

APPENDICES

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BICYCLE TRANSPORTATION POLICIES AND STATUTES

Bicycle Technical Guidelines

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Appendix A-1

California Vehicle Code Sections Restricting Bicycle Use

21960. Freeways and Expressways: Use Restrictions

(a) The Department of Transportation and local authorities, by order, ordinance, or resolution, with respect to freeways, expressways, or designated portions thereof under their respective jurisdictions, to which vehicle access is completely or partially controlled, may prohibit or restrict the use of the freeways, expressways, or any portion thereof by pedestrians, bicycles or other nonmotorized traffic or by any person operating a motor-driven cycle, motorized bicycle, or motorized scooter. A prohibition or restriction pertaining to bicycles, motor-driven cycles, or motorized scooters shall be deemed to include motorized bicycles; and no person may operate a motorized bicycle wherever that prohibition or restriction is in force. Notwithstanding any provisions of any order, ordinance, or resolution to the contrary, the driver or passengers of a disabled vehicle stopped on a freeway or expressway may walk to the nearest exit, in either direction, on that side of the freeway or expressway upon which the vehicle is disabled, from which telephone or motor vehicle repair services are available.

(b) The prohibitory regulation authorized by subdivision (a) shall be effective when appropriate signs giving notice thereof are erected upon any freeway or expressway and the approaches thereto. If any portion of a county freeway or expressway is contained within the limits of a city within the county, the county may erect signs on that portion as required under this subdivision if the ordinance has been approved by the city pursuant to subdivision (b) of Section 1730 of the Streets and Highways Code.

(c) No ordinance or resolution of local authorities shall apply to any state highway until the proposed ordinance or resolution has been presented to, and approved in writing by, the Department of Transportation.

(d) An ordinance or resolution adopted under this section on or after January 1, 2005, to prohibit pedestrian access to a county freeway or expressway shall not be effective unless it is supported by a finding by the local authority that the freeway or expressway does not have pedestrian facilities and pedestrian use would pose a safety risk to the pedestrian.

(Amended by Stats. 2004, Ch. 615, Sec. 28. Effective January 1, 2005.)

23330. Animals, Vehicles, Bicycles, and Motorized Bicycles

Except where a special permit has been obtained from the Department of Transportation under the provisions of Article 6 (commencing with Section 35780) of Chapter 5 of Division 15, none of the following shall be permitted on any vehicular crossing:

(a) Animals while being led or driven, even though tethered or harnessed.

(b) Bicycles, motorized bicycles, or motorized scooters, unless the department by signs indicates that bicycles, motorized bicycles, or motorized scooters, or any combination thereof, are permitted upon all or any portion of the vehicular crossing.

(c) Vehicles having a total width of vehicle or load exceeding 102 inches.

(d) Vehicles carrying items prohibited by regulations promulgated by the Department of Transportation.

Amended Sec. 8, Ch. 722, Stats. 1999. Effective January 1, 2000.

April 24, 2013

Appendix A-2
CALIFORNIA STREETS AND HIGHWAYS CODE – 2012

SECTION 887-888.8 & 890-894.2 & 30112.

887. As used in this chapter, "nonmotorized transportation facility" means a facility designed primarily for the use of pedestrians, bicyclists, or equestrians. It may be designed primarily for one or more of those uses.

887.2. The department, in cooperation with local agencies, shall publish a statewide map illustrating state highway routes available for the use of bicyclists and, where bicyclists are prohibited from using a state highway, illustrating, in such a case, safe, alternate routes available to the bicyclist.

887.4. Prior to December 31 of each year, the department shall prepare and submit an annual report to the Legislature summarizing programs it has undertaken for the development of nonmotorized transportation facilities, including a summary of major and minor projects. The report shall document all state funding for bicycle programs, including funds from the Bicycle Transportation Account, the Transportation Planning and Development Account, and the Clean Air Transportation Improvement Act. The report shall also summarize the existing directives received by the department from the Federal Highway Administration concerning the availability of federal funds for the programs, together with an estimate of the fiscal impact of the federal participation in the programs.

887.6. Upon the request of a public agency, as defined by Section 6500 of the Government Code, 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 improve safety and convenience for bicyclists.

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 or conveyance of right-of-way, maintenance, and any other phase of the project.

887.8. (a) After consulting with the law enforcement agency having primary traffic law enforcement responsibility with respect to the state highway, the department may construct and maintain nonmotorized transportation facilities approximately paralleling that highway.

(b) Where the traffic safety or capacity of the highway would be increased, the department shall pay for the construction and maintenance of nonmotorized transportation facilities approximately paralleling the highway.

(c) The Legislature finds and declares that the construction and maintenance of nonmotorized transportation facilities constitute a highway purpose under Article XIX of the California Constitution, and justify the expenditure of highway funds and the exercise of the power of eminent domain therefor.

888. The department shall not construct a state highway as a freeway that will result in the severance or destruction of an existing major route for nonmotorized transportation traffic and light motorcycles, unless it provides a reasonable, safe, and convenient

alternate route or such a route exists. *(Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

888.2. The department shall also incorporate nonmotorized transportation facilities in the design of freeways on the state highway system along corridors where nonmotorized facilities do not exist, upon a finding that the facilities would conform to the California Recreational Trails System Plan specified in Section 5070.7 of the Public Resources Code or upon a finding, following a public hearing, that the facilities would conform to the master plans of local agencies for the development of nonmotorized facilities and would not duplicate existing or proposed routes, and that community interests would be enhanced by the construction of the facilities.

