

STATION 2

Review of Pedestrian Safety Treatments & Programs



Guiding Documents: Local Level

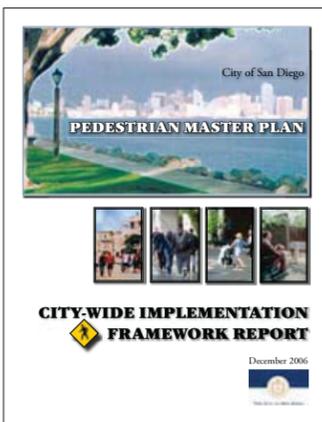


The following list of documents set the policies and guidelines that provide for pedestrian safety at the local level:

Council Policies

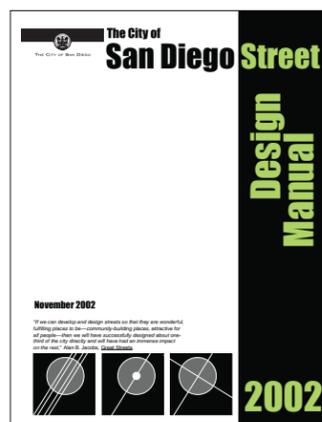
- Council Policy 200-07 (Pedestrian Crossing)*
- Council Policy 200-06 (Traffic Signals)*
- Council Policy 200-08 (Stop Signs)*
- Council Policy 800-01 (Pedestrian Separation Structure)*
- R-251799 (School Pedestrian Safety Policies and Warrants)*

Plans and Manuals



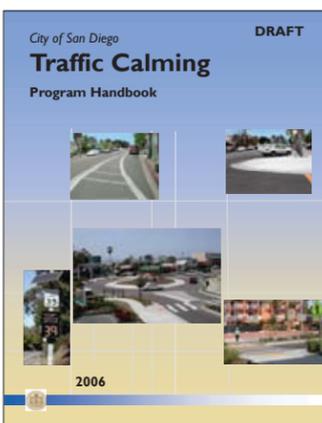
City of San Diego Pedestrian Master Plan

- Guides how the City plans and implements pedestrian improvement projects
- Identifies and prioritizes proposed pedestrian projects



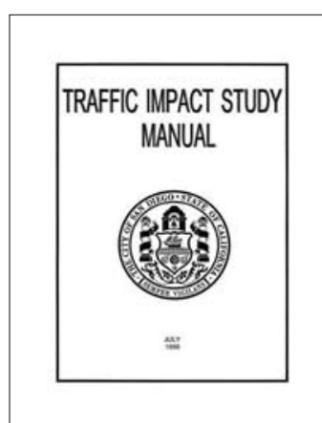
City of San Diego Street Design Manual

- Provides information and guidance for the design of public right-of-way
- Pedestrian reference topics include street design, intersection design, sight distance, pedestrian crossings, sidewalks for overpasses, and pedestrian refuge islands



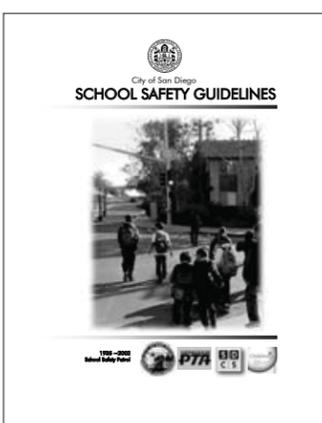
City of San Diego Traffic Calming Handbook

- Intended to improve neighborhood safety through roadway improvement strategies
- Provides a tool for residents, City staff and other interested parties to use when developing effective traffic calming plans



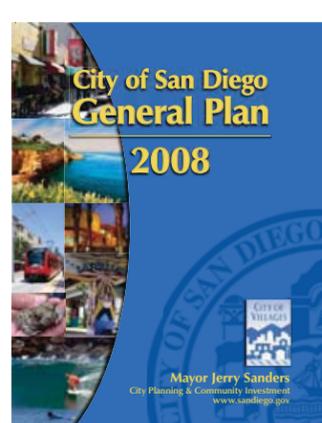
City of San Diego Traffic Impact Study Manual

- Provides guidance on how to prepare traffic impact studies in San Diego



City of San Diego School Safety Guidelines

- Groups all school-related policies into one document for better coordination between affected departments and agencies



