City of Toronto:
Road Engineering Design Guidelines

LANE WIDTHS GUIDELINE V3.0

TORONTO

STREETS ARE
VITAL PLACES IN TORONTO.

HOW OUR STREETS ARE
DESIGNED SHOULD
IMPROVE SAFETY,
MOBILITY, AND
ACCESSIBILITY FOR ALL.

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BACKGROUND

In early 2014, Transportation Services initiated a review of the Division's design guidelines and standards to move our organization in a direction consistent with the transportation departments of many other large North American cities. Road design engineers in Canada have historically relied on the Transportation Association of Canada's (TAC) Geometric Design Guide for Canadian Roads (GDGCR) as the basis for engineering road designs.

It has been determined that the City of Toronto would benefit from more context-sensitive and in-house engineering design guidelines, including components of Vision Zero, active transportation, and other complete street principles - an approach taken by several other municipalities.

Document Control / Version History

Table 1: Version History

Version	Date Published
Version 1.0	November 2014
Version 1.0.1	December 2014
Version 1.0.2	January 2015
Version 2.0	June 2017
Version 2.0.1	May 2018
Version 3.0 [Current Guideline]	November 2025

KIPLING AVENUE, TORONTO

1.0 INTRODUCTION

Lane widths have impacts on vehicle types, vehicle speeds, pedestrian crossing distances, on-street parking, transit routes, and accommodation for cyclists. All these factors must be considered and balanced when determining the appropriate width of lanes.

This guideline was developed to provide appropriate motor vehicle accommodation while improving safety for all road users, prioritizing space for cyclists, and making effective use of the limited right-of-way and pavement width. In situations where curbs can be realigned to right-size lane widths and reduce the pavement width, there are opportunities to shorten crossing distances and minimize vulnerable road users' exposure to vehicular traffic. The additional space gained in the boulevards also offers benefits for improving the streetscape within the right-of-way.

There are many benefits of rightsizing and reducing lane widths. Research conducted by various organizations has found that there is a direct correlation between lane widths and vehicle speeds.

1. Wide lanes allow for and can encourage vehicles to travel at excessively high speeds. Implementing lane widths that are appropriately sized encourages drivers to travel slower in accordance with the speed limit, resulting in reduced impact speeds in the event of a collision and providing drivers with more reaction time.
2. Reducing lane widths also allows for space within the road to better accommodate cyclists by providing urban shoulders, wide shared curb lanes, or by providing dedicated cycling facilities where possible.

Figure 1: Right-sizing of Lane Widths on Kipling Avenue Corridor

1.1 Application of the Guideline

The lane width guideline applies to roads with continuously marked vehicular travel lanes, bike lanes, and cycle tracks.

Two-way local and collector residential roads are typically measured using pavement width. This item will be discussed in the Pavement Width Guideline (to be developed).

The lane width guideline shall be applied in the following scenarios:

- All projects that involve the application or reapplication of lane markings including, but not limited to, new road construction, road reconstruction, road rehabilitation, road resurfacing, cycle track/bike lane marking, quick-build corridor improvements and large-scale utility cut repairs.
- Road corridors identified by Transportation Services.

In these aforementioned instances, lane widths shall be sized to improve the safety and mobility of all users. Where there is an opportunity to move curbs, an appropriate pedestrian clearway width shall be balanced against space allocated to vehicular travel lanes and prioritized over non-vehicular travel lane-related items such as lane buffers.

Lane widths must be designed to be appropriately sized for motor vehicles, and bicycles along a road segment. Lane widths are determined using various design controls such as road classification, existing and planned dedicated cycling facilities, speed limit, surface transit routes, and truck volumes. Good engineering judgement must be used to ensure that lane widths are not undersized or oversized.

District Traffic Operations may recommend minor deviations from the guideline to address site-specific safety or operational issues. Significant deviations from the guideline shall be brought to the Safety and Mobility Committee (SMC) - Transportation Engineering Subcommittee (TES) for endorsement.

1.2 Definitions

Lane Width

A lane width is the cross-sectional dimension of a lane, perpendicular to the direction of travel, measured from the centre of lane markings and the faces of curbs.

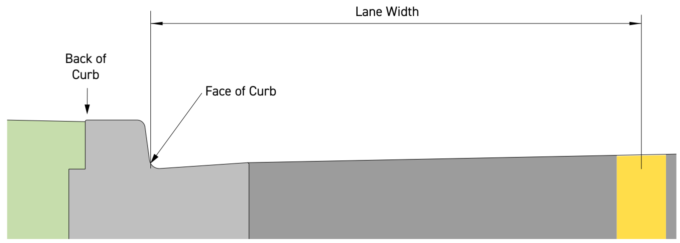


Figure 2: Lane Width Sketch

Pavement Width

Pavement width is the cross-sectional dimension of a road, perpendicular to the direction of travel, measured from the face of the curb on one side to the face of the curb on the other side. Where curbs are not provided, pavement width is measured to the edge of pavement.

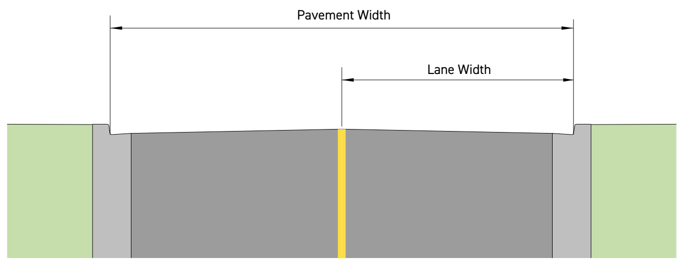


Figure 3: Lane Width vs. Pavement Width

Vehicular Travel Lane

Vehicular travel lanes are lanes used by motor vehicles travelling along a route including curb lanes, through lanes, turn lanes, priority bus lanes and High Occupancy Vehicle (HOV) lanes. Bus bays not used as turn lanes; bike lanes, cycle tracks, or multi-use trails; and dedicated parking lanes are not considered vehicular travel lanes.

Pedestrian Clearway

A pedestrian clearway is a zone on a sidewalk that is dedicated to pedestrian movement and is free and clear of any obstacles so that people of all ages and abilities can travel in a direct, continuous path.

High Truck Volume Routes

Intersections and mid-block locations with 8-hour two-way truck volumes of 700 or more are considered to have high truck volumes. A road segment with a series of locations that have high two-way truck volumes is indicative of a corridor with high truck volumes.

Minimum Lane Width

Minimum widths for lanes and buffers are necessary for the safe and efficient day-to-day operations for vehicles.

Target Lane Width

Target widths provide additional comfort for vehicles and/or minimize excess vehicle lane widths and shall be implemented as per the lane width priorities, in Section 3.1.2: Lane Width Priorities.

Maximum Lane Width

Lanes and buffers can be widened up to the maximum widths as per the lane width priorities in Section 3.1.2: Lane Width Priorities, in order to appropriately allocate excess road space.

Lane Types

Refer to Section 2.0: Lane Types for the definition of various lane types such as curb lane, through lane, urban shoulder, turn lane, dedicated parking lane, and shared curb lane.

MIDLAND AVENUE, TORONTO

2.0 LANE TYPES

This section describes the various types of lanes and buffers found within the road, as well as their associated minimum, target, and maximum widths. This section should be read in conjunction with Sections 3.0: Lane Width Design, 4.0: Design Controls & Considerations, and 5.0: Navigating The Guideline - Examples And Scenarios For Application of this guideline.

2.1 Curb Lane

A curb lane is the vehicular travel lane closest to the curb on the right side, in the direction of travel. The facilities noted in the list below are not considered curb lanes. In scenarios where one or more of these facilities are located adjacent to the curb, the vehicular travel lane adjacent to these facilities shall be considered the curb lane:

- Urban shoulders;
- Dedicated cycling facilities;
- Dedicated parking lanes;
- Dedicated right-turn lanes;
- Bus bays;
- Mid-block bus bays;
- High occupancy vehicle lanes; and,
- Priority bus lanes.

A curb lane should never be narrower than the adjacent through lanes.

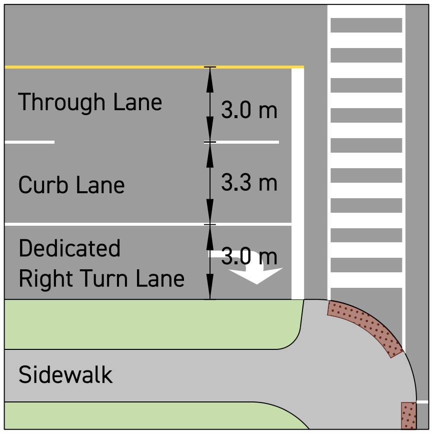
Table 2: Curb Lane Widths

<table>
<tr><th></th><th></th><th></th><th>Min (m)</th><th>Target (m)</th><th>Max (m)</th></tr>
<tr><td rowspan="3">Curb Lane</td><td rowspan="2">50 km/h or less</td><td>Not adjacent to the lane types in Note 1</td><td colspan="3">3.3</td></tr>
<tr><td>Adjacent to the lane types in Note 1</td><td>3.0</td><td colspan="2">3.3</td></tr>
<tr><td colspan="2">60 km/h or more</td><td>3.3</td><td colspan="2">3.5</td></tr>
</table>

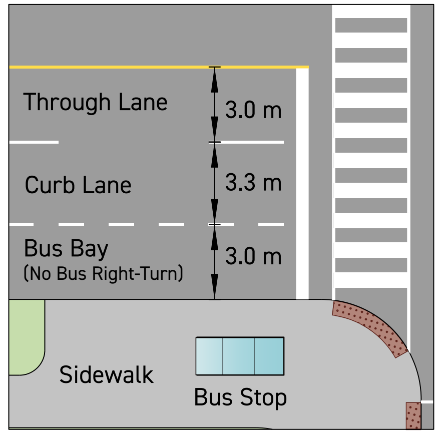
Note 1 = Priority Bus Lane, Dedicated Right-Turn Lane or Bus Bay with Scheduled TTC Bus Right-turns, HOV Lane or Queue Jump Lane.

Roads with a posted speed limit of 50 km/h or less:

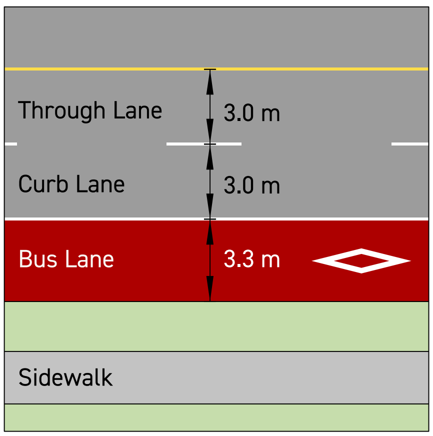
- The target width for curb lanes is 3.3 m.
- The curb lane may be reduced to 3.0 m in constrained conditions at localized sections in consultation with District Traffic Operations.
- Curb lanes adjacent to mid-block bus bays and far-side bus bays shall be 3.3 m (mid-block and far-side bus bays should be 3.0 m wide).



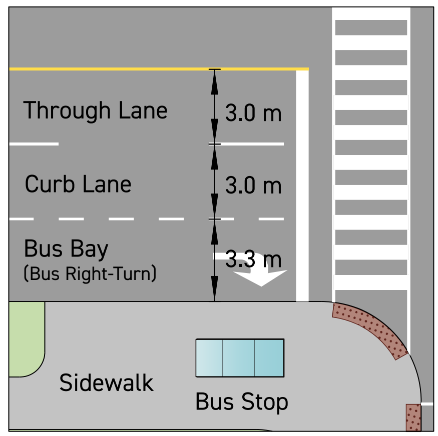
Minimum curb lane adjacent to a dedicated right-turn lane.



Minimum curb lane adjacent to a bus bay; no bus right turn.



Minimum curb lane adjacent to a priority bus lane or HOV lane.



Minimum curbs lane adjacent to a bus bay with TTC bus right-turns.

Figure 4: Minimum Width of Curb Lanes (50 km/h or less)

Roads with posted speed limit of 60 km/h or more:

- Curb lanes on roads with a speed limit of 60 km/h should be 3.5 m where possible. In constrained conditions, the curb lane can be reduced to 3.3 m.
- The curb lane can be reduced to 3.3 m to accommodate an urban shoulder (minimum 1.2 m).
- The curb lane may be reduced as low as 3.0 m in constrained conditions at localized sections in consultation with District Traffic Operations.

2.1.1 Shared Curb Lane

A shared curb lane is a curb lane that is not adjacent to an urban shoulder or turn lane, and where no dedicated cycling facilities are present within the right-of-way (ROW), resulting in cyclists and drivers sharing the lane.

Table 3: Shared Curb Lane Widths

<table>
<tr><th></th><th></th><th>Min (m)</th><th>Target (m)</th><th>Max (m)</th></tr>
<tr><td>Shared Curb Lane</td><td>Shared Curb Lane; no urban shoulder or cycling facility within the ROW; mid-block sections only</td><td>3.3</td><td colspan="2">4.0</td></tr>
</table>

- Shared curb lanes without an adjacent urban shoulder should be 3.3 m to 4.0 m wide.
- Shared curb lanes shall be implemented on mid-block sections only as per the lane width priorities; refer to Section 3.1.2: Lane Width Priorities
- Shared curb lanes may be reduced as low as 3.0 m in constrained conditions at localized sections in consultation with District Traffic Operations.

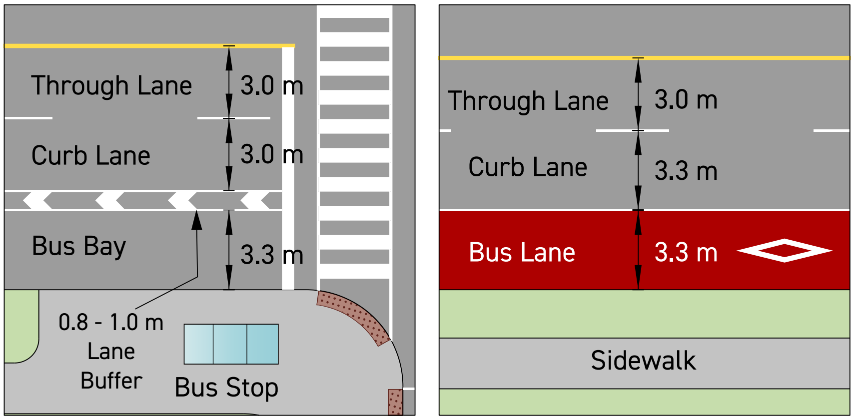
2.1.2 Curb Lane on High Truck Volume Routes

Table 4: Curb Lane on High Truck Volume Routes

<table>
<tr><th></th><th></th><th></th><th>Min (m)</th><th>Target (m)</th><th>Max (m)</th></tr>
<tr><td rowspan="3">Curb Lane on High Truck Volume Routes</td><td rowspan="2">50 km/h or less</td><td>Not adjacent to the lane types in Note 1</td><td colspan="3">3.3</td></tr>
<tr><td>Adjacent to the lane types in Note 1</td><td>3.0</td><td colspan="2">3.3</td></tr>
<tr><td colspan="2">60 km/h or more</td><td>3.3</td><td colspan="2">3.5</td></tr>
</table>

Note 1 = Priority Bus Lane, Dedicated Right-Turn Lane or Bus Bay with Scheduled TTC Bus Right-turns, HOV Lane or Queue Jump Lane.

- The target curb lane width on high truck volume routes is 3.3 m.
- 3.0 m curb lanes on high truck volume routes can be implemented in the following scenarios as per the lane width priorities; refer to Section 3.1.2: Lane Width Priorities
  - There is space for lane buffers with hatching (0.8 m – 1.0 m). Refer to Section 5.2 - Example 2 for the application scenario.
  - Where it is adjacent to a priority bus lane, dedicated right-turn lane or bus bay with scheduled TTC bus right-turns, HOV lane, or queue jump lane.



Minimum curb lane adjacent to a buffer on High Truck Volume Routes.

Target/Maximum curb lane adjacent to a priority bus lane on High Truck Volume Routes.

Figure 5: Width of Curb Lanes on High Truck Volume Routes (50 km/h or less)

2.2 Through Lane

- A through lane is a vehicular travel lane that is not a curb lane and is used primarily for through traffic. The left-most through lane in the direction of travel may be used to make left-turn movements where dedicated left-turn lanes are not provided.

Table 5: Through Lane Widths

		Min (m)	Target (m)	Max (m)
Through Lane	50 km/h or less	3.0		3.3
	60 km/h or more	3.0		3.5
Through Lane on TTC Streetcar Routes	60 km/h or more	3.1		

- Through lanes should be 3.0 m to 3.5 m wide.

2.3 Dedicated Right-Turn Lane

Dedicated right-turn lanes are vehicular travel lanes primarily used to make right-turns at intersections and high-volume driveways.

Table 6: Dedicated Right-Turn Lane Widths

		Min (m)	Target (m)	Max (m)
Dedicated Right-Turn Lane	No Scheduled TTC Bus Right-Turns	3.0		3.8
	TTC Bus Routes with Bus Right-Turns	3.3		4.1

- Dedicated right-turn lanes with TTC bus right-turns should be widened to 3.3 m. The adjacent curb lane should be reduced to 3.0 m as per the land width priorities; refer to Section 3.1.2: Lane Width Priorities.
- District Traffic Operations shall be consulted prior to implementing a dedicated right-turn lane.
- Turning envelopes should be reviewed when determining double right-turn lane widths.