The department shall establish an annual priority list of projects to be funded pursuant to this section, which shall primarily benefit bicyclists rather than other highway users. *(Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

888.4. Each annual budget prepared pursuant to Section 165 shall include an amount of not less than three hundred sixty thousand dollars (\$360,000) for the construction of nonmotorized transportation facilities to be used in conjunction with the state highway system. *(Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

888.8. The department may enter into any agreements, execute any documents, establish and manage any accounts or deposits, or take any other action that may be appropriate to receive and expend funds from the federal government in connection with state or local agency bicycle programs and nonmotorized transportation projects for which federal funds are available. The department may undertake demonstration projects and perform technical studies. *(Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

ARTICLE 3. California Bicycle Transportation Act [890. - 894.2.]

(Article 3 added by Stats. 1993, Ch. 517, Sec. 2.)

890. It is the intent of the Legislature, in enacting this article, to establish a bicycle transportation system. It is the further intent of the Legislature that this transportation system shall be designed and developed to achieve the functional commuting needs of the employee, student, business person, and shopper as the foremost consideration in route selection, to have the physical safety of the bicyclist and bicyclist's property as a major planning component, and to have the capacity to accommodate bicyclists of all ages and skills. *Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

890.2. As used in this chapter, "bicycle" means a device upon which any person may ride, propelled exclusively by human power through a belt, chain, or gears, and having either two or three wheels in a tandem or tricycle arrangement. *Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

890.3. As used in this article, "bicycle commuter" means a person making a trip by bicycle primarily for transportation purposes, including, but not limited to, travel to work, school, shopping, or other destination that is a center of activity, and does not include a trip by bicycle primarily for physical exercise or recreation without such a destination. *Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

890.4. As used in this article, "bikeway" means all facilities that provide primarily for bicycle travel. For purposes of this article, bikeways shall be categorized as follows:

(a) Class I bikeways, such as a "bike path," which provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

(b) Class II bikeways, such as a "bike lane," which provide a restricted right-of-way designated for the exclusive or semiexclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.

(c) Class III bikeways, such as an onstreet or offstreet "bike route," which provide a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists. *Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.*)

890.6. The department, in cooperation with county and city governments, shall establish minimum safety design criteria for the planning and construction of bikeways and roadways where bicycle travel is permitted. 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. The criteria shall be updated biennially, or more often, as needed. *Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.*)

890.8. 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. *(Added by Stats. 1993, Ch. 517, Sec. 2. Effective January 1, 1994.)*

891.

(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 all minimum safety design criteria and uniform specifications and symbols for signs, markers, and traffic control devices established pursuant to Sections 890.6 and 890.8, except as provided in subdivision (b).

(b) The department, by June 30, 2013, shall establish procedures to permit exceptions to the requirements of subdivision (a) for purposes of research, experimentation, testing, evaluation, or verification.

(Amended by Stats. 2012, Ch. 716, Sec. 1. Effective January 1, 2013.)

891.1.

(a) The department shall, by November 1, 2014, submit a report to the transportation policy committees of both houses of the Legislature that describes the steps the department has taken to implement the requirements of subdivision (b) of Section 891 related to permitting exceptions to the

requirements of subdivision (a) of Section 891. The report shall include, but not be limited to, all of the following:

(1) The number of requests the department has received from cities, counties, and local agencies from July 1, 2013, to June 30, 2014, inclusive.

(2) The number of exceptions the department granted during that year.

(3) If any requests were rejected, the reasons why those requests were not approved.

(b) This section shall become inoperative on July 1, 2015, and, as of January 1, 2016, is repealed, unless a later enacted statute, that becomes operative on or before January 1, 2016, deletes or extends the dates on which it becomes inoperative and is repealed.

(Added by Stats. 2012, Ch. 716, Sec. 2. Effective January 1, 2013. Inoperative July 1, 2015. Repealed as of January 1, 2016, by its own provisions.)

891.2. A city or county may prepare a bicycle transportation plan, which shall include, but not be limited to, the following elements:

(a) The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan.

(b) A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, and major employment centers.

(c) A map and description of existing and proposed bikeways.

(d) A map and description of existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings, and major employment centers.

(e) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.

(f) A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom, and shower facilities near bicycle parking facilities.

(g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.

(h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.

(i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.

(j) A description of the projects proposed in the plan and a listing of their priorities for implementation.

(k) A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.

891.4. (a) A city or county that has prepared a bicycle transportation plan pursuant to Section 891.2 may submit the plan to the county transportation commission or transportation planning agency for approval. The city or county may submit an approved plan to the department in connection with an application for funds for bikeways and related facilities which will implement the plan. If the bicycle transportation plan is prepared, and the facilities are proposed to be constructed, by a local agency other than a city or county, the city or county may submit the plan for approval and apply for funds on behalf of that local agency.

(b) The department may grant funds applied for pursuant to subdivision (a) on a matching basis which provides for the applicant's furnishing of funding for 10 percent of the total cost of constructing the proposed bikeways and related facilities. The funds may be used, where feasible, to apply for and match federal grants or loans.

891.5. The Sacramento Area Council of Governments, pursuant to subdivision (d) of Section 2551, may purchase, operate, and maintain callboxes on class 1 bikeways.

891.8. The governing body of a city, county, or local agency may do all of the following:

(a) Establish bikeways.

(b) Acquire, by gift, purchase, or condemnation, land, real property, easements, or rights-of-way to establish bikeways.

(c) Establish bikeways pursuant to Section 21207 of the Vehicle Code.

892. (a) Rights-of-way established for other purposes by cities, counties, or local agencies shall not be abandoned unless the governing body determines that the rights-of-way or parts thereof are not useful as a nonmotorized transportation facility.

