



PUBLIC WORKS DEPARTMENT

STANDARD OPERATING PROCEDURE

Date: September 2019
To: Public Works Staff
From: Public Works Director
Re: SOP 100-17: Installation of Crosswalks

Purpose

The Town of Sahuarita is committed to providing a healthy and safe environment for its residents. There is a risk to using traffic control devices like crosswalks and road signs indiscriminately. When allowed to proliferate, traffic control devices become part of the roadside clutter, and drivers begin to ignore them. The purpose of this SOP is to provide guidance on determining when the installation of a striped crosswalk is appropriate.

Background

The 2000 Uniform Vehicle Code and Model Traffic Ordinance (Uniform Vehicle Code) (Section 1-112) defines a crosswalk as:

- (1)(a) "That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs, or in the absence of curbs, from the edges of the traversable roadway; and in the absence of a sidewalk on one side of the roadway, the part of a roadway included within the extension of the lateral lines of the existing sidewalk at right angles to the centerline.
- (b) Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface."

According to research by Charles Zegeer, "Safety Effects of Marked vs Unmarked Crosswalks at Uncontrolled Locations" (FHWA, 2005), marking a crosswalk across a local street will not decrease or increase the risk of a pedestrian being involved in a crash. A major finding of Zegeer's research is that under certain conditions (high traffic volumes and multiple lanes of travel), risk to the pedestrians increases when crosswalks are marked.

Policy

Marked pedestrian crosswalks may be used to delineate preferred pedestrian paths across roadways under the following conditions:

1. At locations with stop signs or traffic signals. Vehicular traffic might block pedestrian traffic when stopping for a stop sign or red light; marking crosswalks may help to reduce this occurrence.
2. At non-signalized street crossing locations in designated school zones. Use of adult crossing guards, school signs and markings, and/or traffic signals with pedestrian signals (when warranted) should be used in conjunction with the marked crosswalk, as needed.
3. At non-signalized locations where engineering judgment or a study dictates that the number of motor vehicle lanes, pedestrian exposure, average daily traffic (ADT), posted speed limit, and geometry of the location would make the use of specially designated crosswalks desirable for traffic/pedestrian safety and mobility. This must consider the conditions listed below.



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- a. The spacing of marked crosswalks should also be considered so that they are not placed too close together. A more conservative use of crosswalks is generally preferred. Thus, it is recommended that in situations where marked crosswalks alone are acceptable that a higher priority be placed on their use at locations having a minimum of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians per peak hour). In all cases, good engineering judgment must be applied.
- b. Marked crosswalks should not be installed in close proximity to traffic signals, since pedestrians should be encouraged to cross at the signal in most situations. The minimum distance from a signal for installing a marked crosswalk should be determined by local traffic engineers based on pedestrian crossing demand, type of roadway, traffic volume, and other factors. The objective of adding a marked crosswalk is to channel pedestrians to safer crossing points.
- c. Marked crosswalks should not unduly restrict platooned traffic and should also be consistent with marked crosswalks at other unsignalized locations in the area.