2.4 Dedicated Left-Turn Lane

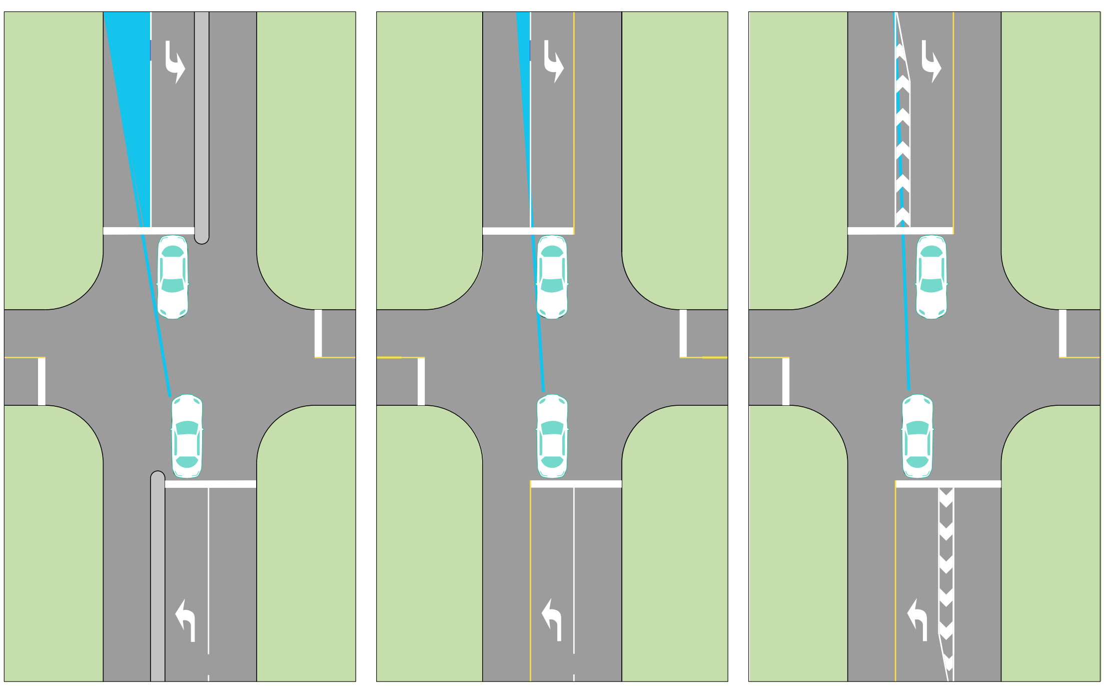
Dedicated left-turn lanes are vehicular travel lanes used to make left-turns at intersections and high-volume driveways.

Table 7: Dedicated Left-Turn Lane Widths

		Min (m)	**Target** (m)	**Max** (m)
Dedicated Left-Turn Lane	Non-TTC Bus Routes and TTC Bus Routes with median	3.0		3.3
	TTC Bus Routes without median	3.0	3.3	

- Where there is no median, left turn lanes that are part of TTC bus routes should be 3.3 m, where feasible, as per the land width priorities in Section 3.1.2: Lane Width Priorities.
    - If the adjacent opposing lane is less than 3.3 m, a 3.3 m left-turn lane on TTC bus routes shall be prioritized over the target cycling facility width and the target urban shoulder.
- District Traffic Operations shall be consulted prior to implementing/formalizing a dedicated left-turn lane.
- Turning envelopes shall be reviewed when determining double left-turn lane widths.

- **Left-Turn Lane Offset**
    - Where possible, at intersections with permissive left-turns, a positive offset or no offset is generally preferred over a negative offset for optimizing sightlines.



Positive Offset   No Offset   Negative Offset

Figure 6: Blind spots (shown in blue) for different Left-Turn Lane Offsets

2.5 Two-Way Left-Turn Lane (Continuous Left-Turn Lane)

A two-way left-turn lane is a vehicular travel lane located between vehicular travel lanes of opposing directions. The two-way left-turn lane is used to make left-turns in either direction.

Table 8: Two-Way Left-Turn Lane (Continuous Left-Turn Lane) Widths

	Min (m)	Target (m)	Max (m)
Two-Way Left-Turn Lane	3.0	4.0	

- Two-way left-turn lanes may be wider than 4.0 m, up to a maximum of 4.5 m, to match the width of a left-turn lane adjacent to a 1.5 m wide median.

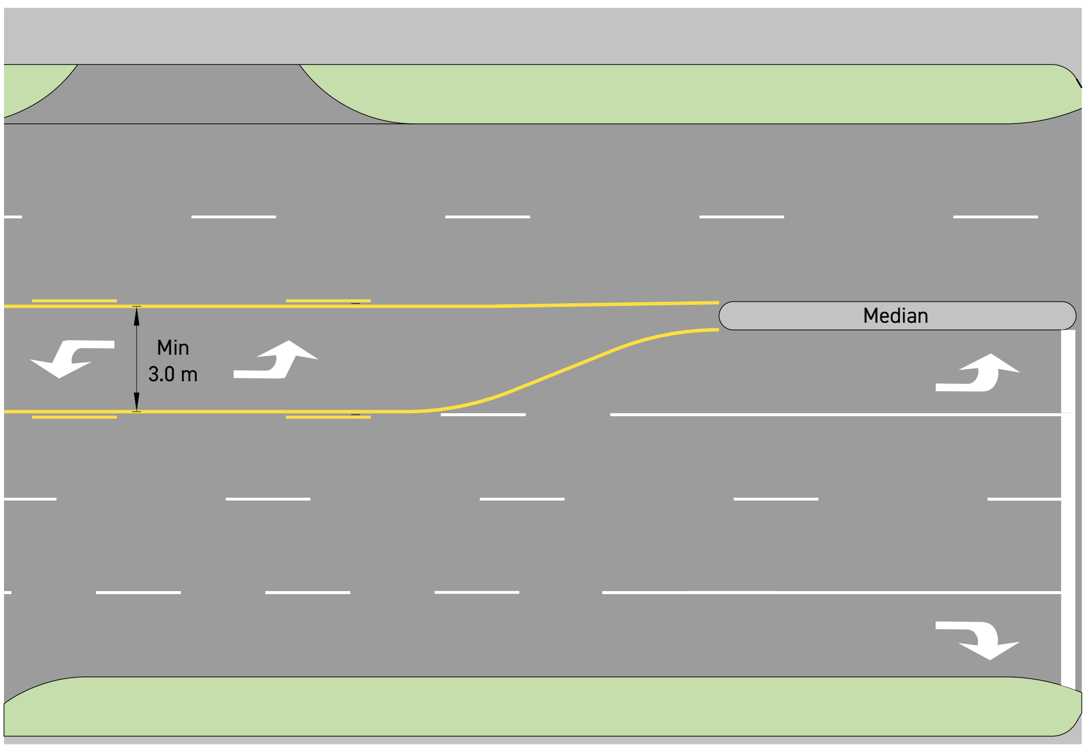


Figure 7: Two-Way Left-Turn Lane

2.6 Dedicated Cycling Facility

A dedicated cycling facility is an exclusive lane for use by cyclists and is separated from motor vehicular traffic in the form of painted lines, painted buffers, bollards, raised curbs, raised surfaces or other physical barriers. Refer to Ontario Traffic Manual Book 18: Cycling Facilities and City of Toronto On-Street Bikeway Design Guidelines for additional information on dedicated cycling facilities.

2.7 Urban Shoulder

An urban shoulder is a space between the curb and the adjacent vehicular travel lane, and is delineated by an edge line. The edge line is used to visually right-size the vehicular travel lane. The urban shoulder provides space that a person cycling may choose to ride in instead of riding in the vehicular shared curb lane at locations where dedicated cycling facilities are not provided within the right-of-way.

- An urban shoulder is not an alternative to a dedicated cycling facility.
- An urban shoulder may be used for snow storage in the winter.

Vehicles parked on-street are expected to park according to City bylaws with the tires of the vehicle within 30 cm of the curb face. Where a vehicle is unable to fit entirely within the urban shoulder, the vehicle will be expected to park in the urban shoulder with the vehicle extending into the curb lane.

Table 9: Urban Shoulder Widths

	Min (m)	**Target** (m)	**Max** (m)
Urban Shoulder	1.2	1.5	2.0

- Urban shoulders should be provided as per the lane width priorities in Section 3.1.2: Lane Width Priorities.
- Urban shoulders may be considered to future-proof cycling facilities.
- Urban shoulders with a width of 2.0 m or more should be hatched.
- Urban shoulders may be reduced lower than 1.2 m, to a minimum of 1.0 m, at the sole discretion of Transportation Services.
- At intersections, lane buffers can be used instead of urban shoulders. Urban shoulders in this case should be terminated before the taper lanes, unless there is space to accommodate both the urban shoulder and the lane buffer. Refer to Example 4 in Section 5.0.
- Urban shoulders can be added to only one side of the road where there is not enough space to accommodate urban shoulders on both sides of the road. This is to be done on a case-by-case scenario based on site conditions.

2.8 Reserved Lane (High Occupancy Vehicle Lane / Priority Bus Lane)

Reserved lanes are designated lanes identified by diamond pavement markings and signage that can only be used by a designated class of vehicle (e.g., Public Transit Vehicle, High Occupancy Vehicles, Taxicabs, plated motorcycles, and bicycles). A list of reserved lanes can be found in Toronto Municipal Code, Chapter 950 (§950-1321. SCHEDULE 22: RESERVED LANES FOR DESIGNATED CLASSES OF VEHICLES).

2.8.1 High Occupancy Vehicle (HOV) Lane

High Occupancy Vehicle (HOV) lanes are lanes reserved for vehicles as defined in Chapter § 950-503, for the use of:

- A private motor vehicle containing a minimum of three persons, or
- A private motor vehicle containing a minimum of two persons (High Occupancy Vehicle TWO PLUS)

Table 10: High Occupancy Vehicle Lane

<table>
<tr><th></th><th>Min (m)</th><th>Target (m)</th><th>Max (m)</th></tr>
<tr><td>High Occupancy Vehicle (HOV) Lane</td><td colspan="2">3.3</td><td>3.5</td></tr>
<tr><td>Shared High Occupancy Vehicle (HOV) Lane</td><td>3.3</td><td colspan="2">4.0</td></tr>
</table>

- HOV Lanes should be 3.3 m to 3.5 m wide.
- HOV Lanes may be reduced as low as 3.0 m in constrained conditions at localized sections in consultation with District Traffic Operations.
- HOV Lanes may also be a shared facility with buses and bikes.
- Where a HOV Lane (without an urban shoulder) is a shared lane, the HOV Lane can be widened up to 4.0 m.

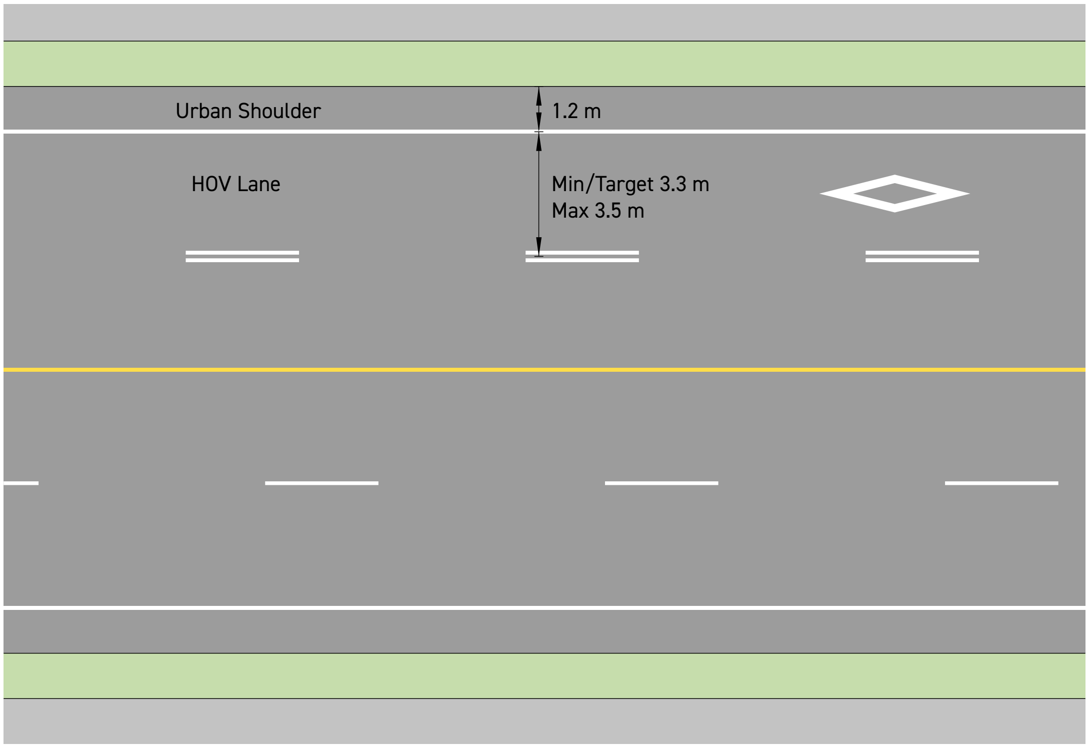


Figure 8: HOV Lane with Urban Shoulder

2.8.2 Priority Bus Lane

Priority bus lanes are sections of the street designated by regulatory signs and pavement markings for use by public transit. Priority bus lanes may also be a shared facility with bikes.

- Queue Jump Lanes shall be treated similarly to priority bus lanes in the lane width priorities; refer to Section 3.1.2: Lane Width Priorities.
- Priority Bus Lanes should be 3.3 m to 3.5 m wide.
- Where a Priority Bus Lane (without an urban shoulder) is a shared lane, the Priority Bus Lane can be widened up to 4.0 m.

Table 11: Priority Bus Lane

	Min (m)	Target (m)	Max (m)
Priority Bus Lane	3.3	3.5	
Shared Priority Bus Lane	3.3	4.0	

2.9 Dedicated Parking Lane

A dedicated parking lane is a lane located between the curb lane and the curb that is used only for parallel parking. A dedicated parking lane does not facilitate vehicular travel.

Table 12: Dedicated Parking Lane Widths

	Min (m)	Target (m)	Max (m)
Dedicated Parking Lane	2.0	2.4	

- Dedicated parking lanes should be 2.0 m to 2.4 m wide.
- Dedicated parking lanes on TTC bus routes should have an unmarked buffer of 0.2 m between the curb lane and parking lane; refer to Figure 9 below.
- Dedicated parking lanes may be wider than 2.4 m:
    - In an industrial area, where a high volume of parked trucks are expected; or
    - If a horizontal curve prevents vehicles from parking within a 2.4 m wide parking lane.

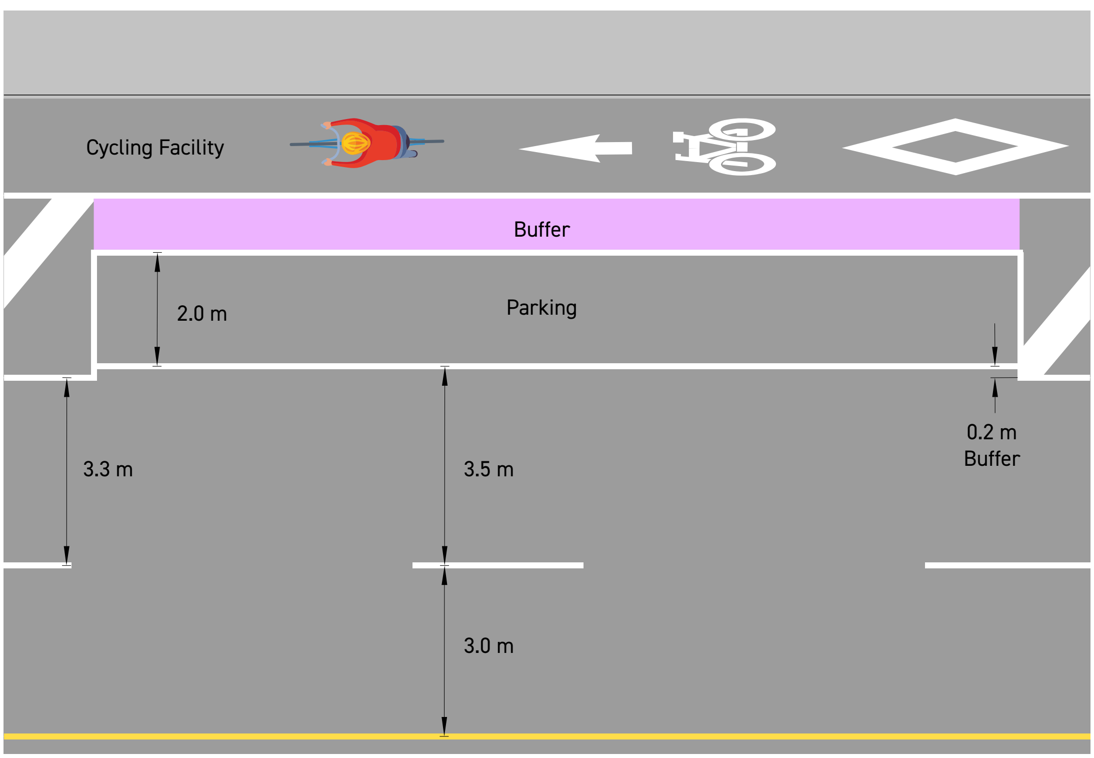


Figure 9: Dedicated Parking Lane with 0.2 m buffer on TTC routes

2.10 Lane Buffer (with Hatching)

A road lane buffer typically refers to the space between adjacent lanes on a road and is a designated area that separates one motor vehicle lane from another. Lane buffers are typically applied in scenarios where there is no opportunity to relocate the curbs and right-size lane widths.

