11,850,000	\$ 106,650,000
135	Major Mackenzie Drive Yonge St to Bayview Ave - Widen to 6 lanes	7,396,650	\$ -	\$ -	\$ -
136	Markham Road South of 14th Ave to - Widen CNR Grade Separation to 6 lanes	7,785,019	\$ -	\$ -	\$ -
203	McCowan Road Davis Drive to Ravenshoe Road - Reconstruct to 2 lanes	15,000,000	\$ 22,191,716	\$ 11,095,858	\$ 11,095,858
137	Metro Road Old Homestead Road to Clarlyn Drive - Reconstruct / provide turning lanes	1,149,338	\$ 1,391,480	\$ 417,444	\$ 974,036
138	Ninth Line Major Mackenzie Drive to Stouffville Road - Widen to 4 lanes	22,947,463	\$ 24,095,023	\$ 2,409,502	\$ 21,685,521
139	Old Homestead Road Metro Road to The Queensway North - Widen and urbanize	4,669,125	\$ 5,692,794	\$ 569,279	\$ 5,123,515
140	Pine Valley Drive Major Mackenzie Drive to Teston Road - Widen to 4 lanes	7,957,305	\$ 8,351,494	\$ 835,149	\$ 7,516,344
141	Pine Valley Drive Steeles Avenue to Highway 7 - Widen to 6 lanes (incl. CNR GS)	14,310,998	\$ -	\$ -	\$ -
142	Ravenshoe Road Weir's Sideroad to York/Durham Line - Reconstruct to 2 paved lanes	16,385,904	\$ 18,895,461	\$ 17,005,915	\$ 1,889,546

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Roads - 2010 DC Analysis	2007 BG Study	2010 to 2031 Gross	Benefit to Existing	Net 2010 to 2031
143 Remaining Gravel Roads to - Reconstruct to 2 paved lanes	1,230,000	\$ 1,410,810	\$ 1,269,729	\$ 141,081
144 Remaining Surface Treated Roads to - Reconstruct to 2 paved lanes	4,018,000	\$ 4,608,646	\$ 4,147,781	\$ 460,865
199 Rutherford Road Pine Valley Drive to Highway 27 - Widen to 6 lanes	17,451,369	\$ 20,930,933	\$ 2,093,093	\$ 18,837,840
202 Second Concession Green Lane to Doane Road - Widen to 4 lanes	23,686,558	\$ 24,836,794	\$ 2,483,679	\$ 22,353,115
147 St. John's Sideroad Yonge Street to Bathurst Street - Widen to 4 lanes	5,441,956	\$ 5,796,452	\$ 579,645	\$ 5,216,807
148 St. John's Sideroad / Highway 404 Interchange to -	3,970,658	\$ 4,703,346	\$ 470,335	\$ 4,233,011
149 Stouffville Road Yonge Street to Woodbine Avenue - Widen to 4 lanes	11,394,123	\$ 4,969,871	\$ 496,987	\$ 4,472,884
150 Teston Road Weston Road to Pine Valley Drive - Widen to 4 lanes	11,036,665	\$ 10,549,642	\$ 1,054,964	\$ 9,494,678
204 Warden Avenue Ravenshoe Road to Baseline Road - Reconstruct to 2 lanes	17,063,854	\$ 18,900,295	\$ 9,450,148	\$ 9,450,148
153 Weston Road Rutherford Road to Major Mackenzie Drive - Widen to 6 lanes	8,461,820	\$ 9,496,376	\$ 949,638	\$ 8,546,738
154 Woodbine Avenue Green Lane to Ravenshoe Road - Widen to 4 lanes	26,223,459	\$ -	\$ -	\$ -
155 Woodbine Avenue Highway 7 to Major Mackenzie Drive - Widen to 6 lanes	13,202,693	\$ -	\$ -	\$ -
156 Woodbine Avenue Morton Avenue to Old Homestead Road - Widen to 4 lanes	3,481,517	\$ 3,864,889	\$ 386,489	\$ 3,478,400
157 Yonge Street Davis Drive to 1 km North - Urbanize west side	2,165,929	\$ -	\$ -	\$ -
158 Yonge Street Elm Grove Ave to Bloomington Rd - Widen LT lane, urbanize and various repairs	2,342,658	\$ -	\$ -	\$ -
159 York/Durham Line Highway 7 to Stouffville Road - Reconstruct to 2 lanes	16,280,013	\$ 18,151,891	\$ 9,075,946	\$ 9,075,946
160 York/Durham Line Stouffville Road to Bloomington Road - Reconstruct to 2 lanes	7,749,411	\$ 8,602,018	\$ 7,741,816	\$ 860,202
162 General road improvements to - Intersection and misc capital improvements	60,000,000	\$ 68,820,000	\$ 20,646,000	\$ 48,174,000
163 General road improvements to - Streetscaping	30,000,000	\$ 34,410,000	\$ 10,323,000	\$ 24,087,000
165 14th Avenue Markham Road to 9th Line - Widen to 4 lanes	10,264,271	\$ 11,413,534	\$ 3,424,060	\$ 7,989,474
166 Aurora Road East of Woodbine Avenue to - Build CNR grade separation	7,880,048	\$ 8,123,949	\$ 5,686,764	\$ 2,437,185
167 Bathurst Street Elgin Mills Road to Gamble Road - Widen to 6 lanes	6,622,341	\$ -	\$ -	\$ -
168 Bloomington Rd Woodbine Avenue to Durham Region - Widen to 4 lanes	41,271,888	\$ 45,622,827	\$ 13,686,848	\$ 31,935,979
169 Dufferin Street North of King Rd to - Build CNR grade separation	7,595,844	\$ 7,691,702	\$ 5,384,191	\$ 2,307,511
170 Dufferin Street Teston Road to King Road Widen to 4 lanes	8,728,456	\$ 10,030,158	\$ 3,009,047	\$ 7,021,111
171 Elgin Mills Road East of Yonge St to Build CNR grade separation	8,075,988	\$ 8,423,468	\$ 5,896,428	\$ 2,527,040
172 Highway 27 Major Mackenzie Drive to North of King Road Widen to 4 lanes	22,263,874	\$ 24,315,559	\$ 7,294,668	\$ 17,020,891
173 Highway 27 Rutherford Road to Major Mackenzie Drive Widen to 6 lanes	7,598,127	\$ 8,357,786	\$ 2,507,336	\$ 5,850,450
175 Jane Street Major Mackenzie Drive to Teston Road Widen to 6 lanes	8,939,148	\$ -	\$ -	\$ -
176 Jane Street Teston Road to Kirby Road Widen to 4 lanes	6,934,222	\$ 7,984,153	\$ 2,395,246	\$ 5,588,907
177 Keele Street King Road to 15th Sideroad Widen to 4 lanes	5,392,235	\$ 6,101,606	\$ 1,830,482	\$ 4,271,124
178 Kennedy Road Aurora Road to Davis Drive Widen to 4 lanes	11,797,090	\$ -	\$ -	\$ -
179 Kennedy Road Major Mackenzie Drive to Elgin Mills Road Widen to 4 lanes	3,032,222	\$ 3,416,247	\$ 1,024,874	\$ 2,391,373
180 Leslie Street Mount Albert to Ravenshoe Road Widen to 4 lanes	21,865,270	\$ -	\$ -	\$ -
181 Major Mackenzie Drive East of Highway 48 to Build CNR grade separation	7,975,077	\$ -	\$ -	\$ -
182 Markham Bypass Highway 48 to Highway 404 Construct new 4 lane road	29,570,106	\$ 33,779,990	\$ 10,133,997	\$ 23,645,993
183 McCowan Road Major Mackenzie Drive to Stouffville Road Widen to 4 lanes	14,253,342	\$ 15,495,846	\$ 4,648,754	\$ 10,847,092
184 New Markham Bypass Steeles Avenue to 16th Avenue Widen to 6 lanes	42,588,224	\$ -	\$ -	\$ -
185 Rutherford Road Highway 50 to Highway 27 Widen to 6 lanes	10,703,062	\$ -	\$ -	\$ -
186 Remaining Gravel Roads to Reconstruct to 2 paved lanes	1,230,000	\$ 1,410,810	\$ 1,269,729	\$ 141,081
187 Remaining Surface Treated Roads to Reconstruct to 2 paved lanes	4,018,000	\$ 4,608,646	\$ 4,147,781	\$ 460,865
188 Highway 404 to Ravenshoe Road	4,943,107	\$ 5,051,385	\$ 1,515,416	\$ 3,535,970
189 Stouffville Road Highway 48 to East of 9th Line Widen to 4 lanes	7,180,052	\$ -	\$ -	\$ -

2010 DC By-Law Amendment Background Study



Roads - 2010 DC Analysis		2007 BG Study	2010 to 2031 Gross	Benefit to Existing	Net 2010 to 2031
191	Warden Avenue Major Mackenzie Drive to Bloomington RoadWiden to 4 lanes	20,638,965	\$ 22,687,887	\$ 6,806,366	\$ 15,881,521
192	Wellington Street Highway 404 to Highway 48Widen to 4 lanes	23,845,935	\$ -	\$ -	\$ -
193	Weston Road Teston Road to Kirby RoadWiden to 4 lanes	5,956,814	\$ 6,211,068	\$ 1,863,320	\$ 4,347,748
194	Woodbine Avenue Elgin Mills Road to Bloomington RoadWiden to 4 lanes	25,513,679	\$ 29,921,331	\$ 8,976,399	\$ 20,944,932
195	York/Durham Line Highway 7 to Stouffville Road	16,572,963	\$ 18,440,708	\$ 5,532,212	\$ 12,908,496
197	General road improvements to Intersection and misc capital improvements	60,000,000	\$ 68,820,000	\$ 34,410,000	\$ 34,410,000
198	General road improvements to Streetscaping	24,000,000	\$ 27,528,000	\$ 2,752,800	\$ 24,775,200
TMP 1	14th AvenueJog Elimination at York/Durham Line		\$ 1,963,190	\$ 357,362	\$ 1,605,828
TMP 2	14th AvenueWarden AvenueHighway 48 Intersection & Corridor Optimization		\$ 3,000,000	\$ 546,094	\$ 2,453,906
TMP 3	19th Ave / Gamble SdrdGrade Separation west of Bayview Avenue		\$ 12,068,393	\$ 2,196,825	\$ 9,871,568
TMP 4	Bathurst StreetMajor Mackenzie Drive19th Avenue/Gamble RoadWidening to 6 lanes		\$ 14,927,199	\$ 2,717,217	\$ 12,209,982
TMP 5	Davis DriveSouth Lake HospitalHighway 404 Intersection & Corridor Optimization		\$ 1,500,000	\$ 273,047	\$ 1,226,953
TMP 6	Dufferin StreetSteeles AvenueLangstaff RoadWiden to 6 lanes		\$ 1,159,015	\$ 210,977	\$ 948,038
TMP 7	Dufferin StreetLangstaff RoadMajor Mackenzie DriveWiden to 6 lanes		\$ 12,626,449	\$ 2,298,408	\$ 10,328,041
TMP 8	Elgin Mills RoadBathurst StreetYonge StreetWiden to 4 lanes		\$ 7,253,264	\$ 1,320,321	\$ 5,932,944
TMP 9	Glenwoods AvenueWoodbine AvenueHighway 404 ExtensionWiden to 4 lanes		\$ 2,023,391	\$ 368,320	\$ 1,655,071
TMP 10	Glenwoods AvenueJog Elimination (Glenwoods/Woodbine)		\$ 3,926,380	\$ 714,724	\$ 3,211,656
TMP 11	Green Lane RoadGreen Lane GO StationHighway 404Widen to 6 lanes		\$ 1,996,724	\$ 363,466	\$ 1,633,258
TMP 12	Green Lane RoadYonge StreetGreen Lane GO TerminalWiden to 6 lanes		\$ 19,152,186	\$ 3,486,296	\$ 15,665,890
TMP 13	Highway 7Grade separation (west of Main Street/Unionville)		\$ 18,073,076	\$ 3,289,865	\$ 14,783,211
TMP 14	Highway 9Highway 400Yonge Street Intersection & Corridor Optimization		\$ 4,500,000	\$ 819,141	\$ 3,680,859
TMP 15	Kennedy RoadHighway 407Highway 7Widen to 6 lanes		\$ 4,300,000	\$ 782,734	\$ 3,517,266
TMP 16	Leslie StreetMount AlbertQueensville Sideroad Intersection & Corridor Optimization		\$ 2,000,000	\$ 364,062	\$ 1,635,938
TMP 17	McCowan Road16th AvenueMajor Mackenzie Drive Intersection & Corridor Optimization		\$ 1,000,000	\$ 182,031	\$ 817,969
TMP 18	New Markham BypassNinth LineMajor Mackenzie DriveWiden to 4 lanes		\$ 4,930,509	\$ 897,507	\$ 4,033,002
TMP 19	Pollock RoadWoodbine AvenueHighway 404 ExtensionWiden to 4 lanes		\$ 3,280,206	\$ 597,100	\$ 2,683,106
TMP 20	Queensville SideroadHighway 404Woodbine AvenueWiden to 4 lanes		\$ 1,881,124	\$ 342,423	\$ 1,538,700
TMP 21	Queensville SideroadLeslie StreetHighway 404Widen to 4 lanes		\$ 2,028,555	\$ 369,260	\$ 1,659,294
TMP 22	Rutherford RoadHighway 27Highway 50Widen to 6 lanes		\$ 10,387,355	\$ 1,890,823	\$ 8,496,532
TMP 23	Rutherford RoadBuild CNR grade separation (West of Hwy 27)		\$ 13,024,870	\$ 2,370,933	\$ 10,653,937
TMP 24	Woodbine AvenueHighway 7 Major Mackenzie DriveWiden to 6 lanes		\$ 15,099,046	\$ 2,748,498	\$ 12,350,548
TMP 25	Yonge StreetDavis DriveGreen LaneWiden to 6 lanes		\$ 7,357,888	\$ 1,339,365	\$ 6,018,522
TMP 26	Highway 404 North of Green Lane RoadMidblock Highway Crossings		\$ 20,500,000	\$ 3,731,641	\$ 16,768,359
TMP 27	Highway 404 South of 19th AvenueMidblock Highway Crossings		\$ 20,200,000	\$ 3,677,031	\$ 16,522,969
TMP 28	Highway 404Between 16th Ave and Major MacMidblock Highway Crossings		\$ 20,200,000	\$ 3,677,031	\$ 16,522,969
TMP 29	Highway 404Queensville SideroadMidblock Highway Crossings		\$ 10,000,000	\$ 1,820,312	\$ 8,179,688
TMP 30	Highway 400King/Vaughan Line/KirkbyMidblock Highway Crossings		\$ 19,900,000	\$ 3,622,422	\$ 16,277,578
99840	14th Avenue Markham Scarborough LinkBuild Grade separation		\$ 8,700,813	\$ 1,583,820	\$ 7,116,993
0	19th Ave / Gamble SdrdBathurst StreetYonge StreetWiden to 4 lanes		\$ 7,625,587	\$ 1,388,095	\$ 6,237,492
0	19th Ave / Gamble SdrdBathurst StreetYonge StreetWiden to 4 lanes		\$ 7,784,090	\$ 1,416,948	\$ 6,367,143
0	19th Ave / Gamble SdrdNew interchange at Highway 404		\$ 11,126,082	\$ 2,025,295	\$ 9,100,787
0	Bathurst StreetCNR north of Steeles AvenueWiden CNR Grade Separation to 6 lanes		\$ 11,455,892	\$ 2,085,330	\$ 9,370,561
0	Kennedy RoadHighway 7Major Mackenzie Drive Intersection & Corridor Optimization		\$ 2,000,000	\$ 364,062	\$ 1,635,938