City of San Diego General Plan Mobility Element

- Plans for the City's transportation goals and needs
- Identifies the proposed transportation network and strategies, designed to meet future travel needs



Guiding Documents: State and National Level



The following is a list of relevant state and national policies and guidelines that will be considered in preparing the City's Pedestrian Safety Study:

California Vehicle Codes (CVC)

Section 275 (Crosswalk)

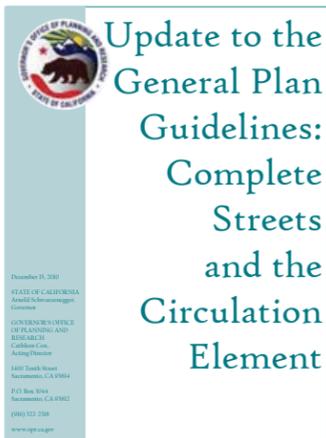
Section 467 (Pedestrians)

Sections 21949-21971 (Pedestrian's Rights and Duties)

Section 22500 (Prohibited Stopping Standing or Parking)

Section 22526 (Entering Intersection Rail Crossing or Marked Crosswalk)

California Statwide Documents



Update to the General Plan Guidelines: Complete Streets and the Circulation Element

- Assists local municipalities in meeting AB 1358 requirements and integrating multimodal transportation policies
- Provides guidance on circulation element goals, policies, data collection, and implementation measures



California Manual on Uniform Traffic Control Devices (2012)

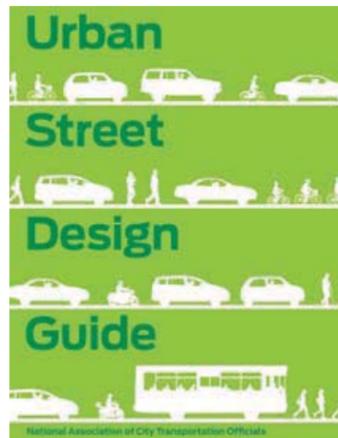
- Sets uniform standards and specifications for all official traffic control devices in California
- Amends the national standards set in Federal Highway Administration's 2009 MUTCD for use in California

National Level References



Pedestrian Safety Guide and Countermeasure Selection System - Federal Highway Administration (FHWA)

- Resource providing practitioners with up to date information for improving the safety and mobility of pedestrians
- Provides countermeasure examples based on crash types and performance objectives



Urban Street Design Guide - National Association of City Transportation Officials (2013)

- Design guide emphasizing urban streets as public places that prioritize safe driving, transit, walking, biking, and public activity
- Provides street design blueprints and case studies of how to successfully implement best practices



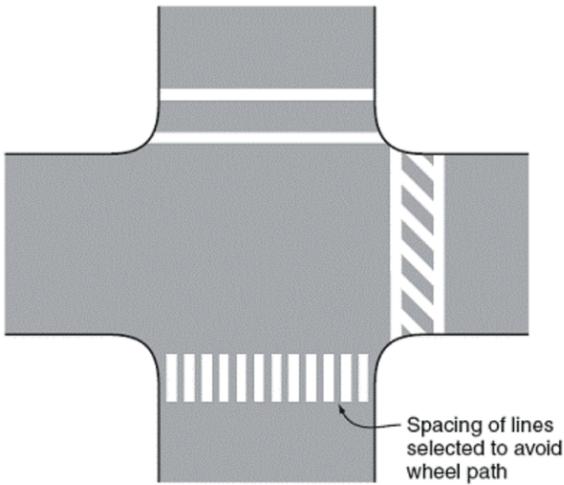
Pedestrian Safety Treatments & Programs



Source: pedbikesafe.org

Signs and Markings

- Signs and markings can alert drivers to expect pedestrians
- Overuse of signs can create visual clutter



Source: MUTCD (2009)

Marked Pedestrian Crossings

- Marked pedestrian crossings indicate preferred crossing locations for pedestrians
- Marked crosswalks designate areas for motorists to yield to pedestrians



Source: Chen Ryan Associates

Pedestrian Signals

- Provide guidance to pedestrians when it is safe to cross
- Can give pedestrians ability to stop traffic



