



## **POLICY STATEMENT**

The City of Chanhassen strives to provide a safe, sustainable, and efficient transportation network which includes our local pedestrian facilities and crosswalks. Traffic control devices such as signage, striping, and other physical improvements may provide enhancements to the overall safety of local pedestrian facilities and crosswalks, but as with all traffic control devices careful consideration and review must be given. The evaluation of whether enhanced traffic control devices at crosswalks are warranted must establish a consistent and effective methodology, align with the City's goals, and must adhere to accepted local and federal guidelines and engineering practices. This policy establishes the City's guidelines for the installation of enhanced crosswalk treatments and is intended to provide a consistent procedure for determining if the installation of crossing treatments is warranted on a case-by-case basis.

## **GENERAL GUIDANCE**

Pedestrians, bicyclists, and motorists each as members of the traveling public have rights and responsibilities when traveling along or across roadways. In other words, everyone plays a role in keeping our roadways safe.

Some responsibilities of the traveling public when crossing roadways or approaching crosswalks are:

- » When traffic control signals are not in place or in operation, a driver must stop when a pedestrian is in a crosswalk. In this type of situation, a driver can proceed once the pedestrian has completely crossed the lane in front of the stopped vehicle.
- » When a vehicle is stopped to permit a pedestrian to cross the roadway at a marked crosswalk or at an intersection with no marked crosswalk, the driver of any other vehicle approaching from the rear shall not overtake and pass the stopped vehicle.
- » A pedestrian must not enter a crosswalk if a vehicle is approaching. There is no defined distance, but the pedestrian must use common safety sense. The law states: "No pedestrian shall suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close that it is impossible for the driver to yield."
- » At crossings with traffic control signals, pedestrians shall be subject to obeying the traffic signals.
- » On all local roadways, every pedestrian crossing at a point other than within a marked crosswalk, or at an intersection with no marked crosswalk, shall yield the right of way to all vehicles on the roadway.
- » Pedestrians, or a person in a wheelchair using the shoulder of the road, shall walk or move along the left side of the roadway facing oncoming traffic. Where sidewalks are provided, and accessible and usable, it shall be unlawful for a pedestrian or person in a wheelchair to use the roadway.

It is important to recognize that all intersections are legal crosswalks and therefore drivers are required to yield to pedestrians. However, pedestrians are urged to cross with caution in any street crossing, marked or unmarked. Minnesota State Statute defines that crosswalks exist at intersections, whether marked or unmarked, and provides for pedestrian and motorist responsibilities.



#### MN STATUTE 169.011 DEFINITIONS

Subdivision 20. Crosswalk. "Crosswalk" means (1) that portion of a roadway ordinarily included with the prolongation or connection of the lateral lines of sidewalks at intersections; (2) any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

#### MN STATUTE 169.21 PEDESTRIAN

Subdivision 2. Rights in absence of signal. (a) Where traffic-control signals are not in place or in operation, the driver of a vehicle shall stop to yield the right-of-way to a pedestrian crossing the roadway within a marked crosswalk or at an intersection with no marked crosswalk. The driver must remain stopped until the pedestrian has passed the lane in which the vehicle is stopped. No pedestrian shall suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close that it is impossible for the driver to yield. This provision shall not apply under the conditions as otherwise provided in this subdivision.

Marked crosswalks are typically viewed by most as "safety devices". There is strong evidence that this prompts many pedestrians to feel overly secure when using a marked crosswalk. As a result, pedestrians will often place themselves in a hazardous position by believing that a motorist can and will stop in all cases, even when it may be impossible to do so. In contrast, a pedestrian using an unmarked crosswalk generally feels less secure and less certain that motorists will stop and will, therefore, exercise more caution before crossing. Because of this, it is important that any request for enhanced crosswalk treatments, such as markings, be consistently evaluated through accepted local and federal guidelines along with sound engineering practices and judgment while maintaining the goals of the City.

## **EVALUATION PROCESS**

Chanhassen residents can have pedestrian and traffic related safety concerns evaluated by the Traffic Safety Committee (TSC) by contacting the City's Engineering Department or by using the "See Click Fix" app (available in your smart device's app store) and selecting the "Traffic Concerns" category. If the concern involves a request for the installation of crosswalk improvements, the TSC will utilize the appropriate "Crosswalk Treatment Flowchart" found attached to this Policy to determine if enhancements are warranted. When warranted, the TSC will recommend to the Public Works Department that the treatments be installed. If the treatment requires substantial improvements or impacts to the right-of-way, the TSC's recommendation will be presented to City Council for approval. Interested parties will be notified of this council meeting and may attend.