2010 DC By-Law Amendment Background Study



Roads - 2010 DC Analysis		2007 BG Study	2010 to 2031 Gross	Benefit to Existing	Net 2010 to 2031
0	Leslie Street/Major Mackenzie Drive/Elgin Mills Road Intersection & Corridor Optimization		\$ 1,000,000	\$ 182,031	\$ 817,969
0	Markham Bypass/Highway 404/Woodbine Avenue/Construct new 4 lane road/New Link		\$ 3,124,811	\$ 568,813	\$ 2,555,998
0	New Markham Bypass/16th Avenue/Ninth Line/Widen to 4 lanes		\$ 5,346,131	\$ 973,163	\$ 4,372,968
0	St. John's Sideroad/Bayview Avenue/Woodbine Avenue/Widen to 4 lanes		\$ 8,843,671	\$ 1,609,824	\$ 7,233,846
0	Stouffville Road/Bayview Avenue/Highway 404/Widen to 4 lanes		\$ 10,407,668	\$ 1,894,521	\$ 8,513,147
0	Warden Avenue/Steeles Avenue/Applewood Cr./Widen to 6 lanes		\$ 1,159,015	\$ 210,977	\$ 948,038
84120	Highway 7/Sciberras Road/Kennedy Road/Widen to 6 lanes		\$ 7,125,505	\$ 712,550	\$ 6,412,954
NULL	Highway 400/Applewood Cr./Midblock Highway Crossings		\$ -		
NULL	Highway 407 / Highway 7/Cedar Avenue/Midblock Highway Crossings		\$ -		
NULL	Highway 427/North of Langstaff Road/Midblock Highway Crossings		\$ 20,500,000	\$ 2,050,000	\$ 18,450,000
NULL	Transportation Planning Studies		\$ 12,500,000	\$ 1,399,630	\$ 11,100,370
NULL	Transportation Demand Management P & I		\$ 6,250,000	\$ 699,815	\$ 5,550,185
NULL	Active Transportation P & I		\$ 25,000,000	\$ 2,799,260	\$ 22,200,740
NULL	Master Plans		\$ 6,750,000	\$ 755,800	\$ 5,994,200
* Projects adjusted as follows (amounts represent 1/3 of estimated project costs):					
	Bathurst/Dufferin Streets Steeles Avenue Major Mackenzie Dr		\$ 100,000,000	\$ 10,000,000	\$ 90,000,000
	H1 Highway 50 Pine Valley		\$ 57,266,667	\$ 5,726,667	\$ 51,540,000
	H4 Markham Centre Reesor Rd		\$ 72,766,667	\$ 7,276,667	\$ 65,490,000
	H5 Reesor Road York/Durham Line		\$ 27,000,000	\$ 2,700,000	\$ 24,300,000
	Jane Street Highway 7 Major Mackenzie Dr		\$ 60,000,000	\$ 6,000,000	\$ 54,000,000
	Ninth Line Steeles Avenue Highway 7		\$ 47,000,000	\$ 4,700,000	\$ 42,300,000
	Ninth Line Highway 7 Major Mackenzie Drive		\$ 48,000,000	\$ 4,800,000	\$ 43,200,000
	Leslie Street Highway 7 Major Mackenzie Drive		\$ 41,000,000	\$ 4,100,000	\$ 36,900,000
	Warden Avenue Steeles Avenue Highway 407/Highway 7		\$ 30,948,665	\$ 3,094,867	\$ 27,853,799
	Green Lane G1 Yonge Street Green Lane Go Terminal		\$ 25,000,000	\$ 2,500,000	\$ 22,500,000
	Y3 19th Avenue Mulock		\$ 146,833,333	\$ 14,683,333	\$ 132,150,000
	Y3 Davis Drive Green Lane		\$ 21,166,667	\$ 2,116,667	\$ 19,050,000
	Jane Street HOV Steeles to Hwy 7		\$ 20,000,000	\$ 2,000,000	\$ 18,000,000
	Leslie Street HOV Steeles to Major Mackenzie		\$ 40,000,000	\$ 4,000,000	\$ 36,000,000
		\$ 3,631,890,205	\$ 3,489,805,727	\$ 661,770,396	\$ 2,828,035,332



5. Development Charge Rate Calculation

Summary of Rates

	Single and Semi-Detached	Multiple Unit Dwelling	Apartments		Non-Residential	
			2 or more Bedroom	Less than 2 Bedrooms	Industrial / Office / Institutional	Retail
	(per unit)	(per unit)	(per unit)	(per unit)	(per sq. ft.)	(per sq. ft.)
Hard Services						
Water	\$7,615	\$6,310	\$4,758	\$3,068	\$4.03	\$4.07
Sewer *	\$11,999	\$9,943	\$7,497	\$4,835	\$6.33	\$6.49
Roads	\$10,008	\$8,293	\$6,253	\$4,032	\$4.42	\$14.93
Subtotal Hard	\$29,622	\$24,546	\$18,508	\$11,935	\$14.78	\$25.49
General Services **						
Transit	\$452	\$361	\$266	\$183	\$0.20	\$0.68
Subway	\$1,401	\$1,161	\$875	\$564	\$0.64	\$2.16
Police	\$296	\$236	\$174	\$119	\$0.18	\$0.20
EMS	\$63	\$50	\$37	\$26	\$0.01	\$0.01
Growth Studies	\$32	\$26	\$19	\$14	\$0.02	\$0.02
Long Term Care	\$199	\$160	\$118	\$80	\$0.00	\$0.00
Public Health	\$57	\$46	\$33	\$22	\$0.01	\$0.01
Public Works	\$75	\$61	\$45	\$30	\$0.03	\$0.12
Subtotal General	\$2,575	\$2,101	\$1,567	\$1,038	\$1.09	\$3.20
GO Transit **	\$306	\$241	\$177	\$111	\$0.00	\$0.00
Total	\$32,503	\$26,888	\$20,252	\$13,084	\$15.87	\$28.69

* Rates do not apply to the Nobleton community.

** GO Transit rates are not subject to this review.

Note: The General Service rates and the GO Transit rates shown are those in effect as of April 1, 2010.

2010 DC By-Law Amendment Background Study



Water Residential Rate Calculation

(000s)

DC Reserve Balance - Including Committed DCs @ start of 2010: \$ 146,484,751.06

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(in 000s) \$95,215,088

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2010 WATER RESIDENTIAL DEVELOPMENT CHARGE										
OPENING CASH BALANCE FROM APPLICABLE RESERVES										
OPENING CASH BALANCE (\$000)	\$95,215.1	-\$43,621.7	-\$186,460.5	-\$261,024.2	-\$354,374.1	-\$459,515.8	-\$500,040.2	-\$484,953.2	-\$460,595.5	-\$428,377.2
2010-2031 RESIDENTIAL FUNDING REQUIREMENTS										
- Water - constant (\$000)	\$156,252.6	\$155,120.9	\$95,252.3	\$108,493.8	\$115,137.6	\$59,985.6	\$33,037.4	\$16,585.6	\$12,637.4	\$24,770.9
- Water - current (\$000)	\$156,252.6	\$158,223.3	\$99,100.4	\$115,134.5	\$124,628.6	\$66,229.0	\$37,205.4	\$19,432.7	\$15,102.9	\$30,191.6
POPULATION GROWTH										
- Population in New Units	22,674	24,091	29,499	29,499	29,499	29,499	29,499	29,499	29,499	29,499
REVENUE - current (\$000)										
- Dev. Charge Receipts	\$49,637.3	\$53,794.4	\$67,187.3	\$68,531.0	\$69,901.6	\$71,299.7	\$72,725.7	\$75,663.8	\$77,177.1	\$78,720.6
INTEREST (EARNED/CHARGED)										
- Interest on Opening Balance	\$3,808.6	-\$2,617.3	-\$11,187.6	-\$15,661.5	-\$21,262.4	-\$27,570.9	-\$30,002.4	-\$29,097.2	-\$27,635.7	-\$25,703.6
- Interest on In-year Transactions (excl.int.)	-\$8,074.3	-\$7,937.1	-\$3,587.3	-\$4,397.5	-\$4,747.9	-\$733.2	\$1,945.6	\$2,056.0	\$2,502.1	\$1,751.8
Existing Debt Payments	-\$27,955.8	-\$27,855.4	-\$27,875.6	-\$26,687.5	-\$24,404.3	-\$17,291.0	-\$11,656.4	-\$4,832.1	-\$4,522.2	-\$4,656.1
TOTAL REVENUE	\$17,415.8	\$15,384.6	\$24,536.7	\$21,784.6	\$19,487.0	\$25,704.5	\$32,021.4	\$43,790.4	\$47,321.2	\$50,116.7
CLOSING CASH BALANCE	-\$43,621.7	-\$186,460.5	-\$261,024.2	-\$354,374.1	-\$459,515.8	-\$500,040.2	-\$505,224.2	-\$460,595.5	-\$428,377.2	-\$348,451.3

(000s)

DC Reserve Balance - Including Committed DCs @ start of 2010: \$ 146,484,751.06

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(in 000s) \$95,215,088

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
2010 WATER RESIDENTIAL DEVELOPMENT CHARGE										
OPENING CASH BALANCE FROM APPLICABLE RESERVES										
OPENING CASH BALANCE (\$000)	-\$408,456.2	-\$384,962.8	-\$358,284.0	-\$328,929.0	-\$296,716.5	-\$261,527.3	-\$183,824.4	-\$136,130.8	-\$84,341.0	-\$25,171.9
2010-2031 RESIDENTIAL FUNDING REQUIREMENTS										
- Water - constant (\$000)	\$24,770.9	\$15,617.9	\$15,617.9	\$15,617.9	\$15,670.9	\$15,670.9	\$7,707.8	\$7,707.8	\$7,707.8	\$7,707.8
- Water - current (\$000)	\$30,799.6	\$19,807.2	\$20,203.4	\$20,607.4	\$21,091.0	\$21,512.8	\$10,792.8	\$11,228.8	\$11,453.4	\$11,684.4
POPULATION GROWTH										
- Population in New Units	29,499	25,573	25,573	25,573	25,573	24,039	22,506	22,506	22,506	11,253
REVENUE - current (\$000)										
- Dev. Charge Receipts	\$80,295.0	\$71,000.5	\$72,420.5	\$73,868.9	\$75,346.3	\$72,245.1	\$68,989.8	\$71,777.0	\$73,212.5	\$37,336.4
INTEREST (EARNED/CHARGED)										
- Interest on Opening Balance	-\$24,507.4	-\$23,097.8	-\$21,497.0	-\$19,735.7	-\$17,803.0	-\$15,691.6	-\$13,660.6	-\$8,167.8	-\$5,060.5	-\$1,511.3
- Interest on In-year Transactions (excl.int.)	\$1,846.2	\$1,914.5	\$1,955.8	\$1,998.0	\$2,038.2	\$1,905.5	\$2,212.0	\$2,306.1	\$2,470.4	\$1,028.2
Existing Debt Payments	-\$3,340.8	-\$3,331.1	-\$3,321.0	-\$3,311.2	-\$3,301.3	-\$3,095.2	-\$2,896.6	-\$2,896.6	\$0.0	\$0.0
TOTAL REVENUE	\$54,293.0	\$46,486.0	\$49,558.3	\$52,820.0	\$56,280.2	\$55,363.8	\$54,644.7	\$63,018.6	\$70,622.4	\$36,856.3
CLOSING CASH BALANCE	-\$384,962.8	-\$358,284.0	-\$328,929.0	-\$296,716.5	-\$261,527.3	-\$227,676.3	-\$183,824.4	-\$136,130.8	-\$84,341.0	-\$25,171.9

2010 DC By-Law Amendment Background Study



Water Non-Residential Rate Calculation

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(In 000's)
2010 WATER NON-RESIDENTIAL DEVELOPMENT CHARGE
OPENING CASH BALANCE FROM APPLICABLE RESERVES \$51,269,663

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	\$51,269.7	-\$22,820.3	-\$89,802.3	-\$121,055.9	-\$161,726.0	-\$208,001.4	-\$218,724.3	-\$209,711.6	-\$186,108.7	-\$159,365.0	-\$127,388.4
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Water - constant (\$000)	\$84,136.0	\$83,526.6	\$51,289.7	\$58,419.8	\$61,997.2	\$32,299.9	\$17,789.4	\$9,513.9	\$8,930.7	\$6,804.8	\$13,338.2
- Water - current (\$000)	\$84,136.0	\$85,197.2	\$53,361.8	\$61,995.5	\$67,107.7	\$35,661.7	\$20,033.7	\$10,928.4	\$10,463.8	\$8,132.3	\$16,252.2
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	6,775,000	9,298,010	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020
REVENUE - current (\$000)	\$27,358.2	\$38,297.4	\$43,970.4	\$44,849.8	\$45,746.8	\$46,661.8	\$47,595.0	\$48,546.9	\$49,517.8	\$50,508.2	\$51,518.4
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	\$2,050.8	-\$1,369.2	-\$5,388.1	-\$7,263.4	-\$9,703.6	-\$12,480.1	-\$13,123.5	-\$12,582.7	-\$11,166.5	-\$9,561.9	-\$7,643.3
- Interest on In-year Transactions (excl.int.)	-\$4,309.9	-\$3,713.9	-\$1,464.1	-\$1,891.0	-\$2,070.1	\$67.6	\$851.4	\$1,391.8	\$1,458.1	\$1,597.6	\$1,310.1
Existing Debt Payments	-\$15,053.1	-\$14,999.1	-\$15,010.0	-\$14,370.2	-\$13,140.8	-\$9,310.5	-\$6,276.5	-\$2,824.6	-\$2,601.9	-\$2,435.1	-\$2,507.1
TOTAL REVENUE	\$10,046.1	\$18,215.1	\$22,108.3	\$21,325.3	\$20,832.4	\$24,938.7	\$29,046.4	\$34,531.4	\$37,207.5	\$40,108.9	\$42,678.0
CLOSING CASH BALANCE	-\$22,820.3	-\$89,802.3	-\$121,055.9	-\$161,726.0	-\$208,001.4	-\$218,724.3	-\$209,711.6	-\$186,108.7	-\$159,365.0	-\$127,388.4	-\$100,969.5

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(In 000's)
2010 WATER NON-RESIDENTIAL DEVELOPMENT CHARGE
OPENING CASH BALANCE FROM APPLICABLE RESERVES \$51,269,663

