

# Appendix H: Implementation, Preliminary Cost Estimates, and Proposed EA Schedules

To evaluate the capital cost constraints at different timeframes, cost estimates were required. Cost estimates from other studies such as Environmental Assessments or the City's 2022 Development Charges were used, where available. Otherwise, costs were estimated at a high level on a unit basis using facility lengths and types.

**Table 1** through **Table 5** presents the preliminary cost estimates and is sorted based on the prioritization framework for implementation. **Table 6** provides a listing of York Region projects. The proposed EA schedule is also provided within this table, based on the Municipal Class Environmental Assessment (MCEA) process as amended in 2015. Amendments made to the MCEA on March 3, 2023, are not reflected, but should be considered by the City prior to commencing new EA projects.

**Table 1: Projects to Deliver in Immediate Timeframe**

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
AT	VTP-IAT-01	Bathurst Street	Teston Road	Major Mackenzie Drive	Cycle tracks	\$ 2.64 M	None
AT	VTP-IAT-02	Dufferin Street	Teston Road	Major Mackenzie Drive	Cycle tracks	\$ 1.32 M	None
AT	VTP-IAT-03	Jane Street	Portage Parkway	Teston Road	Cycle tracks	\$ 10.56 M	None
AT	VTP-IAT-04	Rutherford Road	Jane Street	Westburne Drive	Cycle tracks	\$ 3.43 M	None
AT	VTP-IAT-05	Rutherford Road	Peter Rupert Avenue	Bathurst Street	Cycle tracks	\$ 3.70 M	None
Road	VTP-IR-01	Canada Dr/America Ave Midblock Connector	Weston Road	Jane Street	New road	\$ 17.93 M	N/A
AT	VTP-IAT-06	Major Mackenzie Drive (Hwy 400 Crossing)	West of Highway 400	Jane Street	Multi-use pathway (south side)	\$ 0.60 M	None
AT	VTP-IAT-07	Weston Road	Major Mackenzie Drive	Hawkview Blvd	Cycle tracks	\$ 2.51 M	None
Road	VTP-IR-02	Huntington Road	Langstaff Road	Nashville Road	4-lane new road and widening (discontinuous at Highway 427, Part A and Part B of EA)	\$ 90.76 M	N/A
Road	VTP-IR-03	Huntington Road - 427 Ramp Extension	Major Mackenzie Drive	Huntington Road	4-lane off-ramp extension	\$ 3.46 M	N/A
Road	VTP-IR-04	Kirby Road	Dufferin Street	Bathurst Street	4-lane extension	\$ 6.71 M	N/a
AT	VTP-IAT-08	Bathurst Street	Centre Street	Steeles Avenue	Cycle tracks	\$ 2.64 M	None
AT	VTP-IAT-09	Beverly Glen Boulevard	Dufferin Street	Bathurst Street	Buffered Bicycle Lane	\$ 0.06 M	None
AT	VTP-IAT-10	Bowes Rd	Rivermede Rd	Highway 7	Sidewalk	\$ 0.23 M	None
AT	VTP-IAT-11	Dufferin Street	South of Highway 407	Steeles Avenue	Cycle tracks	\$ 3.96 M	None
AT	VTP-IAT-12	Highway 7	Centre Street	Bathurst Street	Cycle tracks shared with pedestrians	\$ 2.38 M	None
AT	VTP-IAT-13	Highway 7 North Rivermede (100 m MUP)	Bowes Road Centre Street	Centre Street Bartley Smith Greenway	Cycle tracks shared with pedestrians	\$ 1.59 M	None

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
AT	VTP-IAT-14	North Rivermede Rd/Highway 7	Bartley Smith Greenway South	Bowes Rd / Baldwin Ave	Multi-use pathway	\$ 0.47 M	None
AT	VTP-IAT-15	New Westminster Drive	Bathurst Street	Steeles Avenue	Cycle tracks	\$ 3.04 M	None
AT	VTP-IAT-16	North Rivermede Rd	Centre St	Bartley Smith Greenway entrance 100m N of Highway 7	Multi-use pathway	\$ 0.05 M	None
Road	VTP-IR-05	Creditstone Road	Peelar Road	Rutherford Road	Improvement / 4-lane widening	\$ 95.15 M	Schedule C
Road	VTP-IR-06	Portage Parkway	Highway 400	Creditstone Road	4-lane extension	\$ 148.88 M	N/A

