Crosswalk Treatment Systems Policy

April 17, 2023



Introduction

- Crosswalk information
- Crosswalk treatment systems
- Reasons for a new policy
- Treatment system hierarchy
- Treatment system decision process
- Community Road Safety Advisory Committee (CRSAC) feedback
- Next step

Crosswalks



All legs of an intersection are considered to contain crosswalks by default, whether or not they are marked



Installation of a warranted device doesn't guarantee the safety of the pedestrian



Installation of an unwarranted or unjustified devices can be detrimental to road user safety



Misuse or overuse of crossing treatments may result in noncompliance and/or disregard of traffic control devices

Crosswalk Treatment Systems

Designed to control traffic and allow pedestrians to cross the road safely Uniform applications are easily recognized and increase drivers' comprehension and response time

Consist of a combination of pedestrian crossing control devices

Why a new policy?

- Provides more clarity on location and type of treatment system
- Establishes the need to control traffic to enable a pedestrian to cross the road safely based on traffic volume and pedestrian demand
- Identifies the type of treatment system based on the type of road, speed limit, volume of traffic and pedestrian demand
- Used as a decision support tool when managing resident's inquiries
- Incorporates current Transportation Association of Canada (TAC) guidelines

Treatment System Hierarchy

Controlled Intersection Treatment Systems

- Traffic signals
- Stop signs

Active Crossing Treatment Systems

- Overhead flashing lights (OF)
- •Rectangular Rapid Flashing Beacons (RRFB)

Passive Crossing Treatment System

- •Channelized right turn lanes
- Arterial Roads
- Collector roads
- Local roads
- Roundabouts

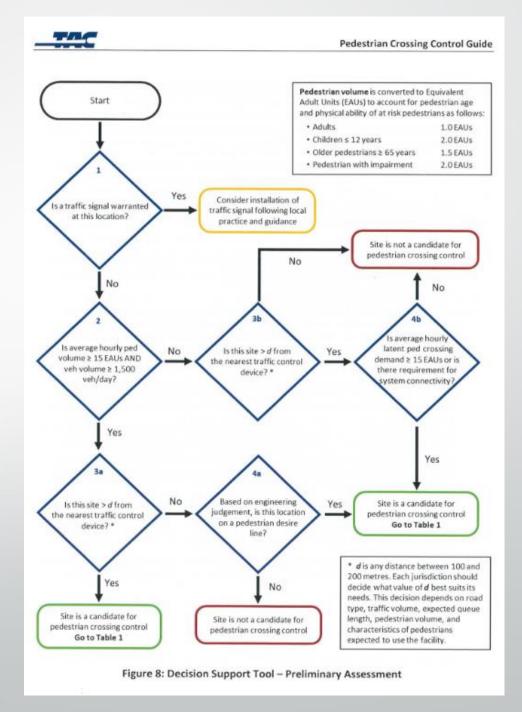
Treatment
System
Decision
Process

Preliminary Assessment

Treatment Selection

Preliminary Assessment Figure 8

- 1. Check if traffic signals are warranted.
- 2. Evaluate pedestrian and vehicle volumes.
 - 15 EAUs/hr (average)
 - 1500 vehicles/day
- 3. Identify the proximity to the nearest traffic control device and other crosswalk treatment systems.
 - distance >100m
- 4. a) Evaluate pedestrian desire lines
 - b) Evaluate latent crossing demand and/or the need to provide system connectivity.





- 1. Select Average Daily Traffic (ADT)
- 2. Select speed limit
- 3. Select number of lanes



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	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	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

Community Road Safety Advisory Committee feedback

- Collect data on collisions at crosswalks
- Enhance webpage with:
 - Flow chart for decision making
 - FAQ's
 - Quick, easy links (e.g., audible signal request)



Summary

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