(b) No state highway right-of-way shall be abandoned until the department first consults with the local agencies having jurisdiction over the areas concerned to determine whether the right-of-way or part thereof could be developed as a nonmotorized transportation facility. If an affirmative determination is made, before abandoning the right-of-way, the department shall first make the property available to local agencies for development as nonmotorized transportation facilities in accordance with Sections 104.15 and 887.6 of this code and Section 14012 of the Government Code.

892.2. (a) The Bicycle Transportation Account is continued in existence in the State Transportation Fund, and, notwithstanding Section 13340 of the Government Code, the money in the account is continuously appropriated to the department for expenditure for the purposes specified in Section 892.4. Unexpended moneys shall be retained in the account for use in subsequent fiscal years.

(b) Any reference in law or regulation to the Bicycle Lane Account is a reference to the Bicycle Transportation Account.

892.4. The department shall allocate and disburse moneys from the Bicycle Transportation Account according to the following priorities:

(a) To the department, the amounts necessary to administer this article, not to exceed 1 percent of the funds expended per year.

(b) To counties and cities, for bikeways and related facilities, planning, safety and education, in accordance with Section 891.4.

892.5. The Bikeway Account, created in the State Transportation Fund by Chapter 1235 of the Statutes of 1975, is continued in effect, and, notwithstanding Section 13340 of the Government Code, money in the account is hereby continuously appropriated to the department for expenditure for the purposes specified in this chapter. Unexpended money shall be retained in the account for use in subsequent fiscal years.

892.6. The Legislature finds and declares that the construction of bikeways pursuant to this article constitutes a highway purpose under Article XIX of the California Constitution and justifies the expenditure of highway funds therefor.

893. The department shall disburse the money from the Bicycle Transportation Account pursuant to Section 891.4 for projects that improve the safety and convenience of bicycle commuters, including, but not limited to, any of the following:

- (a) New bikeways serving major transportation corridors.
- (b) New bikeways removing travel barriers to potential bicycle commuters.
- (c) Secure bicycle parking at employment centers, park-and-ride lots, rail and transit terminals, and ferry docks and landings.
- (d) Bicycle-carrying facilities on public transit vehicles.
- (e) Installation of traffic control devices to improve the safety and efficiency of bicycle travel.
- (f) Elimination of hazardous conditions on existing bikeways.
- (g) Planning.
- (h) Improvement and maintenance of bikeways.

In recommending projects to be funded, due consideration shall be given to the relative cost effectiveness of proposed projects.

893.2. The department shall not finance projects with the money in accounts continued in existence pursuant to this article which could be financed appropriately pursuant to Article 2 (commencing with Section 887), or fully financed with federal financial assistance.

893.4. If available funds are insufficient to finance completely any project whose eligibility is established pursuant to Section 893, the project shall retain its priority for allocations in subsequent fiscal years.

893.6. The department shall make a reasonable effort to disburse funds in general proportion to population. However, no applicant shall receive more than 25 percent of the total amounts transferred to the Bicycle Transportation Account in a single fiscal year.

894. The department may enter into an agreement with any city or county concerning the handling and accounting of the money disbursed pursuant to this article, including, but not limited to, procedures to permit prompt payment for the work accomplished.

894.2. The department, in cooperation with county and city governments, shall adopt the necessary guidelines for implementing this article.

CHAPTER 1. The California Toll Bridge Authority Act [30000. - 30506.]

30112. The department and commission shall consider the inclusion of bicycle and pedestrian facilities on each new toll bridge designed and constructed pursuant to this division, including appropriate connections thereto. Such facilities shall be included on each such new bridge if the commission finds that they are economically and physically feasible. If the commission finds such facilities are not feasible, it shall report its findings to the Legislature at least one year prior to commencement of construction, including the facts on which the commission based its decision.

The cost of the bicycle and pedestrian facilities on the approaches to the toll bridge shall be paid by the commission as a part of the cost of construction of the toll bridge, unless the cost of such facilities is to be paid by a governmental agency other than a state agency. The feasibility study for such facilities shall reflect whether the commission or a governmental agency other than a state agency shall pay the cost of such facilities.

The Legislature finds that the increased use of the bicycle is a desirable activity which should be encouraged by the improvement of access available to that mode of transportation. It is the intent of the Legislature, in enacting this section, to provide for the use of toll bridges by both pedestrians and bicycles, wherever this is economically and physically feasible.

(Amended by Stats. 1980, Ch. 777, Sec. 143.)

Assembly Concurrent Resolution No. 211

RESOLUTION CHAPTER 120

Assembly Concurrent Resolution No. 211—Relative to integrating walking and biking into transportation infrastructure.

[Filed with Secretary of State August 20, 2002.]

LEGISLATIVE COUNSEL'S DIGEST

ACR 211, Nation. Integrating walking and biking into transportation infrastructure.

This measure would encourage all cities and counties to implement the policies of the California Department of Transportation Deputy Directive 64 and the United States Department of Transportation's design guidance document on integrating bicycling and walking when building their transportation infrastructure.