With respect to all crosswalk evaluations, the City may consider vehicular speed reduction strategies, such as driver speed feedback signs, in conjunction with crosswalk treatments. These are case-by-case situations subject to TSC review and City Engineer approval.

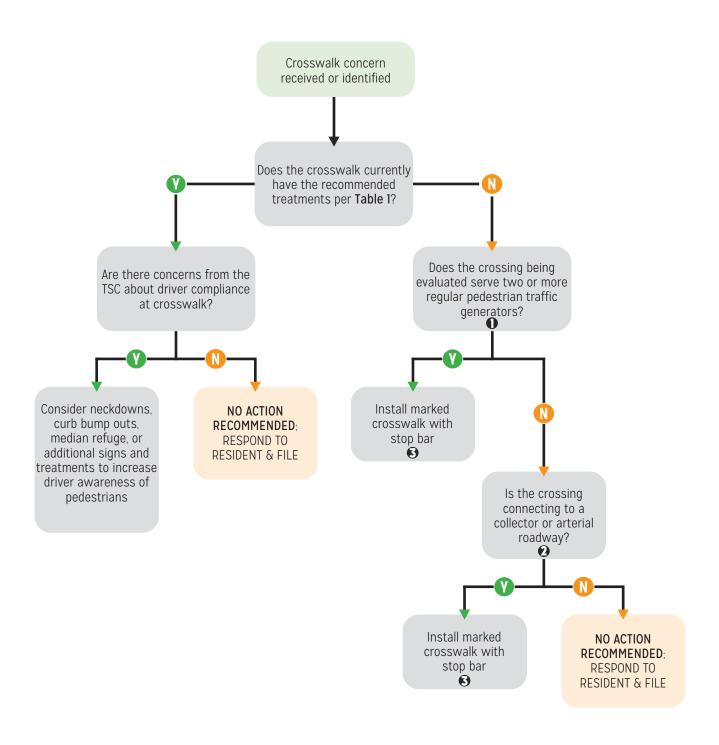
## CONTROLLED VS. UNCONTROLLED INTERSECTIONS AND CROSSWALKS

A controlled intersection is an intersection that has traffic signals, stop signs, or yield signs to regulate the flow of traffic. A controlled crosswalk crosses the controlled leg of an intersection, for example, the leg in which the stop sign is regulating traffic.

An uncontrolled intersection is an intersection that does not have any traffic signals, stop signs, or yield signs to regulate the flow of traffic. This can occur at all legs of an intersection or, more typically, at only two legs of an intersection. An uncontrolled crosswalk crosses the uncontrolled leg of an intersection, for example, the leg in which no stop sign is regulating traffic.



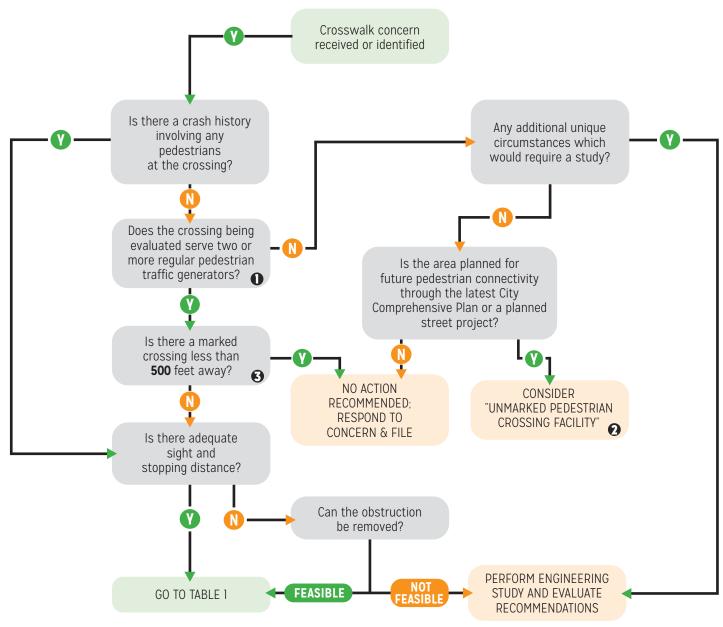
# CONTROLLED CROSSWALK TREATMENT FLOWCHART AT INTERSECTIONS



- Regular pedestrian traffic generators include public or private facilities such as schools, multifamily dwellings, commercial areas, transit stops, parks and recreational facilities, trails, and places of worship.
- 2 Private streets serving less than or equal to four (4) properties will not require the installation of crosswalk treatments. All commercial entrances and drives will be subject to the City Engineer's review.
- If in conjunction with a trail crossing, the Traffic Safety Committee will provide a recommendation to the City Engineer on whether a trail stop sign is warranted.



