



Public Works Department

Transportation Engineering Division

Policy Guidelines: Marked Crosswalks at Intersections

**Adopted by the Traffic Advisory Committee
Last Update on September 8, 2005**

INTRODUCTION:

The City of Napa Public Works Department (PWD) receives numerous requests from local citizens and residents who wish to have crosswalks marked (or painted) at certain locations. The requests typically result from the perception that marking a crosswalk would improve safety for pedestrians using that crossing.

PWD's policies and procedures on traffic control devices are based on the exact language from *California Vehicle Code (CVC)*¹, the *Manual of Uniform Traffic Control Devices (MUTCD)* and the *California Supplement*². Examples of traffic control devices include signal lights, traffic signs, and paint markings. Effective May 20, 2004, the California Department of Transportation (Caltrans) adopted the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD) 2003 as amended by the MUTCD 2003 California Supplement*, to prescribe uniform standards and specifications for all official traffic control devices in California. This action was taken pursuant to the provisions of the *California Vehicle Code* Section 21400 and the recommendation of the California Traffic Control Devices Committee (CTCDC).

I. GENERAL POLICY ON MARKED CROSSWALKS

The *California Vehicle Code (CVC)* provides that “*only those official traffic control devices that conform to the uniform standards and specifications promulgated by the Department of Transportation shall be placed upon a street or highway...*” Hence, PWD follows standard professional engineering practices as prescribed in the MUTCD and the California Supplement.

Pedestrians may legally cross any City street, except between signalized intersections, or where expressly prohibited by regulatory signs. The City shall install marked crosswalks in locations where the City Traffic Engineer, based upon engineering judgment, determines that such installation is appropriate. In situations where the MUTCD does not provide detailed guidance on a pavement marking relevant to a citizen request or defers the engineering decision to the professional judgment of a traffic engineer, PWD will follow the general procedures in these policy guidelines. PWD prepared these policy guidelines to help the Traffic Advisory Committee in making recommendations to PWD on the appropriate use of marked crosswalks in response to citizen requests.

PWD reserves complete and total discretion on the appropriate pavement markings and traffic signage on all public streets maintained by the City of Napa. The general procedures in

¹ State of California 2001 Vehicle Code Through the 2000 Legislative Session

² *Manual on Uniform Traffic Control Devices*, 2003 Edition, U.S. Department of Transportation Federal Highway Administration.

these policy guidelines do not, in any shape, manner or form, pre-empt the professional engineering judgment of the Public Works Department related to locally-maintained public streets.

II. SPECIAL PROCEDURES

The following guidelines shall be used by PWD for the installation of marked crosswalks at intersections:

A. Controlled Intersections

When a stop sign or a traffic signal controls an approach to an intersection (i.e. a controlled intersection), marked crosswalks will normally be installed on the controlled approach, except where a crossing is discouraged or specifically prohibited.

B. Uncontrolled Intersection

When the approach of an intersection is not controlled by a stop sign or a traffic signal (i.e. an uncontrolled intersection), the crossing may be marked. The right-of-way and responsibilities of the pedestrian are exactly the same whether a crossing is marked or unmarked.

Marked crosswalks may also be installed in order to direct pedestrians away from a heavy vehicle conflict or at a location that has substandard visibility, or as part of a comprehensive traffic calming and/or safety improvement plan.

The installation of a marked crosswalk should be considered only when there is a need. The Federal Highway Administration published a study titled *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations*, which includes recommended guidelines for installing marked crosswalks at uncontrolled locations. This study was used as a reference in developing the City of Napa's local recommended guidelines.

C. School Crosswalks

The placement of school crosswalks (yellow) shall comply with the appropriate California legislation. In addition, yellow crosswalks shall be placed on "walking routes to school" as developed jointly by the City and the responsible school. "Continental" type or "ladder" type crosswalk markings will be used for school crosswalks that are uncontrolled.

D. Removal and Reinstallation

Marked crosswalks that are covered or obliterated by construction or maintenance activities shall be reinstalled as soon as practical. When it is determined that a marked crosswalk should be temporarily removed due to a construction or maintenance activity, alternatives should be developed and proper notification to the pedestrian should be provided.

When a marked crosswalk is being considered for permanent removal, all State and local provisions for public notification shall be followed.

TABLE 1

Guidelines for Installing Marked Crosswalks and Other Needed Pedestrian Improvements at Uncontrolled Intersections ⁽¹⁾

Roadway Type (Number of Travel Lanes)	Local Residential Street With Vehicle ADT Up to 2,500 ⁽²⁾	Other Local Street With Vehicle ADT Up to 5,000 ⁽³⁾				Collector Street With Vehicle ADT Up to 9,000		
	<i>Posted Speed Limit</i>							
	25 mph	≤30 mph	35 mph	> 35 mph	≤30 mph	35 mph	> 35 mph	
2 Lanes	C	C	C	NR	C	C	NR	
3 Lanes ⁽⁴⁾		C	P	NR	P	P	NR	

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 in-depth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, etc. may be needed at other sites. A minimum of 40 pedestrian crossings per peak hour (or 30 or more elderly and/or child pedestrians) should exist at a location before placing a high priority on the installation of a marked crosswalk alone. Candidate locations shall have adequate sight distance as well as sufficient lighting at night.

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.

NR = Not recommended

⁽¹⁾ These guidelines do not apply to designated arterial streets or to locations within the Downtown Area. These guidelines include intersection locations with no traffic signals or stop signs on the approach to the crossing. They do not apply to school crossings. 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, staff should 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.

⁽²⁾ As defined in the TAC *Policy Guidelines: Livable Residential Local Streets and Connectivity*

⁽³⁾ As defined in the City of Napa's General Plan Policy Document, *Envision Napa 2020*

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