WHEREAS, Bicycling and walking contribute to cleaner air; and

WHEREAS, Bicycling and walking provide affordable and healthy transportation options for many of the 10 million Californians who do not possess a driver's license; and

WHEREAS, The State Department of Health Services has declared that more than 40,000 Californians annually die from causes related to physical inactivity; and

WHEREAS, The United States Centers for Disease Control has determined that changes in the community environment to promote physical activity may offer the most practical approach to prevent obesity or reduce its comorbidities. Automobile trips that can be safely replaced by walking or bicycling offer the first target for increased physical activity in communities; and

WHEREAS, Bicycling and walking contribute to safeguarding our coast from offshore oil drilling and enhance California's energy independence and national security by reducing our reliance upon imported oil; and

WHEREAS, Designing roads for safe and efficient travel by bicyclists and pedestrians saves lives; and

WHEREAS, Bicyclists and pedestrians pay sales taxes which provide for the majority of local transportation spending; and

WHEREAS, Local demand for funding from the Bicycle Transportation Account, the Safe Routes to School, and the Transportation Enhancement Activity Programs far exceeds available moneys; and



WHEREAS, The best use of limited financial resources is to include bicycle and pedestrian elements into roadway projects where feasible; and

WHEREAS, Bicycling and walking reduce traffic congestion in California; and

WHEREAS, In February 2000, the United States Department of Transportation issued a design guidance statement titled, “Accommodating Bicycle and Pedestrian Travel: A Recommended Approach-A United States Department of Transportation Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure;” and

WHEREAS, In March 2001, the California Department of Transportation issued Deputy Directive 64 titled “Accommodating Non-Motorized Travel” which states that “The Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists and persons with disabilities) in all programming, planning maintenance, construction, operations, and project development activities and products. This includes incorporation of the best available standards in all of the Department’s practices. The Department adopts the best practices concepts in the US DOT Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure;” now, therefore, be it

Resolved by the Assembly of the State of California, the Senate thereof concurring, That in order to improve the ability of all Californians who choose to walk or bicycle to do so safely and efficiently, the Legislature of the State of California hereby encourages all cities and counties to implement the policies of the California Department of Transportation Deputy Directive 64 and the United States Department of Transportation’s design guidance document on integrating bicycling and walking when building their transportation infrastructure.



Deputy Directive

Number: DD-64-R1

*Refer to
Director's Policy:* DP-22
Context Sensitive
Solutions
DP-05
Multimodal Alternatives
DP-06
Caltrans Partnerships
DP-23-R1
Energy Efficiency,
Conservation and Climate
Change

Effective Date: October 2008

Supersedes: DD-64 (03-26-01)

TITLE Complete Streets - Integrating the Transportation System

POLICY

The California Department of Transportation (Department) provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State highway system. The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.

The Department develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian, and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance and operations. Developing a network of "complete streets" requires collaboration among all Department functional units and stakeholders to establish effective partnerships.

DEFINITIONS/BACKGROUND

Complete Street – A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility.

The intent of this directive is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of “complete streets.”

State and federal laws require the Department and local agencies to promote and facilitate increased bicycling and walking. California Vehicle Code (CVC) (Sections 21200-21212), and Streets and Highways Code (Sections 890 – 894.2) identify the rights of bicyclists and pedestrians, and establish legislative intent that people of all ages using all types of mobility devices are able to travel on roads. Bicyclists, pedestrians, and nonmotorized traffic are permitted on all State facilities, unless prohibited (CVC, section 21960). Therefore, the Department and local agencies have the duty to provide for the safety and mobility needs of all who have legal access to the transportation system.

Department manuals and guidance outline statutory requirements, planning policy, and project delivery procedures to facilitate multimodal travel, which includes connectivity to public transit for bicyclists and pedestrians. In many instances, roads designed to Department standards provide basic access for bicycling and walking. This directive does not supersede existing laws. To ensure successful implementation of “complete streets,” manuals, guidance, and training will be updated and developed.

RESPONSIBILITIES

Chief Deputy Director:

- Establishes policy consistent with the Department’s objectives to develop a safe and efficient multimodal transportation system for all users.
- Ensures management staff is trained to provide for the needs of bicyclists, pedestrians, and transit users.

Deputy Directors, Planning and Modal Programs and Project Delivery:

- Include bicycle, pedestrian, and transit modes in statewide strategies for safety and mobility, and in system performance measures.
- Provide tools and establish processes to identify and address the needs of bicyclists, pedestrians, and transit users early and continuously throughout planning and project development activities.
- Ensure districts document decisions regarding bicycle, pedestrian, and transit modes in project initiation and scoping activities.
- Ensure Department manuals, guidance, standards, and procedures reflect this directive, and identify and explain the Department’s objectives for multimodal travel.
- Ensure an Implementation Plan for this directive is developed.

Deputy Director, Maintenance and Operations:

- Provides tools and establishes processes that ensure regular maintenance and operations activities meet the safety and mobility needs of bicyclists, pedestrians, and transit users in construction and maintenance work zones, encroachment permit work, and system operations.
- Ensures Department manuals, guidance, standards, and procedures reflect this directive and identifies and explains the Department's objectives for multimodal travel.

District Directors:

- Promote partnerships with local, regional, and State agencies to plan and fund facilities for integrated multimodal travel and to meet the needs of all travelers.
- Identify bicycle and pedestrian coordinator(s) to serve as advisor(s) and external liaison(s) on issues that involve the district, local agencies, and stakeholders.
- Ensure bicycle, pedestrian, and transit needs are identified in district system planning products; addressed during project initiation; and that projects are designed, constructed, operated, and maintained using current standards.
- Ensure bicycle, pedestrian, and transit interests are appropriately represented on interdisciplinary planning and project delivery development teams.
- Provide documentation to support decisions regarding bicycle, pedestrian, and transit modes in project initiation and scoping activities.

Deputy District Directors, Planning, Design, Construction, Maintenance, and Operations:

- Ensure bicycle, pedestrian, and transit user needs are addressed and deficiencies identified during system and corridor planning, project initiation, scoping, and programming.
- Collaborate with local and regional partners to plan, develop, and maintain effective bicycle, pedestrian, and transit networks.
- Consult locally adopted bicycle, pedestrian, and transit plans to ensure that State highway system plans are compatible.
- Ensure projects are planned, designed, constructed, operated, and maintained consistent with project type and funding program to provide for the safety and mobility needs of all users with legal access to a transportation facility.
- Implement current design standards that meet the needs of bicyclists, pedestrians, and transit users in design, construction and maintenance work zones, encroachment permit work, and in system operations.
- Provide information to staff, local agencies, and stakeholders on available funding programs addressing bicycle, pedestrian, and transit travel needs.

