

Tools to inform the completion of Step 3 & 4 of the process (facility design)

Desirable Cycling Facility Pre-Selection Nomograph  
Urban/Suburban Context (Step 1)

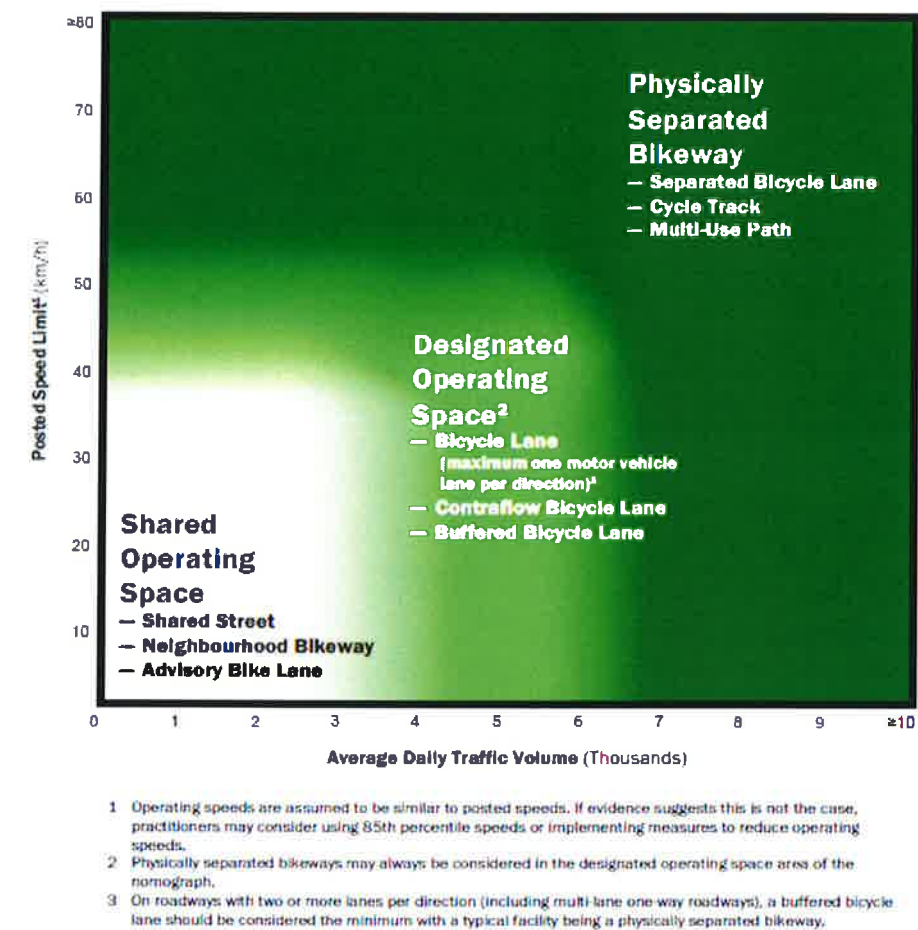


Figure 5.5 – Desirable Cycling Facility Pre-selection Nomograph — Urban/Suburban Context

The nomographs are intended to be used to identify the preliminary recommended level of separation for the various corridors. The recommendation pertains to cycling infrastructure and does not address the requirements for pedestrians - who are assumed to be accommodated outside of the road right of way. Once the level of separation has been identified; Table 5.3 is to be used to consider more of the context specific conditions along the corridor with the intent of "narrowing down" the most applicable facility.

The master plan has applied these tools to identify the recommended facility for the proposed AT network. The tools are intended to be used along with the details provided within the ATMP report, OTM Book 18, OTM Book 15 and OTM Book 12 as the City proceeds with next steps including but not limited to Environmental Assessments, preliminary and detailed design.

Desirable Cycling Facility Pre-Selection Nomograph  
Rural Context<sup>1</sup> (Step 1)

