

## APPENDIX 6

February 2013

## **APPENDIX 6**

### **Costs**

**Cost Estimate - Highways Capital Costs**

Project I.D.	Project Name	Limits From	Limits To	Description of Works	Total Cost (\$M)	Previous Budget (\$M)	Other Revenue (\$M)	Transfer to Reserves (\$M)	Net Cost (\$M)
67	Cross Avenue - 1	Speers Road	CNR Overhead Rail Bridge	Intersection improvements (dual right turn lane)	\$ 0.884				\$ 0.884
77	Cross Avenue - 2	West of Lyons Lane	East of Lyons Lane	Widening of roadway and signalization	\$ 0.801				\$ 0.801
9	Burloak Drive - 1	South of Wycroft Road	North of Prince William Drive	Construction of CN rail grade separation and widening to a 6 lane urban roadway	\$ 25.466		\$ 14.643		\$ 10.823
54	Chartwell Road - 2	Industry Street	Melvin Avenue	Construction of a 4 lane grade separation structure	\$ 29.942		\$ 4.491		\$ 25.451
35	Fourth Line	Wycroft Road	Speers Road	Construction of a 4 lane grade separation structure	\$ 28.226		\$ 4.234		\$ 23.992
52	Kerr Street	Wycroft Road	Speers Road	Construction of a 4 lane grade separation structure	\$ 31.113	\$ 4.634	\$ 4.667		\$ 21.812
79	Cross Avenue - 4	Argus Road	Chartwell Road	Extension and reconfiguration of Cross Avenue	\$ 22.127				\$ 22.127
80	Cross Avenue - 5	Chartwell Road	Royal Windsor Drive	Extension and reconfiguration of Cross Avenue	\$ 13.156				\$ 13.156
99	Highway 403 Crossing	Ninth Line	Bristol Circle	Construction of a new 4 lane urban roadway and grade separation	\$ 17.348				\$ 17.348
18	Midtown - 2 lane connection (Phase 1)	Eighth Line	Royal Windsor Drive	Widening and extending Iroquois Shore Road, widening and realigning SSR, NSR and RWD	\$ 24.000	\$ 9.270			\$ 14.730
98	Midtown - EW South Alignment Road	East of New Cross Avenue	Chartwell Road (or approximate)	Construction of a new 2 lane roadway	\$ 8.873		\$ 4.572		\$ 4.301
92	Midtown - NS QEW Crossing (AT/priority lanes)	Trafalgar Road	Cross Avenue	Elevated structure from Trafalgar Road to Cross Avenue	\$ 42.743		\$ 28.702		\$ 14.041
84	Midtown - NS QEW Crossing (Road)	Cross Avenue	Iroquois Shore Road	New North/South Crossing of the QEW	\$ 16.901				\$ 16.901
2	New Burnhamthorpe Road	Tremaine Road	Bronte Road	Construction of a new 4 lane urban arterial roadway	\$ 11.843				\$ 11.843
24	North Service Road - 5 (Extension)	Joshuas Creek Drive	Ford Drive	Construction of a new 4 lane urban roadway	\$ 9.888	\$ 3.995	\$ 0.700		\$ 5.193
88	QEW-Cross Avenue	QEW	Cross Avenue	New burtonhook EB off-ramp	\$ 0.559				\$ 0.559
90	QEW-Midtown	QEW	Midtown	Modified EB off-ramp to pass under Trafalgar Road to Midtown	\$ 6.630				\$ 6.630
85	QEW-Royal Windsor Drive	Royal Windsor Drive	QEW	New EB on-ramp to QEW	\$ 0.863				\$ 0.863
86	QEW-Royal Windsor Drive	QEW	Royal Windsor Drive	New WB off-ramp to Royal Windsor Drive	\$ 2.578				\$ 2.578
87	QEW-Royal Windsor Drive	QEW	Royal Windsor Drive	Modified EB off-ramp to Royal Windsor Drive	\$ 5.430				\$ 5.430
89	QEW-Trafalgar Road	QEW	Trafalgar Road	Modified EB off-ramp to Trafalgar Road	\$ 2.295				\$ 2.295
102	South Service Road - 2	Proposed roundabout	South Service Road	Construction of a new 2 lane roadway	\$ 1.394				\$ 1.394
49	Third Line	New Burnhamthorpe Road	Dundas Street	Construction of a new 4 lane urban roadway	\$ 3.340	\$ 0.315		\$ (0.137)	\$ 3.162
4	Wycroft Road - 1	Burloak Drive (up to the intersection)	RRL Burloak Limit	Construction of a new 4 lane urban roadway	\$ 5.680	\$ 0.350			\$ 5.330