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	-\$100,969.5	-\$88,745.6	-\$86,473.9	-\$83,871.0	-\$80,913.5	-\$77,616.0	-\$74,492.7	-\$43,345.6	-\$32,016.7	-\$19,697.0	-\$4,698.8
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Water - constant (\$000)	\$13,338.2	\$8,409.6	\$8,409.6	\$8,409.6	\$8,438.2	\$8,438.2	\$4,150.3	\$4,150.3	\$4,150.3	\$4,150.3	\$4,150.3
- Water - current (\$000)	\$16,584.4	\$10,665.4	\$10,878.7	\$11,096.3	\$11,356.7	\$11,583.8	\$5,811.5	\$5,927.7	\$6,046.3	\$6,167.2	\$6,290.5
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	7,162,530	3,859,040	3,859,040	3,859,040	3,859,040	3,739,800	7,360,360	3,620,560	3,620,560	3,620,560	1,810,200
REVENUE - current (\$000)	\$35,962.3	\$19,763.3	\$20,158.6	\$20,561.8	\$20,973.0	\$20,731.5	\$41,618.0	\$20,881.3	\$21,298.9	\$21,724.9	\$11,070.7
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$6,058.2	-\$5,324.7	-\$5,188.4	-\$5,032.3	-\$4,854.8	-\$4,657.0	-\$4,469.6	-\$3,600.7	-\$1,921.0	-\$1,181.8	-\$280.9
- Interest on In-year Transactions (excl.int.)	\$703.2	\$292.2	\$299.7	\$307.3	\$313.5	\$299.2	\$1,369.9	\$535.8	\$547.7	\$622.3	\$190.6
Existing Debt Payments	-\$1,798.9	-\$1,793.7	-\$1,788.2	-\$1,782.9	-\$1,777.6	-\$1,666.7	-\$1,559.7	-\$1,559.7	-\$1,559.7	\$0.0	\$0.0
TOTAL REVENUE	\$28,808.4	\$12,937.1	\$13,481.6	\$14,053.9	\$14,654.1	\$14,707.1	\$36,958.6	\$17,256.6	\$18,366.0	\$21,165.4	\$10,980.3
CLOSING CASH BALANCE	-\$88,745.6	-\$86,473.9	-\$83,871.0	-\$80,913.5	-\$77,616.0	-\$74,492.7	-\$43,345.6	-\$32,016.7	-\$19,697.0	-\$4,698.8	\$0.0

2010 DC By-Law Amendment Background Study



Water Non-Residential – RETAIL Rate Calculation

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE (in 000\$) 2010 WATER NON-RESIDENTIAL DEVELOPMENT CHARGE - RETAIL OPENING CASH BALANCE FROM APPLICABLE RESERVES \$12,304,719											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	\$12,304.7	-\$4,312.9	-\$19,331.8	-\$26,442.5	-\$35,635.5	-\$46,055.1	-\$48,534.8	-\$46,591.1	-\$41,352.0	-\$35,410.7	-\$28,304.9
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Water - constant (\$000)	\$18,627.9	\$18,493.0	\$11,355.6	\$12,934.3	\$13,726.3	\$7,151.3	\$3,938.6	\$2,106.4	\$1,977.3	\$1,506.6	\$2,953.1
- Water - current (\$000)	\$18,627.9	\$18,862.8	\$11,814.4	\$13,725.9	\$14,857.8	\$7,895.6	\$4,435.5	\$2,419.6	\$2,316.7	\$1,800.5	\$3,599.8
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	1,500,000	2,058,600	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200
REVENUE - current (\$000)	\$6,099.3	\$8,538.1	\$9,802.8	\$9,998.9	\$10,198.9	\$10,402.8	\$10,610.9	\$10,823.1	\$11,039.6	\$11,260.4	\$11,481.6
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	\$492.2	-\$258.8	-\$1,159.9	-\$1,586.5	-\$2,138.1	-\$2,763.3	-\$2,912.1	-\$2,795.5	-\$2,481.1	-\$2,124.6	-\$1,698.3
- Interest on In-year Transactions (excl.int.)	-\$968.5	-\$835.5	-\$336.8	-\$430.6	-\$468.8	\$10.9	\$186.8	\$309.0	\$323.9	\$355.0	\$291.4
Existing Debt Payments	-\$3,612.7	-\$3,599.8	-\$3,602.4	-\$3,448.8	-\$3,153.8	-\$2,234.5	-\$1,506.4	-\$677.9	-\$624.5	-\$584.4	-\$601.7
TOTAL REVENUE	\$2,010.2	\$3,844.0	\$4,703.7	\$4,532.9	\$4,438.2	\$5,415.9	\$6,379.2	\$7,658.8	\$8,257.9	\$8,906.3	\$9,476.9
CLOSING CASH BALANCE	-\$4,312.9	-\$19,331.8	-\$26,442.5	-\$35,635.5	-\$46,055.1	-\$48,534.8	-\$46,591.1	-\$41,352.0	-\$35,410.7	-\$28,304.9	-\$22,427.8

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE (in 000\$) 2010 WATER NON-RESIDENTIAL DEVELOPMENT CHARGE - RETAIL OPENING CASH BALANCE FROM APPLICABLE RESERVES \$12,304,719											
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	-\$22,427.8	-\$19,703.0	-\$19,206.4	-\$18,636.1	-\$17,986.9	-\$17,262.0	-\$16,574.2	-\$9,646.6	-\$7,138.1	-\$4,409.5	-\$1,057.1
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Water - constant (\$000)	\$2,953.1	\$1,861.9	\$1,861.9	\$1,861.9	\$1,868.2	\$1,868.2	\$918.9	\$918.9	\$918.9	\$918.9	\$918.9
- Water - current (\$000)	\$3,671.8	\$2,361.3	\$2,408.6	\$2,456.7	\$2,514.4	\$2,564.7	\$1,286.7	\$1,312.4	\$1,338.7	\$1,365.4	\$1,392.7
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	1,585,800	854,400	854,400	854,400	854,400	828,000	1,629,600	801,600	801,600	801,600	400,800
REVENUE - current (\$000)	\$8,017.5	\$4,406.1	\$4,494.2	\$4,584.1	\$4,675.7	\$4,621.9	\$9,278.4	\$4,655.3	\$4,748.4	\$4,843.4	\$2,477.1
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$1,345.7	-\$1,182.2	-\$1,152.4	-\$1,118.2	-\$1,079.2	-\$1,035.7	-\$994.5	-\$578.8	-\$428.3	-\$264.6	-\$68.4
- Interest on In-year Transactions (excl.int.)	\$156.6	\$64.6	\$66.3	\$68.0	\$69.4	\$66.3	\$304.7	\$118.7	\$121.4	\$139.1	\$48.1
Existing Debt Payments	-\$431.7	-\$430.5	-\$429.2	-\$427.9	-\$426.6	-\$400.0	-\$374.3	-\$374.3	-\$374.3	\$0.0	\$0.0
TOTAL REVENUE	\$6,396.6	\$2,858.0	\$2,978.9	\$3,106.0	\$3,239.3	\$3,252.5	\$8,214.3	\$3,820.9	\$4,067.2	\$4,717.9	\$2,448.8
CLOSING CASH BALANCE	-\$19,703.0	-\$19,206.4	-\$18,636.1	-\$17,986.9	-\$17,262.0	-\$16,574.2	-\$9,646.6	-\$7,138.1	-\$4,409.5	-\$1,057.1	\$0.0

2010 DC By-Law Amendment Background Study



Water Non-Residential – Industrial/Office / Institutional Rate Calculation

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
(in 000's)
2010 WATER NON-RESIDENTIAL DEVELOPMENT CHARGE - Non-Retail
OPENING CASH BALANCE FROM APPLICABLE RESERVES \$38,964,944

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	\$38,964.9	-\$18,507.4	-\$70,470.6	-\$94,613.4	-\$126,090.5	-\$161,946.2	-\$170,189.5	-\$163,120.5	-\$144,756.7	-\$123,954.2	-\$99,081.5
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Water - constant (\$000)	\$65,508.1	\$65,033.7	\$39,934.0	\$45,485.5	\$48,270.8	\$25,148.7	\$13,850.8	\$7,407.5	\$6,953.4	\$5,298.2	\$10,381.1
- Water - current (\$000)	\$65,508.1	\$66,334.3	\$41,547.4	\$48,269.6	\$52,249.9	\$27,766.2	\$15,598.2	\$8,508.8	\$8,147.1	\$6,331.8	\$12,651.4
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	5,275,000	7,239,410	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820
REVENUE - current (\$000)	\$21,259.0	\$29,759.3	\$34,167.6	\$34,851.0	\$35,548.0	\$36,258.9	\$36,984.1	\$37,723.8	\$38,478.3	\$39,247.8	\$40,031.8
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	\$1,558.6	-\$1,110.4	-\$4,228.2	-\$5,676.8	-\$7,565.4	-\$9,716.8	-\$10,211.4	-\$9,787.2	-\$8,685.4	-\$7,437.3	-\$5,945.0
- Interest on In-year Transactions (excl.int.)	-\$3,341.4	-\$2,878.5	-\$1,127.2	-\$1,460.4	-\$1,601.3	\$56.7	\$664.6	\$1,082.7	\$1,134.2	\$1,242.6	\$1,018.7
Existing Debt Payments	-\$11,440.4	-\$11,399.3	-\$11,407.6	-\$10,921.4	-\$9,987.0	-\$7,076.0	-\$4,770.2	-\$2,146.7	-\$1,977.5	-\$1,850.6	-\$1,905.4
TOTAL REVENUE	\$8,035.8	\$14,371.1	\$17,404.6	\$16,792.4	\$16,394.2	\$19,522.8	\$22,667.2	\$26,872.6	\$28,949.6	\$31,202.6	\$33,201.1
CLOSING CASH BALANCE	-\$18,507.4	-\$70,470.6	-\$94,613.4	-\$126,090.5	-\$161,946.2	-\$170,189.5	-\$163,120.5	-\$144,756.7	-\$123,954.2	-\$99,081.5	-\$78,541.7

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
(in 000's)
2010 WATER NON-RESIDENTIAL DEVELOPMENT CHARGE - Non-Retail
OPENING CASH BALANCE FROM APPLICABLE RESERVES \$38,964,944

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	-\$78,541.7	-\$69,042.5	-\$67,267.5	-\$65,234.9	-\$62,926.6	-\$60,354.0	-\$57,918.5	-\$33,699.0	-\$24,878.6	-\$15,287.5	-\$3,641.8
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Water - constant (\$000)	\$10,385.1	\$6,547.7	\$6,547.7	\$6,547.7	\$6,569.9	\$6,569.9	\$3,231.4	\$3,231.4	\$3,231.4	\$3,231.4	\$3,231.4
- Water - current (\$000)	\$12,912.6	\$8,304.1	\$8,470.2	\$8,639.6	\$8,842.3	\$9,019.1	\$4,524.8	\$4,615.3	\$4,707.6	\$4,801.8	\$4,891.8
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	5,576,730	3,004,640	3,004,640	3,004,640	3,004,640	2,911,800	5,730,760	2,818,960	2,818,960	2,818,960	1,409,400
REVENUE - current (\$000)	\$27,944.8	\$15,357.3	\$15,664.4	\$15,977.7	\$16,297.3	\$16,109.6	\$32,339.6	\$16,226.0	\$16,550.5	\$16,881.5	\$8,601.6
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$4,712.5	-\$4,142.6	-\$4,036.0	-\$3,914.1	-\$3,775.6	-\$3,621.2	-\$3,475.1	-\$3,021.9	-\$1,492.7	-\$917.2	-\$218.5
- Interest on In-year Transactions (excl.int.)	\$546.6	\$227.6	\$233.4	\$239.3	\$244.2	\$233.0	\$1,065.2	\$417.0	\$426.3	\$483.2	\$148.5
Existing Debt Payments	-\$1,367.2	-\$1,363.2	-\$1,359.0	-\$1,355.0	-\$1,351.0	-\$1,266.7	-\$1,185.4	-\$1,185.4	-\$1,185.4	\$0.0	\$0.0
TOTAL REVENUE	\$22,411.7	\$10,079.1	\$10,502.7	\$10,947.9	\$11,414.8	\$11,454.6	\$28,744.3	\$13,435.7	\$14,298.7	\$16,447.5	\$8,530.5
CLOSING CASH BALANCE	-\$69,042.5	-\$67,267.5	-\$65,234.9	-\$62,926.6	-\$60,354.0	-\$57,918.5	-\$33,699.0	-\$24,878.6	-\$15,287.5	-\$3,641.8	\$0.0

2010 DC By-Law Amendment Background Study



Sewer Residential Rate Calculation

(000s)

DC Reserve Balance - Including Committed DCs @ start of 2010: **\$ (41,745,848.44)**

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(In 000s)

2010 SEWER RESIDENTIAL DEVELOPMENT CHARGE

OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$27,135,451)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	\$27,135.5	\$235,594.4	\$355,212.1	\$414,953.2	\$477,481.0	\$513,874.2	\$577,971.8	\$628,744.6	\$802,793.6	\$820,462.2	-\$811,775.7
2010-2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$233,805.7	\$141,911.9	\$98,860.6	\$99,089.8	\$75,996.1	\$102,805.5	\$92,176.7	\$196,054.3	\$65,697.7	\$45,761.4	\$16,331.3
- Sewer - current (\$000)	\$233,805.7	\$144,750.1	\$102,854.6	\$105,154.9	\$82,260.6	\$113,505.6	\$103,806.0	\$225,204.8	\$76,975.4	\$54,689.1	\$19,911.3
POPULATION GROWTH											
- Population in New Units	22,674	24,091	29,499	29,499	29,499	29,499	29,499	29,499	29,499	29,499	29,499
REVENUE - current (\$000)	\$78,218.7	\$84,769.5	\$105,874.2	\$107,991.6	\$110,151.5	\$112,354.5	\$114,601.6	\$116,893.6	\$119,231.5	\$121,616.1	\$124,041.4
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%
- Interest on In-year Transactions (excl.int.)	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%
Existing Debt Payments											
TOTAL REVENUE	\$25,346.8	\$25,132.4	\$43,113.4	\$42,627.2	\$45,867.4	\$49,408.0	\$53,033.2	\$51,155.7	\$59,306.8	\$63,375.6	\$66,381.6
CLOSING CASH BALANCE	-\$235,594.4	-\$355,212.1	-\$414,953.2	-\$477,481.0	-\$513,874.2	-\$577,971.8	-\$628,744.6	-\$802,793.6	-\$820,462.2	-\$811,775.7	-\$765,291.3

(000s)

DC Reserve Balance - Including Committed DCs @ start of 2010: **\$ (41,745,848.44)**

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(In 000s)

2010 SEWER RESIDENTIAL DEVELOPMENT CHARGE

OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$27,135,451)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	-\$765,296.6	-\$719,884.0	-\$668,070.7	-\$610,986.2	-\$548,270.8	-\$479,542.7	-\$411,947.9	-\$337,135.3	-\$255,581.0	-\$166,835.4	-\$57,301.3
2010-2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$20,990.0	\$6,242.9	\$6,242.9	\$6,242.9	\$6,242.9	\$6,242.9	\$285.6	\$285.6	\$285.6	\$285.6	\$285.6
- Sewer - current (\$000)	\$25,098.4	\$7,917.5	\$8,075.8	\$8,237.3	\$8,402.1	\$8,570.1	\$399.8	\$407.8	\$416.0	\$424.3	\$431.8
POPULATION GROWTH											
- Population in New Units	29,499	25,573	25,573	25,573	25,573	24,039	22,506	22,506	22,506	22,506	11,258
REVENUE - current (\$000)	\$126,529.4	\$111,883.0	\$114,120.6	\$116,403.1	\$118,731.1	\$113,844.3	\$108,714.6	\$110,888.9	\$113,106.7	\$115,368.8	\$58,836.1
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%
- Interest on In-year Transactions (excl.int.)	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%	Rate: 6.00%
Existing Debt Payments											
TOTAL REVENUE	\$71,511.0	\$59,730.7	\$65,160.3	\$70,952.7	\$77,130.2	\$76,164.9	\$75,212.5	\$81,962.2	\$89,161.6	\$109,956.4	\$57,736.1
CLOSING CASH BALANCE	-\$719,884.0	-\$668,070.7	-\$610,986.2	-\$548,270.8	-\$479,542.7	-\$411,947.9	-\$337,135.3	-\$255,581.0	-\$166,835.4	-\$57,301.3	-\$0.0



