Appendix
Recommended
Improvement
Costs and Scores

| Unit Price Schedule |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ID | Description | Unit | Unit Value* | Comments/Assumptions |
| 1 | Signed Bike Route Sharrow Lane Markings | Linear Km | \$ 3,700 | Price for both sides of the road, includes route signs every 330 m ( $\$ 1,500 / \mathrm{km}$ both sides), and sharrow stencil every 75 m as per Ministry Guidelines (Painted $\$ 75$ each $\times 26 / \mathrm{km}=\$ 1,950$ in table) If thermoplastic type product is used assume $\$ 250$ / each $\times 26=\$ 6,500$ source Flint Trading Inc. |
| 2 | Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing | Linear Km | \$ 253,600 | Price for both sides of the road, 1.5 m paved shoulder +0.5 to 1.0 m paved buffer, assumes cycling project pays for additional granular base, asphalt, edge lines and signs (buffer zone framed by white edge lines) |
| 3 | Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs | Linear Km | \$ 12,170 | Price for both sides of the road, includes signs, stencils and edge line. Price is for conventional paint, (assumes painted lane line at $\$ 1 / m+\$ 75$ / symbol x $26+\$ 2000$ for signs)increase budget to $\$ 20,000 / \mathrm{km}$ for Thermoplastic) e.g. lane line in thermo is $\$ 5.50 / \mathrm{m}$ compared to $\$ 1.00 / \mathrm{m}$ for paint |
| 4 | Conventional 1.5m-1.8m Bicycle Lanes in Conjunction with a New Road or Road Reconstruction Project | Linear Km | \$ 253,600 | Price for both sides of the road, assumes 1.5 m bike lanes on both sides of the roadway $(1.5 \mathrm{~m} \times 2$ sides $=3.0 \mathrm{~m})$. Includes catch basin leads, asphalt, signs, pavement markings sub-base only. Road project funds all other improvements |
| 5 | Buffered Bicycle Lane with Flex Bollards - Assumed New Road or Road Reconstruction/Widening Already Planned | Linear Km | \$ 382,430 | Price for both sides of the road, assumes 1.5 m bike lanes + flex bollards centered in hatched buffer zone at 10 m intervals. Includes catch basin leads, asphalt, signs, edge line pavement markings (both sides of buffer zone) sub-base only |
| 6 | Uni-directional Cycle Tracks: Raised and Curb Separated - Retrofit Existing Roadway | Linear Km | \$ 862,240 | Both sides. Includes construction but excludes design and signal modifications. Form of cycle track and materials as well as related components such as bike signals, upgrade/modification of signal controllers, utility/lighting pole relocations, bike boxes etc. are project specific and will impact unit price |
| 7 | Two Way Active Transportation Multi-Use path within road right-of-way | Linear KM | \$ 380,410 | 3.0 m wide hard surface pathway (asphalt) within road right of way (no utility relocations). Price depends of scale / complexity of project and if existing sidewalk is being removed (i.e. crushing of existing sidewalk and compacting for trail base) |
| 8 | Hard Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in an Urban Setting (New) | Linear Km | \$ 310,000 | 3.0 m wide hard surface pathway (asphalt) within park setting (normal conditions) 90 mm asphalt depth. Price depends of scale / complexity of project. |
| 9 | Granular Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in an Urban Setting | Linear Km | \$ 175,000 | 3.0 m wide, compacted stone dust surface normal site conditions. Price depends of scale / complexity of project. |
| 10 | Upgrade existing granular surface trail to meet 3.0 m wide compacted | Linear Km | \$ 126,800 | Includes some new base work ( $25 \%$ approx.) and an average of 20 regulatory signs per kilometre. Price depends of scale and existing trail conditions e.g. width, slope, location of trail, etc. |