# UNCONTROLLED CROSSWALK TREATMENT FLOWCHART AT INTERSECTIONS •



- Regular pedestrian traffic generators include public or private facilities such as schools, multifamily dwelling, commercial areas, transit stops, parks and recreational facilities, trails, and places of worship.
- An "unmarked pedestrian crossing facility" is any treatment that improves a pedestrian's ability to cross a street short of the marked/signed and enhanced crossings detailed in Table 1. Installations of this type of pedestrian facility are subject to TSC review and the City Engineer's judgment and may include curb ramps and/or a raised median refuge. However, no effort is made to attract pedestrians or recommend that pedestrians cross at this location. The treatments simply provide an improvement for a low volume pedestrian crossing where pedestrians are already crossing and will like continue to cross.
- 3 Distance to the nearest marked or protected crossing may be reduced to 300 feet subject to TSC review and the City Engineer's judgment. For example, where crossing treatments and crossing activity would not create undue restrictions to vehicular traffic operations.
- Mid-block crossings are prohibited. Any potential improvements associated with existing mid-block crossings are reviewed on a case-by-case basis and are ultimately subject to the City Engineer's approval.



Table I	# of lanes crossed to reach a refuge <sup>(1)</sup>	# of multiple threat lanes <sup>(2)</sup> per crossing	Roadway ADT & Posted Speed						
Roadway Configuration			1,000-9,000vpd <sup>(3)</sup>			9,000-12,000 vpd			
			≤30 mph*	35 mph*	40 mph*	≤30 mph*	35 mph*	40 mph*	
2 Lanes (two-way street with no median)	2	0	А	В	С	А	В	С	
3 Lanes (with raised median)	1 or 2	0 or 1	А	В	D	А	С	D	
3 Lanes (with striped median)	3	0 or 1	С	С	D	С	С	D	
4 Lanes (two-way street with no median)	4	2	А	D	D	В	D	D	
5 Lanes (with raised median)	2 or 3	2	А	В	D	В	В	С	
5 Lanes (with striped median)	5	2	D	D	D	D	D	D	
6 Lanes (two-way street with or without median)	3 to 6	4	E	E	E	E	E	Е	

#### Notes:

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- 1. Painted medians can never be considered a refuge for a crossing pedestrian. Similarly, a 4 foot wide raised median next to a left turn lane can only be considered a refuge for pedestrians if the left turning volume is less than 20 vehicles per hour (meaning that in most cases the left turn lane is not occupied while the pedestrian is crossing).
- 2. A multiple threat lane is defined as a through lane where it is possible for a pedestrian to step out from in front of a stopped vehicle in the adjacent travel lane (either through or turn lane).
- 3. Additional treatments may be considered if suitable gaps in traffic for safe crossing are not available.

# **Treatment Descriptions**

# Install marked crosswalk with road-side signs

Specific Guidance: Install marked crosswalk with signs mounted on the side of the roadway (W11-2 and W16-7P) with standard (W11-2) advance pedestrian warning signs; use S1-1 signs for School Crossing locations; trail stop signs will be evaluated by the Traffic Safety Committee.

Install marked crosswalk with road-side and in-roadway (bollard mounted) signs

Specific Guidance: Install marked crosswalk with signs mounted on the side of the roadway (W11-2 and W16-7P) and "State Law - Stop for Pedestrian" (R1-6) signs mounted on in-roadway bollards; use standard (W11-2) advance pedestrian warning signs; use S1-1 signs for School Crossing locations; trail stop signs will be evaluated by the Traffic Safety Committee.

# Install marked crosswalk with signs and geometric improvements to increase pedestrian visibility and reduce exposure

Specific Guidance: For 2-lane roadways, install marked crosswalk with signs mounted on the side of the roadway (W11-2 and W16-7P) and "State Law – Stop for Pedestrian" (R1-6) signs mounted on in-roadway bollards; use standard (W11-2) advance pedestrian warning signs; use S1-1 signs for School Crossing locations; trail stop signs will be evaluated by the Traffic Safety Committee. Add curb extensions (concrete, paint, flexible delineators) or median refuge islands to shorten the pedestrian crossing distance and increase pedestrian visibility to motorists.

