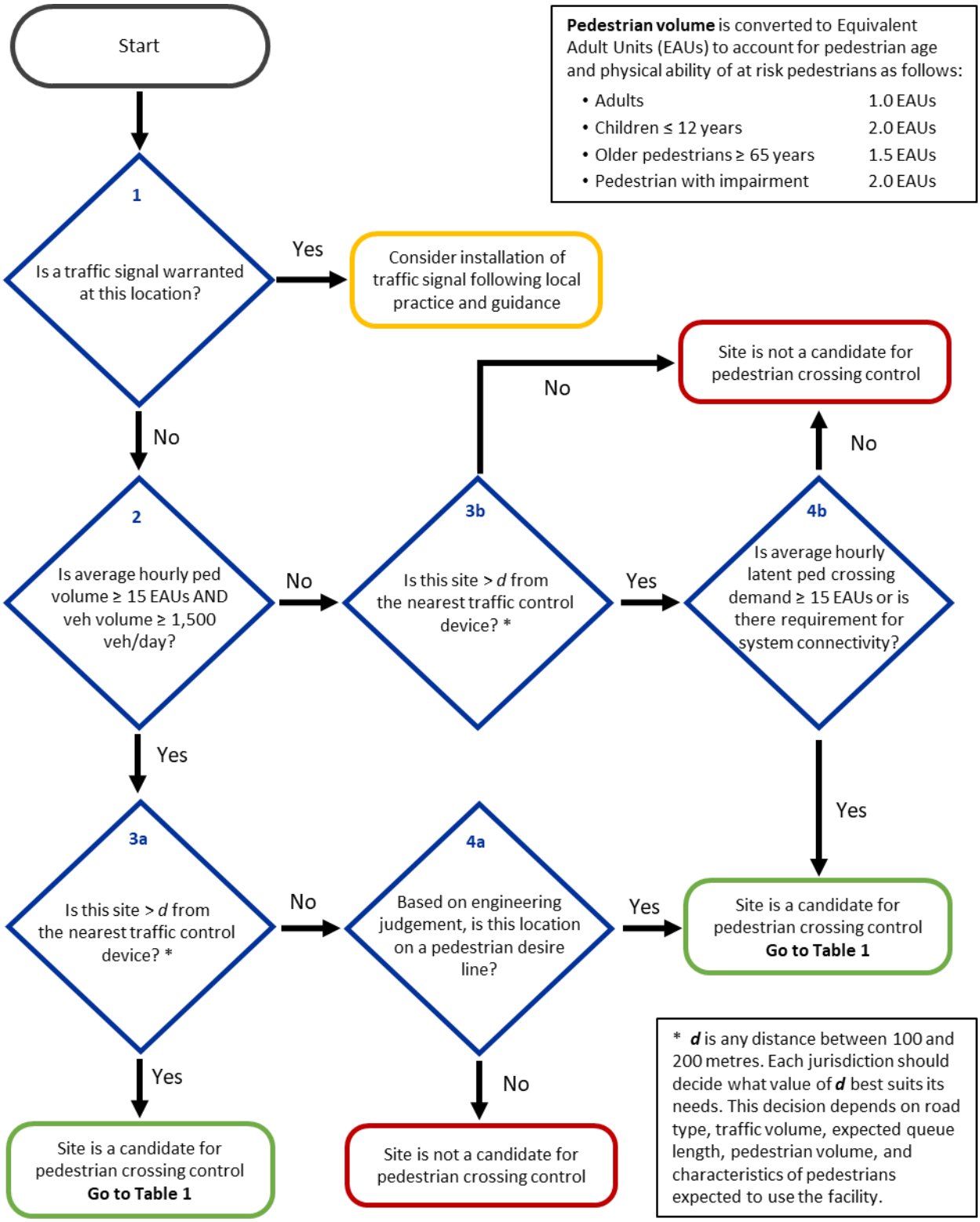


Figure 8: Decision Support Tool – Preliminary Assessment

Table 1: Decision Support Tool – Treatment Selection Matrix

Average Daily Traffic	Speed Limit [2] (km/h)	Total Number of Lanes [1]				
		1 or 2 lanes	3 lanes (two-way)	3 lanes (one-way)	2 or 3 lanes/direction w/ raised refuge	2 lanes/ direction w/o raised refuge
1,500 < ADT ≤ 4,500	≤ 50	GM	GM	GM	GM	GM+
	60	GM+	GM+	OF	RRFB or OF [3]	RRFB
	70	RRFB	RRFB	OF	OF	OF
4,500 < ADT ≤ 9,000	≤ 50	GM	GM	GM	GM	RRFB
	60	GM+	GM+	OF	RRFB or OF [3]	OF
	70	RRFB	OF	OF	OF	TS
9,000 < ADT ≤ 12,000	≤ 50	GM	RRFB	OF	RRFB or OF [3]	OF
	60	RRFB	RRFB	OF	RRFB or OF [3]	TS
	70	OF	OF	OF	TS	TS
12,000 < ADT ≤ 15,000	≤ 50	RRFB	RRFB	OF	RRFB or OF [3]	OF
	60	RRFB	OF	OF	RRFB or OF [3]	TS
	70	OF	TS	TS	TS	TS
> 15,000	≤ 50	RRFB	OF	OF	RRFB or OF [3]	TS
	60	RRFB	TS	TS	TS	TS
	70	OF	TS	TS	TS	TS

[1] The total number of lanes is representative of pedestrian-exposed crossing distance. The following can help determine the applicable number of lanes for a given roadway:

- Travel lanes, two-way left turn lanes, other turning lanes, and part time parking lanes should each be considered as one lane.
- Full time parking lanes on one or both sides of the roadway should be considered as one lane. Curb extensions may be constructed to reduce the total crossing distance and hence, the number of lanes.