2010 DC By-Law Amendment Background Study



Sewer Non-Residential Rate Calculation

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(In 000's)
2010 SEWER NON-RESIDENTIAL DEVELOPMENT CHARGE

OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$14,611,397)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	-\$14,611.4	-\$125,816.8	-\$174,593.6	-\$192,763.3	-\$211,333.7	-\$214,837.0	-\$231,845.5	-\$240,454.9	-\$313,936.7	-\$301,988.5	-\$274,274.3
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$125,895.4	\$76,414.1	\$53,232.6	\$53,356.1	\$40,921.0	\$55,356.8	\$49,633.6	\$105,567.7	\$35,375.7	\$24,640.7	\$8,795.0
- Sewer - current (\$000)	\$125,895.4	\$77,942.4	\$55,383.2	\$56,621.9	\$44,294.2	\$61,118.4	\$55,895.5	\$121,264.1	\$41,448.3	\$29,448.0	\$10,772.9
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	6,775,000	9,298,010	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020
REVENUE - current (\$000)											
- Dev. Charge Receipts	\$43,100.5	\$60,334.1	\$69,271.5	\$70,656.9	\$72,070.1	\$73,511.5	\$74,981.7	\$76,481.3	\$78,011.0	\$79,571.2	\$81,161.6
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$876.7	-\$7,549.0	-\$10,475.6	-\$11,565.8	-\$12,680.0	-\$12,890.2	-\$13,910.7	-\$14,427.3	-\$18,836.2	-\$18,119.3	-\$16,454.5
- Interest on In-year Transactions (excl.int.)	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%
Existing Debt Payments	-\$21,288.8	-\$21,285.8	-\$21,146.9	-\$20,643.1	-\$18,952.2	-\$16,278.3	-\$13,988.8	-\$10,929.0	-\$6,962.3	-\$6,052.5	-\$6,791.8
TOTAL REVENUE	\$14,689.9	\$29,165.6	\$37,213.5	\$38,051.5	\$40,790.8	\$44,109.9	\$47,286.1	\$47,782.3	\$53,396.4	\$57,162.2	\$60,461.9
CLOSING CASH BALANCE	-\$125,816.8	-\$174,593.6	-\$192,763.3	-\$211,333.7	-\$214,837.0	-\$231,845.5	-\$240,454.9	-\$313,936.7	-\$301,988.5	-\$274,274.3	-\$224,531.9

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(In 000's)
2010 SEWER NON-RESIDENTIAL DEVELOPMENT CHARGE

OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$14,611,397)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	-\$224,534.9	-\$200,764.0	-\$191,926.3	-\$181,999.4	-\$170,906.7	-\$158,567.0	-\$145,976.7	-\$93,834.7	-\$72,544.1	-\$49,296.4	-\$16,897.1
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$11,302.3	\$3,361.5	\$3,361.5	\$3,361.5	\$3,361.5	\$3,361.5	\$3,361.5	\$153.8	\$153.8	\$153.8	\$153.8
- Sewer - current (\$000)	\$14,053.0	\$4,263.2	\$4,348.5	\$4,435.5	\$4,524.2	\$4,614.7	\$215.3	\$219.6	\$224.0	\$228.5	\$231.1
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	7,162,530	3,859,040	3,859,040	3,859,040	3,859,040	3,739,800	7,360,360	3,620,560	3,620,560	3,620,560	1,810,200
REVENUE - current (\$000)											
- Dev. Charge Receipts	\$56,655.4	\$31,135.4	\$31,758.1	\$32,393.2	\$33,041.1	\$32,660.6	\$65,565.4	\$32,896.6	\$33,554.6	\$34,225.7	\$17,457.1
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%
- Interest on In-year Transactions (excl.int.)	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%	Rate: 4.00%
Existing Debt Payments	-\$6,791.8	-\$6,791.8	-\$6,791.8	-\$6,791.8	-\$6,791.8	-\$6,791.8	-\$6,791.8	-\$6,791.8	-\$6,791.8	-\$6,791.8	\$0.0
TOTAL REVENUE	\$37,823.9	\$13,101.0	\$14,275.4	\$15,528.1	\$16,863.9	\$17,204.9	\$52,357.3	\$21,510.2	\$23,471.7	\$32,627.8	\$17,130.1
CLOSING CASH BALANCE	-\$200,764.0	-\$191,926.3	-\$181,999.4	-\$170,906.7	-\$158,567.0	-\$145,976.7	-\$93,834.7	-\$72,544.1	-\$49,296.4	-\$16,897.1	\$0.0

2010 DC By-Law Amendment Background Study



Sewer Non-Residential – RETAIL Rate Calculation

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
(In 000's)
2010 SEWER NON-RESIDENTIAL DEVELOPMENT CHARGE - RETAIL
OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$3,506,735)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	-\$3,506.7	-\$28,363.9	-\$39,333.3	-\$43,492.3	-\$47,731.8	-\$48,602.4	-\$52,410.2	-\$54,310.3	-\$70,504.4	-\$67,698.4	-\$61,361.5
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$27,873.5	\$16,918.2	\$11,785.8	\$11,813.1	\$9,060.0	\$12,256.1	\$10,989.0	\$23,372.9	\$7,832.3	\$5,455.5	\$1,947.2
- Sewer - current (\$000)	\$27,873.5	\$17,256.6	\$12,262.0	\$12,556.2	\$9,806.8	\$13,531.7	\$11,375.4	\$26,848.1	\$9,176.7	\$6,519.8	\$2,377.7
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	1,500,000	2,058,600	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200
REVENUE - current (\$000)	\$9,731.2	\$13,622.2	\$15,640.1	\$15,952.9	\$16,271.9	\$16,597.4	\$16,929.3	\$17,267.9	\$17,613.3	\$17,965.5	\$18,321.8
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$210.4	-\$1,701.8	-\$2,360.0	-\$2,609.5	-\$2,863.9	-\$2,916.1	-\$3,144.6	-\$3,258.6	-\$4,230.3	-\$4,061.9	-\$3,681.1
- Interest on In-year Transactions (excl.int.)	-\$1,395.1	-\$524.6	-\$101.8	-\$92.3	\$76.7	-\$50.5	\$47.9	-\$732.2	\$270.6	\$399.7	\$571.8
Existing Debt Payments	-\$5,109.3	-\$5,108.6	-\$5,075.3	-\$4,954.3	-\$4,548.5	-\$3,906.8	-\$3,357.3	-\$2,623.0	-\$1,671.0	-\$1,452.6	-\$1,631.0
TOTAL REVENUE	\$3,016.4	\$6,287.2	\$8,103.0	\$8,296.7	\$8,936.2	\$9,724.0	\$10,475.3	\$10,654.1	\$11,982.7	\$12,850.8	\$13,581.6
CLOSING CASH BALANCE	-\$28,363.9	-\$39,333.3	-\$43,492.3	-\$47,731.8	-\$48,602.4	-\$52,410.2	-\$54,310.3	-\$70,504.4	-\$67,698.4	-\$61,367.5	-\$50,151.3

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
(In 000's)
2010 SEWER NON-RESIDENTIAL DEVELOPMENT CHARGE - RETAIL
OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$3,506,735)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	-\$50,155.6	-\$44,792.7	-\$42,846.2	-\$40,556.4	-\$38,206.0	-\$35,476.9	-\$32,694.3	-\$21,005.3	-\$16,287.0	-\$11,132.0	-\$3,815.0
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$2,502.4	\$744.3	\$744.3	\$744.3	\$744.3	\$744.3	\$34.0	\$34.0	\$34.0	\$34.0	\$34.0
- Sewer - current (\$000)	\$3,111.4	\$943.9	\$962.8	\$982.0	\$1,001.7	\$1,021.7	\$47.7	\$48.6	\$49.6	\$50.6	\$51.6
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	1,585,800	854,400	854,400	854,400	854,400	828,000	1,629,600	801,600	801,600	801,600	400,800
REVENUE - current (\$000)	\$12,791.6	\$7,029.7	\$7,170.3	\$7,313.7	\$7,460.0	\$7,374.1	\$14,803.3	\$7,427.4	\$7,575.9	\$7,727.4	\$3,941.0
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$3,009.3	-\$2,687.6	-\$2,570.8	-\$2,439.4	-\$2,292.4	-\$2,128.6	-\$1,961.7	-\$1,260.3	-\$977.2	-\$667.9	-\$220.0
- Interest on In-year Transactions (excl.int.)	\$322.0	\$178.2	\$183.1	\$186.1	\$193.1	\$188.9	\$525.0	\$229.9	\$235.9	\$307.1	\$151.8
Existing Debt Payments	-\$1,630.0	-\$1,630.0	-\$1,630.0	-\$1,630.0	-\$1,630.0	-\$1,630.0	-\$1,630.0	-\$1,630.0	-\$1,630.0	\$0.0	\$0.0
TOTAL REVENUE	\$8,474.3	\$2,890.4	\$3,152.6	\$3,432.4	\$3,730.7	\$3,804.3	\$11,736.6	\$4,767.0	\$5,204.5	\$7,366.6	\$3,867.8
CLOSING CASH BALANCE	-\$44,792.7	-\$42,846.2	-\$40,556.4	-\$38,206.0	-\$35,476.9	-\$32,694.3	-\$21,005.3	-\$16,287.0	-\$11,132.0	-\$3,816.0	\$0.0

2010 DC By-Law Amendment Background Study



Sewer Non-Residential – Industrial/Office / Institutional Rate Calculation

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(in 000's)
2010 SEWER NON-RESIDENTIAL DEVELOPMENT CHARGE - NON-RETAIL
OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$11,104,662)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	-\$11,104.7	-\$97,453.0	-\$135,260.2	-\$149,271.0	-\$163,601.9	-\$166,234.6	-\$179,435.3	-\$186,144.6	-\$243,432.3	-\$234,290.1	-\$212,906.7
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$98,021.9	\$59,405.8	\$41,446.8	\$41,542.9	\$31,861.0	\$43,100.7	\$38,644.6	\$82,194.8	\$27,543.5	\$19,185.2	\$6,847.8
- Sewer - current (\$000)	\$98,021.9	\$60,685.8	\$43,121.3	\$44,085.7	\$34,487.3	\$47,586.7	\$43,520.1	\$94,416.0	\$32,271.5	\$22,928.1	\$9,347.4
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	5,275,000	7,239,410	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820
REVENUE - current (\$000)	\$33,369.3	\$46,711.9	\$53,631.4	\$54,704.1	\$55,798.1	\$56,914.1	\$58,052.4	\$59,213.4	\$60,397.7	\$61,605.7	\$62,833.8
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$666.3	-\$5,847.2	-\$8,115.6	-\$8,956.3	-\$9,816.1	-\$9,974.1	-\$10,766.1	-\$11,168.7	-\$14,605.9	-\$14,057.4	-\$12,771.4
- Interest on In-year Transactions (excl.int.)	-\$4,849.9	-\$1,809.1	-\$333.7	-\$304.2	\$276.3	-\$182.6	\$156.0	-\$2,610.5	\$913.4	\$1,363.1	\$1,971.1
Existing Debt Payments	-\$16,179.5	-\$16,177.2	-\$16,071.6	-\$15,688.8	-\$14,403.7	-\$12,371.5	-\$10,631.5	-\$8,306.0	-\$5,291.4	-\$4,599.9	-\$5,161.8
TOTAL REVENUE	\$11,673.6	\$22,878.5	\$29,110.5	\$29,754.8	\$31,854.7	\$34,385.9	\$36,810.9	\$37,128.2	\$41,413.8	\$44,311.5	\$46,871.8
CLOSING CASH BALANCE	-\$97,453.0	-\$135,260.2	-\$149,271.0	-\$163,601.9	-\$166,234.6	-\$179,435.3	-\$186,144.6	-\$243,432.3	-\$234,290.1	-\$212,906.7	-\$174,371.3

REGION OF YORK
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(in 000's)
2010 SEWER NON-RESIDENTIAL DEVELOPMENT CHARGE - NON-RETAIL
OPENING CASH BALANCE FROM APPLICABLE RESERVES (\$11,104,662)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	-\$174,379.3	-\$155,971.3	-\$149,080.1	-\$141,343.0	-\$132,700.7	-\$123,090.0	-\$113,282.4	-\$72,829.3	-\$56,257.1	-\$38,164.4	-\$13,081.1
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Sewer - constant (\$000)	\$8,799.9	\$2,617.3	\$2,617.3	\$2,617.3	\$2,617.3	\$2,617.3	\$119.7	\$119.7	\$119.7	\$119.7	\$119.7
- Sewer - current (\$000)	\$10,941.6	\$5,319.4	\$5,385.7	\$3,455.5	\$3,522.5	\$3,593.0	\$167.6	\$171.0	\$174.4	\$177.9	\$181.5
NON-RESIDENTIAL GROWTH											
- Gross Floor Area in New Buildings (000's Sq.Ft.)	5,576,730	3,004,640	3,004,640	3,004,640	3,004,640	2,911,800	5,730,760	2,818,960	2,818,960	2,818,960	1,409,400
REVENUE - current (\$000)	\$43,863.8	\$24,105.7	\$24,587.8	\$25,079.5	\$25,581.1	\$25,286.5	\$50,762.1	\$25,469.3	\$25,978.6	\$26,498.2	\$13,511.1
- Dev. Charge Receipts											
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	-\$10,462.8	-\$9,358.3	-\$8,944.8	-\$8,480.6	-\$7,962.0	-\$7,385.4	-\$6,796.9	-\$4,369.8	-\$3,275.4	-\$2,289.9	-\$789.9
- Interest on In-year Transactions (excl.int.)	\$1,110.4	\$625.0	\$641.6	\$658.6	\$675.9	\$661.3	\$1,817.3	\$805.5	\$825.7	\$1,052.8	\$535.3
Existing Debt Payments	-\$5,161.8	-\$5,161.8	-\$5,161.8	-\$5,161.8	-\$5,161.8	-\$5,161.8	-\$5,161.8	-\$5,161.8	-\$5,161.8	\$0.0	\$0.0
TOTAL REVENUE	\$29,349.7	\$10,210.6	\$11,122.8	\$12,095.8	\$13,133.2	\$13,400.6	\$40,620.7	\$16,743.2	\$18,267.2	\$25,261.2	\$13,265.9
CLOSING CASH BALANCE	-\$155,971.3	-\$149,080.1	-\$141,343.0	-\$132,700.7	-\$123,090.0	-\$113,282.4	-\$72,829.3	-\$56,257.1	-\$38,164.4	-\$13,081.1	\$0.0

2010 DC By-Law Amendment Background Study



Transportation – Roads - Residential Rate Calculation

(000s)