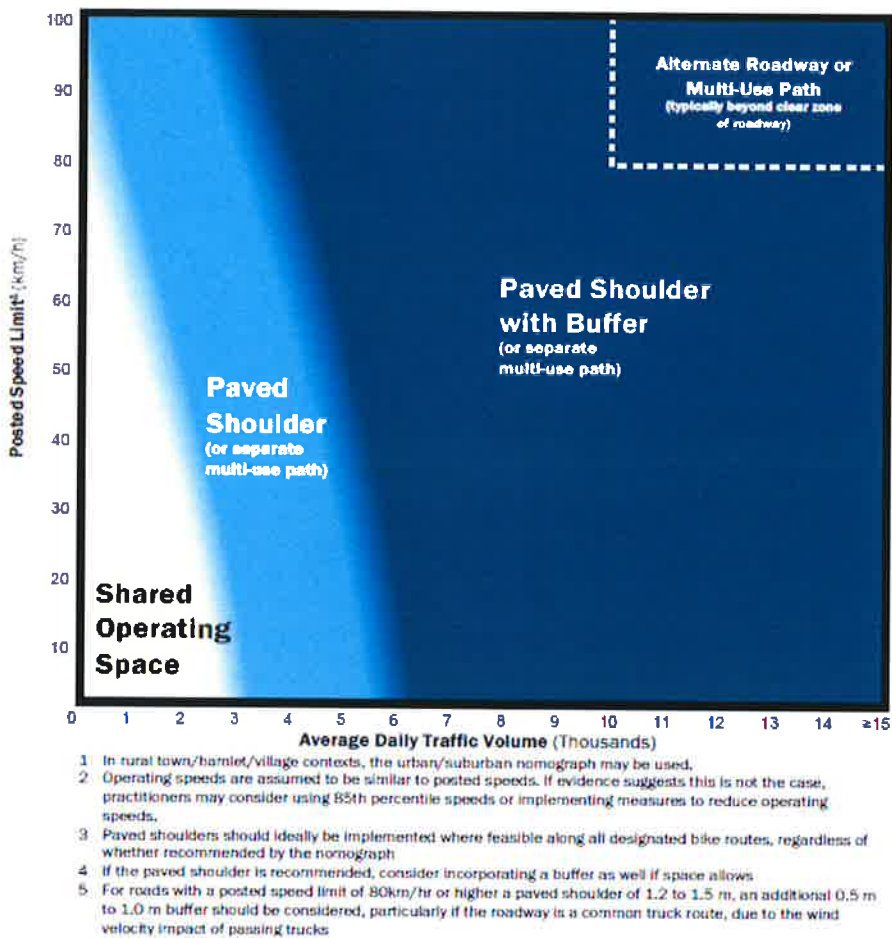


Figure 5.6 – Desirable Cycling Facility Pre-selection Nomograph — Rural Context

- 1 In rural town/hamlet/village contexts, the urban/suburban nomograph may be used.
- 2 Operating speeds are assumed to be similar to posted speeds. If evidence suggests this is not the case, practitioners may consider using 85th percentile speeds or implementing measures to reduce operating speeds.
- 3 Paved shoulders should ideally be implemented where feasible along all designated bike routes, regardless of whether recommended by the nomograph.
- 4 If the paved shoulder is recommended, consider incorporating a buffer as well if space allows.
- 5 For roads with a posted speed limit of 80km/hr or higher a paved shoulder of 1.2 to 1.5 m, an additional 0.5 m to 1.0 m buffer should be considered, particularly if the roadway is a common truck route, due to the wind velocity impact of passing trucks.

Table 5.3 – Roadway Characteristics Application Heuristics Summary

	Shared Roadway	Neighbourhood Bikeway	Rural Paved Shoulder	Advisory Bicycle Lane	Bicycle Lane	Buffered Bicycle Lane	Separated Bicycle Lane	Cycle Track	Multi-Use Path
Motor vehicle speed									
30 km/h or less	✓	✓	?	?					
40 km/h	?	?	?	✓	✓	✓	✓	✓	✓
50 km/h			?	✓	✓	✓	✓	✓	✓
60 km/h			?			?	✓	✓	✓
70 to 90 km/h			?					✓	✓
Over 90 km/h								✓	✓
Motor vehicle volumes									
<1,500 vehicles/day	✓	✓	?	?	?	?			
1,500 to 3,000 vpd	?	?	?	✓	✓	✓	✓	✓	✓
3,000 to 6,000 vpd			?	?	?	?	✓	✓	✓
6,000 to 10,000 vpd			?				✓	✓	✓
> 10,000 vpd							?	✓	✓
Function of street/road/highway									
Access roads (local streets)	✓	✓	✓	?	?	?			
Both mobility and access roads (minor collectors)			?	?	✓	✓	✓	✓	✓
Mobility roads (major collectors and arterials)			?		?	?	✓	✓	✓
Vehicle mix									
More than 30 trucks/buses per hour in curb lane			?			?	✓	✓	✓
Bus stops located along route			?		?	?	✓	✓	✓
Pedestrian activity									
Low pedestrian volumes	✓	✓	✓	✓	✓	✓	✓	✓	✓
High pedestrian volumes	✓	✓		✓	✓	✓	✓	✓	?
On-street parking									
Parallel parking; low turnover	?	?		?	?	?	✓	✓	✓
Parallel parking; high turnover							✓	✓	✓
Perpendicular or angle parking							✓	✓	✓
Frequency of intersections and crossings									
Limited intersections and driveway crossings	?	?	✓	✓	✓	✓	✓	✓	✓
Low-volume driveways or unsignalized intersections	✓	✓	✓	✓	✓	✓	✓	✓	✓
Frequent high-volume driveways or unsignalized intersections					?	?	✓	✓	?
Signalized intersections with high-volume turning conflicts						?	✓	✓	?

✓

Typically appropriate for the context

?

Requires further context specific evaluation

Tool to inform the completion of Step 5 of the process (project phasing)

The identification of project phasing is dependent on a number of factors that are continually changing and evolving based on external decisions made by staff in other municipal departments, decision makers and partners. For the purposes of the ATMP, phasing has been identified in a corridor by corridor basis and not by individual project. The phasing assumes a project initiation date as opposed to completion date which can at times be years beyond the horizon identified.

Phasing has been identified in three horizons:

- short (0-5 years)
- medium (6-10 years)
- long (10-20 years)

To support the identification of project phasing; the project team considered two factors. The complexity of the project i.e. the amount of impact / intervention that would be needed on the current roadway conditions and context to facilitate the implementation of the proposed facility. The community need / interests as documented through our engagement program and prior input received through municipal projects. Both factors were assessed on a high, moderate or low scale and based on the combination of factors an initial phasing recommendation was made. Changes to the preliminary recommendation occurred if the corridor had been identified as part of an existing capital project within an alternate horizon and / or if there is planned development occurring which would impact the timeline and funding opportunities for the proposed project.

The following is a matrix of assessment that was completed and used to inform the identification of corridor phasing.

		Complexity		
		High	Moderate	Low
Community Interest	High	M	S	S
	Moderate	L	M	S
	Low	L	L	M