It is preferable to allocate pavement width to the buffer over widening vehicular travel lanes beyond the target lane width. Lane buffers shall be prioritized and allocated as per the lane width priorities in Section 3.1.2: Lane Width Priorities.

This item does not cover buffer types and widths for dedicated cycling facilities. Refer to the On-Street Bikeway Design Guidelines for dedicated cycling facility buffer types and widths.

Table 13: Lane Buffer Widths

	Min (m)	Target (m)	Max (m)
Lane Buffer (with Hatching)	0.8	1.0	1.5

- Lane buffers should be a minimum width of 0.8m.
- All lane buffers shall be hatched.
- A right-turn lane buffer (between a curb lane and a dedicated right-turn lane) should be prioritized over a left-turn lane buffer (between a curb lane or through lane and a dedicated left-turn lane) unless there are operational improvements requiring a left-turn lane buffer.
- Engineering judgement must be used to determine buffer widths to minimize lane shifts and ensure that lane shifts through intersections do not result in safety or operational issues.

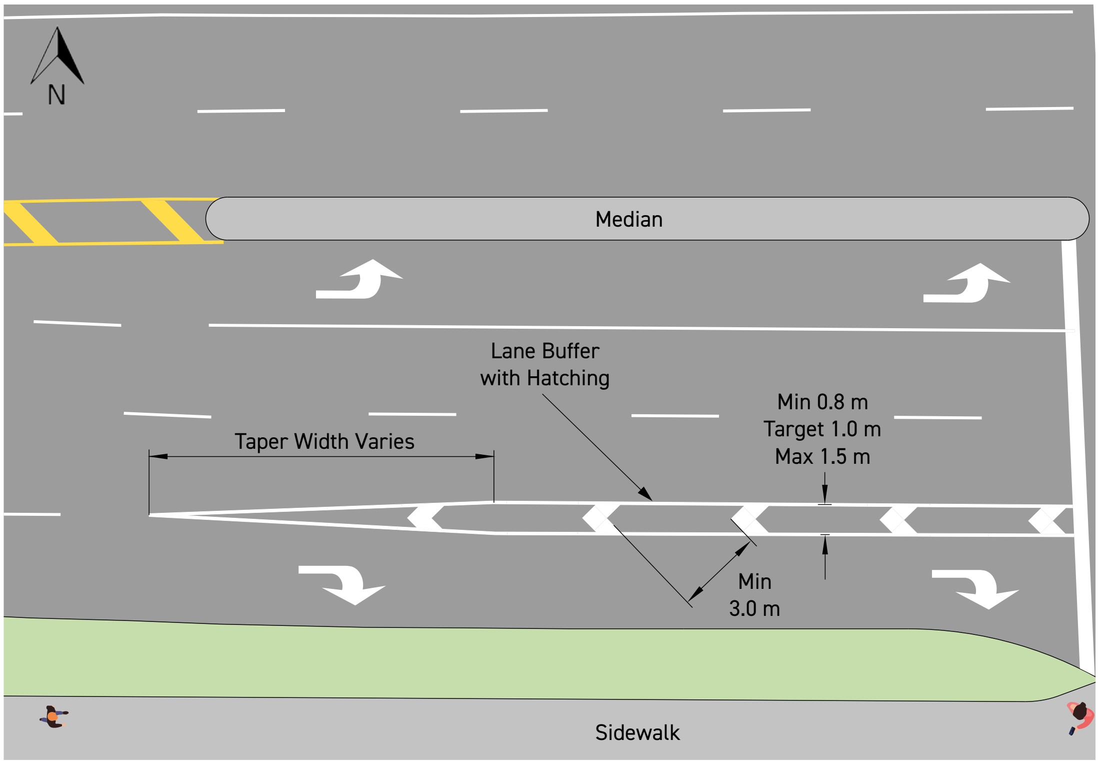


Figure 10: Lane Buffer between Curb Lane and Dedicated Right-Turn Lane

2.11 Centreline Buffer

A road centreline buffer refers to a painted buffer zone or area created along the centreline of a road. This can also be a buffer zone or area created along the centre median of a road. It can be used to right-size lanes.

Table 14: Centre Line Buffer Widths

	Min (m)	Target (m)	Max (m)
Centreline Buffer	0.5	No Max	

- Centreline buffers should be a minimum width of 0.5 m.
- Centreline buffers should be hatched if the width is more than 1.0 m

If there are no left-turn lanes or driveway accesses within the section of road being reviewed, consideration should be given to whether there are opportunities to build a permanent median, including green infrastructure

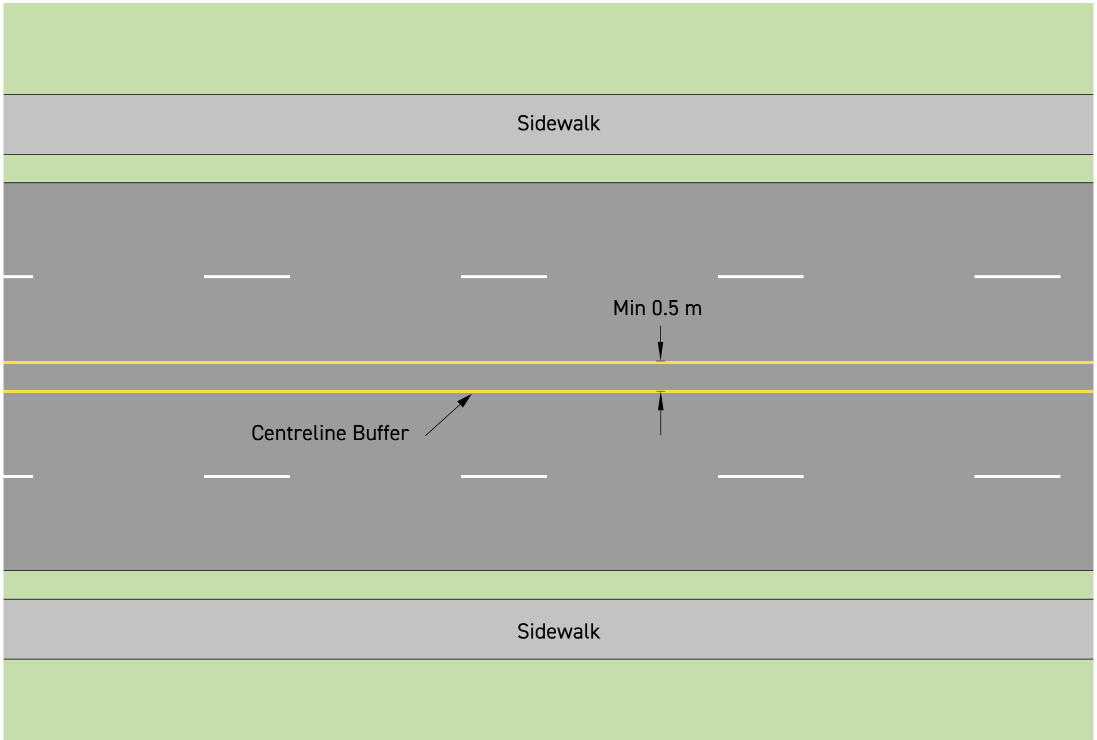


Figure 11: Painted Centreline Buffer

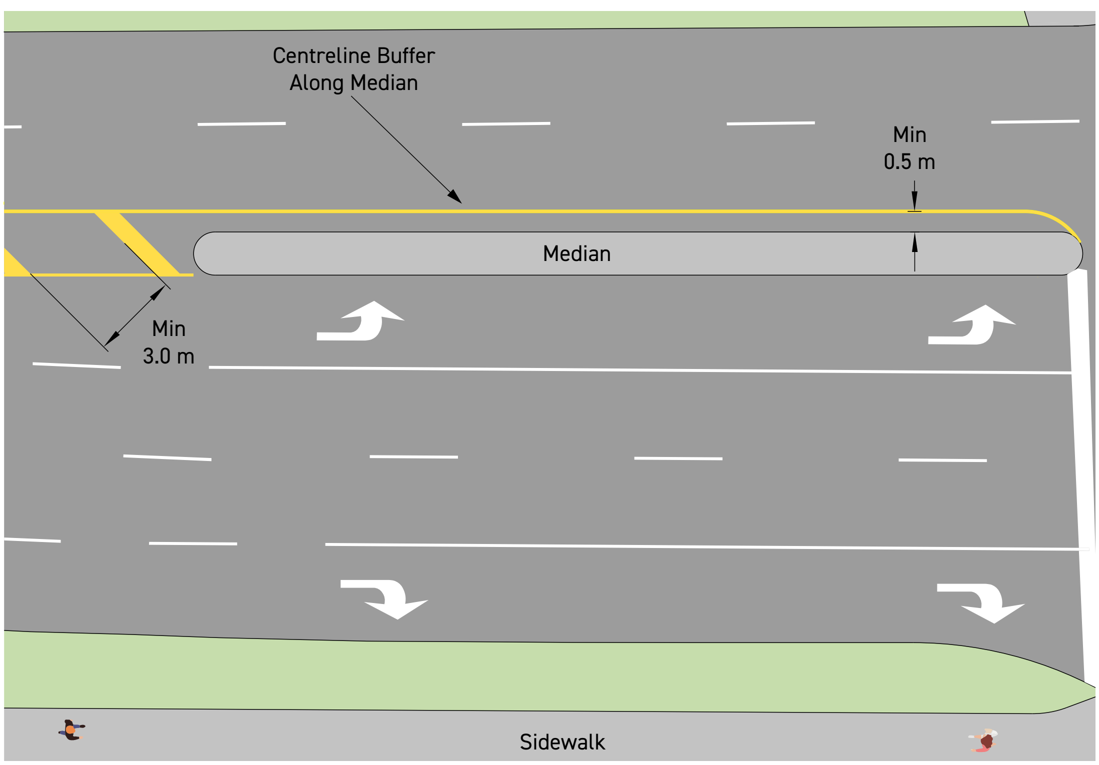


Figure 12: Painted Median Extension Buffer

STEELES AVENUE EAST, TORONTO

3.0 LANE WIDTH DESIGN

This section should be read in conjunction with Sections 4.0: Design Controls & Considerations, and 5.0: Navigating The Guideline - Examples And Scenarios For Application of this Guideline.

3.1 Collector and Arterial Roads

In this section, the design and allocation of lane widths for collector and arterial roads will be discussed.

Two-way collector residential roads do not typically have linear pavement markings and will not be discussed in the Lane Widths Guideline. Two-way collector residential roads are typically measured using pavement width. This item will be discussed in the Pavement Width Guideline (to be developed).

The following table summarizes minimum, target, and maximum widths for through lanes, curb lanes, urban shoulders, turn lanes, and parking lanes.

Table 15: Lane Width Design Summary Table for Collector and Arterial Roads

<table>
<tr><th colspan="3"></th><th>Minimum (m)</th><th>Target (m)</th><th>Maximum (m)</th></tr>
<tr><td rowspan="4">Curb Lane (including High Truck Volume roads)</td><td rowspan="2">50 km/h or less</td><td>Not adjacent to the lane types in Note 1</td><td colspan="3">3.3</td></tr>
<tr><td>Adjacent to the lane types in Note 1</td><td>3.0</td><td colspan="2">3.3</td></tr>
<tr><td colspan="2">60 km/h or more</td><td>3.3</td><td colspan="2">3.5</td></tr>
<tr><td colspan="2">Shared Curb Lane (if there is no urban shoulder or cycling facility within the ROW) (Mid-block sections only)</td><td>3.3</td><td colspan="2">4.0</td></tr>
<tr><td rowspan="2">Through Lane</td><td colspan="2">50 km/h or less</td><td colspan="2">3.0</td><td>3.3</td></tr>
<tr><td colspan="2">60 km/h or more</td><td colspan="2">3.0</td><td>3.5</td></tr>
<tr><td rowspan="5">Turn Lane</td><td rowspan="2">Dedicated Right-Turn Lane</td><td>Non-TTC Bus Routes</td><td colspan="2">3.0</td><td>3.8</td></tr>
<tr><td>TTC Bus Routes with Bus Right-Turns</td><td colspan="2">3.3</td><td>4.1</td></tr>
<tr><td rowspan="2">Dedicated Left-Turn Lane</td><td>Non-TTC Bus Routes and TTC Bus Routes with median</td><td colspan="2">3.0</td><td>3.3</td></tr>
<tr><td>TTC Bus Routes without median</td><td>3.0</td><td colspan="2">3.3</td></tr>
<tr><td colspan="2">Two-way Left-Turn Lane</td><td>3.0</td><td colspan="2">4.0</td></tr>
<tr><td colspan="3">Urban Shoulder</td><td>1.2</td><td>1.5</td><td>2.0</td></tr>
<tr><td rowspan="3">Reserved Lane</td><td colspan="2">High Occupancy Vehicle (HOV) Lane</td><td colspan="2">3.3</td><td>3.5</td></tr>
<tr><td colspan="2">Priority Bus Lane</td><td>3.3</td><td colspan="2">3.5</td></tr>
<tr><td colspan="2">Shared Priority Bus Lane or HOV Lane</td><td>3.3</td><td colspan="2">4.0</td></tr>
<tr><td colspan="3">Dedicated Parking Lane</td><td>2.0</td><td colspan="2">2.4</td></tr>
<tr><td rowspan="2">Lane Buffer</td><td colspan="2">Lane Buffer with Hatching</td><td>0.8</td><td>1.0</td><td>1.5</td></tr>
<tr><td colspan="2">Centreline Buffer</td><td>0.5</td><td colspan="2">No Max</td></tr>
</table>

Note 1 = Priority Bus Lane, Dedicated Right-Turn Lane or Bus Bay with Scheduled TTC Bus Right-turns, HOV Lane or Queue Jump Lane.

3.1.1 Lane Width Classification

Table 16: Lane Width Classification

Lane Width Classification	Descriptions
Minimum	Minimum widths for lanes and buffers are necessary for the safe and efficient day-to-day operations for vehicles.
Target	Target widths are the ideal widths for lanes and buffers. Target widths provide additional comfort for vehicles and/or minimize excess vehicle lane widths and shall be implemented as per the lane width priorities.
Maximum	Lanes and buffers can be widened up to the maximum widths as per the lane width priorities, in order to appropriately allocate excess road space.

3.1.2 Lane Width Priorities

The desired road cross-section with the preferred lane types and lane widths cannot be provided on all corridors due to limited pavement or right-of-way widths. The flowchart below sets out the process for allocating pavement widths into the various cross-sectional elements, as per a hierarchy from most important to least important. Space allocation does not have to be equal in both directions of travel.

