# CHAPTER 31 – Nonmotorized Transportation Facilities

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL</td>
<td>SECTION 1 General</td>
<td>31-3</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>31-3</td>
</tr>
<tr>
<td></td>
<td>Definition</td>
<td>31-3</td>
</tr>
<tr>
<td></td>
<td>Categories of Projects</td>
<td>31-3</td>
</tr>
<tr>
<td></td>
<td>Minimum Annual Funding</td>
<td>31-4</td>
</tr>
<tr>
<td></td>
<td>Project Reports Required</td>
<td>31-4</td>
</tr>
<tr>
<td></td>
<td>Coordinate Planning &amp; Design with Outside Entities</td>
<td>31-4</td>
</tr>
<tr>
<td>APPLICATION</td>
<td>SECTION 2 Application</td>
<td>31-5</td>
</tr>
<tr>
<td></td>
<td>ARTICLE 1 Routes Severed by Freeways</td>
<td>31-5</td>
</tr>
<tr>
<td></td>
<td>Preserving Existing Nonmotorized Capabilities</td>
<td>31-5</td>
</tr>
<tr>
<td></td>
<td>Types of Existing Major Routes</td>
<td>31-5</td>
</tr>
<tr>
<td></td>
<td>Alternative Routes</td>
<td>31-5</td>
</tr>
<tr>
<td></td>
<td>Proposals After Freeway Construction</td>
<td>31-6</td>
</tr>
<tr>
<td></td>
<td>ARTICLE 2 New Corridors</td>
<td>31-6</td>
</tr>
<tr>
<td></td>
<td>Criteria for New Corridors</td>
<td>31-6</td>
</tr>
<tr>
<td></td>
<td>Public Hearing Requirements</td>
<td>31-6</td>
</tr>
<tr>
<td></td>
<td>Public Hearing Process</td>
<td>31-6</td>
</tr>
<tr>
<td></td>
<td>Financing</td>
<td>31-7</td>
</tr>
<tr>
<td></td>
<td>ARTICLE 3 Cooperative Projects</td>
<td>31-7</td>
</tr>
<tr>
<td></td>
<td>Request by Public Agency</td>
<td>31-7</td>
</tr>
<tr>
<td></td>
<td>Location Guidelines</td>
<td>31-7</td>
</tr>
<tr>
<td></td>
<td>State Funding Contribution</td>
<td>31-7</td>
</tr>
<tr>
<td></td>
<td>ARTICLE 4 State Projects</td>
<td>31-8</td>
</tr>
<tr>
<td></td>
<td>Caltrans Initiation</td>
<td>31-8</td>
</tr>
<tr>
<td></td>
<td>State Funding</td>
<td>31-8</td>
</tr>
<tr>
<td></td>
<td>Types of State Projects</td>
<td>31-8</td>
</tr>
<tr>
<td>PLANNING GUIDELINES</td>
<td>SECTION 3 Planning Guidelines</td>
<td>31-9</td>
</tr>
<tr>
<td></td>
<td>Early Evaluation of Need</td>
<td>31-9</td>
</tr>
<tr>
<td></td>
<td>Freeways</td>
<td>31-9</td>
</tr>
<tr>
<td></td>
<td>Expressways and Conventional Highways</td>
<td>31-9</td>
</tr>
<tr>
<td></td>
<td>Toll Bridges</td>
<td>31-9</td>
</tr>
<tr>
<td></td>
<td>Maintenance Provisions</td>
<td>31-10</td>
</tr>
<tr>
<td></td>
<td>Encourage Relinquishment</td>
<td>31-10</td>
</tr>
</tbody>
</table>
Consult with Local Agencies Prior to Abandonment ........................................ 31-10
Funding .................................................................................................................. 31-11
SECTION 4 Design Guidelines ................................................................................. 31-12
California Statutes .................................................................................................... 31-12
Bicycle Design Criteria and Traffic Control Devices .............................................. 31-13
Improvements Not on the State Highway System .................................................. 31-13
Pedestrian Design Policy and Criteria ................................................................. 31-14
Pedestrian Accessibility ......................................................................................... 31-14
SECTION 5 Approvals .............................................................................................. 31-15
Project Report and Public Hearing ......................................................................... 31-15
Changes in Access Control .................................................................................... 31-15
Federal Highway Administration Approval .......................................................... 31-15
CHAPTER 31 – Nonmotorized Transportation Facilities

SECTION 1 General

Introduction

State and federal laws require Caltrans to promote and facilitate increased use of nonmotorized transportation. The purpose of this chapter is to outline pertinent statutory requirements, planning policies, and implementing procedures regarding nonmotorized transportation facilities.

