



Legislation Text

File #: 21-123, **Version:** 1

Staff Report for Pedestrian Crossing Improvements

SUMMARY AND RECOMMENDATIONS

Staff regularly reviews and evaluates and prioritizes crosswalk requests. A list of prioritized crosswalks will be reviewed, and a recommended location will be identified for the upcoming CIP Program.

BACKGROUND

Staff receives many requests for new marked crosswalks or enhancements to existing marked crosswalks throughout the year. These requests for more convenient or safer pedestrian accommodations come from a variety of sources including residents, businesses, new development projects, and planning efforts. As these requests for improvements are made, a strategy is used to determine the relative merit of the improvement and to further consider opportunities with other improvements which might be planned. For instance, there may be a road widening project that includes repaving and utility work where it becomes very cost effective to combine pedestrian related infrastructure such as a flashing crosswalk system with the other work already envisioned. To ensure opportunities are realized and pedestrian crossing needs are sufficiently investigated in a consistent and methodical manner, the Engineering & Transportation Department tracks requests received.

Analysis

By following recommendations from a Federal Highway Administration (FHWA) report and entitled, "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations," staff has routinely reviewed crosswalk inquiries and made recommendations using the following available options:

- (C): Candidate sites for marked crosswalks.
- (P): Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements.
- (N): Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalk alone.

The practice described herein is intended to assist in developing priorities for the allocation of resources for pedestrian crossings.

Scoring Criteria and Priorities:

Scoring criteria are developed to reflect the relative merit for improvements at a pedestrian crossing. In some cases, dependent on conditions, it may be sufficient to have only pavement markings and signing for one crossing while another crossing merits more extensive resources. The criteria includes influences from schools, vehicle traffic, vehicle speeds, pedestrian activity and other considerations which play a role in the merit for additional improvements at a crossing location.

A location which satisfies a particular criteria is not justification in itself for alterations and no duty is implied or presumed for the city to provide a marked crosswalk or enhanced crosswalk treatment by use of this guidance. It should be recognized there are limited resources for managing the transportation system for all users accordingly, and priorities for implementing new features or adjusting existing ones must be balanced with the needs citywide and assessed periodically by the City.

Staff use a scoring criteria to facilitate project prioritization.

In consideration of limited resources, a minimum score of 20 must generally be achieved by the sum of criteria. However, there may be certain limited exceptions to a lower threshold if found by the Engineering & Transportation Department to be in the interest of the overall prioritization process; for instance, coupling a candidate site with another nearby location as part of a CIP project. Once this threshold is satisfied, the subject site will be considered as a candidate for improvements together with other locations which also exceed this score threshold. Staff will then evaluate more subjective conditions such as community support, availability of funds relative to cost of improvement, engineering judgment of the site's safety, crosswalk study findings, or other considerations as deemed appropriate by staff.

SCORING CRITERIA

- A. Elementary School 5, Middle School 4, High School 3 (max score 5); _____ **Score.**
- B. Travel lanes - 2 score for each through travel lane, 1 score for center turn lanes or median areas, 2 score where bike lanes and/or parking exist (max score value 10); _____ **Score.**
- C. Posted Speed Limit - 5 score for 35 mph or higher, 4 for 30 mph, 3 for 25 mph, 2 for 20 mph established school zone. The 85th percentile speed data may be used in lieu of posted speed at discretion of the engineer; _____ **Score.**
- D. ADT - Average Weekday Daily traffic below 10,000 vehicles is 0, 10,000 to 15,000 is 3 and above 15,000 is 5; _____ **Score.**
- E. Accident History (pedestrian/bike) - one non-motorized accident within crossing location in past 3 years = 5. More than one pedestrian/bike accident within past 3 years or a single fatality is score of 10 if determined to be clearly located within the crossing limits as determined by the engineer; _____ **Score.**
- F. Accident History (vehicle) - 2 score for 5 or more rear end collision (or other relatable collision not included in E. above) in past 3 years associated with activity from the crossing as determined by the engineer; _____ **Score.**
- G. Traffic Signal or existing marked crosswalk located within 500 feet of subject review location - deduct 5 score. Where traffic signals are within 300 feet of the crossing outside of the downtown district, flashing crosswalk systems will not be considered. Within the downtown district, this criteria may be overridden at the engineer's discretion; _____ **Score.**

- H. Crossing is located on a designated arterial - Major is 5, Minor is 3, Collector is 2; Local Street is 0; _____ **Score.**
- I. Coordination. Project can be coordinated with another Capital Improvement Project, Grant Opportunity, Development, or Overlay project for efficiency in design and construction and reduced resource demand is 5; _____ **Score.**
- J. Pedestrian volume of 20 peds or higher in peak one hour period is 5 score. Where 20 peds is not achieved for a crossing assign 0 score; _____ **Score.**
- K. Site Conditions. This category allows the professional to assign up to 10 points for site conditions which are unusual, such as a side trail connection, or roadway gradient, or other aspect that in the opinion of the professional elevate the subject crossing beyond typical consideration; _____ **Score.**
- L. Implementation Complexity. If the site meets criteria for installation or enhancement, satisfies certain community goals, and can be implemented relatively simply with minimal costs, staff time, or other resources as determined by the Department, assign a 5 score; _____ **Score.**

The City retains the right to remove or modify any enhanced treatment or marked crosswalk within the public right-of-way at its sole discretion and may from time to time develop pilot projects to evaluate new technologies and advances in crosswalk safety. The above criteria is used by the Transportation Department staff and any interpretation of criteria or conditions rests with the Department Director or their designee.

SUBJECT LOCATION: _____

TOTAL SCORING: _____

Prepared by: _____

Date: _____

Overall, it should be noted that although a scoring process is utilized, it is not used as a sole determining factor for decision making of which sites have the greatest priority. Its primary function is to assist in gaining a general sense of the merits of the crossing improvement relative to other sites. After the department team vetting exercises, there may be lower scored candidates which end up being assigned for immediate improvement if opportunities exist or other consideration necessitates such action.

TENTATIVE CROSSWALK REQUEST LIST

Staff has established a list of prioritized crosswalk requests which is attached to this document.

ATTACHMENT(S)

Attachment(s) to Staff Report

- Crosswalk Request and Priority List

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