



# Policy on the Installation of Pedestrian Crosswalks

*Adopted by City Council on June 19, 2017*

## I. State Statute

### **169.21 PEDESTRIAN.**

#### ***Subd. 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.*
  
- (b) When any vehicle is stopped at a marked crosswalk or at an intersection with no marked crosswalk to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass the stopped vehicle.*

#### ***Subd. 3. Crossing between intersections.***

- (a) Every pedestrian crossing a roadway at any point other than within a marked crosswalk or at an intersection with no marked crosswalk shall yield the right-of-way to all vehicles upon the roadway.*

## II. Introduction & Purpose

The City strives to provide safe, accessible, and efficient travel for all modes of transportation, including pedestrians, bicycles, and motor vehicles by installing and maintaining marked crosswalks at locations where there is substantial conflict between vehicle and pedestrian movements, where significant pedestrian concentrations occur, and where pedestrians would not otherwise recognize the proper place to cross. A consistent application of this policy will best serve both the pedestrian and the motorist.

The purpose of this policy is to guide the City in developing and implementing a pedestrian crossing program that provides pedestrians and bicyclists a safe crossing area and provides motorists reasonable and consistent expectations of the significance of the crossing locations. The intent is to assure a mutual understanding between the City Council, Staff, and the traveling

public of the City's Crosswalk Policy. When street crossings are necessary, it is the City's goal to provide crossing locations and treatments that are as safe as possible. This may or may not include the use of crosswalk markings on the roadway.

In Minnesota, a legal crosswalk does not necessarily have to have a marked crosswalk. State laws (MN STATUTE 169.011, subd. 20 and STATUTE 169.21, subd. 2) define a legal crosswalk as the extension of the sidewalks across a road, whether it has a marked crosswalk or not. Even though drivers are required to yield, pedestrians are urged to cross with caution in any street crossing, marked or unmarked.

Marked crosswalks are widely viewed as "safety devices", and pedestrians have the right-of-way within them. There is strong evidence that because the law dictates right-of-way, many pedestrians feel a level of artificial security when using a marked crosswalk. As a result, pedestrians may place themselves in a hazardous position by inaccurately assuming that motorists 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 accordingly they exercise more caution before crossing, relying on their own best instincts and judgment for safe crossing.

It should be noted that like any warning traffic control device, painted/signed crosswalks are less likely to work as effectively if they are overused or placed at locations with low demand for pedestrian activity.

### **III. Crosswalk Policy**

City Staff will utilize available information including the warrants outlined in the Minnesota Manual on Uniform Traffic Control Devices (MMUTCD), General Safety Recommendations from the U.S. Department of Transportation, and other sources. A Traffic Study may be required when evaluating a location for marked crosswalks.

The following are general criteria to be satisfied in addition to the warrant criteria when considering installation of marked crosswalks:

1. Marked crosswalks should connect to established sidewalks at both ends.
2. ADA accessible ramps should be included at both ends of crosswalk installations. At a minimum, all marked crosswalks should extend from one safe landing zone to another. A safe landing zone is an area where a pedestrian is safe from vehicle conflict while waiting to cross or when finished crossing.
3. Adequate street lighting should be provided for the safety of pedestrians.
4. Street parking must be restricted adjacent to crosswalks to allow for adequate sight lines for both the motorists and the pedestrians. The length of the parking restriction shall be based on an engineering study (judgement).
5. 20 pedestrians or more in any one hour. This could be a weekly occurrence associated with a football game, or a daily occurrence with workers walking across the street for lunch, for example.

## IV. Crosswalk Locations

### A. Residential Streets

Residential streets should not normally require pavement markings or signs to indicate crosswalks. Traffic volumes are generally low, speeds are low, and the vast majority of the motorists traveling on these streets have a high level of familiarity with the neighborhood and expect to see pedestrians in this setting.

A Traffic Study may be performed to assist in the analysis. Marked crosswalks will be evaluated for use on residential streets when indicated by one or more of the following:

1. The minor street intersects with a collector or higher classification street and the average daily traffic volume on the minor street exceeds 1,000 vehicles per day.
2. The crossing location is within a designated school zone or is a key element of a designated school walking route, access to Senior Housing, or access to Health Care Facilities.
3. The traffic engineering study indicates a safety problem that can be addressed by a marked crosswalk.

### B. Mid-Block Crossings

A mid-block crosswalk is defined as a crosswalk at a location other than an intersection. To be effective, a mid-block crosswalk should be installed at specific locations where pedestrian volume is high and crossing activity should be expected. Crosswalk locations must allow motorists to safely yield for pedestrians and bicyclists. Sight distance, roadway geometrics and the potential for rear-end type accidents shall be evaluated. A crosswalk at a mid-block location may be installed when the location meets all the warrant criteria listed below.