| 11 | Granular surfaced Multi-Use Trail in a Woodland Setting | Linear Km | \$ 150,000 | 2.4 m wide, compacted stone dust surface. Price depends of scale / complexity of project. |
| 12 | Sidewalk | Linear Km | \$ 280,000 | Price for 1.5 m concrete sidewalk. Include site prep., select utility relocation, minor drainage modifications / traffic control. |
| 13 | Signalized Intersection Optimization Improvements | each | \$ 50,000 | Price to add signal optimization improvements such as actuated weight pads and buttons at four approaches, as well as transit-signal priority at two approaches. |
| 14 | Arterial (Widening) | Linear Km | \$ 3,249,700 | Price to widen an existing roadway. |
| 15 | Collector (Extension) | Linear Km | \$ 2,730,560 | Price to extend an existing collector roadway. |
| 16 | Flex Street Reconstruction | Linear Km | \$ 2,730,560 | Reconstruction of the roadway to include flexible infrastructure including making the sidewalks flush with the roadwy and incorporating enhanced placemaking and public realm materials. |
| 17 | Roundabout Construction | each | \$ 500,000 | Cost to construct a Roundabout with pedestrian and cyclist faciilities. |
| 18 | Signalized Intersection | each | \$ 300,000 | Cost to implement a signalized intersection with auxiliary left/right-turn lanes on each approach. |
| 19 | Pedestrian Crossover - PXO Level 2 B | each | \$ 20,000 | Cost to implement an OTM Book 15 PXO Level 2 B signalized pedestrian crossover including signage, pavement markings, and signals. |
| 20 | Pedestrian Crossover - PXO Level 2 C | each | \$ 20,000 | Cost to implement an OTM Book 15 PXO Level 2 C signalized pedestrian crossover including signage, pavement markings, and signals. |
| 21 | EA Study - Class B | each | \$ 150,000 | Study cost to prepare an environmental assessment for a Class B improvement. |
| 22 | EA Study - Class C | each | \$ 275,000 | Study cost to prepare an environmental assessment for a Class C improvement. |
| *All unit prices exclude tax, contingency, design and approvals costs. |  |  |  |  |


| 10 |  | ${ }_{\text {rasamay }}$ | Recomenosas fatily | Dasaration | Promesmen |  | Prics stasaute | unt | cost | mpoomenam craseor | Pnatas | Goummeataea\% | ${ }^{\text {costrataten cost }}$ | ${ }_{\text {A Calass }}$ | Ea cost | Doal cost | ca meprasalc cost 0 | Yeporcabe cost | Resposatury |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ${ }^{\text {any Poad } 93}$ | Undabout | Paved shoulders between Highway 12 and Yonge Street with provisions for a centre turn lane. Between Yonge Street and St. Andrews Drive will have multi-use paths on both sides of the road. Between St Andrews Drive and Thompsons Road will have a multi-use path on the east side of the road. This will also coincide with intersection improvements at County Road 93 and Vindin Street. | Couny | 1.0 | ${ }^{17}$ | Linear Km | 500,00 | Capalal wesment | Shootem | 100\% s | s 500,00 | EAAtray | omplead | S 500,000 | S 500,000 | $s$ | Conymuro |
| 2 | mesesecion |  | mersesecion realign |  | Atereal | 1.0 | 14 | Each | 8 3,29,700 | Capial lovesment | Shor-Tem | $50 \%$ s | 3249,700 |  | \|s 275.00 | 4,700 | 1,762,350 | $1.762,50$ | Town |
| 3 |  |  | nessecion oreailoment | Increase the radius of the horizontal curve and renstate Bay StreetAberdeen Boulverard as the through road. Reconfigure the $T$ RW access <br>  <br> mutiuse path on the notth side of Bay 5 steet, and add a pedestrian cross-walk on Abercten south of the curb where sightines permi | Colvecor | 1.0 | ${ }^{15}$ | Each | 82,70.560 | Capital wesment | Shoot-em | $75 \%$ s | 2,70.560 |  | orehensive mbined with 3, and 7 . | S 2,70.500 | 2,047,920 | ${ }^{682840}$ | Town |