3	Wycroft Road - 2	RRL Burloak Lands	Bronte Road	Construction of a new 4 lane urban roadway	\$ 47.935	\$ 3.960			\$ 43.975
	Active Transportation Initiatives			Bicycle parking, rings and shelters, racks	\$ 1.365				\$ 1.365
	AT Cycle Lanes, Routes and Pathways			See Tables PED1, PED2 and PED3	\$ 6.057				\$ 6.057
	Pedestrian Structures			See Table PED4	\$ 21.110				\$ 21.110
	AT Facilities on Regional Roads			See Table PED5 and PED6	\$ 12.424	\$ 4.355			\$ 8.069
57	Lakeshore Road West - 1	East Street	Third Line	Reconstruction to an urban arterial road standard	\$ 4.405				\$ 4.405
58	Lakeshore Road West - 2	Third Line	Sandwell Drive (100m west)	Reconstruction to an urban arterial road standard	\$ 6.375				\$ 6.375
59	Lakeshore Road West - 3	Sandwell Drive	Wittington Place (100m west)	Reconstruction to an urban arterial road standard	\$ 10.942				\$ 10.942
60	Lakeshore Road West - 4	Wittington Place (100m west)	Dorval Drive	Reconstruction to an urban arterial road standard	\$ 5.201				\$ 5.201
62	Lower Base Line (excluding valley section)	Bronte Road	Fourth Line	Reconstruction of a 2 lane rural roadway	\$ 6.146		\$ 3.073		\$ 3.073
53	Chartwell Road - 1	South Service Road	Cornwall Road	Construction of a 4 lane urban roadway and level CN crossing	\$ 4.782				\$ 4.782
12	Cornwall Road - 1	Chartwell Road	Morrison Road	Reconstruction and widening to a 4 lane urban roadway	\$ 4.991	\$ 0.233			\$ 4.758
51	Eighth Line - 2	Iroquois Shore Road	North Service Road	Reconstruction to a 3 lane urban roadway	\$ 1.221				\$ 1.221
55	North Service Road - 1	West of Deerfield Golf Course	Third Line	Reconstruction and widening to a 3 lane urban roadway	\$ 6.693				\$ 6.693
37	North Service Road - 3	Third Line	West of Fourth Line	Reconstruction and widening to a 4 lane urban roadway	\$ 6.037				\$ 6.037
27	North Service Road - 4 (Part C - Midtown)	West of Eighth Line	Eighth Line	Widening from a 2 lane urban to 3 lane urban roadway	\$ 1.230	\$ 0.152			\$ 1.078
48	Sixth Line - 1	407	New Burnhamthorpe Road	Reconstruction to a 4 lane urban roadway	\$ 9.300				\$ 9.300
47	Sixth Line - 2	New Burnhamthorpe Road	E-W Avenue 2	Reconstruction to a 4 lane urban roadway	\$ 4.813				\$ 4.813
46	Sixth Line - 3	E-W Avenue 2	E-W Connector 1	Reconstruction to a 4 lane urban roadway	\$ 4.415				\$ 4.415
45	Sixth Line - 4	E-W Connector 1	Dundas Street	Reconstruction to a 4 lane urban roadway	\$ 4.649	\$ 0.150			\$ 4.499
6	South Service Road - 1	Third Line	West of Fourth Line	Reconstruction and widening to a 4 lane urban roadway	\$ 12.457				\$ 12.457
25	South Service Road - 3	Davis Road	Chartwell Road	Reconstruction and widening to a 2 lane urban roadway	\$ 4.750				\$ 4.750
26	South Service Road - 4	Chartwell Road	Industry Street	Reconstruction and widening to a 2 lane urban roadway	\$ 1.474				\$ 1.474
7	Wycroft Road - 4	East of Fourth Line	Weller Court	Reconstruction and widening to a 4 lane urban roadway	\$ 6.698				\$ 6.698
50	Wycroft Road - 5	Sinclair Road	Kerr Street	Reconstruction of a 2 lane rural to 4 lane urban roadway plus centre turning lane	\$ 3.226				\$ 3.226
-	Goods Movement Study				\$ 0.075				\$ 0.075
-	Goods Movement Study Update				\$ 0.075				\$ 0.075
-	Implementation Plan and Monitoring Study			Update report every 5 years in advance of TMP/ATMP	\$ 0.200				\$ 0.200