- Engineering judgement based on local conditions should be used to determine the lane equivalent associated with bicycle lanes.

[2] At roundabouts, the maximum design speed of entering or exiting vehicles is often lower than the approaching roadway speed and can be used in place of the roadway speed limit.

[3] If three lanes per direction use OF.

Additional notes:

Treatment systems are hierarchical (GM → GM+ → RRFB → OF → TS). Higher order treatment systems may be substituted for lower order treatment systems. The rationale for substituting higher order treatment systems should be consistent throughout the jurisdiction. Remain consistent in application of DESIRABLE components of the GM+ system as best as possible.

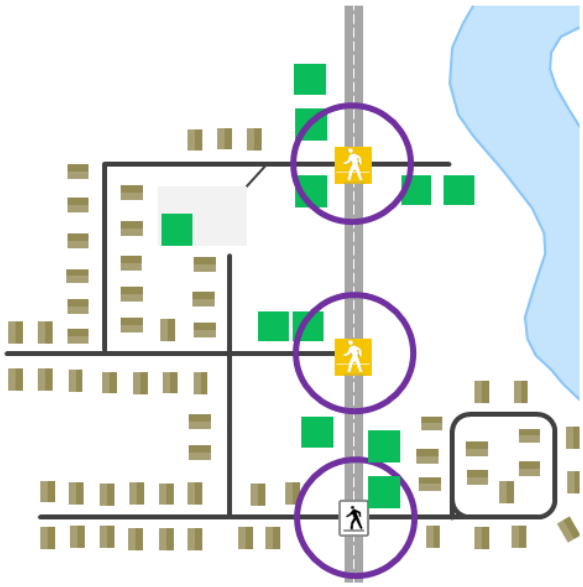
Raised refuge may be a pedestrian refuge island or raised median. Raised refuge should be a minimum of 2.4 metres wide to accommodate groups of pedestrians, bicycles, and mobility aids such as wheelchairs and scooters.

A TS treatment system should be selected: (1) for cross-sections with greater than six lanes where a raised refuge is present; (2) for cross sections with greater than four lanes where no raised refuge is present; and (3) for speeds greater than 70 km/h.