Definition

Section 887 of the Streets and Highways (S&H) Code defines a “nonmotorized transportation facility” as a facility designed primarily for the use of pedestrians, bicyclists, or equestrians. It may be designed primarily for one of these uses or it may be designed as a joint-use facility.

A nonmotorized transportation facility may be part of the highway (such as a shoulder) or it may be separated from highway traffic for exclusive nonmotorized use (such as a bike path or sidewalk).

Categories of Projects

Any new projects for nonmotorized transportation facilities along a State highway or within its right-of-way will generally fall into one of the following categories:

- Replacement of an existing major route for nonmotorized traffic that is being severed or destroyed by freeway construction (S&H Code -- Section 888)
- Provision of a nonmotorized facility along a new freeway corridor where nonmotorized facilities do not exist (S&H Code -- Section 888.2)
- Provision of a nonmotorized facility along a State highway under a Cooperative Agreement at the request of a local agency (S&H Code -- Section 887.6)
Part 3 – Specific Project Development Procedures

- Provision of a nonmotorized facility along a State highway based upon a finding that the traffic safety or capacity of the highway will be increased (S&H Code -- Section 887.8). The finding is made in consultation with appropriate law enforcement agencies.

In addition, any development of a State highway project should address features beneficial to nonmotorized traffic, including (but not limited to) widening shoulders, striping, and signing.

**Minimum Annual Funding**

Section 888.4 of the S&H Code requires an annual state-wide budget of at least $360,000 for new nonmotorized transportation facilities to be used in conjunction with the State Highway System. The primary emphasis of the program is to benefit bicyclists. Projects in this program should be designed to improve safety and convenience for bicyclists and to increase traffic safety or capacity of the highway. Because funds are limited, priority should be given to projects that close gaps in bikeways, eliminate high accident frequency locations, and serve high-use areas such as schools, employment centers, shopping areas, parks, beaches, and other activity centers.

**Project Reports Required**

Proposals for nonmotorized transportation facilities that are within the State right-of-way or are included as part of a State construction project, require the preparation of a project report (PR) or other appropriate report, as specified in Chapter 12 – Project Approvals and Changes to Approved Projects, Section 4.

**Coordinate Planning & Design with Outside Entities**

Planning and design processes for all projects must address the needs of nonmotorized users, and must be fully coordinated with federal, State, regional, and local agencies, as well as user groups served by the project. Bikeway planning and design criteria are found in Chapter 1000 of the *Highway Design Manual (HDM).*
SECTION 2 Application

ARTICLE 1 Routes Severed by Freeways

Preserving Existing Nonmotorized Capabilities

Section 888 of the Streets and Highways (S&H) Code states that Caltrans will not construct a State highway as a freeway that will result in the severance or destruction of an existing major route for nonmotorized traffic and light motorcycles unless it provides a reasonable, safe, and convenient alternate route or unless such a route already exists.

A “light motorcycle”, as used in the above context, is defined as a motor-driven cycle or a motorized bicycle, both of which are defined in Sections 405 and 406 of the Vehicle Code.

Types of Existing Major Routes

An existing major route for nonmotorized traffic may be any of the following:

- Conventional highway or expressway
- Sidewalk on a conventional highway: The sidewalk may be principally for pedestrian use but may also be used by bicyclists when permitted by local ordinance.
- Freeway shoulder on which bicycle traffic is permitted in accordance with Vehicle Code, Section 21960, and for which no reasonable, safe, or convenient alternate route is available.
- Path within the freeway right-of-way
- Path outside of the freeway right-of-way
- Path outside of the roadway

Alternative Routes

A reasonable, safe, and convenient alternate route can consist of a system of local routes or State highways. The alternate route should not consist of significant out-of-direction travel, additional grades of significant length or slope, or high-volume routes with narrow shoulders.
Proposals After Freeway Construction

Pursuant to Section 888 of the S&H Code, nonmotorized facilities proposed after a freeway has been constructed do not qualify as an “alternate route” for a severed or destroyed nonmotorized route. Instead, such facilities are to be developed as a cooperative project under the provisions of Sections 887.6 and 888.2 of the S&H Code.