The following list of items has been prioritized from most important to least important. Items should be allocated to a cross-section in the order of priority and items that are not applicable should be skipped e.g., green boxes can be skipped if there are no cycling facilities within the road. The legend below indicates the different categories:

Cycling Facility Items	Transit-Related Items	Vehicular Travel Lane Items	Lane Buffer Items

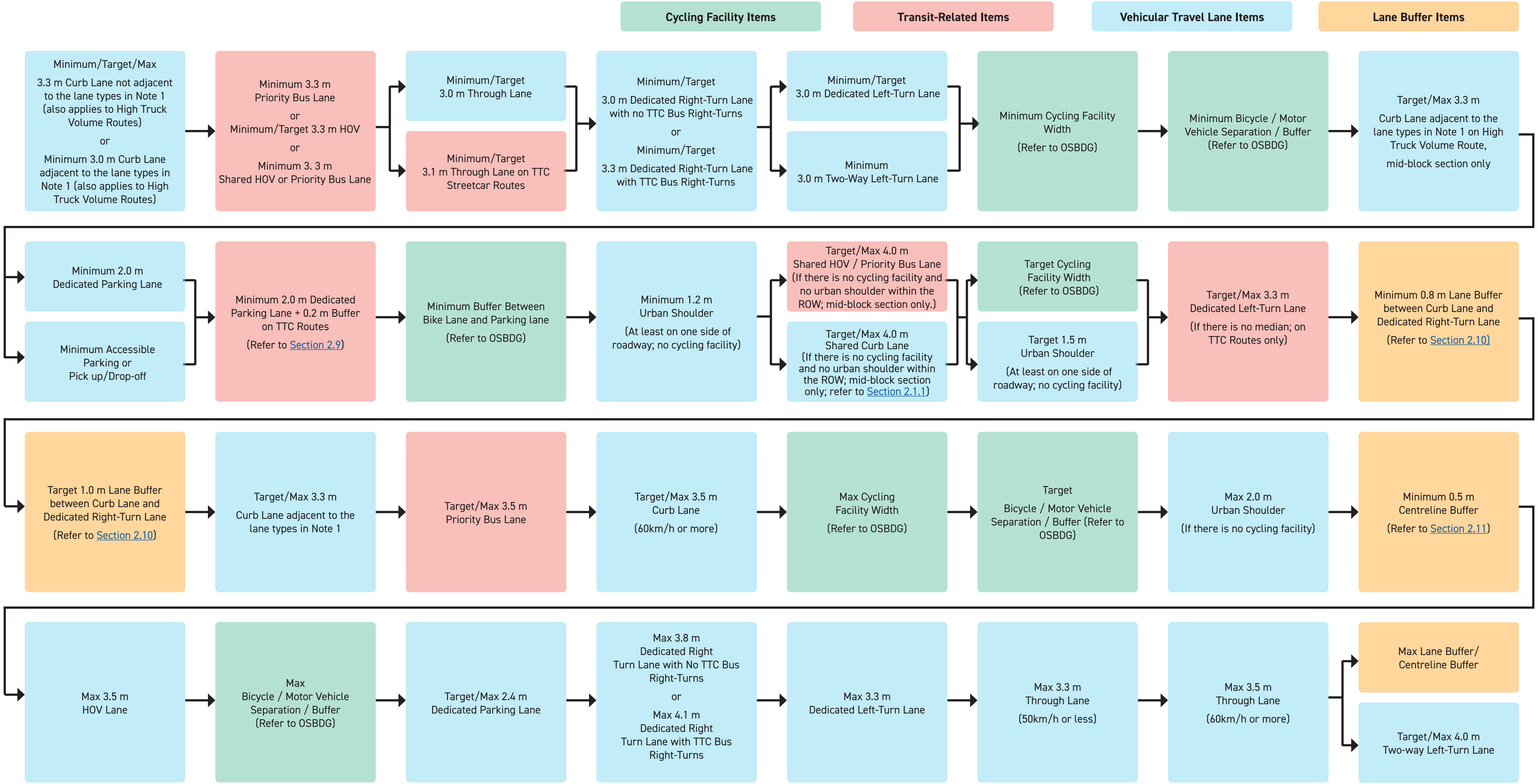
Lane Width Priorities for Collector and Arterial Roads

Figure 13: Lane Width Priorities for Collector and Arterial Roads

* OSBDG: On-Street Bikeway Design Guidelines (Refer to Section 6.1)

** Target widths are identified as default widths in OSBDG.

Note 1 - Priority Bus Lane, Dedicated Right-Turn Lane or Bus Bay with Scheduled TTC Bus Right-turns, HOV Lane or Queue Jump Lane.



3.2 Local Roads with a Dedicated Cycling Facility

In this section, the allocation of lane widths for local roads with a dedicated cycling facility will be discussed.

The minimum pavement width for local roads is 6.0 m unless approval is obtained from Toronto Fire Services and in consultation with District Traffic Operations.

Table 17: Lane Width Design Summary Table for Local Roads with a Dedicated Cycling Facility

<table>
<tr><th colspan="2"></th><th>Minimum (m)</th><th>Target (m)</th><th>Maximum (m)</th></tr>
<tr><td rowspan="2">Curb Lane</td><td>Non-TTC Bus Routes</td><td>3.0</td><td>3.3</td><td>4.5</td></tr>
<tr><td>TTC Bus Routes</td><td colspan="2">3.3</td><td>4.5</td></tr>
<tr><td colspan="2">Dedicated Parking Lane</td><td>2.0</td><td colspan="2">2.4</td></tr>
</table>

3.2.1 Lane Width Priorities

Lane Width Priorities for Local Roads with a Dedicated Cycling Facility

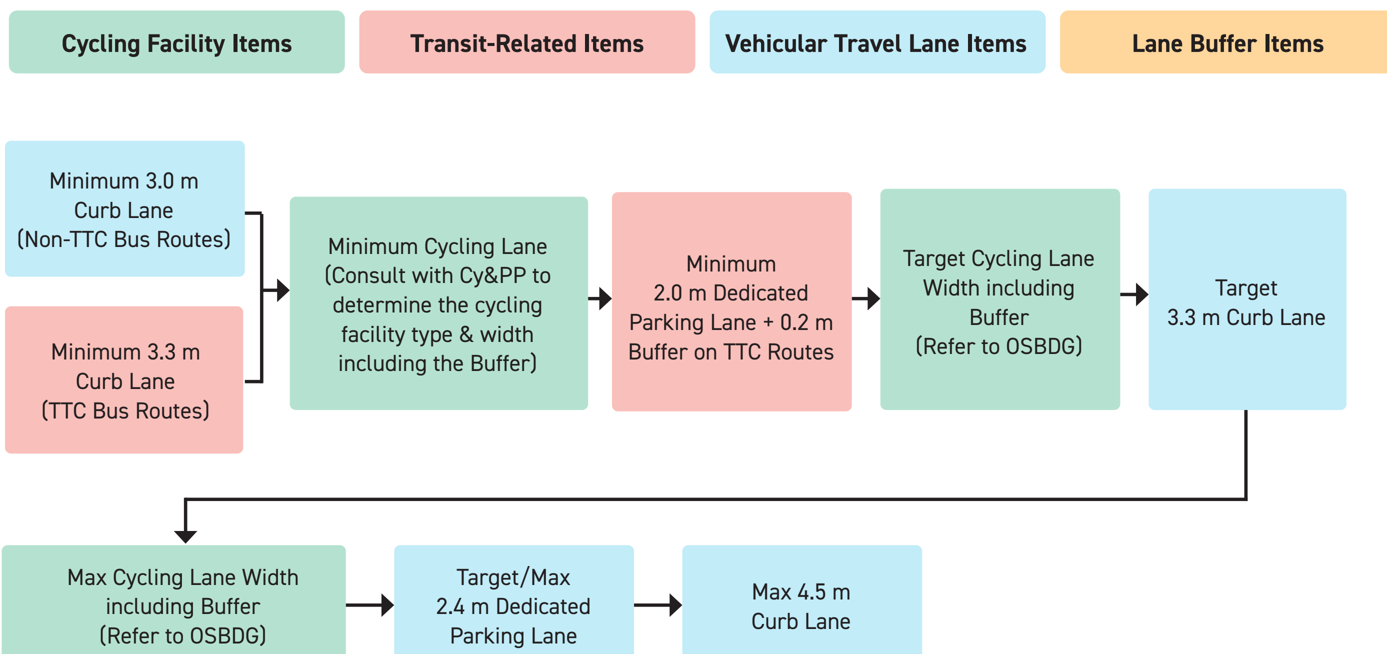


Figure 14: Lane Width Priorities for Local Roads with a Dedicated Cycling Facility

*OSBDG: On-Street Bikeway Design Guidelines (Refer to Section 6.1)

3.3 Local Roads without a Cycling Facility

Local roads without a Cycling Facility do not typically have linear pavement markings and will not be discussed in the Lane Widths Guideline.

Local roads are typically measured using pavement width. This item will be discussed in the Pavement Width Guideline (to be developed).

JANE STREET, TORONTO

4.0 DESIGN CONTROLS & CONSIDERATIONS

Lane widths should be designed to be appropriately sized for vehicles, cyclists, and pedestrians along a road segment. Good engineering judgment must be used to ensure that lane widths are not undersized or oversized.

Table 18: Design Controls vs. Design Considerations

Design Controls	Required	Requirements that shall be followed.
Design Considerations	Desired	Desirable requirements that differ based on site conditions.

Table 19: Design Controls

Design Controls	
Pedestrian Clearway Width	On new roads or where opportunities exist for moving curbs, an appropriate pedestrian clearway width shall be considered prior to allocating lane and buffer widths for other modes of transportation.
Dedicated Cycling Facilities	• Dedicated cycling facilities shall be provided with sufficient lane widths. • Where dedicated cycling facilities are not provided, curb lanes not adjacent to turn lanes shall be designed as shared curb lanes as per the lane width priorities in Section 3.1.2: Lane Width Priorities. • The Cycling & Pedestrian Projects unit shall be consulted on all corridors that are part of the Near-term Toronto Cycling Network Plan. • The Capital Projects & Program unit shall be consulted on all corridors that are part of the Long-term Toronto Cycling Network Plan.
Curb Relocation	Where there are opportunities to move the curbs, lane widths shall not be widened beyond the existing widths if the existing widths already meet the minimum, without the practitioner first considering other factors such as potential uses within the right-of-way, e.g., pedestrian clearway; cycling facilities; streetscaping; costs implications; impacts to drainage; impacts to properties, etc.
New Road Construction	• Target lane widths should be used for all new road construction including environmental assessment studies and new developments, where possible. • This approach shall be balanced with prioritizing appropriate pedestrian clearway widths and target cycling facility widths (where applicable).
Speed Limit	Lane widths can vary depending on the speed limit of a road segment. Wider lanes are allowable on roads with higher speed limits.

Table 19: Design Controls continued on next page

Table 19: Design Controls continued...

Design Controls	
TTC Bus Routes	Lane widths for curb lanes that are part of a TTC bus service route or a shuttle route that is part of the emergency replacement service guide should be a minimum/target width of 3.3 m. Queue jump lanes and bus stop bays may have a width of 3.3 m where possible and an absolute minimum width of 3.0 m in retrofit scenarios. Planned bus routes that are confirmed to be operational in the near future (+/-5 years) should also be considered.
TTC Streetcar Routes	Lane widths for lanes used by TTC streetcars should be a minimum width of 3.1 m. Wider lanes are required at locations with horizontal alignment curves. Lane widths should be determined using TTC streetcar vehicle envelopes.
High Truck Volume Routes	• A minimum of 3.3 m curb lane shall be maintained on high truck volume routes. 3.0 m curb lanes shall be considered at intersections where there is space for lane buffers. Refer to Section 5.2 - Example 2 for the application scenario. • Locations with 8-hour two-way truck volumes of 700 or more are considered to have high truck volumes. • A road segment with a series of locations that have high two-way truck volumes is indicative of a corridor with high truck volumes. • Where there are anticipated large truck movements (i.e., Major, or Minor Arterial or a Commercial/Industrial area) and the latest traffic movement count (TMC) is older than 5 years from the delivery year, newer counts should be ordered and used to determine high truck volume routes. • A link to maps identifying locations with high through-truck volumes can be found in Section 6.0 Supplemental Information. • Other justifiable measures of truck volume may also be used to determine segments with high truck volumes. Consultation with District Traffic Operations is recommended when determining segments with high truck volumes.
Existing Pavement Width	Existing pavement widths shall not be widened beyond existing conditions unless there are documented safety and/or operational concerns. Vision Zero Projects and District Traffic Operations shall be consulted prior to the widening of any pavement widths.
Pavement Markings	All pavement markings shall conform to the Ontario Traffic Manual, Book 11: Pavement, Hazard, and Delineation Markings and City standard drawings and details.

Table 20: Design Considerations

Design Considerations	
Insufficient Pavement Width	• Where there is insufficient pavement width, the road may be widened to accommodate the required lanes if adequate pedestrian clearway widths are provided. Vision Zero Projects and District Traffic Operations shall be consulted prior to the widening of any pavement widths. • Where there are existing dedicated cycling facilities, the width of the facility should not be narrowed below the Target width. • Widening below-minimum cycling facility widths should take precedence over widening vehicular travel lanes. • Where there is no cycling facility present, the Cycling & Pedestrian Projects unit should be consulted on all corridors that are part of the Toronto Cycling Network Plan prior to widening pavement widths.
Horizontal Alignment Curves	There should be consideration for wider vehicle lanes on road segments with horizontal alignment curves. Large vehicles including trucks and buses occupy a wider width when travelling along horizontal curves. • Operations of large vehicles on horizontal alignment curves shall be confirmed using Auto-Turn simulations. • Lane widths wider than the maximum may be considered on horizontal curves.
Constrained Conditions	In constrained conditions (localized sections), existing substandard lane widths can be maintained if there is no clear evidence of any documented existing safety and/or operational concerns. While a curb lane width can be substandard, it should not be narrower than the adjacent through lanes. To accommodate larger vehicles, the curb lane can be widened to 3.3 m with a substandard through lane. Lane widths as narrow as 2.7 m may be considered on localized sections in consultation with District Traffic Operations.
Urban Shoulders where there are Cycling facilities	Where there are off-road/in-boulevard cycling facilities, urban shoulders may be reduced lower than 1.2 m to a minimum of 0.7 m at the sole discretion of Transportation Services.
Lane Transitions	Lane widths may need to be wider at locations with lane shifts and transitions that are substandard to ensure that vehicles can manoeuvre through the lane shift or transition within the marked lane. Lane shifts and transitions are often found at intersections to provide turning lanes. Engineering judgement must be used to provide appropriate lane shifts and ensure that lane shifts through intersections do not result in safety or operational issues.
Future Development	Future development and transportation plans should be considered when determining lane widths. Lane widths should be designed to accommodate future development. Design controls should be selected based on post-development conditions where possible. Development could result in changes in volumes of vehicles, trucks, transit vehicles and users, cyclists, and pedestrians.

PALMERSTON BOULEVARD, TORONTO

5.0 NAVIGATING THE GUIDELINE - EXAMPLES AND SCENARIOS FOR APPLICATION

The following examples demonstrate the application of lane width priorities. Unless specified otherwise, all the examples depict scenarios where there are no opportunities to relocate the curbs. Some examples show both scenarios where there are opportunities to move the curb and where there are not.

5.1 Example 1: Local Road with One-Way Motor Vehicular Traffic, with Proposed Cycling Facilities (40 km/h or less)

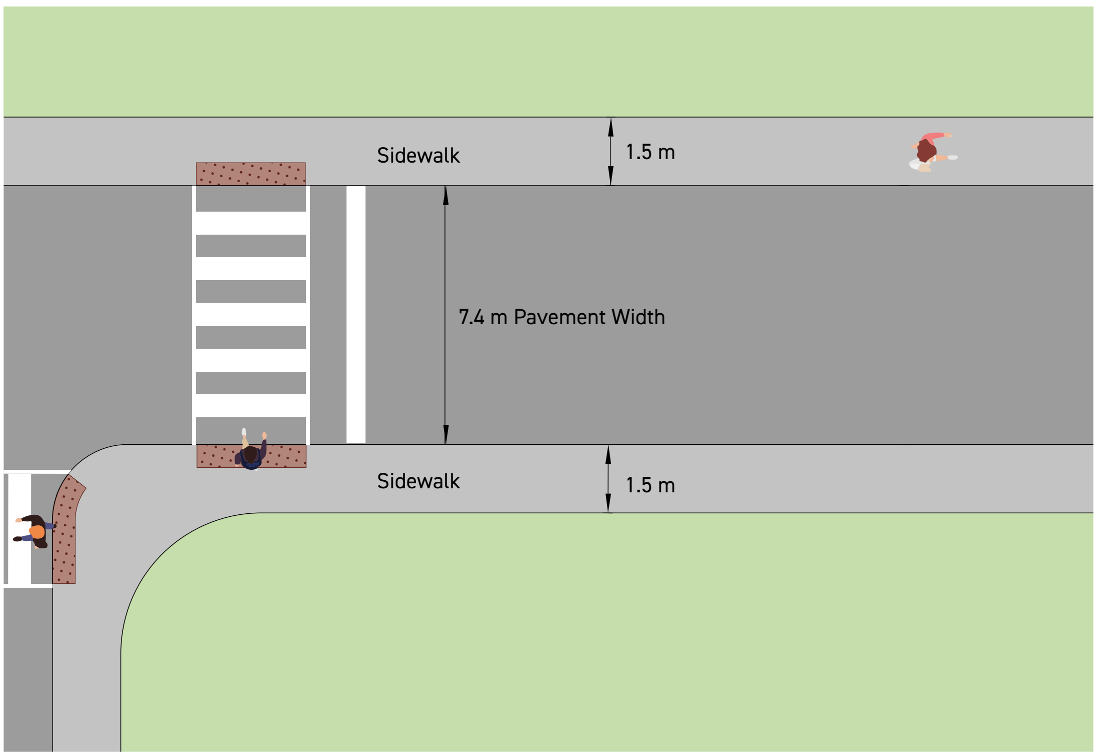


Figure 15: Example 1 - Existing Configuration

Step 1: Identify existing street characteristics.

- Local road
- One-way vehicular travel lane
- Existing pavement width: 7.4m
- No existing cycling facility
- On-street parking
- Not a TTC bus route
- Existing sidewalk width: 1.5 m (both sides)

5.1 Example 1A: Where there are no opportunities to move the curbs:

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths - existing road width 7.4 m:**
  - Minimum Curb Lane: 3.0 m
  - Minimum Cycling Facility (Contra-flow Bike Lane): 1.8 m
  - Minimum Dedicated Parking Lane: 2.0 m
- **After allocating minimum widths, the remaining width is 0.6 m.**
  - Target Contra-Flow Bike Lane: 2.0 m; an additional 0.2 m can be allocated to this, increasing the width to 2.0 m.
  - Target/Maximum Curb Lane: 3.3 m; an additional 0.3 m can be allocated to this, increasing the width to 3.3 m.
  - Maximum Contra-Flow Bike Lane: 2.3 m; an additional 0.1 m can be allocated to this, increasing the width to 2.1 m.