For 3+ lane roadways, install marked crosswalk with advance regulatory "Stop here for Pedestrians" (R1-5) signs mounted on the side of the roadway, (W11-2 and W16-7P) mounted at the crossing location on the side of the roadway and "State Law – Stop for Pedestrian" (R1-6) signs mounted on in-roadway bollards; use standard (W11-2) advance pedestrian warning signs; use S1-1 signs for School Crossing locations; trail stop signs will be evaluated by the Traffic Safety Committee. Add curb extensions or median refuge islands to shorten the pedestrian crossing distance and increase pedestrian visibility to motorists. Advance stop bars may be used in combination with "Stop here for Pedestrians" (R1-5) sign.



<sup>\*</sup> The 85<sup>th</sup> percentile speed collected near the crossing may be considered at the discretion of the TSC or City Engineer if it is higher than the posted speed limit.

Table 1 (Continued)	# of lanes	# of multiple threat lanes <sup>(2)</sup> per crossing	Roadway ADT & Posted Speed						
Roadway Configuration	crossed to reach a refuge <sup>(1)</sup>		1,000-9,000vpd <sup>(3)</sup>			9,000-12,000 vpd			
			≤30 mph*	35 mph*	40 mph*	≤30 mph*	35 mph*	40 mph*	
2 Lanes (two-way street with no median)	2	0	А	В	С	А	В	С	
3 Lanes (with raised median)	1 or 2	0 or 1	А	В	D	А	С	D	
3 Lanes (with striped median)	3	0 or 1	С	С	D	С	С	D	
4 Lanes (two-way street with no median)	4	2	А	D	D	В	D	D	
5 Lanes (with raised median)	2 or 3	2	А	В	D	В	В	С	
5 Lanes (with striped median)	5	2	D	D	D	D	D	D	
6 Lanes (two-way street with or without median)	3 to 6	4	E	E	E	E	E	Е	

#### Notes:

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- 1. Painted medians can never be considered a refuge for a crossing pedestrian. Similarly, a 4 foot wide raised median next to a left turn lane can only be considered a refuge for pedestrians if the left turning volume is less than 20 vehicles per hour (meaning that in most cases the left turn lane is not occupied while the pedestrian is crossing).
- 2. A multiple threat lane is defined as a through lane where it is possible for a pedestrian to step out from in front of a stopped vehicle in the adjacent travel lane (either through or turn lane).
- 3. Additional treatments may be considered if suitable gaps in traffic for safe crossing are not available.
- \* The 85<sup>th</sup> percentile speed collected near the crossing may be considered at the discretion of the TSC or City Engineer if it is higher than the posted speed limit.
- † Will require an engineering study to be performed

## **Treatment Descriptions (Continued)**

Install marked crosswalk with advanced "Stop here for Pedestrians" signs, pedestrian activated Rectangular Rapid Flashing Beacons (RRFBs), and geometric improvements to increase pedestrian visibility and reduce exposure

Specific Guidance: Install raised median refuge island (unless it is a one-way street or one already exists) to shorten the pedestrian crossing distance and increase pedestrian visibility to motorists. [If a median refuge cannot be constructed on a two-way street, go to Treatment E]. Install marked crosswalk with signs (W11-2 and W16-7P) WITH pedestrian activated RRFBs mounted on the side of the roadway and on median mounted signs AND advance regulatory "Stop here for Pedestrians" (R1-5) signs mounted on the side of the roadway; use standard (W11-2) advance warning pedestrian warning signs; use S1-1 signs for School Crossing locations; trail stop signs will be evaluated by the Traffic Safety Committee. Consider adding curb extensions at the crossing if on-street parking exists on the roadway and storm drain considerations will allow. Advance stop bars may be used in combination with "Stop here for Pedestrians" (R1-5) sign.

Do not install marked crosswalk at uncontrolled crossing. Consider HAWK beacon, pedestrian traffic signal, or grade-separated crossing

Specific Guidance: Consider HAWK beacon, pedestrian traffic signal or grade-separated crossing; application of these treatments will consider corridor signal progression, existing grades, physical constraints, and other engineering factors.