ARTICLE 2 New Corridors

Criteria for New Corridors

Section 888.2 of the S&H Code states that Caltrans will incorporate nonmotorized transportation facilities into the design of freeways on the State Highway System along corridors where nonmotorized facilities do not exist, upon a finding that such facilities: (1) would conform to the California Recreational Trails System Plan or (2) would (following a public hearing) conform to the nonmotorized transportation master plans of local agencies; would not duplicate existing or proposed routes; and would enhance community interests.

Public Hearing Requirements

When designing a new freeway, the project engineer (PE) must determine if nonmotorized facilities or reasonable, safe, and convenient alternate routes exist or are proposed within the corridor. The findings must be discussed as part of the regular public hearing for the project or at a separate public hearing to comply with the requirements of Section 888.2 of the S&H Code.

For projects past the regular public hearing stage, local agencies should be contacted to determine their desires regarding nonmotorized transportation facilities. If a local agency requests nonmotorized facilities to be included in the project, Caltrans must conduct a public hearing. It is important to note that if Caltrans defers inclusion of nonmotorized facilities until after the freeway is completed, it may still be required to include the facilities at a later date, under the provisions of Sections 887.6 or 887.8 of the S&H Code.

Public Hearing Process

The public hearing process, if separately accomplished, should follow normal procedures, as specified in Chapter 11 – Public Hearing. At the hearing it is
important to fully discuss and document the relationship of the freeway project and its nonmotorized transportation facilities to the California Recreational Trails Plan, the local agencies’ nonmotorized master plans or bicycle transportation plans, and the regional agencies’ Regional Transportation Plan.

**Financing**

Nonmotorized facilities constructed under Section 888.2 of the S&H Code are financed with State highway funds.

**ARTICLE 3 Cooperative Projects**

**Request by Public Agency**

Section 887.6 of the S&H Code states that:

Upon the request of a public agency, the department may enter into an agreement with the agency for the construction and maintenance of nonmotorized transportation facilities which generally follow a state highway right-of-way where the department has determined that the facility will increase the safety and convenience of bicyclists.

**Location Guidelines**

The facility may be inside or outside of the highway right-of-way. The PE should document the availability of reasonable, safe, and convenient alternate routes and the relationship of the project to the local agencies’ nonmotorized master plans or bicycle transportation plans and the regional agencies’ Regional Transportation Plan.

**State Funding Contribution**

Section 887.6 of the S&H Code further states that:

The department’s contribution, if any, to the cost of constructing the nonmotorized facilities shall be based upon a finding that the traffic safety or capacity of the highway will be increased. The agreements may provide for the handling and accounting of funds, the acquisition of right-of-way, maintenance, and any other phase of the project.
ARTICLE 4  State Projects

Caltrans Initiation

Section 887.8 of the S&H Code states that Caltrans may construct and maintain nonmotorized transportation facilities approximately paralleling State highways after consulting with the law enforcement agency having jurisdiction over the highway.

State Funding

If Caltrans determines that a nonmotorized facility approximately paralleling the highway would increase traffic safety or traffic capacity on the highway, Caltrans pays for the construction and maintenance of the nonmotorized facility.

Types of State Projects

Examples of State-funded projects include:

- A bikeway in an area where a freeway constructed prior to 1976 severed or destroyed a major nonmotorized route
- Striping and signing a State highway shoulder as a bikeway—or constructing a separate path—to provide continuity to a local or regional bikeway system
- Widening a State highway shoulder to improve safety and convenience for nonmotorized users
SECTION 3 Planning Guidelines

Early Evaluation of Need

Caltrans must address the needs of bicyclists and pedestrians in the initial planning stages of all projects and must coordinate the planning of nonmotorized projects with relevant outside entities.

Freeways

Section 21960 of the Vehicle Code allows Caltrans to prohibit nonmotorized travel on freeways. It is Caltrans’ policy to prohibit pedestrians on freeways. However, Caltrans allows bicycle travel on approximately one-fourth of the State’s freeways. Freeway shoulders that are open to bicyclists are usually in non urban areas where a safe and convenient alternate route does not exist.

For additional information regarding bicyclists and pedestrians on freeways, see Chapter 100 of the *Highway Design Manual*.