Table 2: Projects to Deliver in Short-Term Timeframe

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
AT	VTP-IAT-01	Rivermede Road	Langstaff Road	Highway 7	Cycle tracks	\$ 2.07 M	None
AT	VTP-IAT-02	Avro Road	Jane Street	Major Mackenzie Drive	Buffered Bicycle Lane	\$ 0.07 M	None
AT	VTP-IAT-03	Dufferin Avenue	Peter Rupert Avenue	Dufferin Street	Buffered Bicycle Lane	\$ 0.03 M	None
AT	VTP-IAT-04	Dufferin Street	Rutherford Rd	Major Mackenzie Dr	Multi-use pathway	\$ 1.00 M	None
AT	VTP-IAT-05	Dufferin Street	Langstaff Road	North of Highway 407	Cycle tracks	\$ 0.40 M	None
AT	VTP-IAT-06	Dufferin Street	District Ave/Marc Santi Blvd	Apple Blossom Drive	Cycle tracks	\$ 0.99 M	None
AT	VTP-IAT-07	Dufferin Street	Major Mackenzie Drive	District Ave/Marc Santi Blvd	Cycle tracks	\$ 2.24 M	None
AT	VTP-IAT-08	Dufferin Street	Rutherford Road	Langstaff Road	Cycle tracks	\$ 2.64 M	None
AT	VTP-IAT-09	Highway 7	Edgeley Boulevard	Bowes Road	Cycle tracks	\$ 0.66 M	None



Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
AT	VTP-IAT-10	Keele Street	Teston Road	Major Mackenzie Drive	Cycle tracks	\$ 0.06 M	None
AT	VTP-IAT-11	Keele Street	Major Mackenzie Drive	Rutherford Road	Cycle tracks	\$ 2.64 M	None
AT	VTP-IAT-12	Lealind Rd/Freedom Trail/Valley Vista Drive	Petticoat Rd	Bathurst Street	Buffered Bicycle Lane	\$ 0.13 M	None
AT	VTP-IAT-13	Major Mackenzie Drive	Keele St	Silk Oak Ct	Multi-use pathway (south side)	\$ 0.35 M	None
AT	VTP-IAT-14	Major Mackenzie Drive	McNaughton Rd	Keele St	Sidewalk and Cycle tracks (MUPs in constrained areas)	\$ 1.64 M	None
AT	VTP-IAT-15	Major Mackenzie Drive	100m East of Keele Street	Bathurst Street	Cycle tracks	\$ 2.51 M	None
AT	VTP-IAT-16	McNaughton Road East	Keele Street	Major Mackenzie Drive	Cycle tracks	\$ 0.06 M	None
AT	VTP-IAT-17	McNaughton Road West	Major Mackenzie Drive	Keele Street	Cycle tracks	\$ 0.05 M	None
AT	VTP-IAT-18	Melville Avenue	Roseheath Drive	Rutherford Road	Cycle tracks	\$ 3.50 M	None
AT	VTP-IAT-19	Peter Rupert Avenue	Major Mackenzie Drive	Rutherford Road	Buffered Bicycle Lane	\$ 0.10 M	None
AT	VTP-IAT-20	Rutherford Road (Bridge over 400)	Weston Road	Jane Street	Cycle tracks	\$ 1.06 M	None
AT	VTP-IAT-21	Ten Oaks Boulevard/Autumn Hill Boulevard	Confederation Parkway	Bathurst Street	Buffered Bicycle Lane	\$ 0.08 M	None
AT	VTP-IAT-22	Thomas Cook Avenue	Major Mackenzie Drive	Randolph Drive	Cycle tracks	\$ 0.64 M	None
AT	VTP-IAT-23	Thornhill Woods Drive	Rutherford Road	Highway 7	Cycle tracks	\$ 3.50 M	None
AT	VTP-IAT-24	Vaughan Super Trail On-road Connections (Avro Rd, Netherford Rd, Goodman)	Various	Various	Multi-use pathway	\$ 1.85 M	None