**Cost Estimate - Highways Capital Costs**

Project I.D.	Project Name	Limits From	Limits To	Description of Works	Total Cost (\$M)	Previous Budget (\$M)	Other Revenue (\$M)	Transfer to Reserves (\$M)	Net Cost (\$M)
-	Traffic Management - Intersections			Intersection improvements, transit priority and queue jump lanes	\$ 40.483				\$ 40.483
-	Signal Optimization Program			Once every 5 years (key corridors)and optimize key corridors other years	\$ 3.450				\$ 3.450
-	Traffic Impact Assessment Guidelines				\$ 0.050				\$ 0.050
-	Traffic Signals (2014-2022)			Two new signals per year (20 signals total)	\$ 4.770				\$ 4.770
-	Traffic Signals (2023-2032)			Two new signals per year (20 signals total)	\$ 4.770				\$ 4.770
-	Transportation Master Plan Studies			Major Transportation Study Updates 2/5 years, TMP and ATMP	\$ 1.800				\$ 1.800
-	Travel Demand Management Studies				\$ 0.195				\$ 0.195
-	New Shelters			New Roadside Shelters	\$ 0.462				\$ 0.462
-	Transit Centres			North Oakville West, Centre and East	\$ 0.600				\$ 0.600
-	Palermo Terminal			Transit Station	\$ 1.500				\$ 1.500
-	Oakville Share - Park and Ride Facilities			Park and Ride Facilities	\$ 0.400				\$ 0.400
15	Cornwall Road - 2	Ford Drive	Winston Churchill Boulevard	Widening to a 4 lane urban roadway	\$ 4.869				\$ 4.869
23	Eighth Line - 1	Falgarwood Drive	Iroquois Shore Road	Widening from a 2 lane urban to 3 lane urban roadway	\$ 1.282				\$ 1.282
32	Fourth Line	Wycroft Road	Speers Road	Widening from a 2 lane to 4 lane roadway with level crossing	\$ 3.456	\$ 4.035		\$ (3.061)	\$ 2.482
11	Great Lakes Boulevard	Burloak Drive	Rebecca Street	Widening and resurfacing to a 4 lane urban roadway	\$ 2.690				\$ 2.690
82	Kerr Street	North of QEW	Wycroft Road	Relocation of the westerly abutment of the QEW/Sixteen Mile Creek structure	\$ 4.609				\$ 4.609
16	Midtown - 4 lane connection (Phase 2)	Eighth Line	QEW off-ramp connection	Widening and resurfacing to a 4 lane urban roadway	\$ 11.324				\$ 11.324
5	Wycroft Road - 3	Bronte Road	Third Line	Widening and resurfacing to a 4 lane urban roadway	\$ 10.941				\$ 10.941
10	Burloak Drive - 2	North of Prince Willam Drive	Old Burloak Drive	Widening to a 6 lane urban roadway	\$ 2.478		\$ 1.239		\$ 1.239
78	Cross Avenue - 3	Lyons Lane	Argus Road	Modifications to Cross Avenue	\$ 3.029				\$ 3.029
101	Royal Windsor Drive - 1	QEW	The Canadian Road	Widening from 2 to 5 lanes	\$ 4.019				\$ 4.019
83	Royal Windsor Drive - 2	Ford Drive	Winston Churchill Boulevard	Reconstruction to a 4 lane urban roadway	\$ 3.305				\$ 3.305
81	Speers Road	Kerr Street	Cross Avenue	Widening of Sixteen Mile Creek structure (6 lanes Speers Road)	\$ 14.925				\$ 14.925
42	Speers Road - 1	Procor	Third Line	Widening and resurfacing of a 4 lane urban roadway	\$ 2.320	\$ -			\$ 2.320
41	Speers Road - 2	Third Line	West of Fourth Line	Widening and resurfacing of a 4 lane urban roadway	\$ 9.103				\$ 9.103
40	Speers Road - 5	East of Fourth Line	West of Dorval Drive	Widening and resurfacing of a 4 lane urban roadway	\$ 5.345				\$ 5.345
39	Speers Road - 6	East of Dorval Drive	West of Kerr Street	Widening and resurfacing of a 4 lane urban roadway	\$ 3.061				\$ 3.061
110	Speers Road - 7	Procor	Bronte Road	Widening and resurfacing of a 4 lane urban roadway	\$ 4.014				\$ 4.014
104	Speers Road - F1	Bronte Road	Third Line	Widening from 4 to 6 lanes	\$ 14.670				\$ 14.670
105	Speers Road - F2	Third Line	Fourth Line	Widening from 4 to 6 lanes	\$ 6.157				\$ 6.157
106	Speers Road - F3	Fourth Line	Dorval Drive	Widening from 4 to 6 lanes	\$ 9.658				\$ 9.658
107	Speers Road - F4	Dorval Drive	Kerr Street	Widening from 4 to 6 lanes	\$ 17.476				\$ 17.476
108	Speers Road - F5	Kerr Street	Trafalgar Road	Widening from 4 to 6 lanes	\$ 16.763				\$ 16.763
109	North Service Road Extension	Sixth Line	Kerr Street	Extend NSR over 16 Mile Creek and connect to Kerr St at CTC Signals	\$ 26.251				\$ 26.251
<b>TOTAL</b>					<b>\$ 751.352</b>	<b>\$ 31.449</b>	<b>\$ 66.321</b>	<b>\$ (3.198)</b>	<b>\$ 656.780</b>