| 4 | Roadway | Yonge street | Truck Route Designaion |  | Anterial | 1.0 | 1 | Linear Km | 3,700 | Capial losesment | Siotiem | \%\% 5 | 3,700 |  | s . | 3,700 | s | 3,700 | wn |
| 5 | mersection | Yorese Steel IEghn Street | Stonal opinimation |  | Aterial | 1.0 | ${ }^{13}$ | Eaan | 50.000 | Capial lvestment | T-Tem | \%\% 5 | $5 \quad 50.000 \mathrm{~A}$ |  | s - | 50,00 | s - s | 50,000 | Town |
| 6 | menescecion |  | med lesesction |  <br>  | Aterial | 1.0 | ${ }^{18}$ | Each | s 300,000 | Capiala lnesment | MidTem | 75\% | 300,00 |  | S 275.00 | 575000 | s 431,250 | 143,50 | Toun |
| 7 |  | wiliam Street | rene | Convert 3-lane sections to 1 lane per direction + centre turn lane (except from Yonge Street to north of Chaingate Drive, where 2 SB lanes should be maintained to accommodate truck traffic and address operational impacts associated with the vertical grade). Widen 2-lane section to 3 lanes to construct a centre turn lane. Provisions for separated bike lanes and sidewalks on both sides of the road should be made. | Atereal | 1.6 | 14 | Linear Km | [ $53.29,700$ | Capatal wesment | Midiem | 50\% s | 5.102029 |  | $\begin{aligned} & \text { ensive } \\ & \text { ned with } \\ & \text { and } 7 \text {. } \end{aligned}$ | S 5,020,29 | s 2.551.015 | 2.55,015 | Town |
| : | mersection | Vindin Street / Harbourview Drive (Intersection) | mesesecior reasiomment |  | Aterial | 1.0 | 14 | Each | s 3,29,700 | Capital l wesment | MidTem | 75\% s | 3.499700 | Ot | chen | 249700 | S 2.4787275 | ${ }^{812,425}$ | Town |
| 9 | mersection |  | mesesection reaigment |  | Atereial | 1.0 | 14 | Each | 700 | Capalal wesment | Miderem | 75\% s | 19.700 |  |  | 29,700 | 2,437275 | ${ }^{812,425}$ | Town |
| 10 | Inesesecion |  | Siganied dhesesecion |  | Aterial | 1.0 | 18 | Each | 00,000 | Capial Invesment | MidTem | $100 \%$ s | .000 A |  |  | S 300,000 | S 300,000 | s | Town |
| 11 | Inesesecion | (enemead 1 Ning Street | Sisalized hinesection |  | Ateial | 1.0 | 18 | Each | ¢ 300,000 | Capital wesesment | Tem | 100\% 5 | 300,00 |  | s - | 300,00 | 300,000 | s | Town |
| 12 | Roaduy | Neen Road 1 | New Road |  | Colear | 23 | ${ }^{15}$ | Linear Km | \$ 2,70,560 |  | Modem | $100 \%$ s | 6,280,288 |  | S 275,000 | S 6,55,288 | s 6.55,288 | s | Town |
| 13 | Roadway | New Road 2 | New Road |  | Looal | 0.9 | 15 | farkm | \$ 2,73,500 | Capial luesment | Midiem | $100 \%$ | 2,457,504 |  | s - | S 2,457,504 | 2,45,504 | s | \%n |
| 14 | mersestion |  | Sigale | Implement a signalized intersection to connect the new residential development north of Highway 12 with commercial/employment areas south of the highway. Intersection layout and design to be determined at the site development application stage, but should include provisions for dedicated bike lanes and pedestrian facilities. | Higmay | 1.0 | ${ }^{18}$ | Each | -30,000 | Capital wesment | Mdidem | 100\% s | 300,00 |  | s . | 300,00 | 300,00 | s | Town |
| 15 | menesection |  | Roundaout | Implement a signle-lane roundabout to convert the existing offset intersection into one roundabout intersection. Provisions for dedicated bike lanes on boht sides of the road along Fuller Avenue, multi-use path connections along Brunelle Sideroad, and Sharrows on Midland Point Road should be made. The roundabout design should allow for the movement of transit and commercial vehicles through the intersection. | Aterial | 1.0 | ${ }^{17}$ | Each | 5 500,000 | Capail wnesment | LongTem | $75 \%$ | 500.000 |  | $\begin{aligned} & \text { prehensive } \\ & \text { ombined with } \\ & 8,9, \text { and } 15 \text {. } \end{aligned}$ | S 500,00 | S 375,000 | ${ }^{125,00}$ | Town |