1. The crossing volume is not caused by a correctable gap in the sidewalk system.
2. There is minimum distance of 300 feet to nearest protected crossing. A protected crossing is a crossing controlled by stop signs or signals or at a grade separation.
3. An engineering study indicates no unsafe visibility or site conditions would be created.
4. The speed limit is 35 mph or less.
5. Higher priority should be placed on providing crosswalk markings where pedestrian volume exceeds 20 per peak hour (or 15 or more elderly pedestrians and/or children per peak hour).

Exceptions to the warrant criteria: The pedestrian volume and vehicle volume warrants may be waived for any of the following situations:

1. The crossing location is a key element of a designated school walking route plan, access to Senior Housing, or access to Health Care Facilities.
2. A traffic engineering study indicates a safety problem that can be addressed by a marked mid-block crosswalk.
3. The City has identified the location as a desirable location to encourage crossing. Such locations can include:
  - a. Across collector streets where the distance to the nearest protected crossing or marked crossing is greater than 300 feet that pedestrians would not logically be expected to use,
  - b. Near transit stops, bike corridors and multi-use path crossings.

C. Major Intersections

Because of higher traffic volumes and the fact that pedestrian and bicyclist exposure to vehicles is increased when vehicle volumes increase, major intersections with all-way stop control or that are signalized will generally be provided with marked crosswalks. A major intersection is defined as an intersection of two streets of collector or higher classification, and intersects within a business district. In general, it is good practice to funnel pedestrians to crossings at controlled locations because vehicle speeds are general lower, all parties have more time to react, and motorists usually expect to encounter pedestrians at these locations. Intersections of minor streets with a collector may be studied like major intersections if identified as a desirable crossing location.

D. State & County Facilities

The policy only applies on streets that are owned and maintained by the City. County and State owned streets will continue to perform their own evaluations and make their own decisions on locating, enhancing, and maintaining crosswalks.

## V. Traffic Engineering Study

- A. A traffic engineering study is required to determine if the criteria and warrants are met for a marked crosswalk at a particular location, and to determine the level of marking justified. The level of detail required for a traffic engineering study will vary with the location under consideration.
- B. The engineering study may include:
1. Speed and traffic volume data on streets being crossed
  2. Pedestrian volume, age, and level of mobility
  3. Location of pedestrian origin and destination point and crossing patterns
  4. Existing sidewalk network and sidewalk ramps
  5. Sight distances and sight obstructions
  6. Street characteristics including grades, curvature, pavement widths, and number of vehicle an bicycle lanes
  7. Location of adjacent driveways
  8. On-street parking
  9. Street lighting
  10. Review of Documented Vehicle and Pedestrian crash data records
  11. Check with City public safety departments regarding their observations, experiences, and records of responses on pedestrian-related incidents at the location(s) in question

## VI. Additional Measures

When considering and planning for pedestrian crossing locations, the City should also consider the following in addition to placement of crosswalk markings:

1. Provide raised medians or pedestrian refuge islands
2. Install countdown pedestrian indications at signalized intersections
3. Reduce the effective street crossing distance for pedestrians by narrowing roads or providing curb extensions (i.e. bulbouts or bumpouts)
4. Install traffic calming measures to slow vehicle speeds – locations must meet City's criteria for traffic calming.

5. Provide adequate nighttime lighting for pedestrians at locations that have high frequency and volume of nighttime crossings
6. Use grade-separated crossings such as pedestrian bridges, tunnels, and raised crosswalks for the highest speed and highest vehicular traffic volume locations
7. Tighter turn radii to slow traffic. To be balanced with design requirements for trucks.
8. Proper placement of stop bars or yield lines
9. "No turn on red" restrictions at signalized intersections
10. Location of drainage structures
11. Distance to nearest protected or marked crossing
12. Traffic signal progression
13. Potential for rear end accidents

## **VII. Request and Review Process Required**

Outside requests for installations of crosswalks will be brought before the Operations Committee of the City Council by the Public Works Department. The Committee will take into account preliminary information gathered by the Department and provide direction to City staff as to whether to proceed with the Engineering study steps discussed in the policy.

Should a study be directed, it may require several months to complete, depending on prioritization of staff assignment towards other City priorities, as well as on weather conditions (important for traffic data collection, etc.), any needs for consultation with outside resources (i.e. traffic engineering experts), and the applicability of the study to integration with planned projects.

City staff will return to the Committee with the findings of the study and a professional recommendation, and the Committee will act to provide its final recommendation to the full City Council. The City Council has final decision-making authority.

### *Review Timelines & Conditions*

- The review period for all crosswalk requests will be in the early fall of each year such that all data can be gathered during school-year traffic patterns and final recommendations are proposed to the City Council in advance of the finalization of the City's annual traffic marking program plans for the forthcoming year
- All requests to be considered during the annual review period must be documented by no later than August 15<sup>th</sup> of each year. Requests taken after this time may not allow for enough time for collection of all information necessary to conduct a full study and may have to wait until the following year's review cycle.
- Data gathering activities that require outdoor equipment or staff observations must be completed before winter conditions that would inhibit this work (i.e. traffic counting devices cannot be deployed in winter conditions).
- Quantities to plan the annual pavement marking program for the City are due in January, and will include any approved new cross walk markings.