Expressways and Conventional Highways

Nonmotorized traffic is not prohibited on expressways and conventional highways. The vast majority of bicycling is done on public roads with or without bikeway designations. When the roadway and the shoulders are adequately paved and maintained, they provide safe and convenient routes for most bicyclists.

Toll Bridges

Bicycle and pedestrian facilities should be considered on new toll bridges and their connections. Caltrans should coordinate the development of the facilities with local and regional agencies to ensure continuity of a nonmotorized transportation system in the area.

The cost of the facilities on the bridges and their connections is paid for by Caltrans as part of the cost of the construction of the bridge, unless the cost of such facilities is to be paid by a governmental agency other than a State agency.
Part 3 – Specific Project Development Procedures

Maintenance Provisions

Nonmotorized projects within the State highway right-of-way that are partially funded by local agencies may be maintained by local agencies under a cooperative agreement with Caltrans.

If the nonmotorized facility is a bike path or a walkway that connects to a local nonmotorized facility, and if it is outside the limits needed for operating and maintaining the roadway, then Caltrans should seek agreement for the local agency to maintain the facility. Maintenance by the local agency can provide continuity in the maintenance of the local nonmotorized system and helps demonstrate a local willingness to cooperate in the project. Maintenance provisions should be established that do not compromise the safety or operation of the highway.

If the nonmotorized facility is a bike route or bike lane on the shoulder of the roadbed, Caltrans should maintain it as part of its normal roadway maintenance.

Maintenance responsibility may vary with the circumstances; however isolated segments or parallel facilities of substantial length near the roadway should be maintained by Caltrans, as discussed above.

Encourage Relinquishment

Section 73 of the Streets and Highways (S&H) Code states that the California Transportation Commission (CTC) may relinquish any nonmotorized facility (as defined in S&H Code, Section 887) constructed as part of a State highway project, to a county or city within whose territorial limits it is located. As a condition for relinquishment, the county or city must enter into an agreement or adopt a consenting resolution. See Chapter 25 for more information.

Consult with Local Agencies Prior to Abandonment

Section 892 of the S&H Code requires Caltrans to consult with local agencies to determine if State highway right-of-way could be developed as a nonmotorized transportation facility prior to taking any abandonment actions. If Caltrans and local agencies determine that the right-of-way can be developed as a nonmotorized transportation facility, then Caltrans must first make the property available to the local agencies. These procedures are described in Sections 104.15 and 887.6 of the S&H Code and in Section 14012 of the Government Code.
Caltrans needs to determine the potential for development of the property as a nonmotorized transportation facility and include the determination in the notification of proposed abandonment. The determination should include any known local or regional plans for nonmotorized facilities on the property and any schedules for construction and funding by the local agency responsible for development of the facility.

**Funding**

Federal, State, and local funding is also available to local agencies for local nonmotorized projects.

The federal Intermodal Surface Transportation Efficiency Act (ISTEA) provides Caltrans and local agencies with nonmotorized facilities funding from several sources. The regional transportation planning agencies and CTC establish priorities for projects.

Caltrans administers the Bicycle Lane Account, which provides $360,000 a year to local agencies for projects that improve safety and convenience for bicycle commuters. In addition, the State Local Transportation Fund provides funds to local agencies for nonmotorized projects.

Caltrans is also eligible for ISTEA funds for nonmotorized projects. As discussed in Section 1, it must set aside at least $360,000 per year for nonmotorized transportation facilities used in conjunction with the State Highway System.
SECTION 4 Design Guidelines

California Statutes

*California Streets and Highways Code, Section 890.6*

Section 890.6 states:

(a) The department, in cooperation with county and city governments, shall establish minimum safety design criteria for the planning and construction of each type of bikeway identified in Section 890.4 and roadways where bicycle travel is permitted.

(b) The criteria shall include, but not be limited to, the design speed of the facility, minimum widths and clearances, grade, radius of curvature, pavement surface, actuation of automatic traffic control devices, drainage, and general safety, with consideration for the safety of vulnerable populations, such as children, seniors, persons with impaired vision, and persons of limited mobility. The criteria shall be published by January 1, 2016, and updated biennially, or more often, as needed.

(c) The criteria shall be established in consultation with the existing advisory committee of the department dedicated to improving access for persons with disabilities.