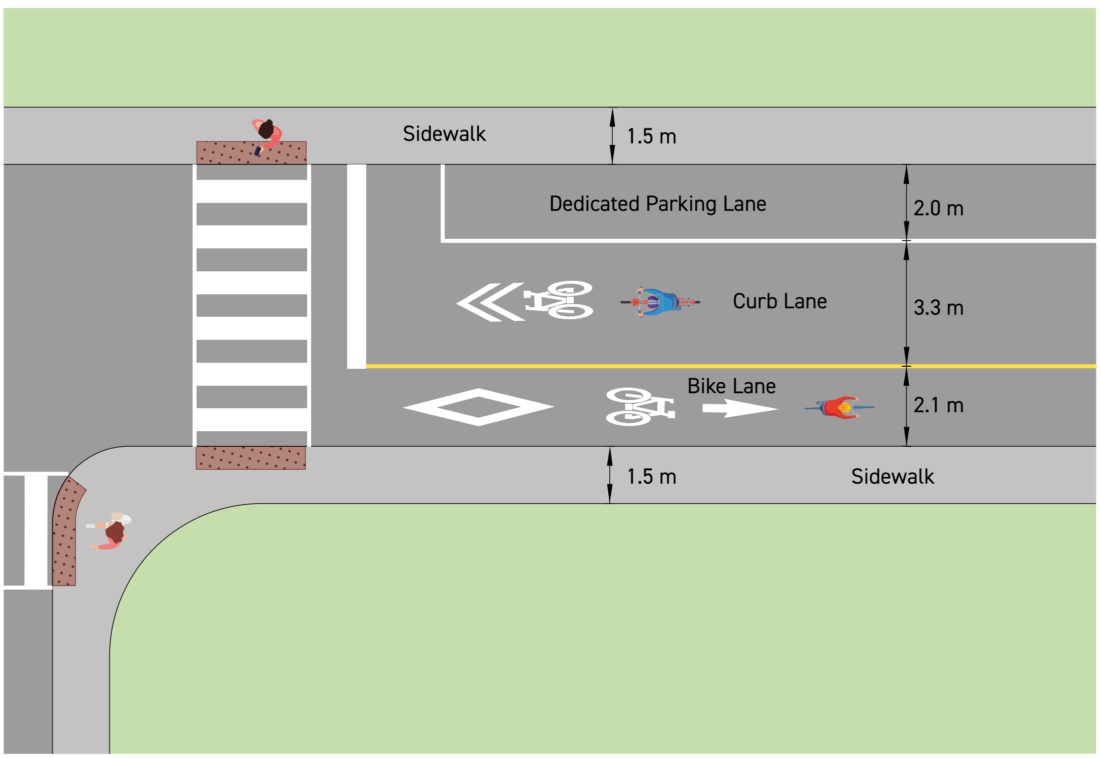


Figure 16: Example 1A - no Opportunities to move Curbs

Example 1B: Where there are opportunities to move the curbs:

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths - existing road width 7.4 m:**
  - Minimum Curb Lane: 3.0 m
  - Minimum Cycling Facility (Contra-flow Bike Lane): 1.8 m
  - Minimum Dedicated Parking Lane: 2.0 m
- **After allocating minimum widths, the remaining width is 0.6 m.**
  - The remaining width of 0.6 m can be allocated to the sidewalks, with 0.3 m on each side, increasing the width to 1.8 m

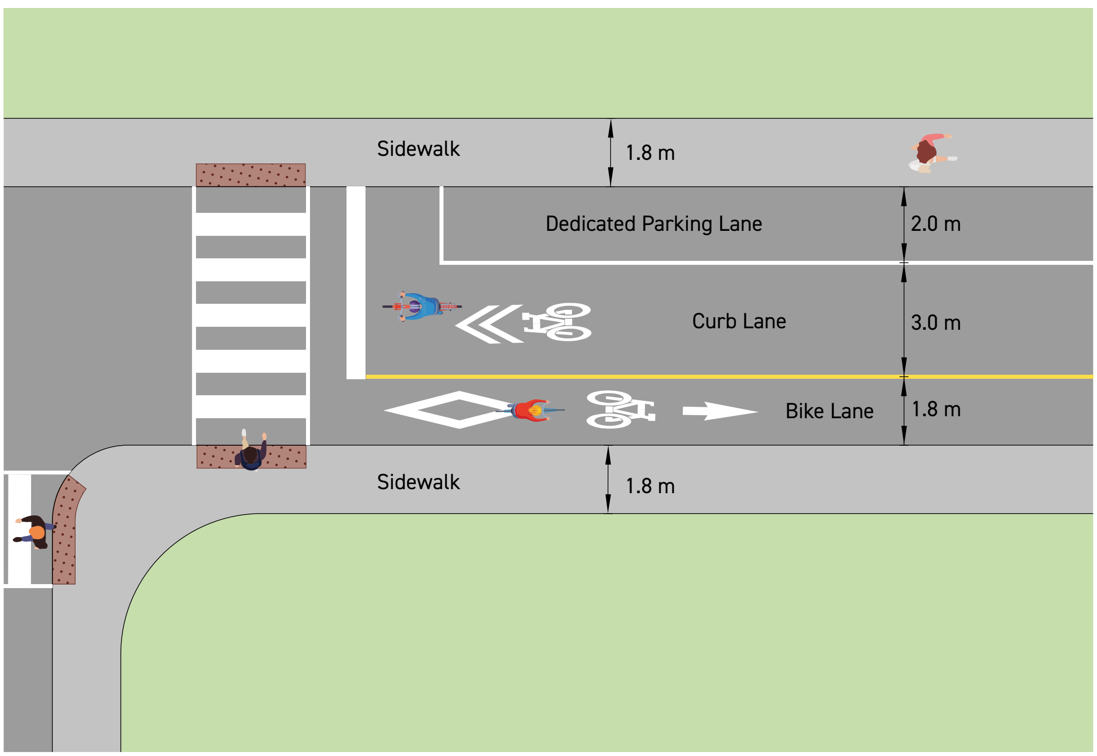


Figure 17: Example 1B - with Opportunities to move Curbs

5.2 Example 2: Major Arterial Road with Scheduled TTC Bus Right-Turns - (50 km/h or less)

Step 1: Identify existing street characteristics.

- Major Arterial
- EB existing road width: 13.3 m
- EB: Dedicated Right-Turn Lane / Bus Bay with Scheduled TTC Bus Right-Turns, Left-Turn Lane, Curb Lane and Through Lane
- WB existing road width: 7.5 m
- WB: Curb Lane & Through Lane
- Existing median island
- No existing cycling facility
- TTC Bus Stop at SW corner, with Scheduled TTC Bus Right-Turns
- High Truck Volume Route
- A posted speed limit of 50 km/h or less

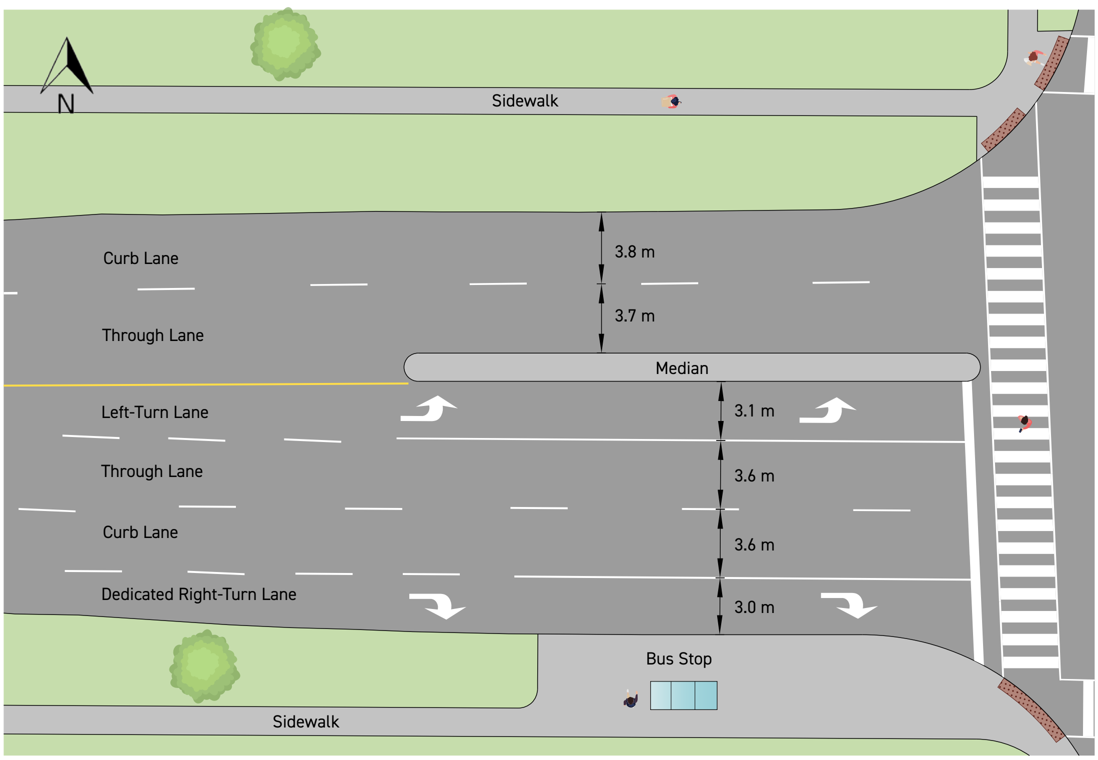


Figure 18: Example 2 - Configuration of Existing Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths - EB existing road width 13.3 m:**
  - Minimum Curb Lane adjacent to Bus Bay with scheduled TTC right-turns: 3.0 m
  - Minimum 3.3 m Dedicated Right-Turn Lane because of Dedicated Right-turn Lane / Bus Bay with TTC Bus Right-Turns (0.3 m from curb lane is allocated to right-turn lane)
  - Minimum Through Lane: 3.0 m
  - Minimum Dedicated Left-Turn: 3.0 m
- **After allocating minimum widths, the remaining width is 1.0 m.**
  - Allocate the surplus width as a 1.0 m lane buffer.
    - Despite the High Truck Volume Route, the Curb Lane can be at 3.0 m width given the lane buffer of 1.0 m.
- **Allocate the minimum required widths - WB existing road width 7.5 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
  - Minimum Urban Shoulder: 1.2 m

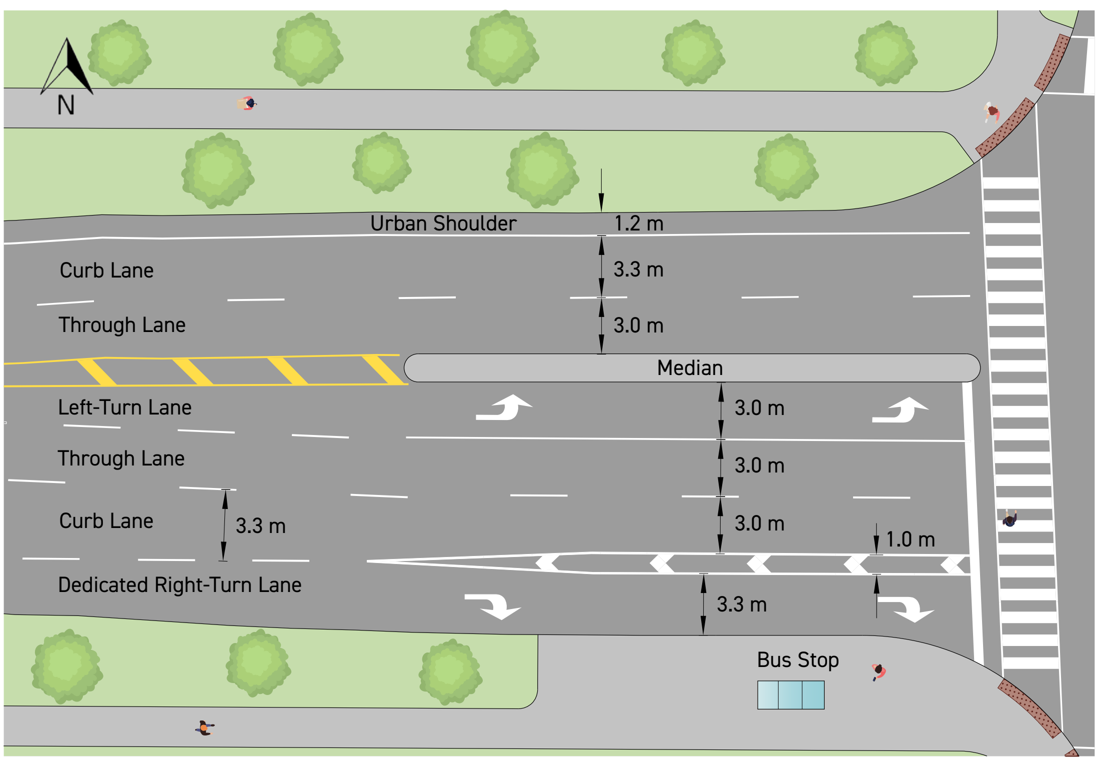


Figure 19: Example 2 - Configuration of Proposed Lane Widths

5.3 Example 3: Major Arterial Road with Scheduled TTC Bus Right-Turns & Left-Turns Without Median - (50 km/h or less)

The existing condition is similar to Example 2; however, in this example, TTC buses make frequent left-turns at this intersection and there is no median island present.

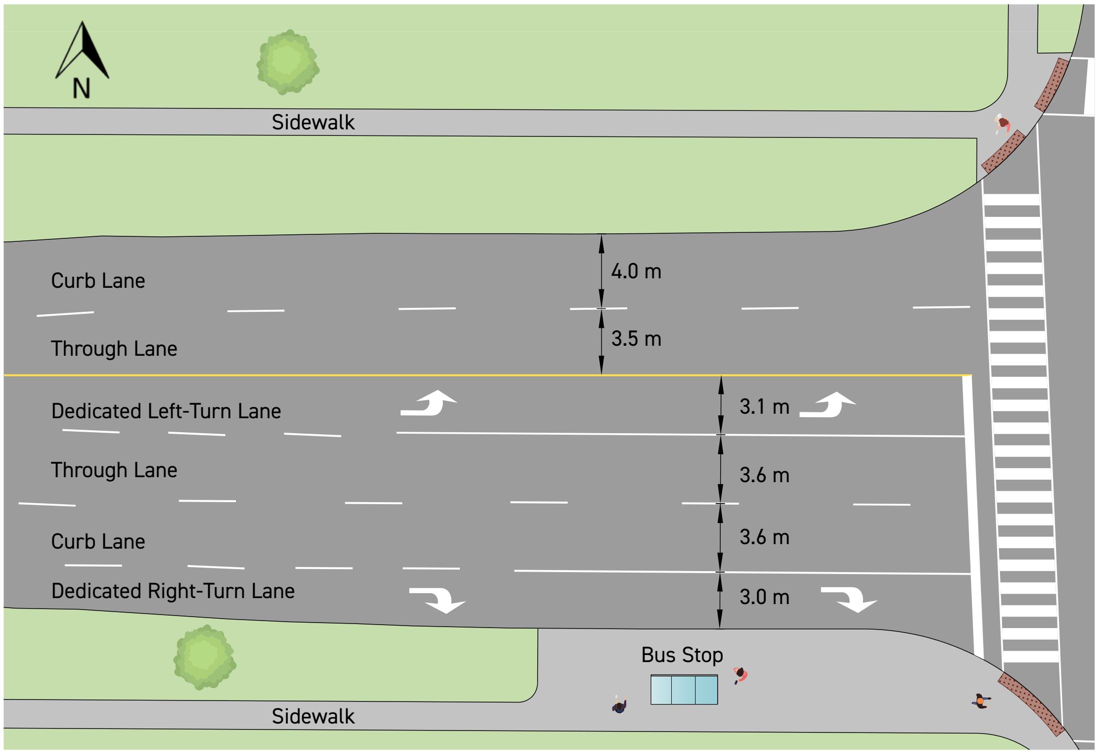


Figure 20: Example 3 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Minor Arterial
- EB existing road width: 13.3 m
- EB: Dedicated Right-Turn Lane, Dedicated Left-Turn Lane, Curb Lane and Through Lane
- TTC Bus Stop at SW corner
- TTC buses make scheduled Right-Turns and Left-Turns at this intersection.
- WB existing road width: 7.5 m
- WB: Curb Lane & Through Lane
- No existing median island
- No existing cycling facility
- High Truck Volume Route
- A posted speed limit of 50 km/h or less