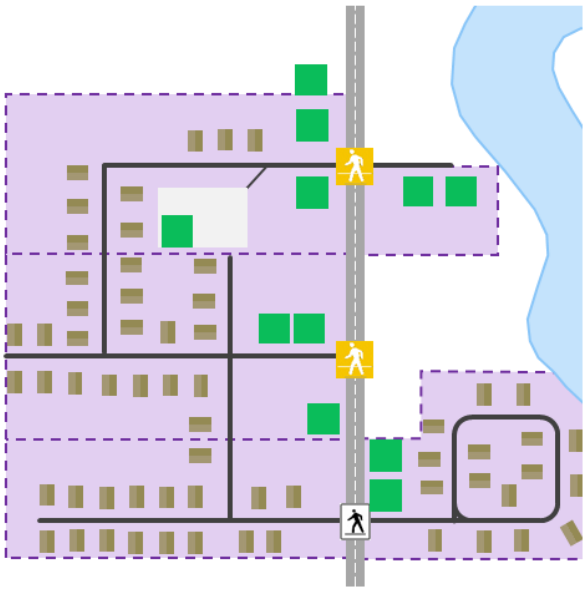
Always ensure adequate sight distance at the site as per the TAC *Geometric Design Guide for Canadian Roads*, and if it is insufficient, create it by applying available tools.

A crossing location with a very wide (7m or more) pedestrian refuge area between opposing directions of traffic may be considered to divide the crossing into two independent sections and may be treated as two separate crosswalks. This may occur at locations with a wide raised refuge or offset crosswalk.

Passive crossing treatment systems		Active crossing treatment systems		Traffic signal systems
GM Go to Table 2	GM+ Go to Table 3	RRFB Go to Table 4	OF Go to Table 5	TS go to Table 6 (pedestrian signal) or Table 7 (full signal)

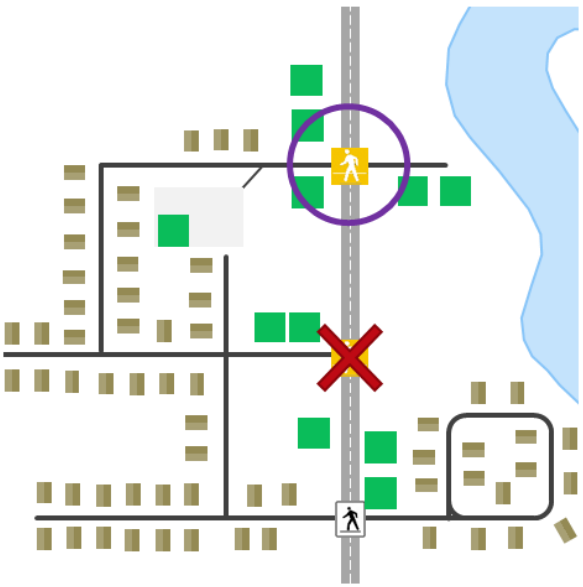


Step 1: Identify existing and potential pedestrian crossing control locations.



Step 2: Identify and quantify walking trip generators/attractors on each side of the roadway.

Step 3, 4: Determine probable OD pairs and assign probable trip routes



Step 5: Identify potential locations that serve the greatest latent crossing demand

Legend:

Potential crossing location

Existing crossing location

Residential unit

Walking trip attractor

Figure 3: Latent Crossing Demand Methodology

Glossary of Terms

Latent pedestrian crossing demand: a measure of the potential volume of pedestrians that may use a crossing if one were provided

Equivalent Adult Units (EAUs): A conversion of pedestrian volume to account for pedestrian age and physical ability of at risk pedestrians.

Ground Mounted System (GM): Standard Crosswalk with signage and pavement markings

Enhanced Ground Mounted System (GM+): Zebra Crosswalk with signage and pavement markings

Rectangular Rapid Flashing Beacon System (RRFB): Pedestrian activated treatment system which consts of two rapidly flashing beacons mounted above ground mounted signs

Overhead Flashing Beacon System (OF): Pedestrian activated treatment system which consists of internally illuminated overhead mounted signs with alternating ambler flashing beacons and down lighting. Equivalent to an Active Pedestrian Crossing (APC).

Traffic Signals (TS): Provide designated crossing opportunities for pedestrians and assign the right-of-way between conflicting streams of traffic. Equivalent to Pedestrian Actuated Signals (PAS) or full traffic signals.