

Table 5-1: Contextual Guidance for Selecting All Ages and Abilities Cycling Facilities

Contextual Guidance for Selecting All Ages & Abilities Cycling Facilities (NACTO 2017)				
Roadway Context				All Ages and Abilities – Bicycle Facility
Target Motor Vehicle Speed	Target Max. Motor Vehicle Volume (ADT)	Motor Vehicle Lanes	Key Operational Considerations	
Any			Any of the following: High curbside activity, frequent buses, motor vehicle congestion or significant turning conflicts***	Cycle Track (Class 1)
≤15km/h	Less relevant	No centerline, or single lane one-way	Pedestrians share the roadway	Shared Street
≤30km/h	≤1,000 – 2,000		<50 motor vehicles per hour in the peak direction at peak hour	Bicycle Boulevard
≤40 km/h	≤500 – 1,500	Single lane each direction or single lane one-way	Low curbside activity or low congestions pressure	Conventional or Buffered Bicycle Lane or Cycle Track (Class 2)
	≤1,500 – 3,000			Buffered Bicycle Lane or Cycle Track (Class 1)
	≤3,000 – 6,000	Multiple lanes per direction		Protected Cycle Track (Class 1)
>40 km/h	≥6,000	Single lane each direction or single lane one-way	Low curbside activity or low congestions pressure	Protected Cycle Track (Class 1), or Reduce Speed
		Multiple lanes per direction		Protected Cycle Track (Class 1), or Reduce to Single Lane & Reduce Speed
	Greater than 6,000	Any		Protected Cycle Track, or Bicycle Path (Class 1)
High-speed limited access roadways, natural corridors, or geographic edge conditions with limited conflicts	Any	High pedestrian volume		Bike Path with Separate Walkway or Protected Cycle Track (Class 1)
		Low pedestrian volume		Shared-Use Path or Protected Bicycle Lane (Class 1)

* While posted or 85th percentile motor vehicle speed are commonly used design speed targets, 95th percentile speed captures high-end speeding, which causes greater stress to bicyclists and more frequent passing events. Setting target speed based on this threshold results in a higher level of bicycling comfort for the full range of riders.

**Setting 40 kilometres per hour as a motor vehicle speed threshold for providing protected bikeways is consistent with many cities' traffic safety and Vision Zero policies. However, some cities use a 50 kilometres per hour posted speed as a threshold for protected bikeways, consistent with providing Level of Traffic Stress level 2 (LTS 2) that can effectively reduce stress and accommodate more types of riders.

***Operational factors that lead to bikeway conflicts are reasons to provide protected bike lanes regardless of motor vehicle speed and volume.