Chiefs, Divisions of Aeronautics, Local Assistance, Mass Transportation, Rail, Transportation Planning, Transportation System Information, Research and Innovation, and Transportation Programming:

- Ensure incorporation of bicycle, pedestrian, and transit travel elements in all Department transportation plans and studies.
- Support interdisciplinary participation within and between districts in the project development process to provide for the needs of all users.
- Encourage local agencies to include bicycle, pedestrian, and transit elements in regional and local planning documents, including general plans, transportation plans, and circulation elements.
- Promote land uses that encourage bicycle, pedestrian, and transit travel.
- Advocate, partner, and collaborate with stakeholders to address the needs of bicycle, pedestrian, and transit travelers in all program areas.
- Support the development of new technology to improve safety, mobility, and access for bicyclists, pedestrians, and transit users of all ages and abilities.
- Research, develop, and implement multimodal performance measures.
- Provide information to staff, local agencies, and stakeholders on available funding programs to address the needs of bicycle, pedestrian, and transit travelers.

Chiefs, Divisions of Traffic Operations, Maintenance, Environmental Analysis, Design, Construction, and Project Management:

- Provide guidance on project design, operation, and maintenance of work zones to safely accommodate bicyclists, pedestrians, and transit users.
- Ensure the transportation system and facilities are planned, constructed, operated, and maintained consistent with project type and funding program to maximize safety and mobility for all users with legal access.
- Promote and incorporate, on an ongoing basis, guidance, procedures, and product reviews that maximize bicycle, pedestrian, and transit safety and mobility.
- Support multidisciplinary district participation in the project development process to provide for the needs of all users.

Employees:

- Follow and recommend improvements to manuals, guidance, and procedures that maximize safety and mobility for all users in all transportation products and activities.
- Promote awareness of bicycle, pedestrian, and transit needs to develop an integrated, multimodal transportation system.
- Maximize bicycle, pedestrian, and transit safety and mobility through each project's life cycle.

APPLICABILITY

All departmental employees.

Randell H. Iwasaki

RANDELL H. IWASAKI
Chief Deputy Director

October 2, 2008

Date Signed

DIRECTOR'S POLICY

Effective Date: 11-29-01

TITLE Context Sensitive Solutions

POLICY

The Department uses “Context Sensitive Solutions” as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.

The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.

*INTENDED
RESULTS*

In towns and cities across California, the State highway may be the only through street or may function as a local street. These communities desire that their main street be an economic, social, and cultural asset as well as provide for the safe and efficient movement of people and goods. In urban areas, communities want transportation projects to provide opportunities for enhanced non-motorized travel and visual quality. In natural areas, projects can fit aesthetically into the surroundings by including contour grading, aesthetic bridge railings, and special architectural and structural elements. Addressing these needs will assure that transportation solutions meet more than transportation objectives.

The Department can be proud of the many contributions it has made to improve highways that are main streets and the aesthetics of its highways and structures; however, there is a strongly expressed desire across California for this concept to be the norm.

Context sensitive solutions meet transportation goals in harmony with community goals and natural environments. They require careful, imaginative, and early planning, and continuous community involvement.

The Department's *Highway Design Manual*, Federal Highway Administration (FHWA) regulations, FHWA's *Flexibility in Highway Design* publication, and the American Association of State Highway Transportation Officials' *A Policy on Geometric Design of Highways and Streets* all share a philosophy that explicitly allows flexibility in applying design standards and approving exceptions to design standards where validated by applying sound engineering judgment. This design philosophy seeks transportation solutions that improve mobility and safety while complementing and enhancing community values and objectives.

RESPONSIBILITIES

Director:

- Creates an environment in which innovative actions, such as context sensitive solutions, can flourish.
- Recognizes and highlights individuals, teams, and projects that advance the goals of this policy.
- Encourages staff to conduct and participate in meetings and conferences to expand the knowledge of context sensitive solutions internally and externally.

Chief Counsel: Evaluates and provides opinions on legal issues associated with context sensitive solutions.

Deputy Director, Maintenance and Operations; Chiefs, Divisions of Traffic Operations and Maintenance:

- Support context sensitive solutions in the maintenance and operation of transportation facilities.
- Revise manuals and procedure documents to facilitate the application of context sensitive solutions.
- Initiate and coordinate research to enable context sensitive solutions.

Chief, Division of New Technology and Research:

- Conducts research and develops and improves techniques and materials to enable context sensitive solutions.
- Revises manuals and procedure documents to facilitate the application of context sensitive solutions.

Chief Engineer (Deputy Director, Project Delivery):

- Supports context sensitive solutions in the design and construction of transportation facilities.
- Encourages innovation and flexibility in design.
- Ensures projects are well coordinated to support the application of context sensitive solutions through the life of projects.

Chief, Division of Engineering Services:

- Conducts research and develops and improves techniques and materials to enable context sensitive solutions.
- Trains staff in the application of context sensitive solutions.
- Revises manuals and procedure documents to facilitate the application of context sensitive solutions.

Chief, Division of Project Management: Ensures resources are distributed to enable implementation of context sensitive approaches.

Chiefs, Divisions of Right of Way and Construction:

- Train staff in the application of context sensitive solutions.
- Revise manuals and procedure documents to facilitate the application of context sensitive solutions.