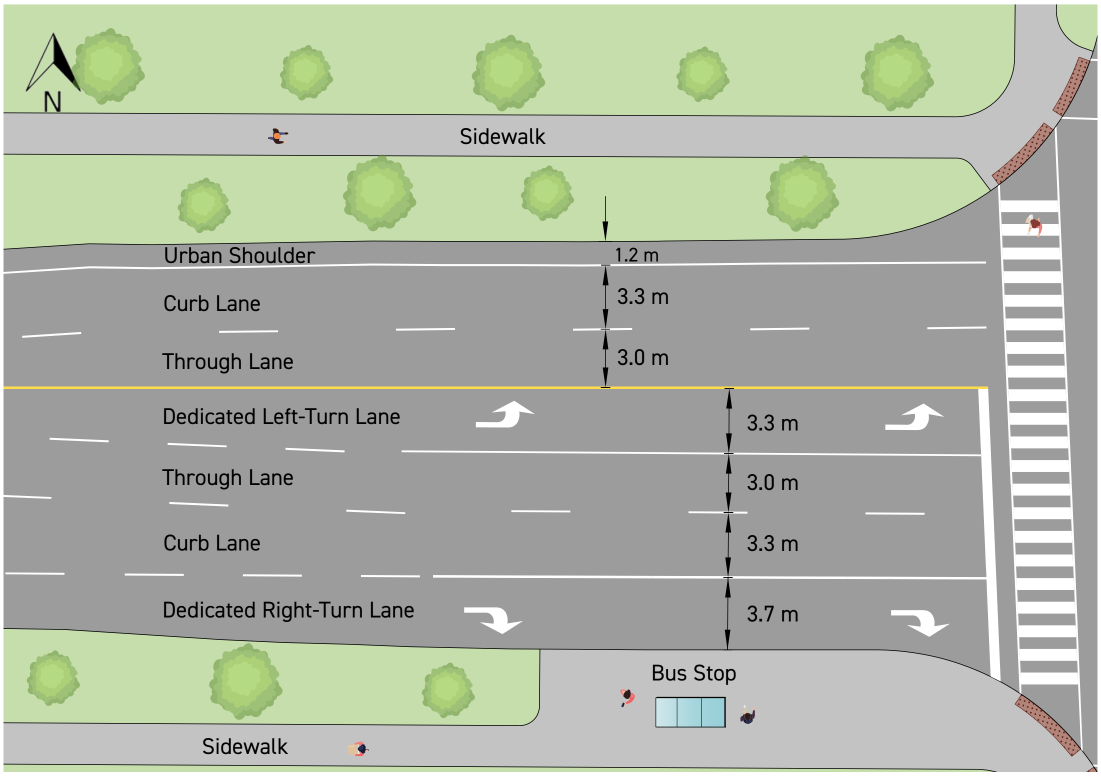


Figure 21: Example 3 - Configuration of Proposed Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths - EB existing road width 13.3 m:**
  - Minimum Curb Lane adjacent to Dedicated Right-Turn Lane with Bus Right-Turns: 3.0 m
  - Minimum 3.3 m Dedicated Right-Turn Lane with Bus Right-Turns (0.3 m from curb lane is allocated to right-turn lane)
  - Minimum Through Lane: 3.0 m
  - Minimum Dedicated Left-Turn Lane (without median): 3.3 m because of scheduled TTC bus Left-Turns
- **After allocating minimum widths, the remaining width is 0.7 m.**
  - Target/Maximum Curb Lane: 3.3 m; an additional 0.3 m can be allocated to this, increasing the width to 3.3 m.
  - Maximum Dedicated Right-Turn Lane with TTC Bus Right-Turns: 4.1 m; an additional 0.4 m can be allocated to this, increasing the width to 3.7 m.
- **Allocate the minimum required widths - WB existing road width 7.5 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
  - Minimum Urban Shoulder: 1.2 m

5.4 Example 4: Major 4-Lane Arterial; Mid-block Section with Urban Shoulders; No Cycling Facility - (50 km/h or less)

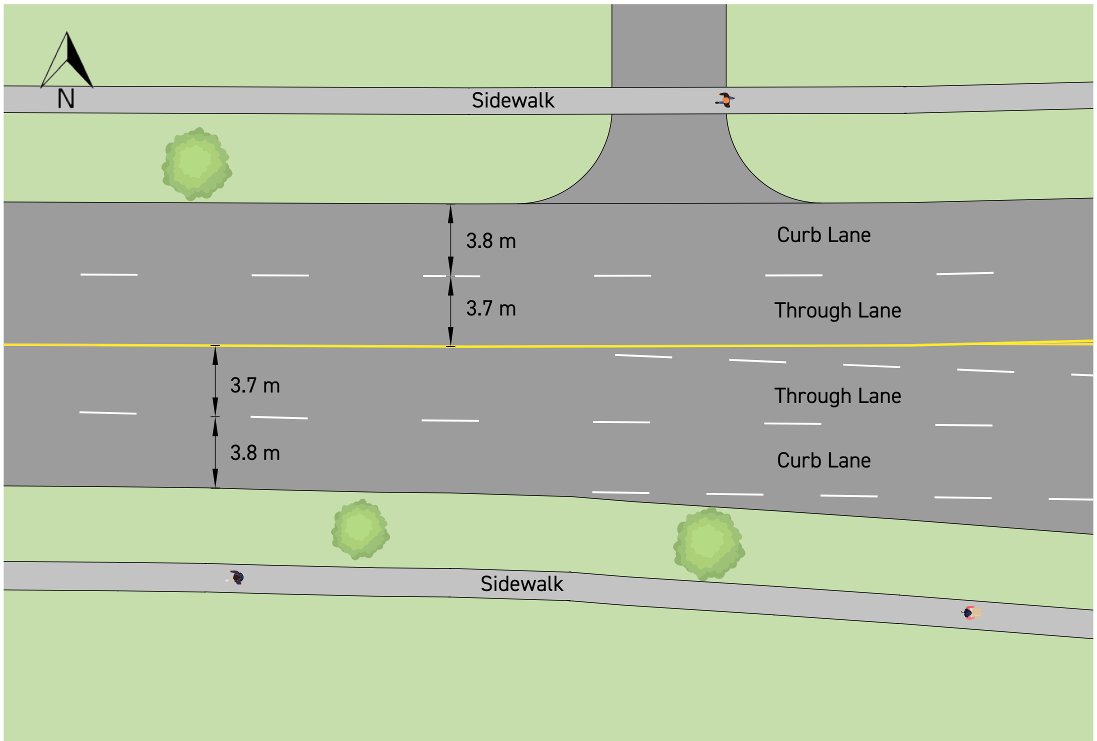


Figure 22: Example 4 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Minor Arterial
- EB existing road width: 7.5 m
- EB: Curb Lane & Through Lane
- WB existing road width: 7.5 m
- WB: Curb Lane & Through Lane
- No existing cycling facility
- A posted speed limit of 50 km/h or less

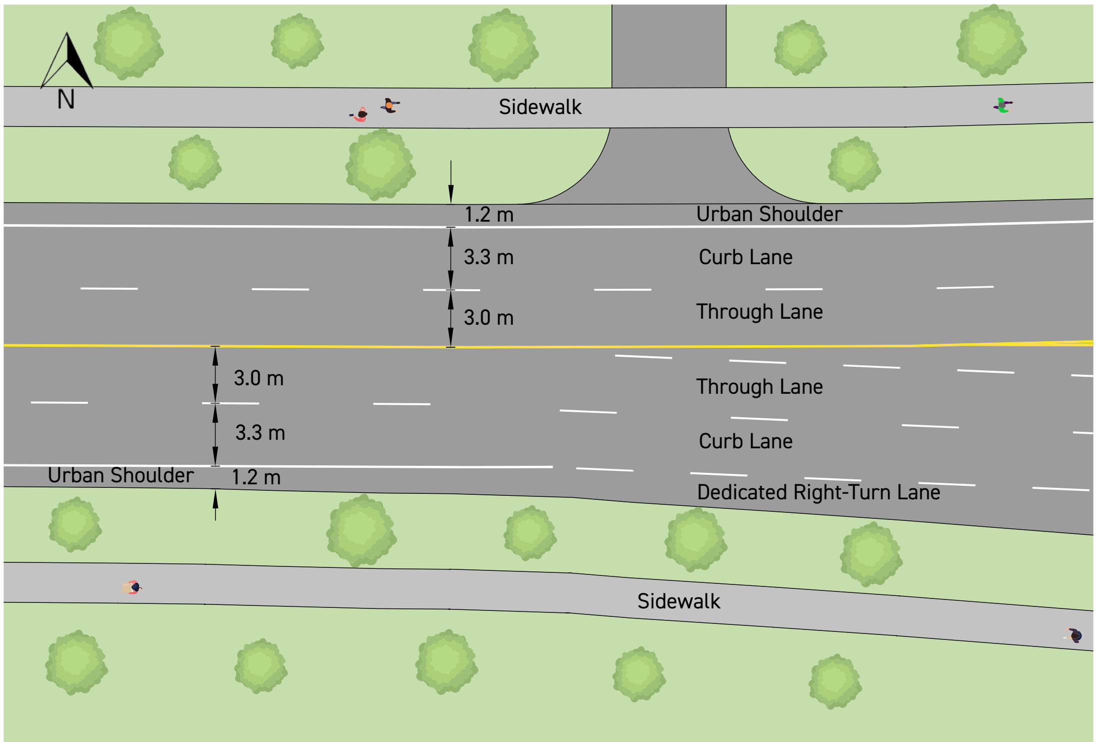


Figure 23: Example 4 - Configuration of Proposed Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths – EB & WB existing road width 7.5 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
  - Minimum Urban Shoulder: 1.2 m

5.5 Example 5: Major Arterial Road with Planned Priority Bus Lanes and Dedicated Cycling Facility - (50 km/h or less)

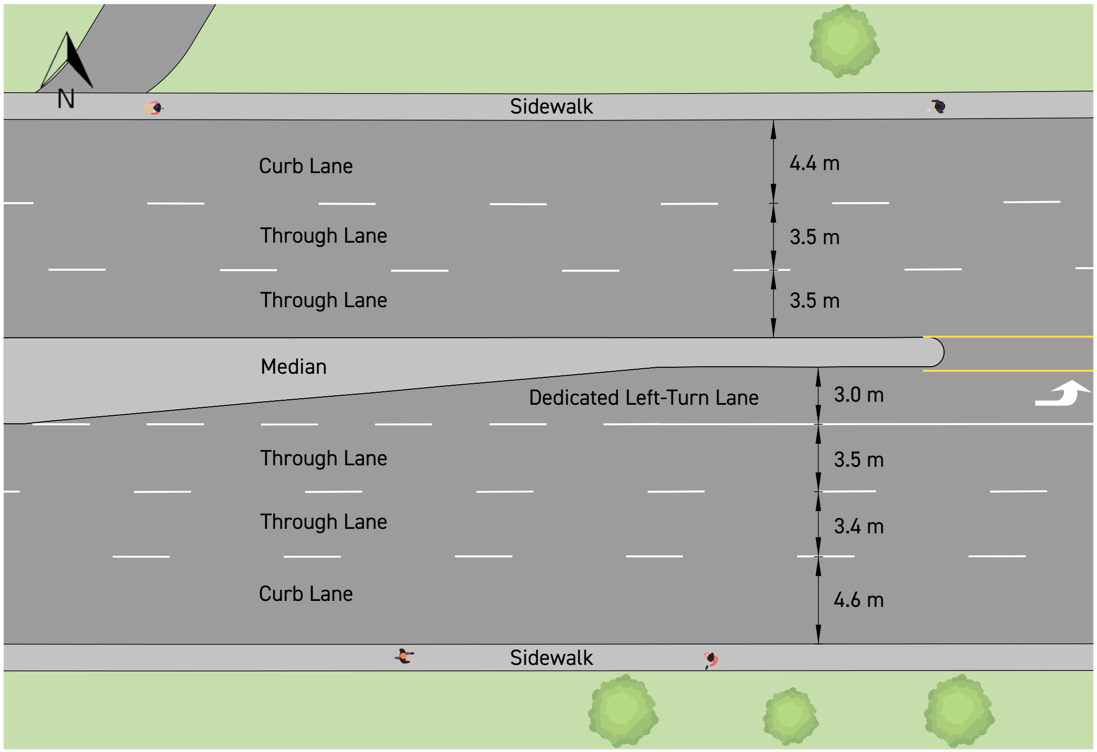


Figure 24: Example 5 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Major Arterial
- EB existing road width: 14.5 m
- EB: Curb Lane, 2 Through Lanes and Dedicated Left-Turn Lane
- WB existing road width: 11.4 m
- WB: Curb Lane & 2 Through Lanes
- Existing median island
- No existing cycling facility
- A posted speed limit of 50 km/h or less
- Non-High Truck Volume Routes

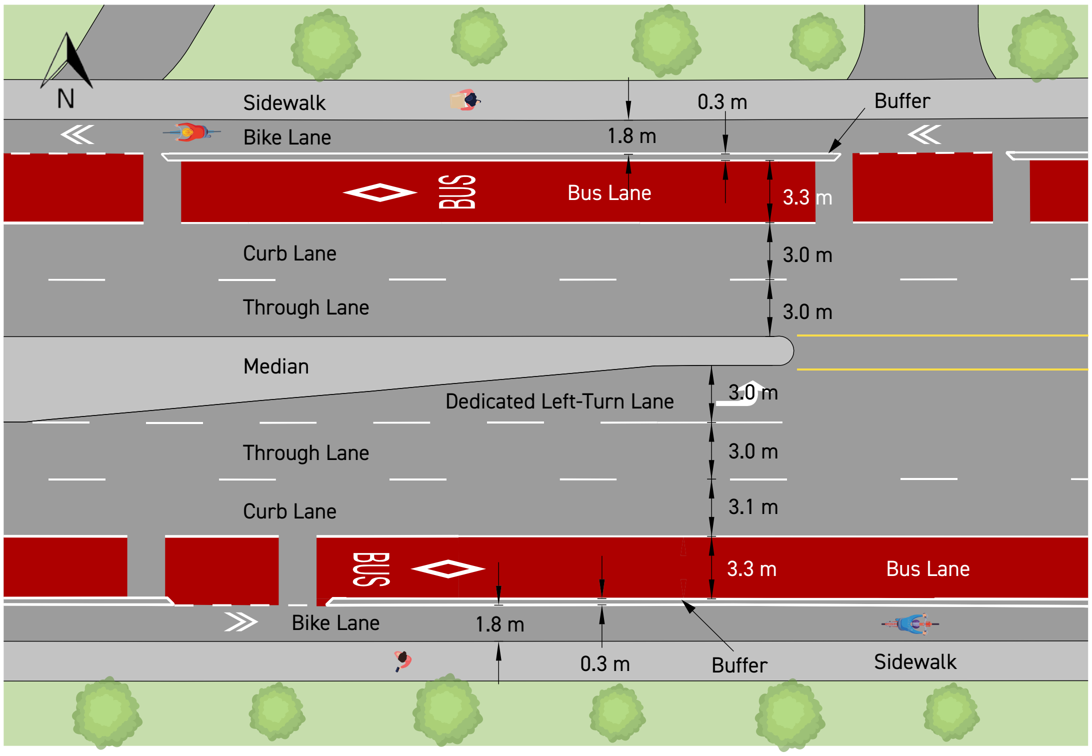


Figure 25: Example 5 - Configuration of Proposed Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths – EB existing road width 14.5 m:**
    - Minimum Curb Lane adjacent to Priority Bus Lane: 3.0 m
    - Minimum Priority Bus Lane: 3.3 m
    - Minimum Through Lane: 3.0 m
    - Minimum Dedicated Left-Turn Lane: 3.0 m
    - Minimum Cycling Facility Width and Buffer in consultation with Cycling & Pedestrian Projects unit: 1.8 m and 0.3 m.

- **Allocate the minimum required widths – WB existing road width 11.4 m:**
    - Minimum Priority Bus Lane: 3.3 m
    - Minimum Curb Lane adjacent to Priority Bus Lane: 3.0 m
    - Minimum Through Lane: 3.0 m
    - Minimum Cycling Facility Width and Buffer in consultation with Cycling & Pedestrian Projects unit: 1.8 m and 0.3 m.