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
		Cres, Barhill Rd, Planchet Rd, Woodbridge Memorial Arena Parking lot connection to Riverwalk, etc.)					
AT	VTP-IAT-25	Via Romano Boulevard	Teston Road	Major Mackenzie Drive	Cycle tracks	\$ 3.66 M	None
AT	VTP-IAT-26	Davos Road / Ashberry Boulevard	Pine Valley Drive	Vellore Woods Boulevard	Buffered Bicycle Lane	\$ 0.13 M	None
AT	VTP-IAT-27	Major Mackenzie Drive	Pine Valley Drive	West of Highway 400	Multi-use pathway (south side)	\$ 1.50 M	None
AT	VTP-IAT-28	Pine Valley Dr	Davos Rd	Via Teodoro	Multi-use pathway	\$ 0.15 M	None
AT	VTP-IAT-29	Rutherford Road	Humber River Trail	Weston Road	Cycle tracks	\$ 3.70 M	None
AT	VTP-IAT-30	Vellore Avenue	Major Mackenzie Drive	La Rocca Avenue	Buffered Bicycle Lane	\$ 0.11 M	None
AT	VTP-IAT-31	Vellore Woods Boulevard	Major Mackenzie Drive	Rutherford Road	Buffered Bicycle Lane	\$ 0.10 M	None
Road	VTP-IR-07	Colossus Drive (Highway 400 Midblock Crossing)	Commerce Street	Famous Avenue	2-lane extension	\$ 176.09 M	Schedule C
Grade Separation	VTP-IGS-01	Block 27 Street 2	Block 27	Block 27	Grade Separated Rail Crossing	\$ 41.21 M	Schedule C
Grade Separation	VTP-IGS-02	Kirby Road	Block 27	Keele Street	Grade Separated Rail Crossing	\$ 44.24 M	Schedule C
Grade Separation	VTP-IGS-03	McNaughton Road at Barrie GO Rail	Falvro Street	Troon Avenue	Grade Separated Rail Crossing	\$ 74.76 M	Schedule C
Grade Separation	VTP-IGS-04	Rivermede Road at Barrie GO Rail	Bowes Road	Ortona Court	Grade Separated Rail Crossing	\$ 91.99 M	Schedule C
AT	VTP-IAT-32	"GO Link" - Block 18 Trail	Rutherford Rd	Major Mackenzie Dr	Multi-use pathway	\$ 0.95 M	None
AT	VTP-IAT-33	America Avenue / Brandon Gate / Melville Avenue / Drummond Drive	Highway 400	Keele Street	Buffered Bicycle Lane	\$ 0.06 M	None

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
AT	VTP-IAT-34	Barhill Rd	Rutherford Rd	Bartley Smith Greenway entrance 100m N of Rutherford	Multi-use pathway	\$ 0.05 M	None
AT	VTP-IAT-35	Major Mackenzie Drive	Jane Street	McNaughton Rd	Cycle tracks	\$ 0.04 M	None

**Table 3: Projects to Deliver in Medium-Term Timeframe**

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
Road	VTP-IR-08	Aviva Park Drive Extension / Connection to Galcat Drive	Weston Road	Pine Valley Drive	2-lane extension	\$ 1.44 M	Schedule B
Road	VTP-IR-09	Scholes Road	Steeles Avenue	Aviva Park Drive	2-lane extension	\$ 1.73 M	Schedule B
Grade Separation	VTP-IGS-05	Snidercroft Road CP Rail Crossing	CP Rail Line	CP Rail Line	Grade Separated Rail Crossing	\$ 97.57 M	Schedule C
Road	VTP-IR-10	Grand Trunk Avenue	Princess Isabella Court	District Ave	2-lane extension	\$ 0.98 M	Schedule B
Road	VTP-IR-11	Thomas Cook Avenue	Randolph Drive	Valley Vista Drive	2-lane extension	\$ 1.44 M	Schedule B
Grade Separation	VTP-IGS-06	Huntington Road CP Rail Crossing North of Nashville Rd	CP Rail Line	CP Rail Line	Grade Separated Rail Crossing	\$ 41.21 M	Schedule C
Grade Separation	VTP-IGS-07	Nashville Road CP Rail Crossing east of Huntington	CP Rail Line	CP Rail Line	Grade Separated Rail Crossing	\$ 41.21 M	Schedule C

**Table 4: Projects to Deliver in Long-Term Timeframe**

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
Road	VTP-IR-12	McNaughton Road Improvements (West of Keele Street)	Major Mackenzie Drive	Keele Street	Road Improvement	\$ 11.13 M	N/A
Road	VTP-IR-13	John Lawrie Street	Huntington Road	Highway 27	New road	\$ 0.79 M	Schedule C