DC Reserve Balance - Including Committed DCs @ start of 2010: **\$146,163,956.77**

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(in 000s)

2010 ROAD RESIDENTIAL DEVELOPMENT CHARGE

OPENING CASH BALANCE FROM APPLICABLE RESERVES \$87,698,374

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)	\$87,698.4	\$70,258.0	\$56,262.4	\$58,692.8	\$61,389.7	\$64,367.9	\$67,644.5	\$73,629.9	\$81,953.8	\$92,485.8	\$103,685.1
2010-2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads - constant (\$000)	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2
- Roads - current (\$000)	\$77,128.2	\$78,670.8	\$80,244.2	\$81,849.1	\$83,486.1	\$85,155.8	\$86,858.9	\$88,596.1	\$90,368.0	\$92,175.4	\$94,018.9
POPULATION GROWTH											
- Population in New Units	22,674	24,091	29,499	29,499	29,499	29,499	29,499	29,499	29,499	29,499	29,499
REVENUE - current (\$000)											
- Dev. Charge Receipts	\$65,234.6	\$70,698.1	\$88,299.4	\$90,065.4	\$91,866.7	\$93,704.0	\$95,578.1	\$97,489.6	\$99,439.4	\$101,428.2	\$103,456.8
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	\$3,507.9	\$2,810.3	\$2,250.5	\$2,347.7	\$2,455.6	\$2,574.7	\$2,705.8	\$2,945.2	\$3,278.2	\$3,699.4	\$4,142.4
- Interest on In-year Transactions (excl.int.)	-\$1,185.8	-\$951.3	\$6.9	\$13.4	\$20.1	\$27.0	\$126.1	\$206.9	\$279.0	\$288.5	\$372.5
Existing Debt Payments	-\$7,869.0	-\$7,881.9	-\$7,882.2	-\$7,880.5	-\$7,878.1	-\$7,873.3	-\$5,565.6	-\$3,721.7	-\$2,096.5	-\$2,041.5	\$0.0
TOTAL REVENUE	\$59,687.8	\$64,675.2	\$82,674.6	\$84,546.0	\$86,464.3	\$88,432.4	\$92,844.4	\$96,920.0	\$100,900.1	\$103,374.6	\$107,981.7
CLOSING CASH BALANCE	\$70,258.0	\$56,262.4	\$58,692.8	\$61,389.7	\$64,367.9	\$67,644.5	\$73,629.9	\$81,953.8	\$92,485.8	\$103,685.1	\$117,642.3

(000s)

DC Reserve Balance - Including Committed DCs @ start of 2010: **\$146,163,956.77**

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

(in 000s)

2010 ROAD RESIDENTIAL DEVELOPMENT CHARGE

OPENING CASH BALANCE FROM APPLICABLE RESERVES \$87,698,374

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)	\$117,647.9	\$132,365.5	\$132,883.3	\$133,326.2	\$133,689.4	\$133,967.7	\$127,736.4	\$114,476.2	\$100,318.2	\$85,219.2	\$69,139.9
2010-2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads - constant (\$000)	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2	\$77,128.2
- Roads - current (\$000)	\$95,899.3	\$97,817.3	\$99,773.6	\$101,769.1	\$103,804.5	\$105,880.5	\$107,998.2	\$110,158.1	\$112,361.3	\$114,608.5	\$116,900.7
POPULATION GROWTH											
- Population in New Units	29,499	25,573	25,573	25,573	25,573	24,039	22,506	22,506	22,506	22,506	11,233
REVENUE - current (\$000)											
- Dev. Charge Receipts	\$105,525.9	\$93,310.8	\$95,177.0	\$97,080.5	\$99,022.1	\$94,946.5	\$90,668.3	\$92,481.7	\$94,331.3	\$96,217.9	\$49,071.1
INTEREST (EARNED/CHARGED)											
- Interest on Opening Balance	\$4,705.9	\$5,294.6	\$5,333.0	\$5,333.0	\$5,347.6	\$5,358.7	\$5,109.5	\$4,579.0	\$4,012.7	\$3,408.8	\$2,765.4
- Interest on In-year Transactions (excl.int.)	\$385.1	-\$270.4	-\$275.8	-\$281.3	-\$286.9	-\$656.0	-\$1,039.8	-\$1,060.6	-\$1,081.8	-\$1,103.4	-\$4,061.8
Existing Debt Payments	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL REVENUE	\$110,616.9	\$98,335.0	\$100,216.5	\$102,132.3	\$104,082.8	\$99,649.2	\$94,738.0	\$96,000.1	\$97,262.2	\$98,523.3	\$47,768.7
CLOSING CASH BALANCE	\$132,365.5	\$132,883.3	\$133,326.2	\$133,689.4	\$133,967.7	\$127,736.4	\$114,476.2	\$100,318.2	\$85,219.2	\$69,133.9	\$0.0

2010 DC By-Law Amendment Background Study



Transportation – Roads - Non-Residential Rate Calculation

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 2010 ROAD NON-RESIDENTIAL DEVELOPMENT CHARGE (in 000\$)		OPENING CASH BALANCE FROM APPLICABLE RESERVES \$58,465,583											2020
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
OPENING CASH BALANCE (\$000)		\$58,465.6	\$49,892.1	\$59,114.2	\$77,472.8	\$96,982.3	\$117,697.4	\$139,676.4	\$164,375.4	\$191,630.8	\$221,421.2	\$252,904.5	
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
- Roads - constant (\$000)		\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	
- Roads - current (\$000)		\$51,418.8	\$52,447.2	\$53,496.1	\$54,566.1	\$55,657.4	\$56,770.5	\$57,905.9	\$59,064.1	\$60,245.3	\$61,450.3	\$62,679.3	
NON-RESIDENTIAL GROWTH													
- Gross Floor Area in New Buildings (000's Sq.Ft.)		6,775,000	9,298,010	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	10,466,020	
REVENUE - current (\$000)		\$45,714.6	\$63,993.5	\$73,473.0	\$74,942.4	\$76,441.3	\$77,970.1	\$79,529.5	\$81,120.1	\$82,742.5	\$84,397.3	\$86,085.3	
- Dev. Charge Receipts													
INTEREST (EARNED/CHARGED)													
- Interest on Opening Balance		\$2,338.6	\$1,995.7	\$2,364.6	\$3,098.9	\$3,879.3	\$4,707.9	\$5,587.1	\$6,575.0	\$7,665.2	\$8,856.8	\$10,116.2	
- Interest on In-year Transactions (excl.int.)		-\$617.7	\$277.9	\$615.2	\$631.2	\$647.5	\$664.3	\$735.1	\$795.4	\$851.0	\$907.2	\$958.2	
Existing Debt Payments		-\$4,590.3	-\$4,597.8	-\$4,597.9	-\$4,597.0	-\$4,595.6	-\$4,592.8	-\$3,246.6	-\$2,171.0	-\$1,223.0	-\$1,190.9	\$0.0	
TOTAL REVENUE		\$42,845.3	\$61,669.4	\$71,854.8	\$74,075.5	\$76,372.5	\$78,749.5	\$82,605.0	\$86,319.5	\$90,035.7	\$92,933.6	\$97,132.7	
CLOSING CASH BALANCE		\$49,892.1	\$59,114.2	\$77,472.8	\$96,982.3	\$117,697.4	\$139,676.4	\$164,375.4	\$191,630.8	\$221,421.2	\$252,904.5	\$287,362.9	
REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 2010 ROAD NON-RESIDENTIAL DEVELOPMENT CHARGE (in 000\$)		OPENING CASH BALANCE FROM APPLICABLE RESERVES \$58,465,583											2031
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
OPENING CASH BALANCE (\$000)		\$287,362.9	\$294,785.7	\$272,458.2	\$248,555.2	\$223,000.0	\$195,712.7	\$165,438.9	\$169,452.4	\$135,370.8	\$99,108.8	\$60,566.7	
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
- Roads - constant (\$000)		\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	\$51,418.8	
- Roads - current (\$000)		\$63,932.8	\$65,211.5	\$66,515.7	\$67,846.0	\$69,203.0	\$70,587.0	\$71,998.8	\$73,438.7	\$74,907.5	\$76,405.7	\$77,931.8	
NON-RESIDENTIAL GROWTH													
- Gross Floor Area in New Buildings (000's Sq.Ft.)		7,162,530	3,859,040	3,859,040	3,859,040	3,859,040	3,739,800	7,360,360	3,620,560	3,620,560	3,620,560	1,810,200	
REVENUE - current (\$000)		\$60,091.6	\$33,023.8	\$33,684.3	\$34,358.0	\$35,045.1	\$34,641.5	\$69,542.1	\$34,891.9	\$35,589.7	\$36,301.5	\$18,511.8	
- Dev. Charge Receipts													
INTEREST (EARNED/CHARGED)													
- Interest on Opening Balance		\$11,494.5	\$11,791.4	\$10,898.3	\$9,942.2	\$8,920.0	\$7,828.5	\$6,617.6	\$6,778.1	\$5,414.8	\$3,964.4	\$2,421.5	
- Interest on In-year Transactions (excl.int.)		-\$230.5	-\$1,931.3	-\$1,969.9	-\$2,009.3	-\$2,049.5	-\$2,156.7	-\$1,477.4	-\$2,312.8	-\$2,359.1	-\$2,406.2	-\$3,561.2	
Existing Debt Payments		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
TOTAL REVENUE		\$71,355.7	\$42,884.0	\$42,612.7	\$42,290.9	\$41,915.6	\$40,313.3	\$76,012.2	\$39,357.2	\$38,645.5	\$37,859.6	\$17,371.1	
CLOSING CASH BALANCE		\$294,785.7	\$272,458.2	\$248,555.2	\$223,000.0	\$195,712.7	\$165,438.9	\$169,452.4	\$135,370.8	\$99,108.8	\$60,562.7	\$0.0	

2010 DC By-Law Amendment Background Study



Transportation – Roads – Non-Residential – RETAIL Rate Calculation

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 2010 ROAD NON-RESIDENTIAL DEVELOPMENT CHARGE - <u>RETAIL</u> (in 000\$)		\$28,648,136											
OPENING CASH BALANCE FROM APPLICABLE RESERVES		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
OPENING CASH BALANCE (\$000)		\$28,648.1	\$24,447.9	\$28,965.6	\$37,959.3	\$47,516.7	\$57,664.8	\$68,432.0	\$80,531.8	\$93,883.9	\$108,477.9	\$123,901.2	
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
- Roads - constant (\$000)		\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	
- Roads - current (\$000)		\$25,190.2	\$25,694.0	\$26,207.9	\$26,732.0	\$27,266.7	\$27,812.0	\$28,368.3	\$28,935.6	\$29,514.3	\$30,104.6	\$30,706.7	
NON-RESIDENTIAL GROWTH													
- Gross Floor Area in New Buildings (000's Sq.Ft.)		1,500,000	2,058,600	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	2,317,200	
REVENUE - current (\$000)		\$22,395.4	\$31,350.2	\$35,994.1	\$36,714.0	\$37,448.3	\$38,197.2	\$38,961.2	\$39,740.4	\$40,535.2	\$41,345.9	\$42,172.8	
- Dev. Charge Receipts													
INTEREST (EARNED/CHARGED)													
- Interest on Opening Balance		\$1,145.9	\$977.9	\$1,158.6	\$1,518.4	\$1,900.7	\$2,306.6	\$2,737.3	\$3,221.3	\$3,755.4	\$4,339.1	\$4,956.0	
- Interest on In-year Transactions (excl.int.)		-\$302.6	\$136.1	\$301.3	\$309.2	\$317.2	\$325.4	\$360.1	\$389.6	\$416.9	\$426.3	\$458.6	
Existing Debt Payments		-\$2,248.8	-\$2,252.4	-\$2,252.5	-\$2,252.1	-\$2,251.4	-\$2,250.0	-\$1,590.5	-\$1,063.6	-\$599.1	-\$583.4	\$0.0	
TOTAL REVENUE		\$20,989.9	\$30,211.8	\$35,201.5	\$36,289.5	\$37,414.8	\$38,579.2	\$40,468.0	\$42,287.7	\$44,108.3	\$45,527.9	\$47,587.5	
CLOSING CASH BALANCE		\$24,447.9	\$28,965.6	\$37,959.3	\$47,516.7	\$57,664.8	\$68,432.0	\$80,531.8	\$93,883.9	\$108,477.9	\$123,901.2	\$140,782.0	
REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 2010 ROAD NON-RESIDENTIAL DEVELOPMENT CHARGE - <u>RETAIL</u> (in 000\$)		\$28,648,136											
OPENING CASH BALANCE FROM APPLICABLE RESERVES		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
OPENING CASH BALANCE (\$000)		\$140,782.0	\$144,418.2	\$133,479.7	\$121,769.4	\$109,249.7	\$95,881.4	\$81,050.1	\$66,319.0	\$48,553.9	\$29,669.9	\$0.0	
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
- Roads - constant (\$000)		\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	\$25,190.2	
- Roads - current (\$000)		\$31,320.8	\$31,947.3	\$32,586.2	\$33,237.9	\$33,902.7	\$34,580.7	\$35,272.4	\$35,977.8	\$36,697.4	\$37,431.3	\$38,179.9	
NON-RESIDENTIAL GROWTH													
- Gross Floor Area in New Buildings (000's Sq.Ft.)		1,585,800	854,400	854,400	854,400	854,400	828,000	1,629,600	801,600	801,600	801,600	400,800	
REVENUE - current (\$000)		\$29,438.6	\$16,178.2	\$16,501.8	\$16,831.8	\$17,168.5	\$16,970.7	\$34,068.4	\$17,093.4	\$17,435.3	\$17,784.0	\$9,061.6	
- Dev. Charge Receipts													
INTEREST (EARNED/CHARGED)													
- Interest on Opening Balance		\$5,631.3	\$5,776.7	\$5,339.2	\$4,870.8	\$4,370.0	\$3,835.3	\$3,242.0	\$3,320.6	\$2,652.8	\$1,942.2	\$1,181.8	
- Interest on In-year Transactions (excl.int.)		-\$112.9	-\$946.1	-\$965.1	-\$984.4	-\$1,004.1	-\$1,056.6	-\$72.2	-\$1,133.1	-\$1,155.7	-\$1,178.8	-\$1,748.6	
Existing Debt Payments		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
TOTAL REVENUE		\$34,957.0	\$21,008.8	\$20,875.9	\$20,718.2	\$20,534.4	\$19,749.4	\$37,238.1	\$19,281.0	\$18,932.3	\$18,547.3	\$8,510.0	
CLOSING CASH BALANCE		\$144,418.2	\$133,479.7	\$121,769.4	\$109,249.7	\$95,881.4	\$81,050.1	\$66,319.0	\$48,553.9	\$29,669.9	\$0.0	\$0.0	

2010 DC By-Law Amendment Background Study



Transportation – Roads – Non-Residential – Industrial/Office/ Institutional Rate Calculation