*California Streets and Highways Code, Section 890.8*

Section 890.8 states:

The department shall establish uniform specifications and symbols for signs, markers, and traffic control devices to designate bikeways, regulate traffic, improve safety and convenience for bicyclists, and alert pedestrians and motorists of the presence of bicyclists on bikeways and on roadways where bicycle travel is permitted.
California Streets and Highways Code, Section 891

Section 891 states:

(a) All city, county, regional, and other local agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted shall utilize the minimum safety design criteria established pursuant to Section 890.6, except as provided in subdivision (b), and shall utilize the uniform specifications and symbols for signs, markers, and traffic control devices established pursuant to Section 890.8.

(b) An agency may utilize minimum safety design criteria other than those established by Section 890.6 if all of the following conditions are met:

(1) The alternative criteria have been reviewed and approved by a qualified engineer with consideration for the unique characteristics and features of the proposed bikeway and surrounding environs.

(2) The alternative criteria, or the description of the project with reference to the alternative criteria, are adopted by resolution at a public meeting, after having provided proper notice of the public meeting and opportunity for public comment.

(3) The alternative criteria adhere to guidelines established by a national association of public agency transportation officials.

Bicycle Design Criteria and Traffic Control Devices

The Highway Design Manual Chapter 1000 – Bicycle Transportation Design contains the design criteria discussed in California Streets and Highways Code, Section 890.6.

The California Manual on Uniform Traffic Control Devices (California MUTCD) contains the information for signs, markers, and traffic control devices discussed in California Streets and Highways Code, Section 890.8.

Improvements Not on the State Highway System

For improvements on local systems, the responsible local entity is delegated authority to exercise their engineering judgment when utilizing the applicable design guidance and standards, including those for bicycle facilities established by Caltrans pursuant to California Streets and Highways Code, Sections 890.6 and 890.8. The Caltrans Local Assistance Procedures Manual, Chapter 11 provides the guidance for documenting design decisions on local systems when engineering judgment is exercised for deviation from accepted design standards.
Pedestrian Design Policy and Criteria

Policy and criteria for developing pedestrian facilities are contained in Topic 105 – Pedestrian Facilities of the *Highway Design Manual* and *Design Information Bulletin* 82 – Pedestrian Accessibility Guidelines for Highway Projects.

**Pedestrian Accessibility**

Buildings and transportation facilities on all projects must be accessible within the State highway rights-of-way in accordance to federal and State law. The *Americans with Disabilities Act of 1990*, along with its implementing regulations, and the *California Government Code*, Section 4450 et seq., prescribe that buildings and facilities shall be made accessible to persons with disabilities. Accessibility design standards for the State of California are prescribed in *Title 24 California Code of Regulations*; in Part 2, the *California Building Code*. The Department of General Services, Division of the State Architect (DSA), oversees *California Building Code* compliance.

Except for rail and transit stations, within the State highway rights-of-way, Caltrans (in addition to Division of the State Architect) is authorized by State law to certify, on a project-by-project basis, that a project complies with State pedestrian accessibility design standards for transportation facilities. *Design Information Bulletin* 82 – Pedestrian Accessibility Guidelines for Highway Projects, provides design guidance on pedestrian accessibility for highway projects and how to comply with the various federal laws and State codes.

Division of the State Architect reviews and provides the required approval that a rail or transit station project complies with the State pedestrian accessibility code.
SECTION 5 Approvals

Project Report and Public Hearing

For projects on freeways where nonmotorized facilities do not exist, the Draft and final Project Report should discuss the following items regarding a nonmotorized facility: (1) the project’s conformity with the California Recreational Trails System Plan; or (2) the local agency’s nonmotorized transportation master plans or bicycle transportation plans; the non-duplication of existing or proposed nonmotorized routes; and the enhancement of community interests as a result of the nonmotorized project.

Item (2) should be discussed at the public hearing. If the public hearing process has already occurred, a separate public hearing will be required.

Changes in Access Control

Nonmotorized projects are often proposed within the access control line on existing freeways and expressways. It may be necessary to obtain Federal Highway Administration (FHWA) concurrence for a change in access control. Consult with the Headquarters Project Delivery Coordinator.

Federal Highway Administration Approval

Programs involving Federal-aid participation have guidelines that specify approval procedures for nonmotorized projects. Additional FHWA approval is normally not required. Districts should review the guidelines for specific information regarding approval procedures for nonmotorized projects.