**Table 5: Projects to Deliver with Development**

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
Road	VTP-IR-13	Bass Pro Mills	Highway 400	Weston Road	New road	\$ 29.26 M	Schedule C
Road	VTP-IR-14	Caldari Road	Riverock Gate	Rutherford Road	New road	\$ 1.15 M	Schedule B
Road	VTP-IR-15	Kirby GO Station Road Network / Vista Gate Extension	Keele Street	GO Station	New road	\$ 0.36 M	Schedule B
Road	VTP-IR-16	Maplecrete Road	Portage Parkway	Barnes Court	2-lane extension / new road	\$ 1.53 M	Schedule B
Road	VTP-IR-17	Ortona Court	Rivermede Rd	340M South Rivermede	2-lane widening	\$ 1.18 M	Schedule B
Road	VTP-IR-18	Riverock Gate	Jane Street	Caldari Road	2-lane widening	\$ 0.61 M	Schedule B
Road	VTP-IR-19	Barnes Court	Maplecrete Road	Creditstone Road	2-lane extension / improvements	\$ 5.49 M	Schedule C
Road	VTP-IR-20	Block 27 Collector Road Network	Block 27	Block 27	New road network	\$ 99.03 M	Schedule C
Road	VTP-IR-21	Block 34 Collector Road Network	Block 34	Block 34	New road network	\$ 30.22 M	Schedule C
Road	VTP-IR-22	Block 35 Collector Road Network	Block 35	Block 35	New road network	\$ 52.34 M	Schedule C
Road	VTP-IR-23	Block 41 Collector Road Network	Block 41	Block 41	New road network	\$ 22.97 M	Schedule C
Road	VTP-IR-24	Block 59 North/South Collector Road Network	Block 59	Block 59	New road network	\$ 27.59 M	Schedule C
Road	VTP-IR-25	Block 60 Collector Road Network (McGillivray Road)	Block 60	Block 60	New road network	\$ 70.08 M	Schedule C
Road	VTP-IR-26	Block 60 East Collector Road Network (Residential)	Block 60 East	Block 60 East	New road network	\$ 8.46 M	Schedule C
Road	VTP-IR-27	Commerce Street	Applemill Road	Exchange Avenue	2-lane extension	\$ 10.11 M	Schedule C
Road	VTP-IR-28	Doughton Road	Commerce Street	Creditstone Road	2-lane extension / improvements	\$ 23.61 M	Schedule C
Road	VTP-IR-29	Edgeley Boulevard	Portage Parkway	Exchange Avenue	Extension / Improvement	\$ 34.43 M	Schedule C
Road	VTP-IR-30	Huntington Road	Nashville Road	Kirby Road	Road improvements	\$ 30.35 M	Schedule C
Road	VTP-IR-31	Interchange Way	Highway 400	Creditstone Road	New road / 4-lane widening	\$ 61.25 M	Schedule C
Road	VTP-IR-32	Kirby Road	Jane Street	Dufferin Street	4-lane widening	\$ 79.44 M	Schedule C
Road	VTP-IR-33	Kirby Road	Weston Road	Jane Street	4-lane widening	\$ 40.11 M	Schedule C
Road	VTP-IR-34	Kirby Road	Highway 27	Weston Road	Reconstruction	\$ 119.17 M	Schedule C
Road	VTP-IR-35	Kleinburg-Nashville Focus Area Collector Network	Block 62/55	Block 62/55	New road network	\$ 21.50 M	Schedule C



Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
Road	VTP-IR-36	Maplecrete Road	Highway 7	Peelar Road	2-lane extension / widening	\$ 14.81 M	Schedule C
Grade Separation	VTP-IGS-06	McGillivray Road	CP Rail Line	CP Rail Line	Grade Separated Rail Crossing	\$ 41.60 M	Schedule C
Road	VTP-IR-37	Millway Avenue (South)	Highway 7	Peelar Road	4-lane extension	\$ 20.62 M	Schedule C
Road	VTP-IR-38	Ortona Court	490M South Rivermede	Highway 7	New road	\$ 8.26 M	Schedule C
Road	VTP-IR-39	Ortona Court	340M South Rivermede	490M South Rivermede	New road	\$ 6.87 M	Schedule C
Road	VTP-IR-40	Peelar Road / Exchange Avenue	Commerce Street	Creditstone Road	2-lane extension / improvements	\$ 23.53 M	Schedule C
Road	VTP-IR-41	Pinewood Drive Extension	Powell Road	Yonge Street	New road	\$ 11.40 M	Schedule C
Road	VTP-IR-42	Primary East West Collector (Steeles Avenue West Secondary Plan)	Jane Street	Keele Street	4-lane new road	\$ 11.52 M	Schedule C
Road	VTP-IR-43	Promenade Secondary Plan - Collector Road Network	Promenade Circle	Promenade Circle	New road network	\$ 8.54 M	Schedule C
Road	VTP-IR-44	Royal Palm Drive Extension	Hilda Avenue	Yonge Street	New road	\$ 30.82 M	Schedule C
Road	VTP-IR-45	Vellore Woods Boulevard / Creditview Road Extension	Rutherford Road	Langstaff Road	2-lane extension	\$ 12.16 M	Schedule C
Road	VTP-IR-46	Hill Street	Eagle Rock Way	Hill Street	2-lane extension	\$ 5.93 M	Schedule C
Road	VTP-IR-47	Vaughan Mills Secondary Plan – Collector Road Network	Vaughan Mills SP Area	Vaughan Mills SP Area	New road network	\$ 23.57 M	Schedule C