### Cost Estimate - Transit Capital Costs

Description	Quantity	Unit	Unit cost (\$M)	Total Cost (\$M)
<b>Dundas Street BRT</b>				
Fleet	24	ea	\$ 0.475	\$ 11.400
Online stop development	8	ea	\$ 0.373	\$ 2.982
Terminal	2	ea	\$ 4.000	\$ 8.000
<b>Subtotal</b>				\$ 22.382
<b>Trafalgar Road BRT</b>				
Fleet	11	ea	\$ 0.475	\$ 5.225
Online stop development	9	ea	\$ 0.373	\$ 3.355
Midtown Station (From Trafalgar BRT Study)	1	ea	\$ 16.306	\$ 16.306
Terminal	1	ea	\$ 4.000	\$ 4.000
<b>Subtotal</b>				\$ 28.885
<b>North Oakville</b>				
Fleet	16	ea	\$ 0.475	\$ 7.600
<b>Subtotal</b>				\$ 7.600
<b>South of Dundas and Grid</b>				
Additional Fleet - Grid Service and South of Dundas Local Service	75	ea	\$ 0.475	\$ 35.625
Midtown Shuttle (Hybrid Buses)	4	ea	\$ 0.775	\$ 3.100
<b>Subtotal</b>				\$ 38.725
<b>Operational Needs</b>				
Care-A-Van	15	ea	\$ 0.210	\$ 3.150
Supervisor Vehicles	3	ea	\$ 0.040	\$ 0.120
<b>Subtotal</b>				\$ 3.270
<b>Studies</b>				\$ 0.400
<b>Subtotal</b>				\$ 0.400
<b>TOTAL</b>				\$ 101.262

### Cost Estimate - Transit and Travel Demand Management Operating Costs

Description	Total Annual Cost (\$M)
<b>Net Operating Cost of New Local Transit Service</b>	
Grid Routes - New	
Dundas	
Upper Middle	
Lakeshore	
Burnhamthorpe	
Trafalgar	
Dorval/Neyagawa	
Third Line	
North of Dundas - New	
South of Dundas - New	
<b>Subtotal</b>	\$ 27.439
<b>Transit Marketing</b>	
<b>Subtotal</b>	\$ 0.250
<b>Travel Demand Management Coordination and Outreach</b>	
Implementation Costs	
Marketing	\$ 0.050
Outreach (e.g. Transit Pass)	\$ 0.025
Implementation - Resources	\$ 0.080
Promotion of Employer Carpool	
Promotion of Telework and Alternate Hours	
TDM Review for Developments	
Guaranteed Ride Home Program	
Carshare Promotion	
<b>Subtotal</b>	\$ 0.155
<b>TOTAL</b>	<b>\$ 27.844</b>