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 2010 ROAD NON-RESIDENTIAL DEVELOPMENT CHARGE (in 000\$)		\$29,817,447										
OPENING CASH BALANCE FROM APPLICABLE RESERVES		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE (\$000)		\$29,817.4	\$25,444.2	\$30,148.6	\$39,513.5	\$49,465.5	\$60,032.6	\$71,244.3	\$83,843.6	\$97,746.9	\$112,943.3	\$129,003.3
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Roads - constant (\$000)		\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6
- Roads - current (\$000)		\$26,228.6	\$26,753.2	\$27,288.3	\$27,834.0	\$28,390.7	\$28,958.5	\$29,537.7	\$30,128.4	\$30,731.0	\$31,345.6	\$31,972.5
NON-RESIDENTIAL GROWTH												
- Gross Floor Area in New Buildings (000's Sq.Ft.)		5,275,000	7,239,410	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820	8,148,820
REVENUE - current (\$000)												
- Dev. Charge Receipts	Per Sq. Ft. Rate for 2010 \$4.42	\$23,319.2	\$32,643.3	\$37,478.8	\$38,228.4	\$38,993.0	\$39,772.9	\$40,568.3	\$41,379.7	\$42,207.3	\$43,051.4	\$43,912.4
INTEREST (EARNED/CHARGED)												
- Interest on Opening Balance	Earned 4.00%	\$1,192.7	\$1,017.8	\$1,205.9	\$1,580.5	\$1,978.6	\$2,401.3	\$2,849.8	\$3,353.7	\$3,909.9	\$4,517.7	\$5,160.1
- Interest on In-year Transactions (excl.int.)	Charged 6.00%	-\$315.1	\$141.8	\$313.8	\$322.0	\$330.3	\$338.9	\$375.0	\$405.8	\$434.1	\$463.9	\$493.6
Existing Debt Payments	Rate: Rate:	-\$2,341.5	-\$2,345.3	-\$2,345.4	-\$2,344.9	-\$2,344.2	-\$2,342.8	-\$1,656.1	-\$1,107.4	-\$623.8	-\$607.5	\$0.0
TOTAL REVENUE		\$21,855.4	\$31,457.6	\$36,653.2	\$37,786.0	\$38,957.8	\$40,170.3	\$42,137.0	\$44,031.7	\$45,927.4	\$47,405.6	\$49,550.2
CLOSING CASH BALANCE		\$25,444.2	\$30,148.6	\$39,513.5	\$49,465.5	\$60,032.6	\$71,244.3	\$83,843.6	\$97,746.9	\$112,943.3	\$129,003.3	\$146,580.3

REGION OF YORK CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE 2010 ROAD NON-RESIDENTIAL DEVELOPMENT CHARGE (in 000\$)		\$29,817,447										
OPENING CASH BALANCE FROM APPLICABLE RESERVES		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
OPENING CASH BALANCE (\$000)		\$146,580.9	\$150,367.6	\$138,978.5	\$126,785.7	\$113,750.3	\$99,831.2	\$84,388.8	\$66,436.5	\$69,051.8	\$50,554.8	\$30,891.8
2010-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Roads - constant (\$000)		\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6	\$26,228.6
- Roads - current (\$000)		\$32,612.0	\$33,264.2	\$33,929.5	\$34,608.1	\$35,300.3	\$36,006.3	\$36,726.4	\$37,460.9	\$38,210.2	\$38,974.4	\$39,751.8
NON-RESIDENTIAL GROWTH												
- Gross Floor Area in New Buildings (000's Sq.Ft.)		5,576,730	3,004,640	3,004,640	3,004,640	3,004,640	2,911,800	5,730,760	2,818,960	2,818,960	2,818,960	1,409,400
REVENUE - current (\$000)												
- Dev. Charge Receipts	Per Sq. Ft. Rate for 2010 \$4.42	\$30,653.0	\$16,845.6	\$17,182.5	\$17,526.1	\$17,876.7	\$17,670.8	\$35,473.7	\$17,798.5	\$18,154.5	\$18,517.5	\$9,443.9
INTEREST (EARNED/CHARGED)												
- Interest on Opening Balance	Earned 4.00%	\$5,863.2	\$6,014.7	\$5,559.1	\$5,071.4	\$4,550.0	\$3,993.2	\$3,375.6	\$3,457.5	\$2,762.1	\$2,022.2	\$1,233.7
- Interest on In-year Transactions (excl.int.)	Charged 6.00%	-\$117.5	-\$985.1	-\$1,004.8	-\$1,024.9	-\$1,045.4	-\$1,100.1	-\$75.2	-\$1,179.7	-\$1,203.3	-\$1,227.4	-\$1,818.6
Existing Debt Payments	Rate: Rate:	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL REVENUE		\$36,398.7	\$21,875.1	\$21,736.8	\$21,572.6	\$21,381.2	\$20,563.9	\$38,774.1	\$20,076.2	\$19,713.2	\$19,312.3	\$8,865.1
CLOSING CASH BALANCE		\$150,367.6	\$138,978.5	\$126,785.7	\$113,750.3	\$99,831.2	\$84,388.8	\$66,436.5	\$69,051.8	\$50,554.8	\$30,892.8	\$0.0





6. Implementation of Rate Changes

1. Timing

It is recommended that the proposed rates come into force on June 25, 2010. This is the day following expected approval by Regional Council.

2. Other Considerations

The current Region-wide development charges for roads, water, sewer and all of the general service components with the exception of the GO Transit charge are due to be indexed on June 18, 2010. In addition, the last phase-in to full cost recovery of the non-residential development charges is scheduled to occur on that date. Staff recommends that the indexing of the applicable general service components be deferred until June 25, 2010 and that the revised rates proposed above take effect on the same date.





Appendices

- A. Proposed Development Charge By-law
- B. Estimated Operating Costs





A. Proposed Development Charge By-law

THE REGIONAL MUNICIPALITY OF YORK

BILL NO. ##

BY-LAW NO. DC-####-2010-###,
a by-law to amend By-law No. DC-0007-2007-040

A by-law for the imposition of development charges

WHEREAS Section 19 of the *Development Charges Act, 1997, S.O. 1997, c.27*, (the “Act”) provides for amendments to development charge by-laws;

AND WHEREAS the Council of The Regional Municipality of York requires certain amendments to By-law No. DC 0007-2007-040;

AND WHEREAS in accordance with the Act a development charge background study has been completed in support of the increased development charges and imposition thereof through amendments to the By-law;

AND WHEREAS the Council of The Regional Municipality of York has given notice and held a public meeting on the 6th day of May, 2010, in accordance with the Act;

Now therefore, the Council of The Regional Municipality of York HEREBY ENACTS as follows:

1. Section 3.6.1 of By-law No. DC-0007-2007-040 is amended by changing subsection (d) as follows:

(d) Schedule B-3A February 1, 2009 to June 24, 2010
2. Section 3.6.1 of By-law No. DC-0007-2007-040 is amended by adding subsection (e) as follows:

(e) Schedule B-4 June 25, 2010 to June 17, 2012
3. Section 3.8.1 of By-law No. DC-0007-2007-040 is amended by changing references from “MoveOntario 2020 Initiatives” to “Road Improvements to Support Transit Runnigways”.
4. Section 3.8.1 of By-law No. DC-0007-2007-040 is amended by changing reference from the “Background Study dated March 22, 2007” to “Background Study dated April 21, 2010”.

2010 DC By-Law Amendment Background Study



5. Section 3.11 of By-law No. DC-0007-2007-040 is amended by changing subsection (d) as follows:

(d) Schedule F-3 June 18, 2009 to June 24, 2010
6. Section 3.11 of By-law No. DC-0007-2007-040 is amended by changing subsection (e) as follows:

(e) Schedule F-4 June 25, 2010 to June 17, 2012
7. Section 3.13.1 of By-law No. DC-0007-2007-040 is amended by changing subsection references from “MoveOntario 2020 Initiatives” to “Road Improvements to Support Transit Runningways”.
8. Section 3.13.1 of By-law No. DC-0007-2007-040 is amended by changing reference to the “Background Study dated March 22, 2007” to “Background Study dated April 21, 2010”.
9. Section 5.1 of By-law No. DC-0007-2007-040 is amended to read as follows:

“Development charges imposed pursuant to this by-law shall be adjusted annually, without amendment to this by-law, commencing on the first anniversary date of amending by-law no. _____ and each anniversary date thereafter, in accordance with the Statistics Canada Quarterly Construction Price Statistics.”
10. Schedule B-3A of By-law No. DC-0007-2007-040 is hereby amended by replacing the effective date of “February 1, 2009 to June 17, 2012” with “February 1, 2009 to June 24, 2010”.
11. Schedule B-4 is hereby added to By-law No. DC-0007-2007-040 effective from “June 25, 2010 to June 17, 2011”.
12. Schedule F-3 of By-law No. DC-0007-2007-040 is hereby amended by replacing the effective date of “June 18, 2009 to June 17, 2010” with “June 18, 2009 to June 24, 2010”.
13. Schedule F-4 of By-law No. DC-0007-2007-040 is hereby amended by replacing the effective date of “June 18, 2010 to June 17, 2012” with “June 25, 2010 to June 17, 2012”.
14. Schedule F-4 of By-law No. DC-0007-2007-040 is hereby amended by the addition of a note indicating that the Roads, Water and Sewer rates as well as General Services will both be subject to indexing effective as of the date of amending by-law no. _____ and the replacement the effective date of Schedule F-4 of “June 18, 2010 to June 17, 2012” with “June 25, 2010 to June 17, 2012”.
15. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by changing the title from “Eligible MoveOntario 2020 Initiatives: to “Eligible Road Improvements to Support Transit Runningways”.



16. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by repealing the following item:
“2. Yonge St. – Steeles to Highway 7”
17. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by repealing the following item:
“3. Yonge St. –Hwy 7 to Bernard (19th)”
18. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by repealing the following item:
“6. Hwy 7 – Vaughan Corporate Centre to Yonge Street”
19. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by repealing the following item:
“7. Hwy 7 - Yonge Street to Markham Centre”
20. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:
“Bathurst and Dufferin Streets - Steeles Avenue to Major Mackenzie Dr.”
21. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:
“Hwy 7 (H1) - Highway 50 to Pine Valley”
22. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:
“Hwy 7 – Reesor Road to York / Durham Line”
23. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:
“Jane Street – Steeles to Highway 7”
24. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:
“Jane Street - Highway 7 to Major Mackenzie”
25. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:



“Ninth Line – Steeles Avenue to Highway 7”

26. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:

“Ninth Line - Highway 7 to Major Mackenzie”

27. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:

“Leslie Street – Steeles to Highway 7”

28. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:

“Leslie Street - Highway 7 to Major Mackenzie”

29. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:

“Warden Avenue – Steeles Avenue to Highway 407/ Highway 7”

30. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:

“Green Lane (G1) – Yonge Street to Green Lane Go Terminal”

31. Schedule I of By-law No. DC-0007-2007-040 is hereby amended by adding the following item:

“Yonge Street (Y3) – Davis Drive to Green Lane”



SCHEDULE "B-4"

Regional Municipality of York

Schedule of Residential Development Charge by Service Category

June 25, 2010 to June 17, 2012

	Single and Semi-Detached	Multiple Unit Dwelling	Apartments	
			2 or more Bedroom	Less than 2 Bedrooms
<u>Hard Services</u>				
Water	\$7,615	\$6,310	\$4,758	\$3,068
Sewer *	\$11,999	\$9,943	\$7,497	\$4,835
Roads	\$10,008	\$8,293	\$6,253	\$4,032
Subtotal - Hard	\$29,622	\$24,546	\$18,508	\$11,935
<u>General Services</u> ***				
Transit	\$404	\$323	\$238	\$163
Subway	\$1,251	\$1,037	\$782	\$504
Police	\$264	\$211	\$156	\$106
EMS	\$56	\$45	\$33	\$23
Growth Studies	\$29	\$23	\$17	\$12
Long Term Care	\$178	\$143	\$105	\$72
Public Health	\$51	\$41	\$30	\$20
Public Works	\$67	\$54	\$40	\$27
Subtotal - General	\$2,300	\$1,877	\$1,401	\$ 927
GO Transit **	\$296	\$233	\$171	\$108
Total	\$32,218	\$26,656	\$20,080	\$12,970

* Rates do not apply to the Nobleton community.

** The GO Transit rates calculated under separate by-law. Rates are shown for illustration only.

*** The General Service components are as per the 2007 DC Background Study.

Note: Rates exclude impacts of Water changes as per Schedule G and annual indexing.



SCHEDULE "F-4"

Regional Municipality of York

Schedule of Non-Residential Development Charge by Service Category

Rates in effect June 25, 2010 to June 17, 2012

	Per Square Foot of Gross Floor Area		Per Square Metre of Gross Floor Area	
	Industrial / Office / Institutional	Retail	Industrial / Office / Institutional	Retail
<u>Hard Services</u>				
Water	\$4.03	\$4.07	\$43.38	\$43.81
Sewer *	\$6.33	\$6.49	\$68.14	\$69.86
Roads	\$4.42	\$14.93	\$47.58	\$160.71
Subtotal - Hard	\$ 14.78	\$ 25.49	\$ 159.10	\$ 274.38
<u>General Services</u> **				
Transit	\$0.18	\$0.61	\$1.95	\$6.58
Subway	\$0.57	\$1.93	\$6.14	\$20.78
Police	\$0.161	\$0.179	\$1.733	\$1.927
EMS	\$0.011	\$0.013	\$0.118	\$0.140
Growth Studies	\$0.018	\$0.020	\$0.194	\$0.215
Long Term Care	\$0.000	\$0.000	\$0.000	\$0.000
Public Health	\$0.006	\$0.006	\$0.065	\$0.065
Public Works	\$0.029	\$0.106	\$0.312	\$1.141
Subtotal - General	\$0.98	\$2.86	\$10.51	\$30.85
GO Transit	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$15.76	\$28.35	\$169.61	\$305.23

* Rates do not apply to the Nobleton community.

** The General Service components are as per the 2007 DC Background Study.

Note: Rates exclude annual indexing.



Schedule "H"

Contingent Adjustments to Development Charges for Road Services

Residential Development				Non-Residential Development		
1	2	3	4	5	6	7
Single and Semi-Detached	Multiple Unit Dwelling	Apartments		Per Square Foot of Gross Floor Area		Per Square Metre of Gross Floor Area
		2 or more Bedrooms	Less than 2 Bedrooms	Industrial / Office / Institutional	Retail	
\$73	\$60	\$45	\$29	\$0.03	\$0.11	\$1.14





B. Estimated Operating Costs

1. Water

Water Net Operating Impact of New Capital Projects

\$000's	2010 Budget	2011 Outlook	2012 Outlook	2013 Outlook	2014 Outlook	2015 – 2019 Outlook
OPERATING COSTS						
Salaries and Benefits	150	198	210	229	244	1,619
Debt Repayment	9,425	28,784	47,454	62,684	77,988	510,378
Contribution to Replacement Reserve	942	1,001	1,086	1,241	1,625	9,477
Other: Chemical & Hydro	410	440	489	579	631	4,454
TOTAL GROSS COST	10,927	30,423	49,239	64,733	80,488	525,928

2. Wastewater

Wastewater Net Operating Impact of New Capital Projects

\$000's	2010 Budget	2011 Outlook	2012 Outlook	2013 Outlook	2014 Outlook	2015 – 2019 Outlook
OPERATING COSTS						
Salaries and Benefits	198	249	295	315	376	2,575
Debt Repayment	21,593	44,510	61,880	73,685	78,435	542,741
Contribution to Replacement Reserve	379	818	1,039	1,200	1,695	17,609
Other: Chemical & Hydro	415	1,018	1,038	1,111	1,133	6,357
TOTAL GROSS COST	22,585	46,595	64,252	76,311	81,639	569,282

3. Roads

Roads Net Operating Impact of New Capital Projects

\$000's	2010 Budget	2011 Outlook	2012 Outlook	2013 Outlook	2014 Outlook	2015 – 2019 Outlook
OPERATING COSTS						
Salaries and Benefits	0	130	183	269	303	2,787
Other: Contract/Program Costs	0	391	537	792	897	8,416
TOTAL GROSS COST	0	521	720	1,061	1,200	11,203

Additional operating costs are consistent with existing similar infrastructure and will be covered by assessment growth.