| 16 | miesesecion | Penemanusisere Read / Husel | Pedestrian Cossosuer |  | ${ }_{\text {coledor }}$ | 1.0 | 19 | Eaan | 20.000 | Capial livestment | Shor.tem | $25 \%$ s | 20.000 A |  | s - | 20,00 | S 5.000 | 15.000 | mon |
| 17 | miesesecion | Fouth Streat Hugeal Avenue | Pedestrian C Cossouer |  | Coleatie | 1.0 | 19 | Each | s 20,000 | Capalal wresment | Shor-Temm | $25 \%$ s | s 20,000 |  | s - | s 20.000 ${ }^{\text {s }}$ | S 5.000 | 15.000 | fomn |
| 18 | mesesection | Fount Stret Victora Steet | Pedestrian Cososover |  | Aterial | 1.0 | 19 | Each | s 20,000 | Capalal wosesment | Shortiem | $25 \%$ s | s 20,00 |  | $\mathrm{s}^{5}$ - | s 20.000 | s 5,000 | 15.000 | Tom |
| 19 | Inessection | First steet/ Elizaens Street | Pedestrian Cososover |  | Coloseor | 1.0 | 19 | Each | s 20,000 | Capial wresement | Shot-Tem | $25 \%$ s | 20.000 A |  | s. | 20.00 | S 5.000 | 15.000 | Town |
| 20 | Inesesecion | Many Steel Itusel Avenue | Pedestrita C Cossouer |  | Coloceor | 1.0 | ${ }^{20}$ | Each | 20,00 | Capaial wresment | Shor.tem | $25 \%$ s | s 20,00 |  | s - | 20,00 | s 5,000 | 15,000 | Town |
| 21 | Inesesecion | Many Steet/ Bassiore Dive | Pesiestian Cossoser |  | Ateial | 1.0 | 19 | Each | s 20,000 | Capial lnvesment | Stoot-Tem | $25 \%$ 5 | s 20,000 |  | s - | 20,000 | 5.000 | 15,000 | fown |
| ${ }^{22}$ | Inesesection | Many Streel Y Yones street | Pedestrita C Cossover |  | Ateial | 1.0 | 19 | Each | s 20,000 | Capial wresesment | Slontiem | 25\% s | 20.000 |  | s - | 20,00 | 5.000 | 15.000 | Town |
| ${ }^{23}$ | Inesesecion | wilam Steet 8 Bay Steet | Petestrita C Cossover |  | Aterial | 1.0 | 19 | Each | s 20,000 | Capial wresement | Snot-Tem | $75 \%$ s | 20.000 |  | s - | 20,00 | s 15,000 | 5,000 | Town |
| ${ }^{24}$ | Inessescion | Wiliam Streat /Husel Avene | Peodestian Cososouer |  | Ataieial | 1.0 | 19 | Each | s 20,000 | Capail wnesment | Stortiem | $75 \%$ \% | S $\quad 20.000 \mathrm{~A}$ |  | $5 \cdot$ | 20,000 | S 15,000 | 5.00 | Town |
| 25 | mesesection | Wwiem Street Soots Street | Pedestritan Cossosor |  | Anerial | 1.0 | ${ }^{19}$ | Each | s 20,000 | Capaial wesesment | Shor-Tem | $75 \%$ s | 20.000 A |  | s - | s 20,000 s | s 15,000 | 5,000 | Town |
| 26 | mesesection | Wwilam Stret/ Hany Street | Pedestritan Cossosoer |  | Aterial | 1.0 | 19 | Ean | s 20,000 | Capaial wesment | Stor-tem | 25\% s | 20.000 A |  | $s$ - | 20.00 | s 5,000 | 15,000 | Town |
| ${ }^{27}$ | cysing | Fuleateone | Paneedike Lane | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between the existing bike lane terminus at Midland Point Road south to Harbourview Drive. This work should be coordinated with Project No. 9 - the Fuller Avenue / Harbourview Drive intersection re-alignment. | Aneral | ${ }^{3.7}$ | 4 | Linear Km | 25,600 | Capial luestsent | Midiem | $75 \%$ / | ${ }^{982} 279$ | A+ | s - | S22,279 | s 696,20 | 232.70 | Town |
| ${ }^{28}$ | Eyding | Hatounsew Dive | Panined Bke Lane | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between Fuller alignment, as well as Project No. 8 - The Vindin Street / Harbourview Drive intersection re-alignment. | Atereal | 1.3 |  | Lnear Km | S 253,600 | Remaba Adtion | Midiem | 75\% s | 322,50 | A+ | s - | 322,50 | s 24,998 | ${ }^{80,633}$ | fown |