5.6 Example 6: Major 4-Lane Arterial; Mid-block Section with Shared Curb Lane; No Cycling Facility - (50 km/h or less)

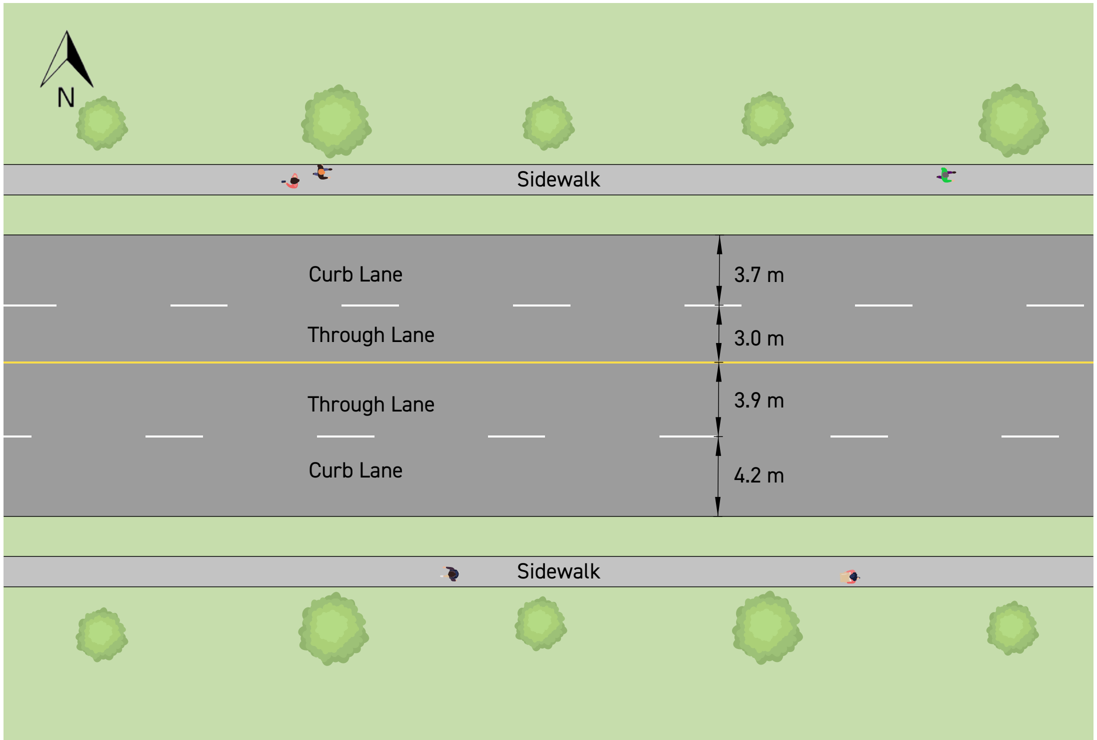


Figure 26: Example 6 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Major Arterial
- EB existing road width: 8.1 m
- EB: Curb Lane & Through Lane
- WB existing road width: 6.7 m
- WB: Curb Lane & Through Lane
- No existing cycling facility
- A posted speed limit of 50 km/h or less

Figure 27: Example 6 - Configuration of Proposed Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths – EB existing road width 8.1 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
  - Minimum Urban Shoulder: 1.2 m
- **After allocating minimum widths, the remaining width is 0.6 m.**
  - Target Urban Shoulder: 1.5 m; an additional 0.3 m can be allocated to this, increasing the width to 1.5 m.
  - Allocate the surplus width of 0.3 m to the WB road width. This is to accommodate the Shared Curb Lane for the WB road; see below.
- **Allocate the minimum required widths – WB existing road width 6.7 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
- **After allocating minimum widths, the remaining width is 0.4 m.**
  - Maximum Shared Curb Lane: 4.0 m; an additional 0.4 m can be allocated to the shared curb lane, plus the surplus width of 0.3 m from the EB road width, the Shared Curb Lane to 4.0 m (3.3 m + 0.4 m + 0.3 m = 4.0 m).

5.7 Example 7: Major 4-Lane Arterial; Mid-block Section with Urban Shoulders; No Cycling Facility - (60 km/h or more)

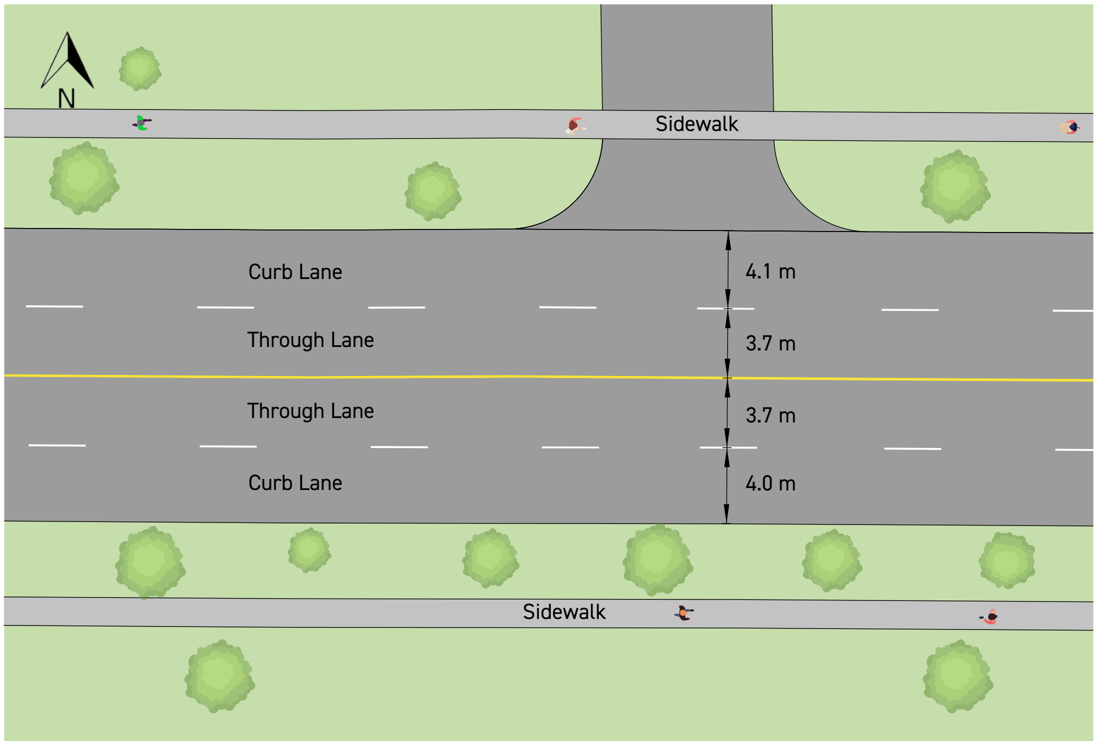


Figure 28: Example 7 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Major Arterial
- A posted speed limit of 60 km/h
- EB existing road width: 7.7 m
- EB: Curb Lane & Through Lane
- WB existing road width: 7.8 m
- WB: Curb Lane & Through Lane
- No existing cycling facility

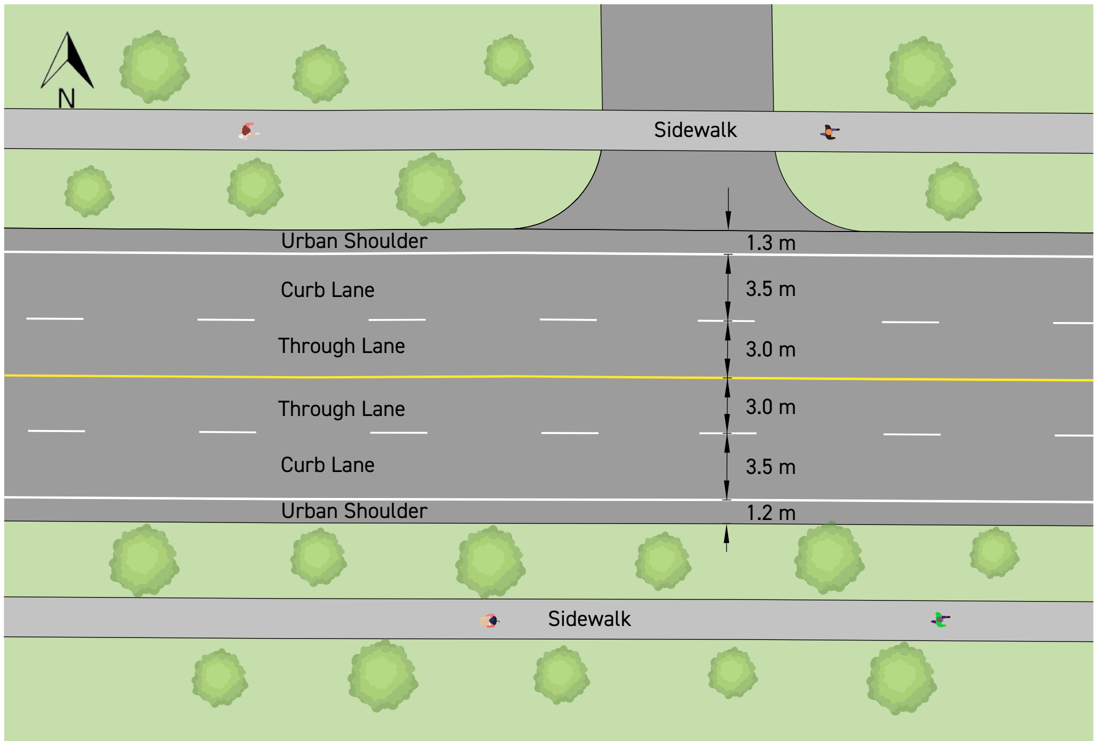


Figure 29: Example 7 - Configuration of Proposed Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths – EB existing road width 7.7 m:**
  - Minimum Curb Lane (60 km/h or more): 3.5 m
  - Minimum Through Lane: 3.0 m
  - Minimum Urban Shoulder: 1.2 m
- **Allocate the minimum required widths – WB existing road width 7.7 m:**
  - Minimum Curb Lane (60 km/h or more): 3.5 m
  - Minimum Through Lane: 3.0 m
  - Minimum Urban Shoulder: 1.2 m
- **After allocating minimum widths, the remaining width is 0.1 m.**
  - Target Urban Shoulder: 1.5 m; an additional 0.1 m can be allocated to the urban shoulder on one side, increasing the width to 1.3 m.

5.8 Example 8: Major Arterial Road with Planned In-Boulevard Cycling Facility - (50 km/h or less)

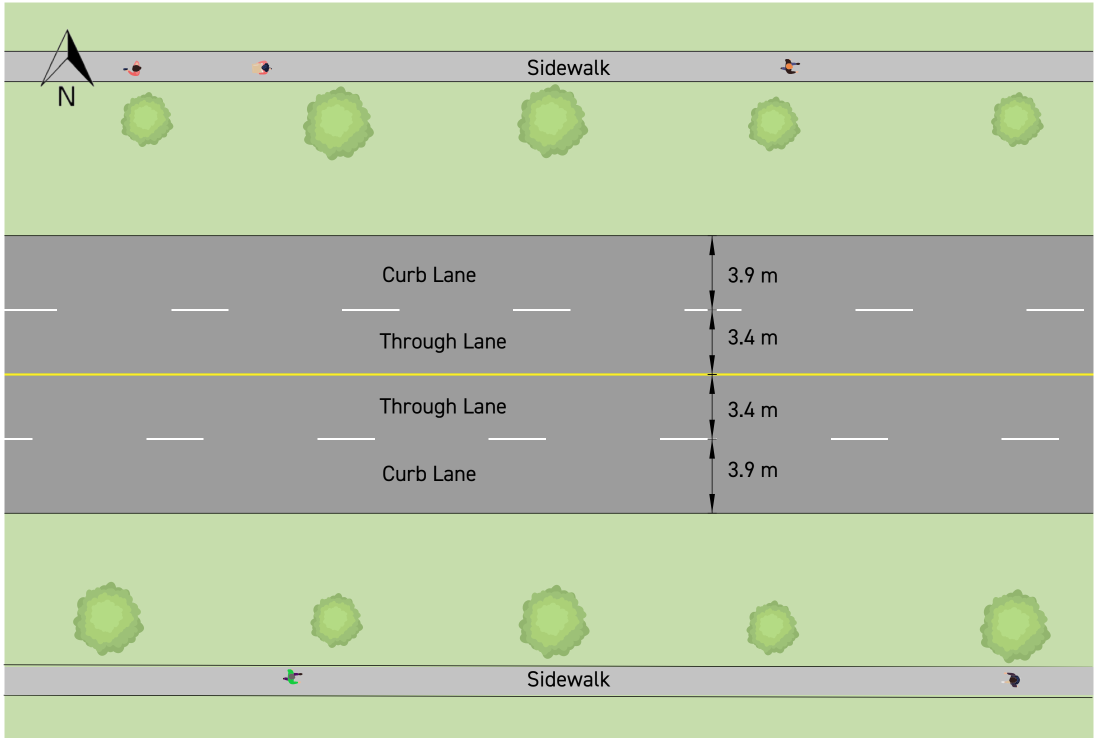


Figure 30: Example 8 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Major Arterial
- EB existing road width: 7.3 m
- EB: Curb Lane & Through Lane
- WB existing road width: 7.3 m
- WB: Curb Lane & Through Lane
- No existing cycling facility
- A posted speed limit of 50 km/h or less

5.8 Example 8A: If there are no opportunities to move the curbs:

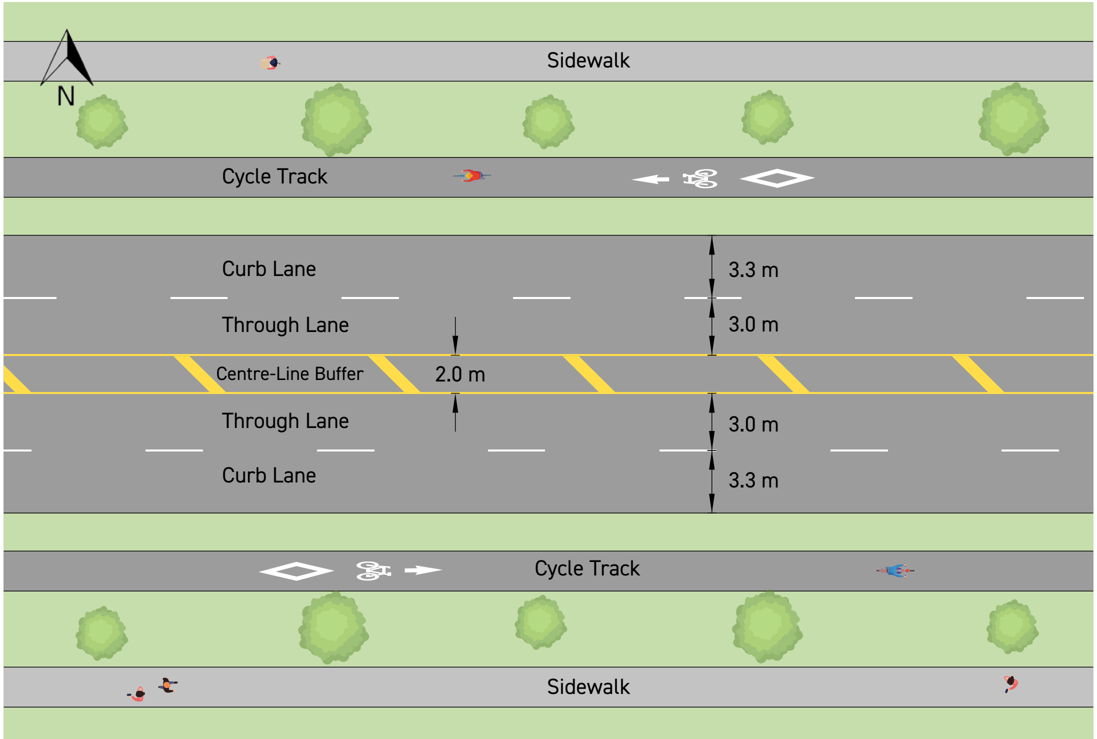


Figure 31: Example 8A - Configuration of Proposed Lane Widths; without Curb Relocation

Step 2A: Allocate the lane widths.

- **Allocate the minimum required widths - EB existing road width 7.3 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
- **After allocating minimum widths, the remaining width is 1.0 m.**
  - Centreline Buffer: Minimum 0.5 m - no Max; allocate the surplus width as a centreline buffer of 1.0 m.
- **Allocate the minimum required widths - WB existing road width 7.3 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
- **After allocating minimum widths, the remaining width is 1.0 m.**
  - Centreline Buffer: Minimum 0.5 m - no Max; allocate the surplus width as a centreline buffer of 1.0 m.
- **Total width of the centreline buffer: 2.0 m**

5.8 Example 8B: If there are opportunities to move the curbs:

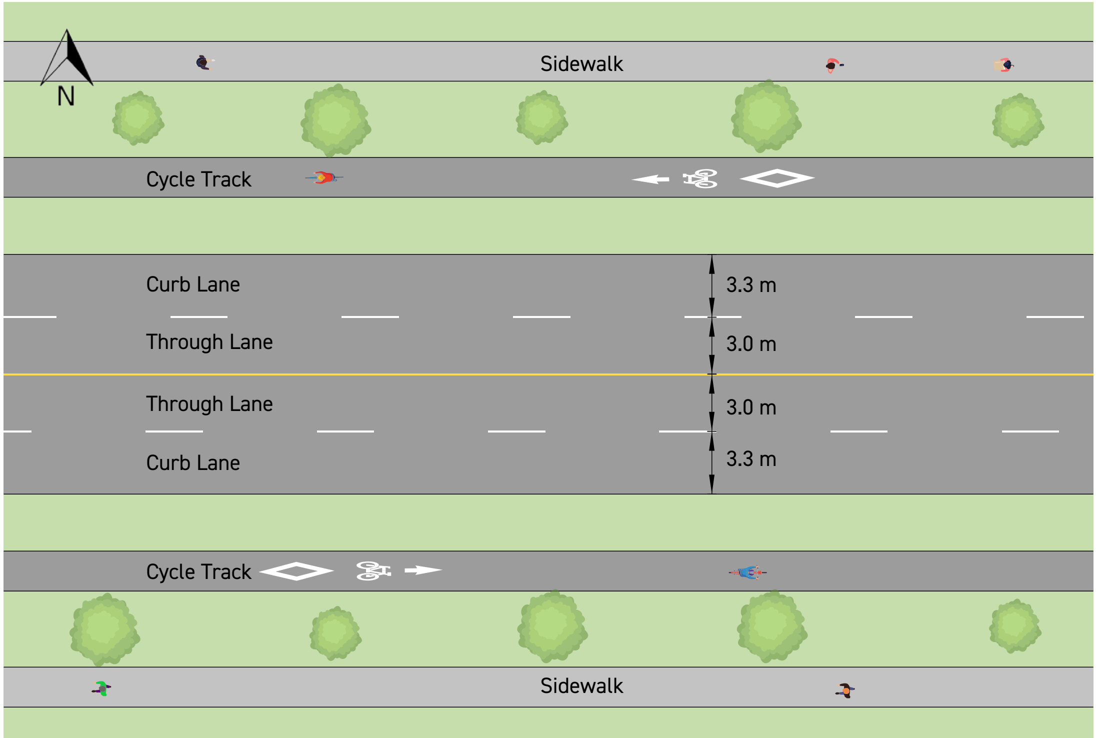


Figure 32: Example 8B - Configuration of Proposed Lane Widths; with Curb Relocation

Step 2B: Allocate the lane widths.