Chief, Division of Design:

- Works in cooperation with district and other functional units to develop guidance on design flexibility.
- Identifies good examples of the application of context sensitive solutions to share with departmental and local agency staff.
- Initiates and coordinates research to enable context sensitive solutions.
- Trains staff in the application of context sensitive solutions.

- Revises manuals and procedure documents to facilitate the application of context sensitive solutions.

Chief, Division of Environmental Analysis:

- Facilitates coordination with resource agencies to assure facilities and activities are in harmony with the surrounding environment.
- Ensures communities have the opportunity to be actively involved in the environmental stage of the project development process.
- Ensures context sensitive commitments are sustained, as warranted, as a project moves through the environmental approval process.
- Trains staff in the application of context sensitive solutions.
- Revises manuals and procedure documents to facilitate the application of context sensitive solutions.

Chief Financial Officer (Deputy Director, Finance); Chief, Division of Transportation Programming:

- Support the inclusion of context sensitive solutions when programming transportation projects.
- Communicate the importance of context sensitive solutions to the California Transportation Commission.
- Facilitate district development of funding partnerships for context sensitive solutions.

Deputy Director, Administration: Supports context sensitive solutions in the planning, design, construction, maintenance, and operation of offices, maintenance stations, and other departmental support facilities.

Deputy Director, Planning and Modal Programs: Supports context sensitive solutions in the planning of transportation programs and facilities.

Chief, Division of Local Assistance:

- Facilitates training of local agencies in the principles of context sensitive solutions.
- Trains staff in the application of context sensitive solutions.
- Revises manuals and procedure documents to facilitate the application of context sensitive solutions.

Chief, Division of Transportation Planning:

- Develops and maintains community planning guidance.
- Trains staff in the application of context sensitive solutions.
- Revises manuals and procedure documents to facilitate the application of context sensitive solutions.
- Works with regional transportation planning agencies, metropolitan transportation organizations, counties, cities, and the private sector to support and incorporate context sensitive solutions in planning, programming, and developing transportation facilities and services.

District Directors:

- Provide leadership in the application of context sensitive solutions in all planning, programming, project development, construction, maintenance, and operational activities of the district.
- Proactively ensure early and continuous involvement of stakeholders.
- Are responsive to requests by local communities, resource and other agencies, and the general public for context sensitive solutions.
- Assure that context sensitivity is applied to local and other projects within the State right-of-way.
- Train staff in the application of context sensitive solutions.

APPLICABILITY

All employees and others involved in the planning, development, construction, maintenance, and operation of State transportation and support facilities.

Originally Signed by

11-29-01

JEFF MORALES
Director

Date Signed

B

MTC RESOLUTION #3765
ROUTINE ACCOMMODATION

Bicycle Technical Guidelines

Date: June 28, 2006
W.I.: 1125
Referred by: POC

ABSTRACT

Resolution No. 3765

This resolution sets forth MTC's regional policy for accommodation of bicycle and pedestrian facilities during transportation project planning, design, funding and construction.

Further discussion of these actions are contained in the MTC Executive Director's Memorandum to the Planning Committee dated June 9, 2006.

MTC page on the Routine Accommodations:

http://www.mtc.ca.gov/planning/bicyclespedestrians/routine_accommodations.htm

Date: June 28, 2006
W.I.: 1125
Referred by: PC

RE: Regional Policies for Accommodation of Bicycle and Pedestrian Facilities In
Transportation Project Planning, Design, Funding and Construction

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 3765

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 et seq.; and

WHEREAS, MTC adopted Resolution No. 3427 in 2001 which adopted the 2001 Regional Transportation Plan and the 2001 Regional Bicycle Plan for the region; and

WHEREAS, MTC adopted Resolution No. 3681 in 2005 which adopted the Transportation 2030 Plan including Calls to Action to address bicyclist and pedestrian transportation needs during project development; and

WHEREAS, MTC recognizes that coordinated development of pedestrian and bicycle infrastructure offers cost savings in the long term and opportunities to create safe and convenient bicycle and pedestrian travel; now, therefore, be it

RESOLVED, that MTC adopts the Recommendations from the study *Routine Accommodation of Pedestrians and Bicyclists in the Bay Area*, as outlined in Attachment A, attached hereto and incorporated herein as though set forth at length

METROPOLITAN TRANSPORTATION COMMISSION



Jon Rubin, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on June 28, 2006.

Date: June 28, 2006
W.I.: 1125
Referred by: PC

Attachment A
Resolution No. 3765
Page 1 of 2

Routine Accommodation of Pedestrians and Bicyclists in the Bay Area: Study Recommendations

POLICY

1. Projects funded all or in part with regional funds (e.g. federal, STIP, bridge tolls) shall consider the accommodation of bicycle and pedestrian facilities, as described in Caltrans Deputy Directive 64. These recommendations shall not replace locally adopted policies regarding transportation planning, design, and construction. These recommendations are intended to facilitate the accommodation of pedestrians, which include wheelchair users, and bicyclist needs into all projects where bicycle and pedestrian travel is consistent with current, adopted regional and local plans. In the absence of such plans, federal, state, and local standards and guidelines should be used to determine appropriate accommodations.

PROJECT PLANNING and DESIGN

2. Caltrans and MTC will make available routine accommodations reports and publications available on their respective websites.
3. To promote local bicyclist and pedestrian involvement, Caltrans District 4 will maintain and share, either quarterly or semi-annually at the District 4 Bicycle Advisory Committee, a table listing ongoing Project Initiation Documents (PIDS) for Caltrans and locally-sponsored projects on state highway facilities where bicyclists and pedestrians are permitted.