Source: pedbikesafe.org

No Parking Zones

- Parked vehicles can limit visibility of pedestrians
- No Parking Zones improve pedestrian and motorist sightlines



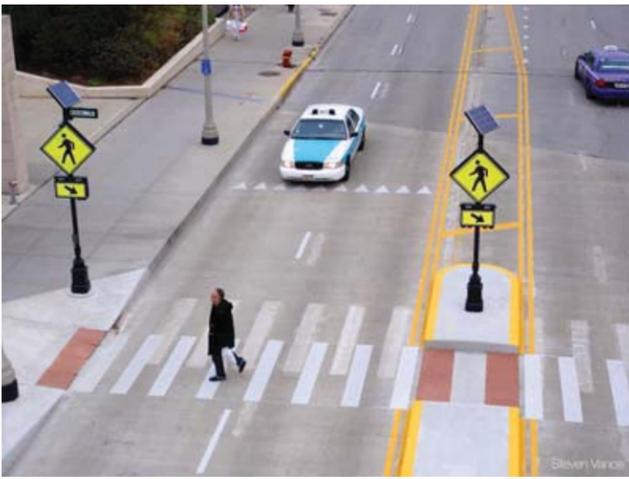
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Source: pedbikesafe.org

Pedestrian Hybrid Beacon (PHB)

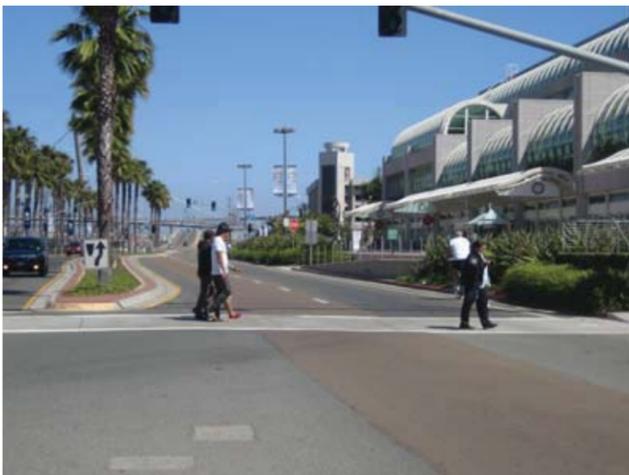
- Pedestrian-activated beacon for unsignalized crossings
- Beacon remains dark until activated by pedestrian
- Used to warn and control traffic to assist pedestrians in crossing a street



Source: pedbikesafe.org

Rectangular Rapid Flash Beacons (RRFB)

- Pedestrian-activated flashing beacons indicate to drivers a pedestrian is crossing
- Enhance pedestrian safety at unsignalized and mid-block crossings by increasing driver awareness of pedestrians



Source: Chen Ryan Associates

Leading Pedestrian Interval (LPI)

- LPI gives pedestrians the WALK signal 3-7 seconds before driver's signal turn green
- LPI allows pedestrians to establish a presence in the crosswalk before drivers can start turning



Source: SF.StreetsBlog.org

Raised Pedestrian Crossing

- Help reduce vehicle speeds and enhance the crosswalk
- Crosswalks are elevated to sidewalk level
- Cars are forced to slow for ramps on each vehicle approach leading to the crosswalk



Pedestrian Safety Treatments & Programs



Source: joemcnally.com

In-Roadway Warning Lights

- Lights installed in the roadway to alert drivers of a crosswalk
- Can be used at school crossings, marked crosswalks, marked mid-block crossings, and other pedestrian crossings
- Lights flash to increase awareness of pedestrians



Source: smartgrowthamerica.org

Pedestrian Refuge

- Protected section of pavement where pedestrians can stop and wait for traffic to stop while crossing the road
- Provides a dedicated space for pedestrians on the roadway



Source: techtransfer.berkeley.edu

Curb Extensions/Bulb Outs

- Reduces the crossing distance for pedestrians
- Narrows the roadway, helping to slow traffic speeds



Source: livingstreetsalliance.org

Pedestrian Scramble/Diagonal Crossing

- Pedestrian crossing that stops all directions of traffic and allows pedestrians to cross an intersection in all directions, including diagonally, at the same time