| 29 | Cysing | Vindin Street | Painee | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between Harbourview Drive and County Road 93 | Aterial | 2.5 |  | Linear Km | S 253,00 | Remaba Adition | Shoot Tem | 50\% 5 | ${ }_{621,502}$ A+ | A+ | s. ${ }^{\text {s }}$ | ${ }^{621,502}$ | s 30,751 | ${ }^{310,51}$ | Town |
| ${ }^{30}$ | cyding | astreet | Pained Sike Lane | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between 4 th Street to Penetanguishene Road. This work should be coordinated with Project No. 18 - the Fourth Street / Victoria Street pedestrian crossing improvement. | esor | 1.8 |  | Linear Km | \$ 253,00 | Remab Addrion | Shortiem | $25 \%$ s | 488.150 | A+ | $\mathrm{s}^{5}$ - | 488.50 | s 112,038 | \%,13 | fown |
| 31 | Cyding | Eghth Street | Pained Bike tane | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between Victoria <br> Street and Yonge Street | Collector | 1.1 |  | 4 Linear km | / s 25,600 | Refaba Addition | Stont.eem | $25 \%$ s | s $\quad 286,429$ At | ${ }^{\text {A+ }}$ | ${ }^{5} \cdot{ }^{\text {s }}$ | 286,42 | s 71,007 | 214,822 | Town |
| ${ }^{32}$ | cysing | goal Avenue | Lane | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between Eighth St and Penetanguishene Road/Mountainview Plaza Midland. This work should be coordinated with Project No. 16 - the Penetanguishene Road and Penetanguishene Road/Mountainv / Hugel Avenue pedestrian crossover. | coecor | 27 |  | Linear Km | 25,600 | Remaba Addition | Sot.tem | $25 \%$ s | $6^{68,03}$ | A+ | s - | 687003 | s 171,751 | 515,52 | Town |
| ${ }^{3}$ | cysing | Many Steeet | Panine Bike Lane | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between Yonge Street and St. Theresa's Catholic High School. This work should be coorindated with Project No. 22 - the Manly Street / Yonge Street | Collecor | 1.5 |  | Lnear Km | 253,600 | Remab Addition | Tem | 25\% 5 | ${ }^{387,53}$ | A+ | 5. | 387,35 | 96,38 | 20.515 | fown |
| ${ }^{34}$ | cysting | Calower Buuevard | Painees Bie Lane | Suile in | Collesor | 1.1 |  | 3 Linar Km | /s ${ }^{2,170}$ | Minofadition | Shontiem | $25 \%$ s | S $\quad 13.880^{\text {At }}$ | ${ }^{\text {A+ }}$ | ${ }^{5} \cdot{ }^{\text {c }}$ | 13.870 | 5 3,468 | ${ }^{10.003}$ | Town |
| ${ }^{35}$ | cysing | WRoad 2 | 樶 | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between Pratt Avenue and King Street. This should be coordinated with Project No. 13 - the New Road 2 which is a new roadway to serve a new development area. | ${ }^{\text {Loaal }}$ | 0.9 |  | Linearkm | 253,60 | Cap | Mdi.tem | 100\%/s | ${ }^{23} 3,35$ |  | $s$ - | 238,315 | s 238,315 | s | Town |
| ${ }^{36}$ | cysting | RRoad | Panted Bke Lane | Build on-road painted bike lanes on both sides of the road in both directions with appropriate lane markings and signage between Hanson Road 1 which is a new east-west collector roadway to serve the Hanson Development lands. This should also be coordinated with Project <br> No. 14 - the Highway 12 / Beamish Road intersection signalization | Coloceor | 0.8 |  | Hearkm | s 255,600 | Remab Addition | MidTem | 100\% s | 203,155 | At | s - | s 203,155 | s 203,155 | s - | Town |
| ${ }^{37}$ | Mutivese Pat | Midanaf Poitr Road | Mulitus Pah |  | ${ }_{\text {colesor }}$ | ${ }^{3.3}$ |  | Linaar km | ¢ ${ }^{175,000}$ | Remaba Adstion | Shortiem | $25 \%$ | 5 583,45 |  | - | s 583,145 | \% 1457.86 | ${ }_{477,39}$ | Town |
| ${ }^{38}$ | Criving | Everoto Road | Sinoed Route |  | Coleter | 1.7 |  | 1 Linarkm | ns 3,700 | Mioratadion | Shoritem | $25 \% / 5$ | 6.178 | A+ |  | 6,178 | s 1.545 | 4.654 | Town |
| ${ }^{39}$ | Cyding | Manls Street | Signef Roule |  | Looal | 0.8 |  |  |  | dion | Shortiem | 258 | 3.123 |  |  | ${ }^{3,123}$ | s 781 s | 243 | Town |