FUNDING and REVIEW

4. MTC will continue to support funding for bicycle and pedestrian planning, with special focus on the development of new plans and the update of plans more than five years old.
5. MTC's fund programming policies shall ensure project sponsors consider the accommodation of bicyclists and pedestrians consistent with Caltrans' Deputy Directive 64. Projects funded all or in part with regional discretionary funds must consider bicycle and pedestrian facilities in the full project cost consistent with Recommendation 1 above. The Federal Highway Administration recommends including up to 20% of the project cost to address non-motorized access improvements; MTC encourages local agencies to adopt their own percentages.

6. TDA Article 3, Regional Bike/Ped, and TLC funds shall not be used to fund bicycle and pedestrian facilities needed for new roadway or transit construction projects that remove or degrade bicycle and pedestrian access. Funding to enhance bicycle and/or pedestrian access associated with new roadway or transit construction projects should be included in the funding for that project.
7. MTC, its regional bicycle and pedestrian working groups, the Partnership's Local Streets and Roads committee, and the county congestion management agencies (CMAs) shall develop a project checklist to be used by implementing agencies to evaluate bicycle and pedestrian facility needs and to identify its accommodation associated with regionally-funded roadway and transit projects consistent with applicable plans and/or standards. The form is intended for use on projects at their earliest conception or design phase and will be developed by the end of 2006.
8. CMAs will review completed project checklists and will make them available through their websites, and to their countywide Bicycle/Pedestrian Advisory Committees (BPACs) for review and input to ensure that routine accommodation is considered at the earliest stages of project development. The checklist outlined in Recommendation 7 should be the basis of this discussion prior to projects entering the TIP.
9. Each countywide BPAC shall include members that understand the range of transportation needs of bicyclists and pedestrians consistent with MTC Resolution 875 and shall include representation from both incorporated and unincorporated areas of the county.
10. MTC and its partner agencies will monitor how the transportation system needs of bicyclists and pedestrians are being addressed in the design and construction of transportation projects by auditing candidate TIP projects to track the success of these recommendations. Caltrans shall monitor select projects based on the proposed checklist.

TRAINING

11. Caltrans and MTC will continue to promote and host project manager and designer training sessions to staff and local agencies to promote routine accommodation consistent with Deputy Directive 64.



ROAD BRIDGE BARRIER OPTIONS

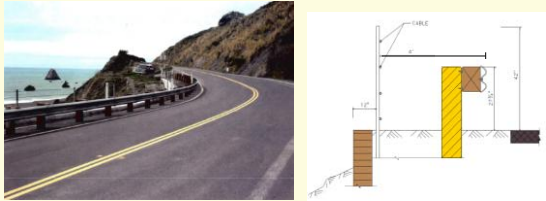




Bicycle Technical Guidelines

Marin and Sonoma Highway 1 Barrier Options

Barrier Types

Pros

Cons

Barrier Types	Pros	Cons
<p>1) MBGR (Current Design Solution)</p> 	<ul style="list-style-type: none"> • Status quo - (a familiar element in the coastal landscape) • Good transparency • Context sensitive • Cost effective 	<ul style="list-style-type: none"> • Need for secondary Bike/Pedestrian Railing • Additional R/W - due to 4' space between two railing • Appears cluttered • Maintainability – more worker exposure
<p>2) ST-10</p> 	<ul style="list-style-type: none"> • More Transparent than type 80 • Minimal maintenance • Tested/Standard Plans • No additional R/W requirements- single footprint 	<ul style="list-style-type: none"> • May require additional Bike/Pedestrian Railing • Higher construction cost • Not typically seen on coast
<p>3) ST-10 Modified I (W/Bike Rail)</p> 	<ul style="list-style-type: none"> • Good transparency • Minimal Maintenance • Tested/Standard Plans • No additional R/W requirements • Can be modified for Bike/Pedestrian rail requirements – 42” to 54” height depending on bike rail design 	<ul style="list-style-type: none"> • Additional Bike/Pedestrian rail may appear awkward (added-on) • Higher construction cost • Not typically seen on coast
<p>4) ST-20</p> 	<ul style="list-style-type: none"> • Meets Bike/Pedestrian Height requirements of 46” to 54” • Transparency is moderate • Minimal maintenance • Tested/Standard Plans • No additional R/W requirements 	<ul style="list-style-type: none"> • Appears large and obtrusive • Higher construction cost • Not typically seen on coast
<p>5) TYPE 80 (shown with Bike/Pedestrian Rail attached)</p> 	<ul style="list-style-type: none"> • Allows some transparency • Minimal maintenance • Tested/Standard Plans • No additional R/W requirements • Can be stained or treated with a form lined texture. 	<ul style="list-style-type: none"> • Heavy & Bulky – not typically seen on coast • May require additional Bike/ Pedestrian rail of 42” to 54” in height • Semi-transparent • Higher construction cost

Note: All photos are intended to be representations and should not be used as design standards. Barrier design standards can change and should be reviewed for each project.



***BICYCLE SIGNAL HEAD
WARRANTS PER MUTCD (CA)***

Bicycle Technical Guidelines

MUTCD California Section on Use of Bicycle Signal Head

Section 4C.102(CA) Bicycle Signal Warrant

Guidance:

A bicycle signal should be considered for use only when the volume and collision or volume and geometric warrants have been met:

1. Volume; When $W = B \times V$ and $W \geq 50,000$ and $B \geq 50$.

Where: W is the volume warrant. B is the number of bicycles at the peak hour entering the intersection. V is the number of vehicles at the peak hour entering the intersection. B and V shall use the same peak hour.

2. Collision; When 2 or more bicycle/vehicle collisions of types susceptible to correction by a bicycle signal have occurred over a 12-month period and the responsible public works official determines that a bicycle signal will reduce the number of collisions.