- **Allocate the minimum required widths - EB existing road width 7.3 m:**
  - Minimum Curb Lane: 3.3 m
  - Minimum Through Lane: 3.0 m
- **After allocating minimum widths, the remaining width is 1.0 m.**
  - The remaining surplus width can be added to the pedestrian clearway, cycling facility or boulevard. Refer to Table 19 - Design Controls (Curb Relocation) for more details.

5.9 Example 9: Major Arterial Road with Insufficient Road Width - (50 km/h or less)

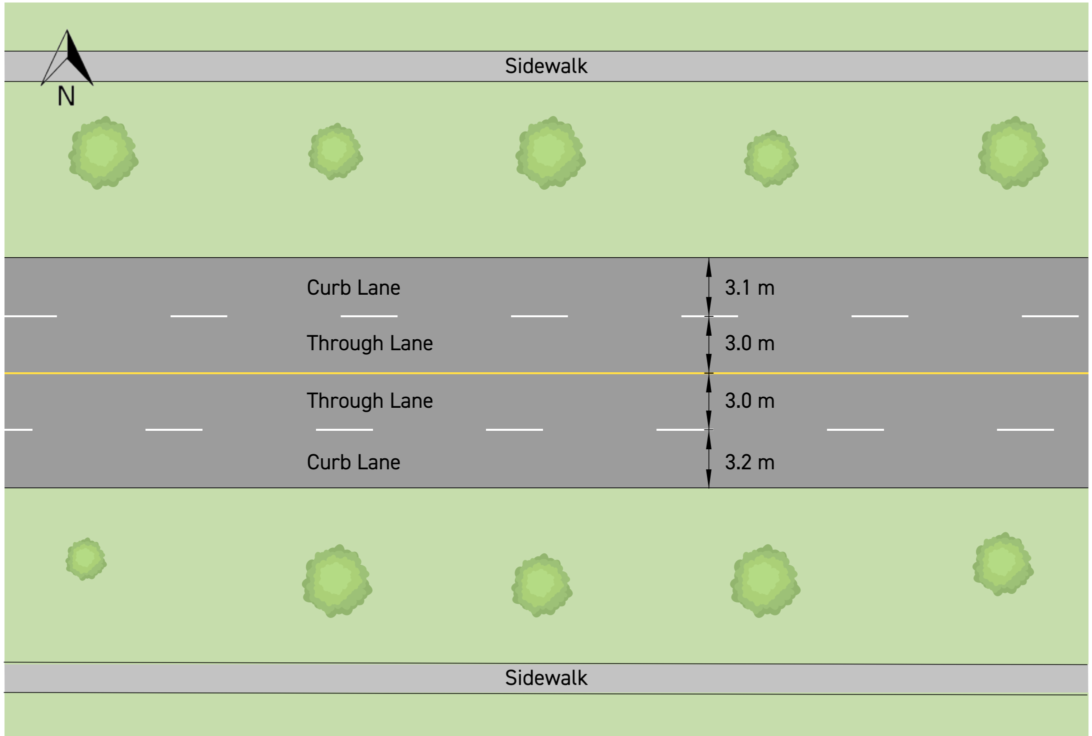


Figure 33: Example 9 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Major Arterial
- EB existing road width: 6.2 m
- EB: Curb Lane & Through Lane
- WB existing road width: 6.1 m
- WB: Curb Lane & Through Lane
- No existing cycling facility
- TTC Bus Route
- A posted speed limit of 50 km/h or less

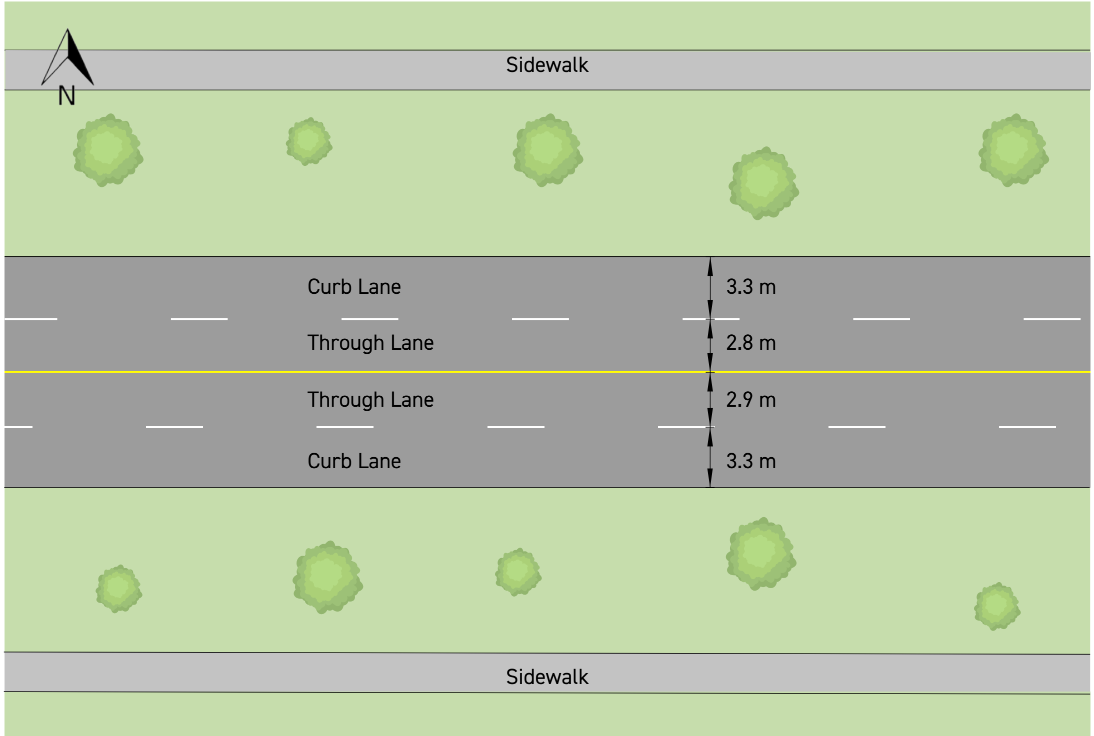


Figure 34: Example 9 - Configuration of Proposed Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths – EB existing road width 6.2 m:**
  - Minimum Curb Lane: 3.3 m (because of a TTC Bus Route)
  - Minimum Through Lane: 3.0 m; in this case, the remaining width for the Through Lane is 2.9 m. Refer to Table 20 - Design Considerations (Constraint Conditions) for more details
- **Allocate the minimum required widths – WB existing road width 6.1 m:**
  - Minimum Curb Lane: 3.3 m (because of a TTC Bus Route)
  - Minimum Through Lane: 3.0 m; in this case, the remaining width for the Through Lane is 2.8 m. Refer to Table 20 - Design Considerations (Constraint Conditions) for more details.

5.10 Example 10: Major Arterial Road with Shared Priority Bus Lane - (50 km/h or less)

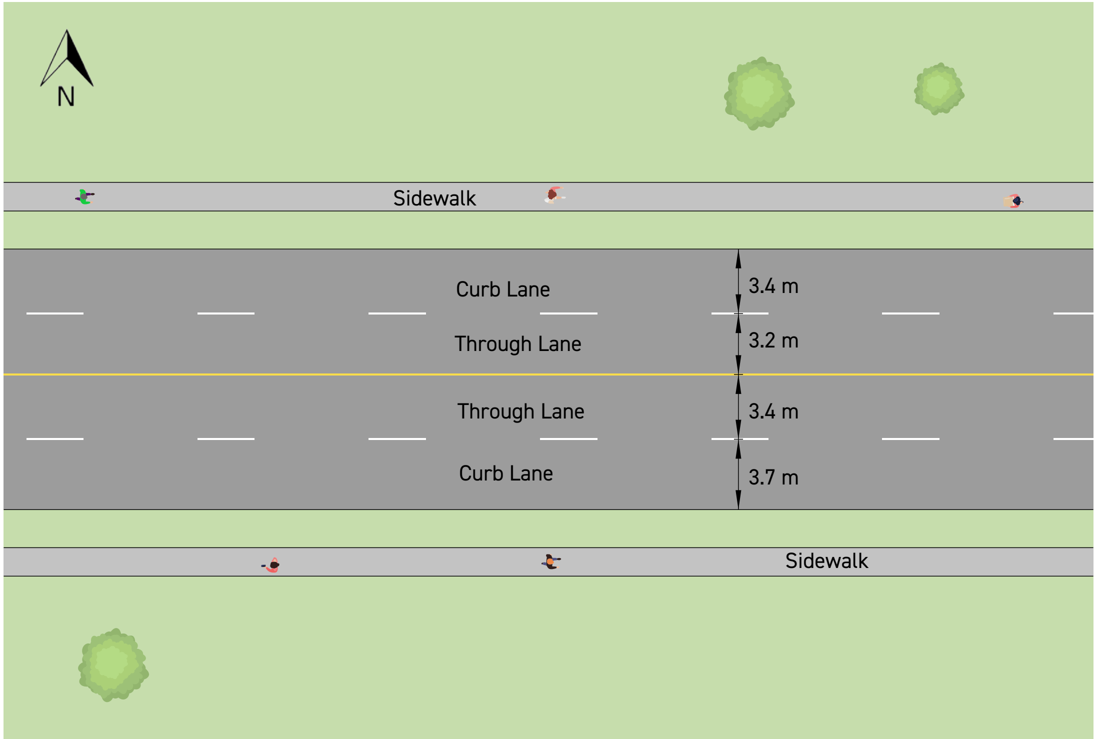


Figure 35: Example 10 - Configuration of Existing Lane Widths

Step 1: Identify existing street characteristics.

- Major Arterial
- EB existing road width: 7.1 m
- EB: Curb Lane & Through Lane
- WB existing road width: 6.6 m
- WB: Curb Lane & Through Lane
- No existing cycling facility
- A posted speed limit of 50 km/h or less

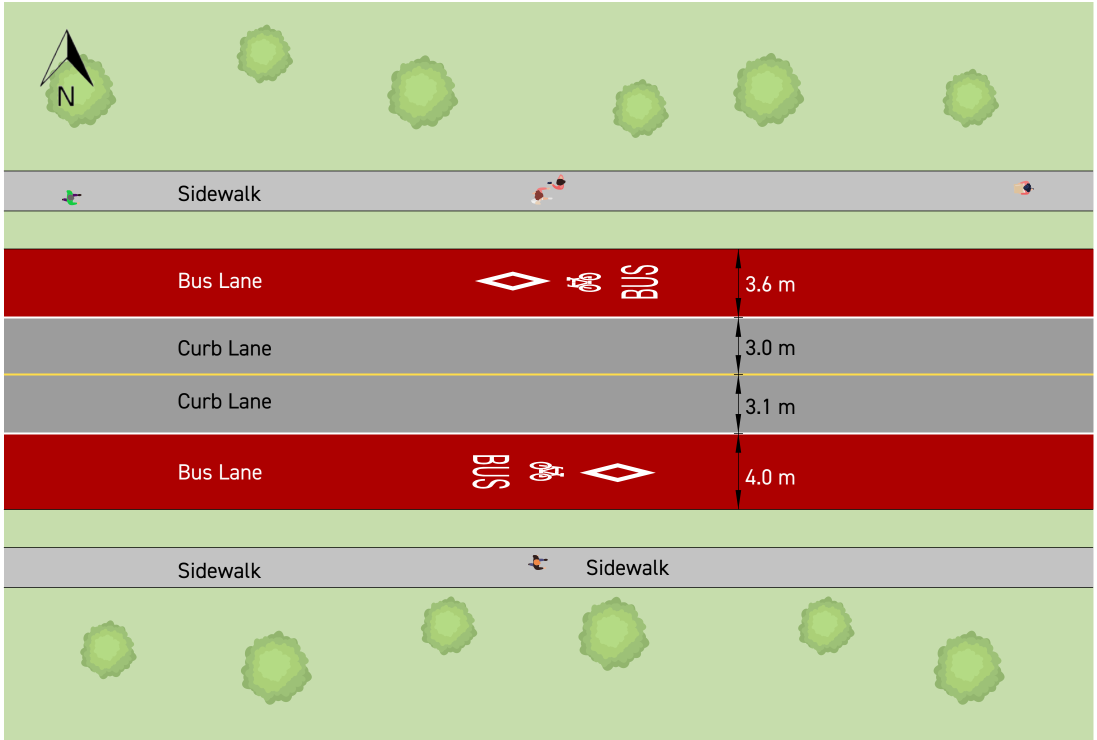


Figure 36: Example 10 - Configuration of Proposed Lane Widths

Step 2: Allocate the lane widths.

- **Allocate the minimum required widths – EB existing road width 7.1 m:**
  - Minimum Curb Lane adjacent to a Shared Priority Bus Lane: 3.0 m
  - Minimum Shared Priority Bus Lane: 3.3 m
- **After allocating minimum widths, the remaining width is 0.8 m.**
  - Target/Maximum Shared Priority Bus Lane: 4.0 m; an additional 0.7 m can be allocated to this, increasing the width to 4.0 m.
  - Target Curb Lane adjacent to Priority Bus Lane: 3.3 m; an additional 0.1 m can be allocated to this, increasing the width to 3.1 m.
- **Allocate the minimum required widths – WB existing road width 6.6 m:**
  - Minimum Shared Priority Bus Lane: 3.3 m
  - Minimum Curb Lane adjacent to a Shared Priority Bus Lane: 3.0 m
- **After allocating minimum widths, the remaining width is 0.3 m.**
  - Target/Maximum Shared Priority Bus Lane: 4.0 m; an additional 0.3 m can be allocated to this, increasing the width to 3.6 m.

ST GEORGE STREET & BLOOR STREET WEST, TORONTO

6.0 SUPPLEMENTAL INFORMATION

6.1 Guidelines

Complete Streets Guidelines

https://www.toronto.ca/services-payments/streets-parking-transportation/enhancing-our-streets-and-public-realm/complete-streets/complete-streets-guidelines/

City of Toronto Road Engineering Guidelines

https://www.toronto.ca/services-payments/building-construction/infrastructure-city-construction/construction-standards-permits/standards-for-designing-and-constructing-city-infrastructure/

On-Street Bikeway Design Guidelines

https://www.toronto.ca/ext/digital_comm/pdfs/transportation-services/On-Street-Bikeway-Design-Guidelines.pdf

6.2 Policies

Vision Zero Road Safety Plan

The Vision Zero Road Safety Plan (opens in new window) is a comprehensive action plan focused on eliminating traffic-related fatalities and serious injuries on Toronto's streets. The Plan prioritizes the safety of our most vulnerable road users across seven emphasis areas through a range of extensive, proactive, targeted, and data-driven initiatives.

https://www.toronto.ca/services-payments/streets-parking-transportation/road-safety/vision-zero/vision-zero-plan-overview/

6.3 Maps

Cycling Network Plan

The Cycling Network Plan (CNP) serves as a comprehensive roadmap and work plan, outlining the City's planned investments in the near term and intentions for the long term. The CNP identifies existing and planned cycling infrastructure such as bike lanes, cycle tracks, trails, quiet street routes, and major corridor studies.

https://www.toronto.ca/services-payments/streets-parking-transportation/cycling-in-toronto/cycling-pedestrian-projects/cycling-network-plan/

6.3 Maps

High Through Truck Volume Map

The high-through truck volume map identifies signalized intersections with 8-hour two-way truck volumes of 700 or more. The two-way truck volume includes all the trucks leaving an intersection and entering the receiving leg of an intersection for an opposing pair of intersection legs. The north-south through volumes include all trucks leaving the intersection and entering the north and south receiving legs. The east-west through volumes include all trucks leaving the intersection and entering the east and west receiving legs.

https://totransportation.maps.arcgis.com/apps/Viewer/index.html?appid=12a0726b5b5d48c2b25e37c3cbc3ccea