Proposed Crosswalk Policies and Guidelines

City of San Leandro
Facilities and Transportation Committee Meeting
July 5, 2017

Proposed Crosswalk Policies and Guidelines

- Providing safe and efficient pedestrian facilities is a well-established goal of the City of San Leandro.
- City's goal to provide safer, convenient environment for pedestrians.
- Staff receives many requests for new marked crosswalks or enhanced crosswalks for convenience or safety reasons.
- A strategy is necessary to determine relative merit of improvement and for further consider opportunities.
- Staff proposes draft scoring criteria and Three-Tiered approach for review.

FHWA Crosswalk Recommendations

Table 11. Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations.*

Roadway Type (Number of Travel Lanes and Median Type)	Vehicle ADT ≤ 9,000			Vehicle ADT >9,000 to 12,000			Vehicle ADT >12,000–15,000			Vehicle ADT > 15,000		
	Speed Limit**											
	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)
Two lanes	C	C	P	C	C	P	C	C	N	C	P	N
Three lanes	C	C	P	C	P	P	P	P	N	P	N	N
Multilane (four or more lanes) with raised median***	C	C	P	C	P	N	P	P	N	N	N	N
Multilane (four or more lanes) without raised median	C	P	N	P	P	N	N	N	N	N	N	N

* These guidelines include intersection and midblock locations with no traffic signals or stop signs on the approach to the crossing. They do not apply to school crossings. A two-way center turn lane is not considered a median. Crosswalks should not be installed at locations that could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices. Adding crosswalks alone will not make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Whether or not marked crosswalks are installed, it is important to consider other pedestrian facility enhancements (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic-calming measures, curb extensions), as needed, to improve the safety of the crossing. These are general recommendations; good engineering judgment should be used in individual cases for deciding where to install crosswalks.

** Where the speed limit exceeds 64.4 km/h (40 mi/h), marked crosswalks alone should not be used at unsignalized locations.

*** The raised median or crossing island must be at least 1.2 m (4 ft) wide and 1.8 m (6 ft) long to serve adequately as a refuge area for pedestrians, in accordance with MUTCD and American Association of State Highway and Transportation Officials (AASHTO) guidelines.

C = Candidate sites for marked crosswalks. Marked crosswalks must be installed carefully and selectively. Before installing new marked crosswalks, an engineering study is needed to determine whether the location is suitable for a marked crosswalk. For an engineering study, a site review may be sufficient at some locations, while a more indepth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, and other factors may be needed at other sites. It is recommended that a minimum utilization of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians) be confirmed at a location before placing a high priority on the installation of a marked crosswalk alone.

P = Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements. These locations should be closely monitored and enhanced with other pedestrian crossing improvements, if necessary, before adding a marked crosswalk.

N = Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalks alone. Consider using other treatments, such as traffic-calming treatments, traffic signals with pedestrian signals where warranted, or other substantial crossing improvement to improve crossing safety for pedestrians.

FHWA Crosswalk Recommendations

- (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.

Proposed Scoring Criteria

- Elementary School 5, Middle School 4, High School 3 (max score 5); _____**Score.**
- 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**.
- 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.**

Proposed Scoring Criteria

- 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.**
- 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.**

Proposed Scoring Criteria

- 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.**
- Crossing is located on a designated arterial – Major is 5, Minor is 3, Collector is 2; Local Street is 0; _____ **Score.**

Proposed Scoring Criteria

- 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.**
- 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.**

Proposed Scoring Criteria

- 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.**
- 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.**

Three-Tiered Approach

Three draft Tier Levels that are an important strategy in helping to manage how and when improvements are made for pedestrian crossings given limited resources.

- Tier 1 – In progress (Current Design and/or Construction)

This first Tier represents those crossing improvements which are currently either in design with known funding designated for the improvement or are pending construction soon.

Three-Tiered Approach

- Tier 2 – Unfunded/ Un-resourced Priority Candidate
- The second Tier represents pedestrian crossings which have relatively high scoring and priority need with a general concept of improvement, but no funding or resources identified to further its design and implementation.
- Tier 3 – Vetting and Options Investigations

The third Tier are sites which have merit for improvement but have not been fully vetted and may have various options to consider before improvements can or should be made.

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- 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.
- 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 (Not in the Sequence of Priorities)

Tentative City of San Leandro Pedestrian Crosswalk Request List (06-16-17)

Location	Council District	To-be-Implemented
Davis St at Carpentier St	1	
Davis St at Clarke St	1	
East 14th St at Blossom Way	1 &2	
Estudillo Ave and Collier Dr	1	2017-18
East 14th St at 144th Ave	2	2017-18
Teagarden St atLincoln High School	3	2017-18
Lewelling Blvd and Sedgeman St	4	
Wicks Blvd and Burkhart Ave	4	2017-18
Bancroft Ave and Downling Blvd	5	2017-18
Dutton Ave and Arbor Dr east leg	5	
Dutton Ave and Cheatland Rd	5	
Bancroft Ave at Oakes Blvd	5	
Bancroft Ave at Glen Dr	5	
Best Ave at Pershing Dr	5	
Durant Ave at Bancroft Ave	5	
Bancroft Avenue at Haas Ave	5	
Parrott St at two BART parking lots	1	

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- RECOMMENDATION

Staff recommends to proceed with aforementioned scoring criteria and the proposed Three-Tiered system

- NEXT STEPS

Staff continues to develop and evolve its practices for managing the proposed crosswalk program.

Questions and Answers?