Table 6: York Region Projects

Type	Improvement ID	Project	From	To	Improvement	Project Cost Estimate	Proposed MCEA Schedule
Road - YR	VTP-IR-YR-01	Highway 7	Kipling Avenue	Helen Street	6-lane widening	\$ 9.79 M	N/A
Road - YR	VTP-IR-YR-02	Rutherford Road	Jane Street	Bathurst Street	6-lane widening	\$ 29.91 M	N/A
Road - YR	VTP-IR-YR-03	Major Mackenzie Drive	Highway 400	Jane Street	6-lane widening	\$ 4.72 M	N/A
Road - YR	VTP-IR-YR-04	Teston Road	Pine Valley Drive	Weston Road	4-lane widening	\$ 10.28 M	N/A
Road - YR	VTP-IR-YR-05	Highway 27	Major Mackenzie Drive	North City limits	4-lane widening	\$ 35.24 M	N/A
Road - YR	VTP-IR-YR-06	Bathurst Street	Autumn Hill Boulevard	Kirby Road	6-lane widening	\$ 25.70 M	N/A
Road - YR	VTP-IR-YR-07	Dufferin Street	Major Mackenzie Drive	Teston Road	4-lane widening	\$ 9.98 M	N/A
Road - YR	VTP-IR-YR-08	Highway 50	Rutherford Road	GTA West	6-lane widening	\$ 20.07 M	N/A
Road - YR	VTP-IR-YR-09	Highway 50	Steeles Avenue	Highway 7	6-lane widening	\$ 10.28 M	N/A





<b>Road - YR</b>	VTP-IR-YR-10	Jane Street	Teston Road	King-Vaughan Road	4-lane widening	\$ 19.37 M	N/A
<b>Road - YR</b>	VTP-IR-YR-11	Keele Street	Steeles Avenue	Highway 407	6-lane widening	\$ 6.36 M	N/A
<b>Road - YR</b>	VTP-IR-YR-12	Keele Street	Highway 7	Rutherford Road	6-lane widening	\$ 20.07 M	N/A
<b>Road - YR</b>	VTP-IR-YR-13	Teston Road	Keele Street	Dufferin Street	4-lane extension	\$ 7.34 M	N/A
<b>Road - YR</b>	VTP-IR-YR-14	Langstaff Road	Weston Road	Dufferin Street	6-lane extension & widening	\$ 370.75 M	N/A
<b>Road - YR</b>	VTP-IR-YR-15	Dufferin Street	Langstaff Road	Rutherford Road	6-lane widening	\$ 10.28 M	N/A
<b>Road - YR</b>	VTP-IR-YR-16	Pine Valley Drive	Rutherford Road	Teston Road	4-lane widening	\$ 21.80 M	N/A
<b>Road - YR</b>	VTP-IR-YR-17	Teston Road	Dufferin Street	Bathurst Street	4-lane widening	\$ 9.59 M	N/A
<b>Road - YR</b>	VTP-IR-YR-18	Weston Road	Teston Road	King-Vaughan Road	4-lane widening	\$ 19.70 M	N/A
<b>Road - YR</b>	VTP-IR-YR-19	King-Vaughan Road	Weston Road	Bathurst Street	4-lane widening	\$ 38.27 M	N/A
<b>Grade Separation - YR</b>	VTP-IGS-YR-01	Rutherford Road CP Rail Crossing west of Highway 27	CP Rail Line	CP Rail Line	Grade Separated Rail Crossing	N/A	N/A
<b>Grade Separation - YR</b>	VTP-IGS-YR-02	Teston Road	Barrie GO	Barrie GO	Grade Separated Rail Crossing	N/A	N/A
<b>Grade Separation - YR</b>	VTP-IGS-YR-02	Langstaff Road	Barrie GO	Barrie GO	Grade Separated Rail Crossing	N/A	N/A