2010 Development Charge By-law Amendment Draft Background Study

Kelly Strueby

Finance and Administration Committee
May 6, 2010



DC By-law was to be reviewed once Master Plans adopted



□ Council direction from June 2007:

“Within six months of the adoption of the Master Plans by Council, a report be brought forward outlining the development charge impacts and if the roads, transit, water and wastewater impacts are greater than 5%, those elements of the Development Charge By-law be updated at that time.”

Master Plans have been updated



2006	Master Plan update commenced
October 2008	Presentation to BILD on Master Plan status
January 2009	Preliminary Master Plan cost info presented to BILD
May 2009	Preliminary Master Plans and associated fiscal impacts presented to Council
July 2009	Master Plan cost info presented to BILD
Nov 2009	Master Plans approved by Council

Master Plan Updates identified significant additional infrastructure



- ❑ Estimated impact on development charges beyond 5% parameter
- ❑ On April 22/10, Council approved proceeding with amendment for roads, water and sewer

By-law Amendment Schedule



- ❑ Background study released - April 21
- ❑ Public Meeting - May 6
- ❑ Final recommendations F&A - June 10
- ❑ Regional Council consideration - June 24
- ❑ Rates in effect - June 25

Industry Consultation is underway



- Consultation meetings to date:
 - April 14, 28
- BILD Breakfast Meeting:
 - April 26
- Further scheduled meetings:
 - May 11, 12, 19, 20, 25, 26
 - June 1, 2

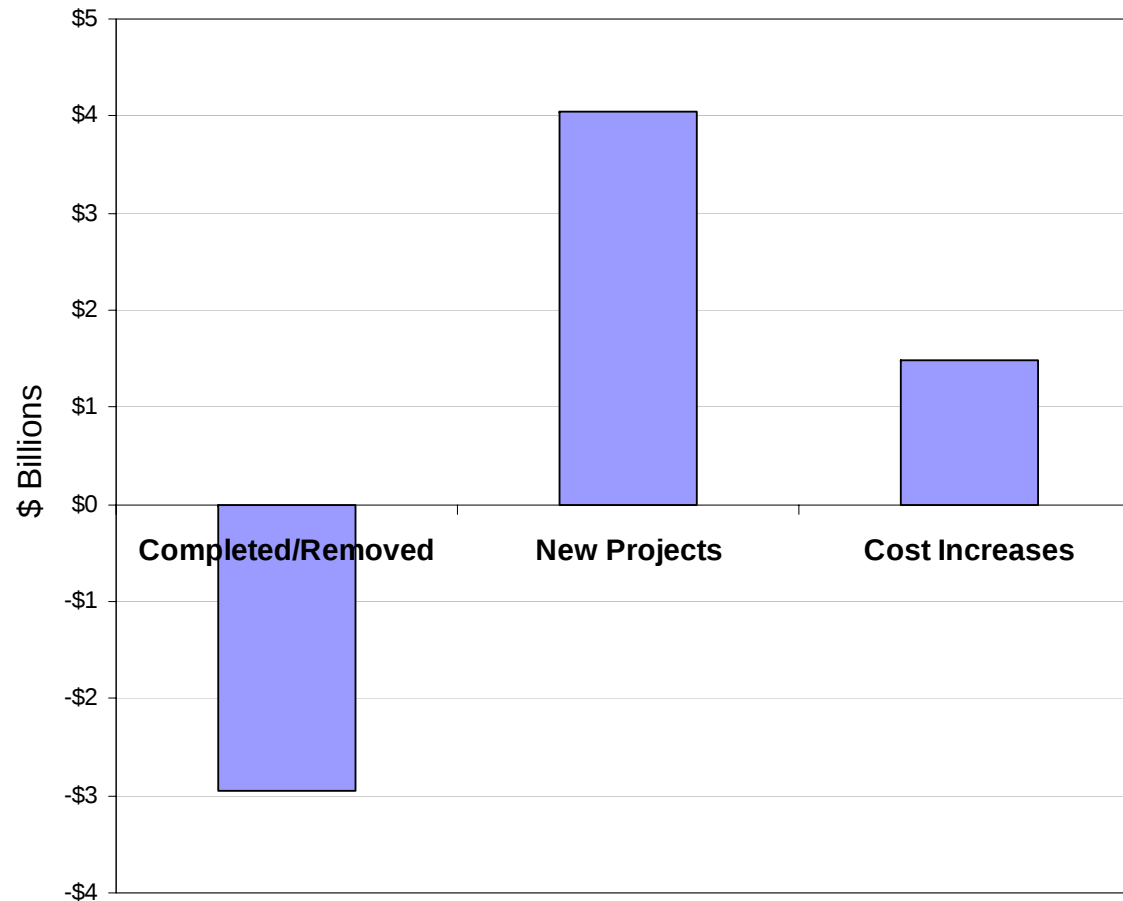
Infrastructure Costs have increased



Service	2007 Study (\$ millions)*	2010 Study (\$ millions)*
Water	861.7	1,765.8
Wastewater	1,913.3	2,256.6
Roads	3,654.9	4,843.8
Total	6,429.9	8,866.2

*Gross costs in current year dollars

Change in Gross Infrastructure Cost 2010 vs. 2007 Background Study



2010 Background Study Calculated Rates

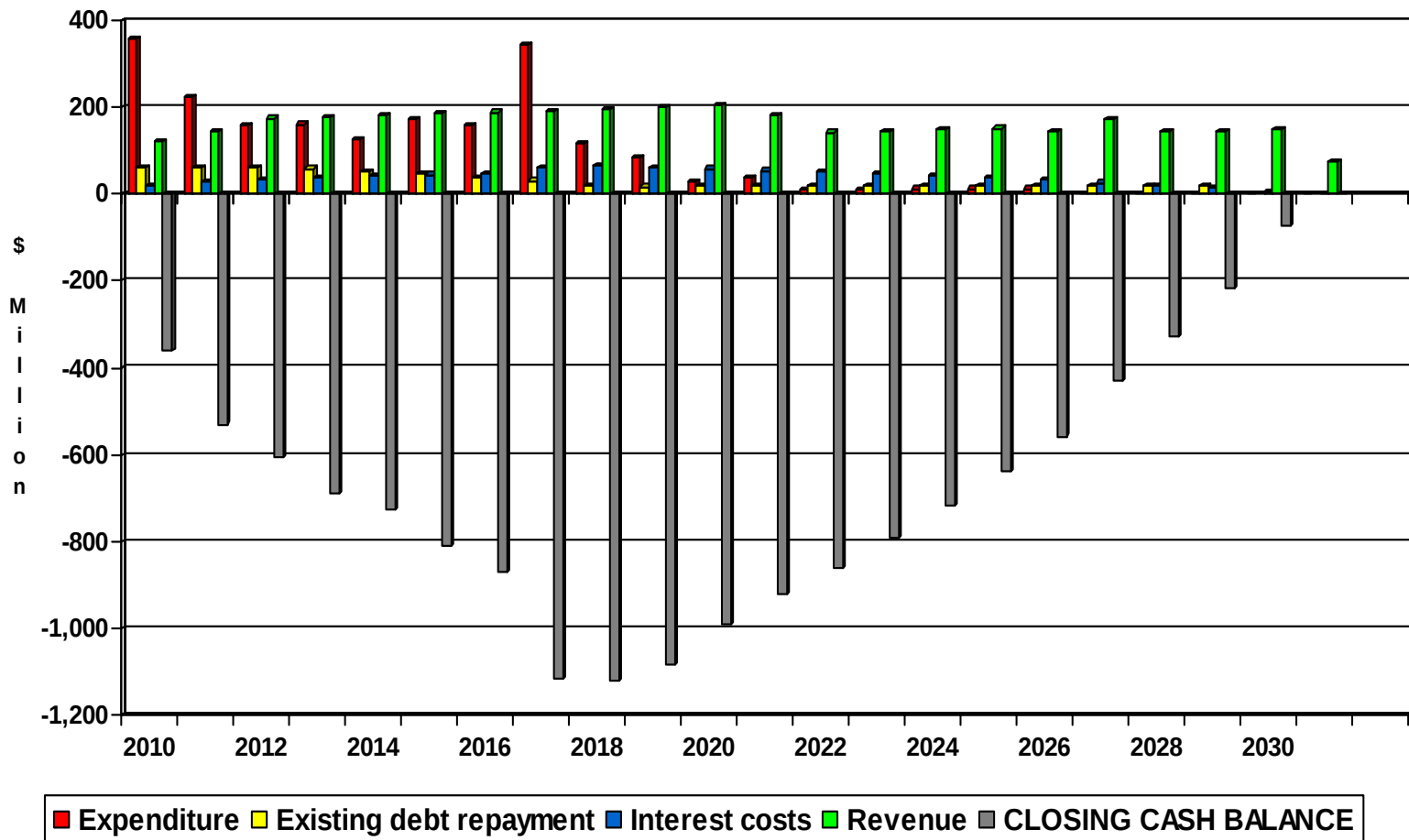
	Water			Sewer			Roads			Total Water, Sewer, Roads		
	Current	Proposed	% Chg	Current	Proposed	% Chg	Current	Proposed	% Chg	Current	Proposed	% Chg
Residential rates per Unit												
Single/Semi Detached	\$4,364	\$7,615	74%	\$9,533	\$11,999	26%	\$7,403	\$10,008	35%	\$21,300	\$29,622	39%
Multiple Unit Dw elling	3,615	6,310	75%	7,900	9,943	26%	6,136	8,293	35%	17,651	24,546	39%
Apt 2 or more bedroom	2,726	4,758	75%	5,957	7,497	26%	4,627	6,253	35%	13,310	18,508	39%
Apt <2 bedrooms	1,758	3,068	75%	3,842	4,835	26%	2,983	4,032	35%	8,583	11,935	39%
Non-Residential rates per Square Foot												
Industrial/Office/ Institutional	\$1.98	\$4.03	104%	\$3.52	\$6.33	80%	\$3.21	\$4.42	38%	\$8.71	\$14.78	70%
Retail	2.68	4.07	52%	5.33	6.49	22%	10.23	14.93	46%	\$18.24	\$25.49	40%
Non-Residential rates per Square Metre												
Industrial/Office/ Institutional	\$21.68	\$43.38	100%	\$37.89	\$68.14	80%	\$34.55	\$47.58	38%	\$94.12	\$159.10	69%
Retail	28.85	43.81	52%	57.37	69.86	22%	110.12	160.71	46%	\$196.34	\$274.38	40%

An adjustment to proposed rates for roads is required

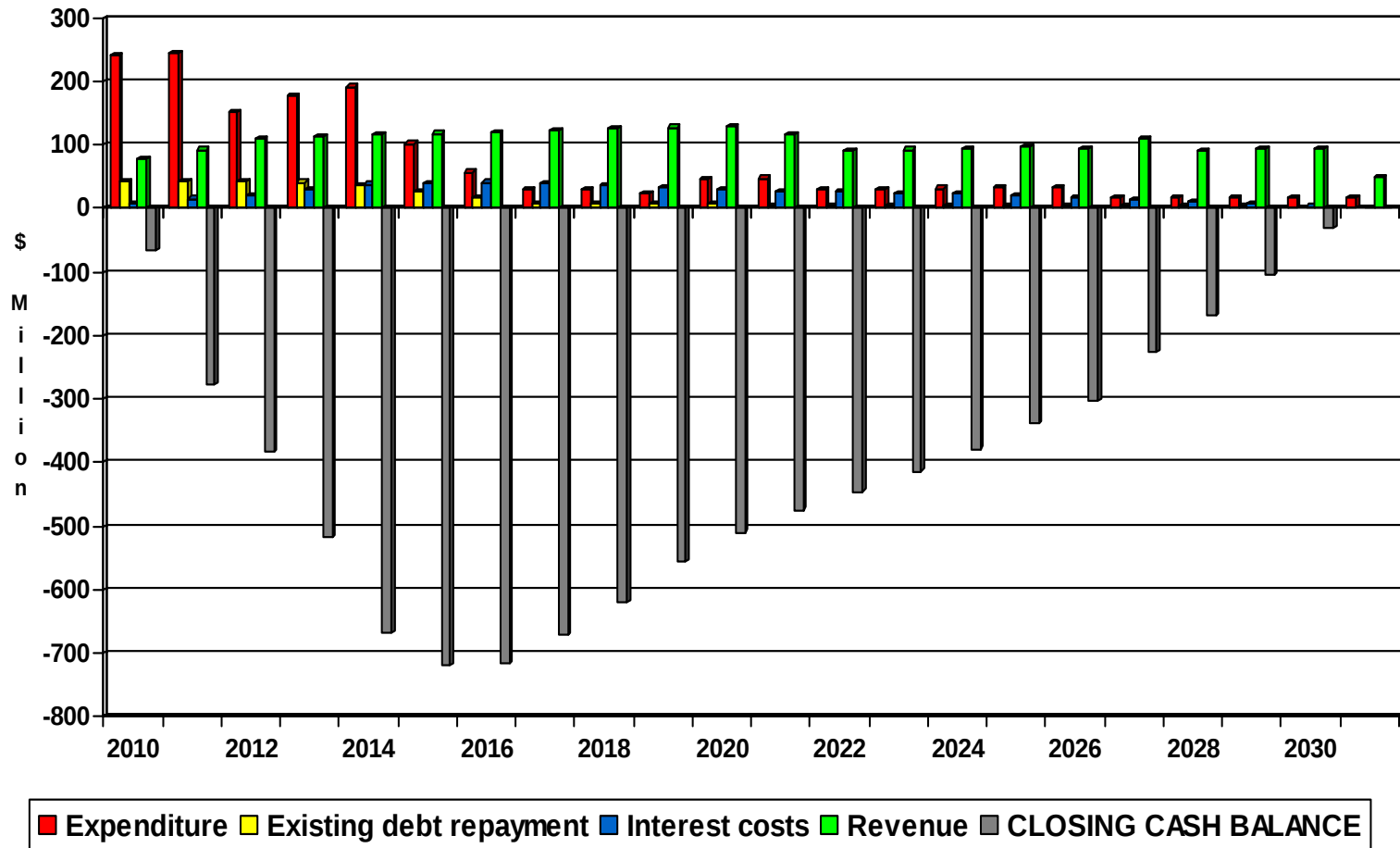


- ❑ Total costs for Highway 400 and 404 crossings were included in Background Study rate calculation
- ❑ Region share of these projects is 1/3
- ❑ This adjustment would reduce Roads DC rate

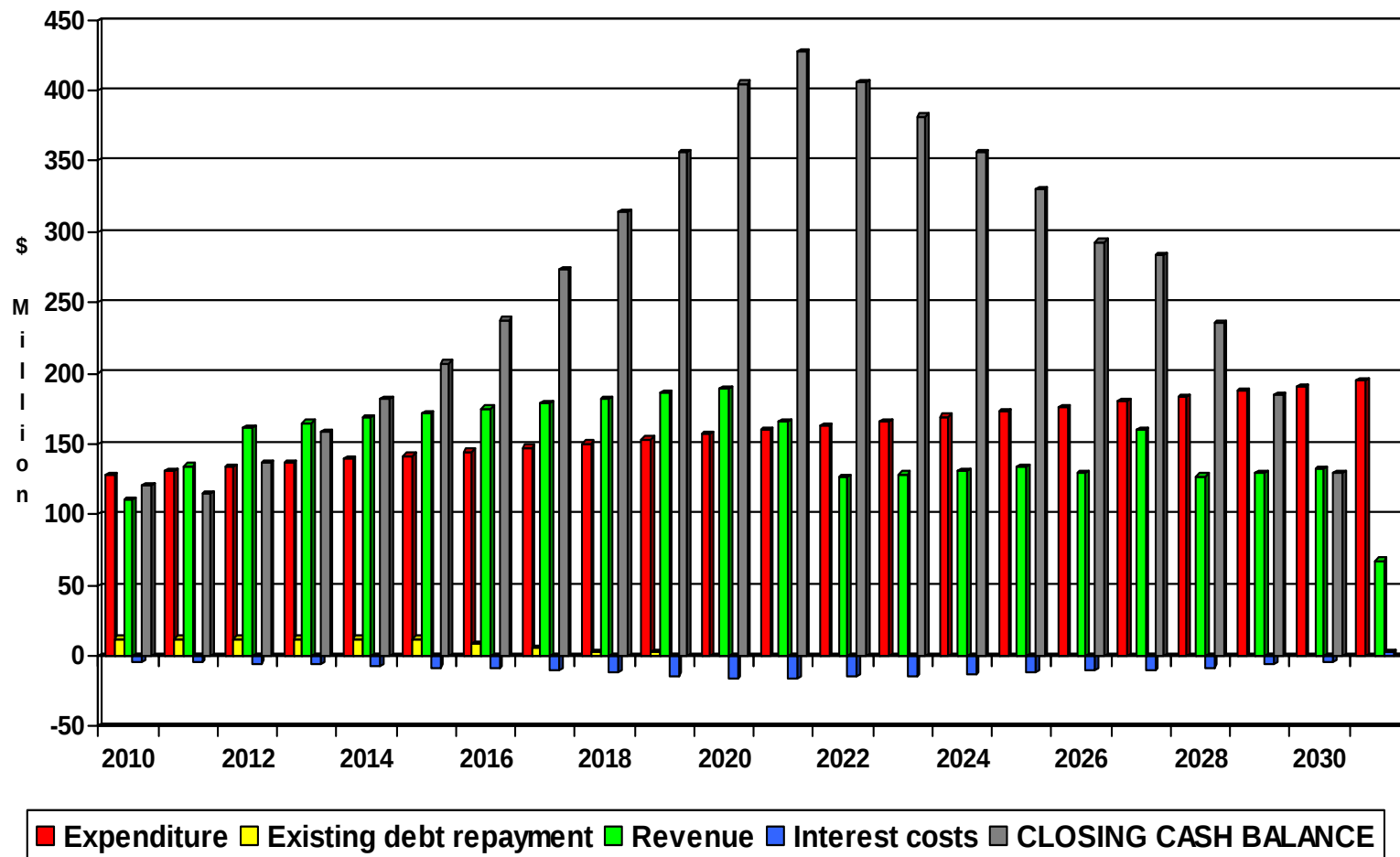
Wastewater Program



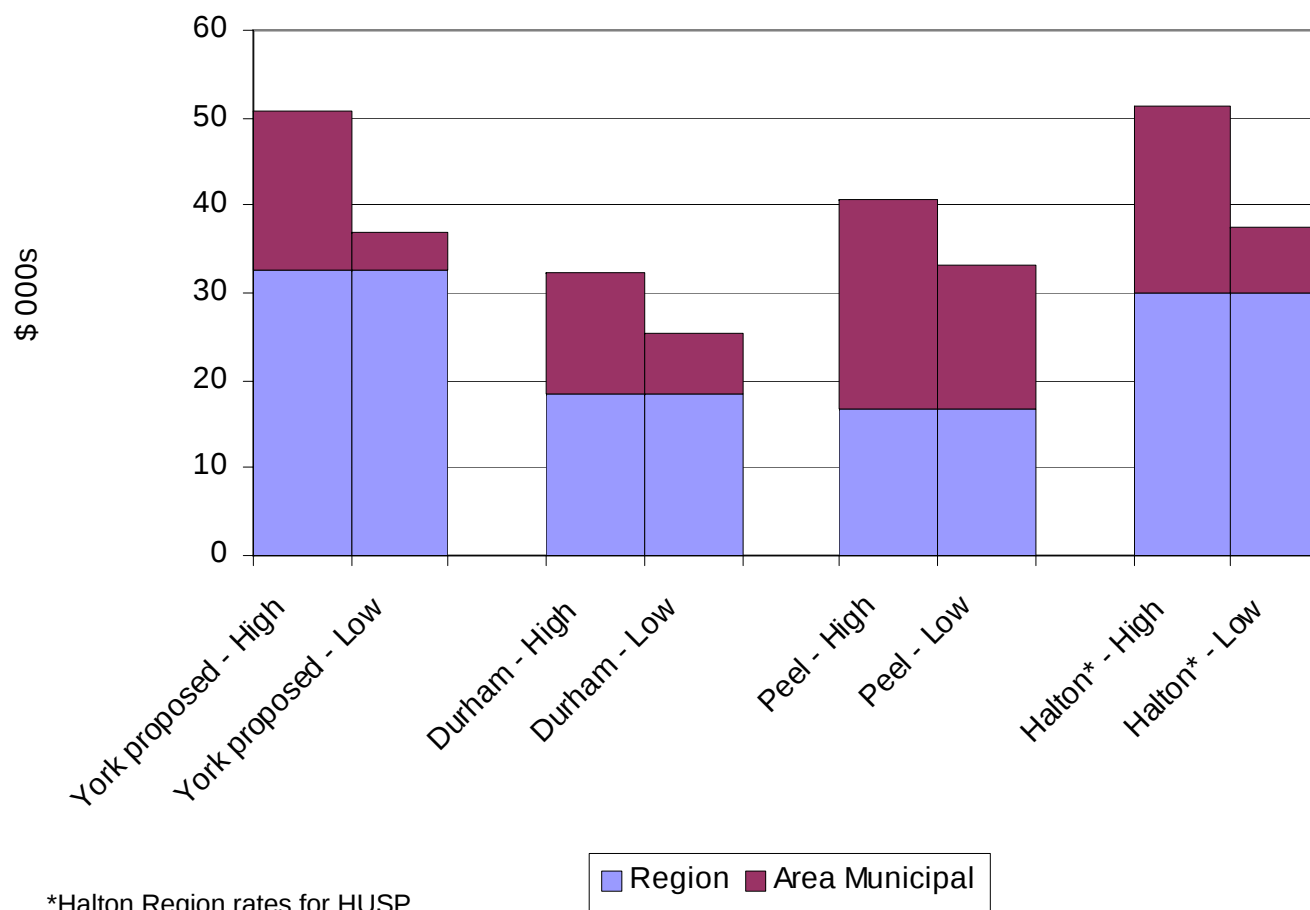
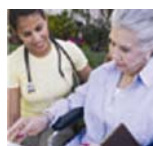
Water Program



Roads Program



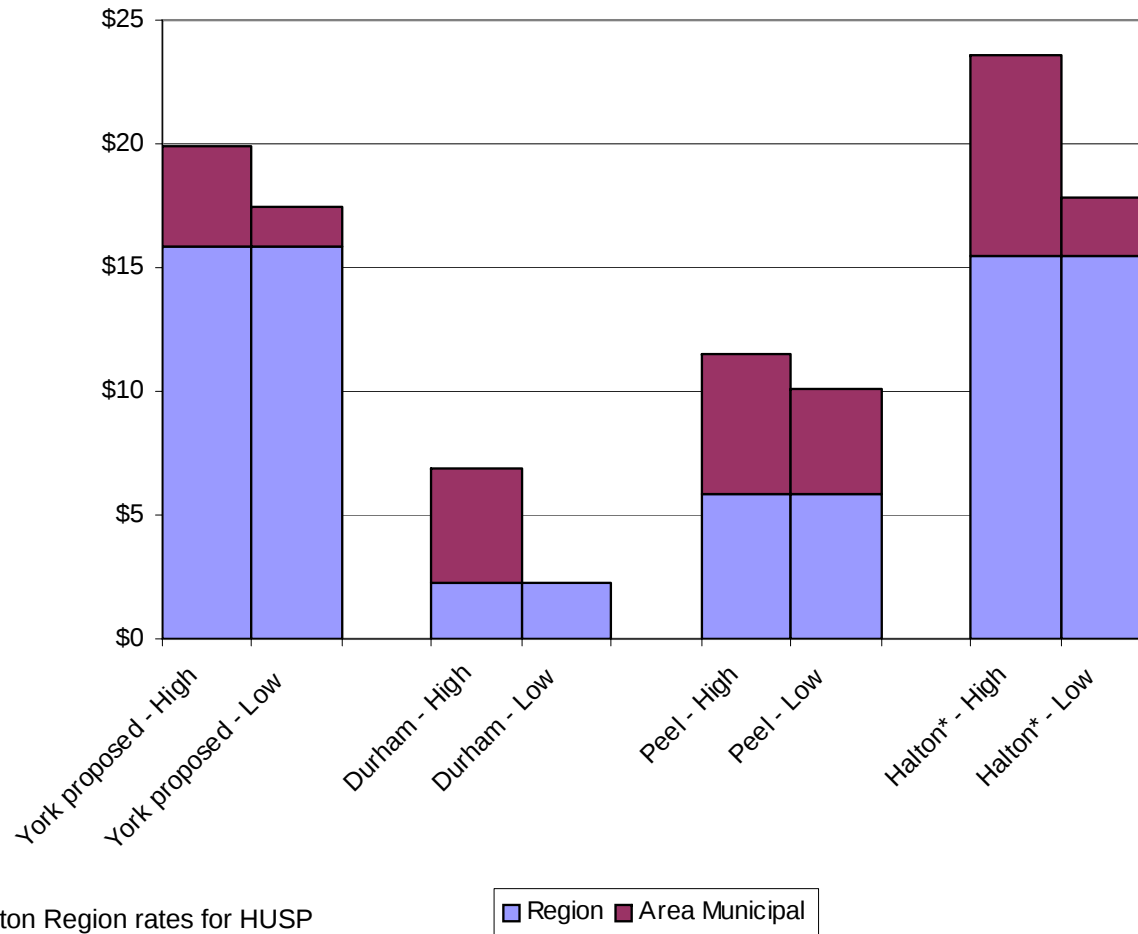
Comparison of DC Rates Single Family Dwellings



*Halton Region rates for HUSP

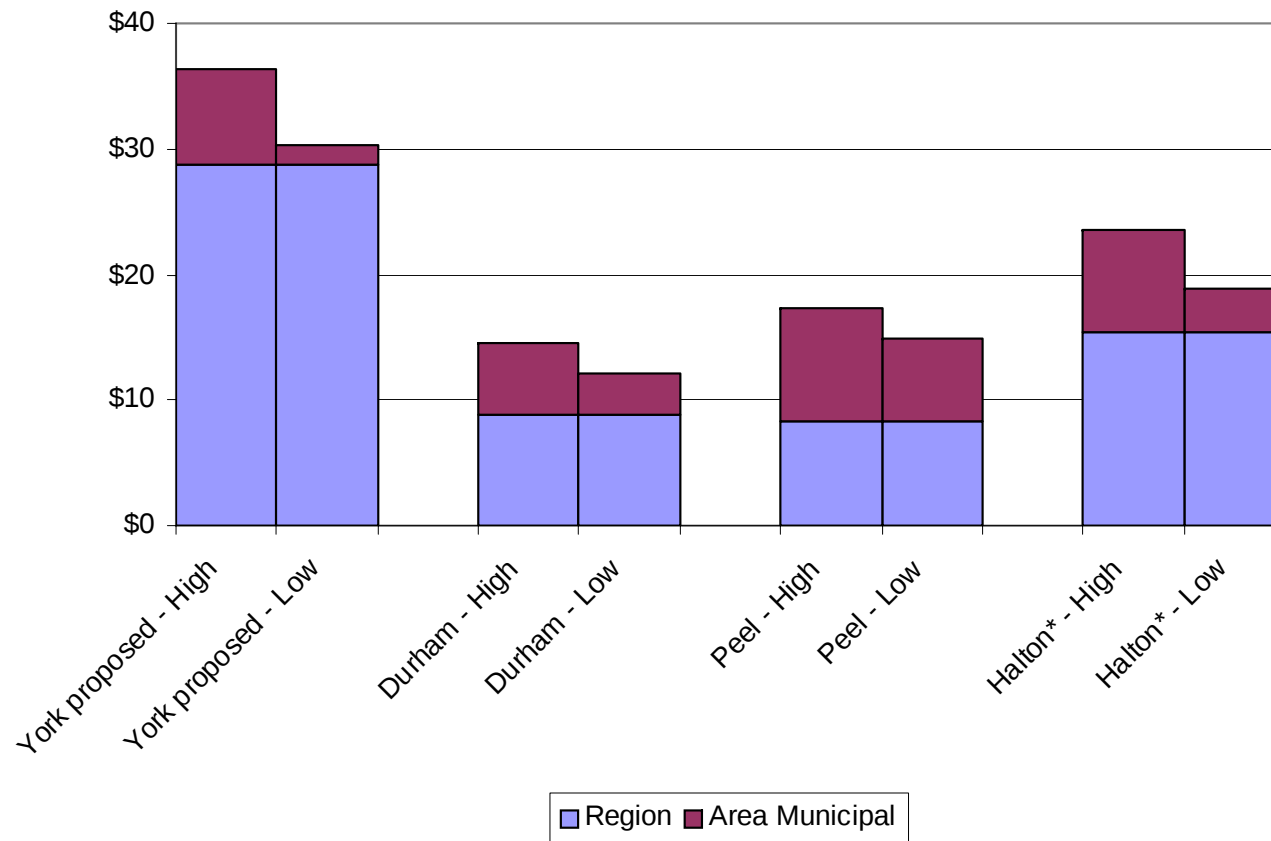
Comparison of DC Rates

Industrial/Office/Institutional \$ per square foot



Comparison of DC Rates

Retail \$ per square foot



*Halton Region rates for HUSP

Full review will be required before By-law expires in 2012



- ❑ Commence industry consultations and policy reviews required to support full DC background study and by-law
 - ❑ for implementation in June 2012
- ❑ 2012 review will include issues that have been the subject of DC complaints since the passage of the 2007 By-law

Concerns have been expressed by the development industry



- ❑ Magnitude of increase
- ❑ Short time line for reviewing cost information
- ❑ Impact on units that have already been sold but for which DCs have not yet been paid
- ❑ Prepayment option not applicable to subdivisions

Discussion