3. Geometric; (a) Where a separate bicycle/ multi use path intersects a roadway. (b) At other locations to facilitate a bicycle movement that is not permitted for a motor vehicle.

Section 4D.104(CA) Bicycle Signals

Support:

A bicycle signal is an electrically powered traffic control device that may only be used in combination with an existing traffic signal. Bicycle signals shall direct bicyclists to take specific actions and may be used to improve an identified safety or operational problem involving bicycles. Refer to CVC 21450.

Standard:

Only green, yellow and red lighted bicycle symbols, shall be used to implement bicycle movement at a signalized intersection. The application of bicycle signals shall be implemented only at locations that meet Department of Transportation Bicycle Signal Warrants (see Section 4C.102(CA)).

A separate signal phase for bicycle movement shall be used.

Guidance:

Alternative means of handling conflicts between bicycles and motor vehicles should be considered first.

Two alternatives that should be considered are:

1. Striping to direct a bicyclist to a lane adjacent to a traffic lane such as a bike lane to left of a right-turn-only lane.

2. Redesigning the intersection to direct a bicyclist from an off-street path to a bicycle lane at a point removed from the signalized intersection.

A bicycle signal phase should be considered only after these and other less restrictive remedies have had an adequate trial with enforcement and with the result that the collision frequency has not been reduced



TRAIL DESIGN CHECKLISTS

Bicycle Technical Guidelines

- 1. Trail Review Checklist from the *Contra Costa County Trail Review Study***
- 2. Figure 9-1 Ramp Design from the *Contra Costa County Trail Design Resource Handbook March 2001***

Trail Intersection Field Review Form-Contra Costa Canal Trail

Contra Costa Trail Review Study

Trail: Contra Costa Canal **At Cross Road** _____ **Intersection #** _____

Photograph number looking: North: _____ East: _____ South: _____ West: _____

Traffic Controls **Of Trail:** 2-way STOP Yield Flashing beacon **Of Road:** 2-way STOP Yield Flashing beacon
4-way STOP Signal None 4-way STOP Signal None

If signal-- Bike Detection: Pedestrian push button Loop with stencil Loop without stencil Can't tell

Separate push button signal for pedestrians and bikes? Yes No

Number of seconds until light changed: _____ seconds Local Collector Arterial Private Trail

Cross Road **Width:** _____ **Speed limit:** _____ **ADT:** _____ **Type of Street**

Crosswalk? Std Zebra None **Width of crosswalk:** _____ **Condition of Paint?** Good Average Poor

Median? Yes No **Width of median:** _____

Warning / trailname signs/pavement markings on roadway (describe):

Eastbound: _____ **Westbound:** _____

Ft from Int.: _____ **Ft from Int.:** _____

Trail

Lighting at Intersection? Yes No

Sight Distances at 5' from road edge

	<u>Northbound/Westbound</u>					<u>Southbound/Eastbound</u>					
To WEST (left):	Clear?	Yes	No	_____	Ft	To EAST (left):	Clear?	Yes	No	_____	Ft
To EAST (right):	Clear?	Yes	No	_____	Ft	To WEST (right):	Clear?	Yes	No	_____	Ft

Describe view obstructions: _____ **Describe view obstructions:** _____

Bollards? Yes No **Centerline?** Yes No **Pavement Markings?** Yes No

Include width between bollards and distance to curb face on sketch **Median?** Yes No describe

Ramp / curb-cut slope: Width: _____ feet **Slope?** Shallow Steep **Lip:** Flush Not Flush _____ inches

Trail approach to intersection: Level Shallow Steep **Is it curved or straight?** Curved Straight **Are the bollards easy to navigate?** Yes No

Signs on trail:

Type of sign	Northbound						Southbound					
	Exit			Enter			Exit			Enter		
Cross street name	Std	Non-Std	None	Std	Non-Std	None	Std	Non-Std	None	Std	Non-Std	None
Destination	Yes	No		Yes	No		Yes	No		Yes	No	
Distance	Yes	No		Yes	No		Yes	No		Yes	No	
Other signs	Yes	No		Yes	No		Yes	No		Yes	No	
Other signs description	_____			_____			_____			_____		

Trail Midblock Review Form-Contra Costa Canal Trail

Contra Costa Trail Review Study

Date: _____ Name: _____

Name of Trail **Contra Costa Canal** _____

From: _____ Intersection # _____

To: _____ Intersection # _____

Width: _____ ft **Centerline stripe?** Yes None **Condition of stripe?** Good
Average
Poor

Pavement quality: Good Average Poor

Lighting: (e.g. Is the trail lit at night?) Yes No

Posted Time of Use Restrictions: _____

Pedestrian accommodation:

Type: Shared Width of _____ ft How separated? Stripe Other: _____
 Separate ped facility

Curvature: Straight Curved Warning Sign (describe) _____

Grade: Flat Shallow (less than 5%) Steep (more than 5%)

Sight distance obstructions: _____

Obstructions in path (trees, poles, etc): _____

Obstructions to side of path within 2 feet of paved surface (check all that apply)

- | | | | |
|--------------------------------|---|--|--------------------------------|
| <input type="checkbox"/> Trees | <input type="checkbox"/> Curb | <input type="checkbox"/> Thorny bushes | <input type="checkbox"/> Other |
| <input type="checkbox"/> Poles | <input type="checkbox"/> Guardrail/retaining wall | <input type="checkbox"/> Steep downslope/dropoff | Other |
| <input type="checkbox"/> Fence | <input type="checkbox"/> Overgrown shrubs/trees | <input type="checkbox"/> Steep upslope | Description: |

Tunnels: Is there a tunnel?

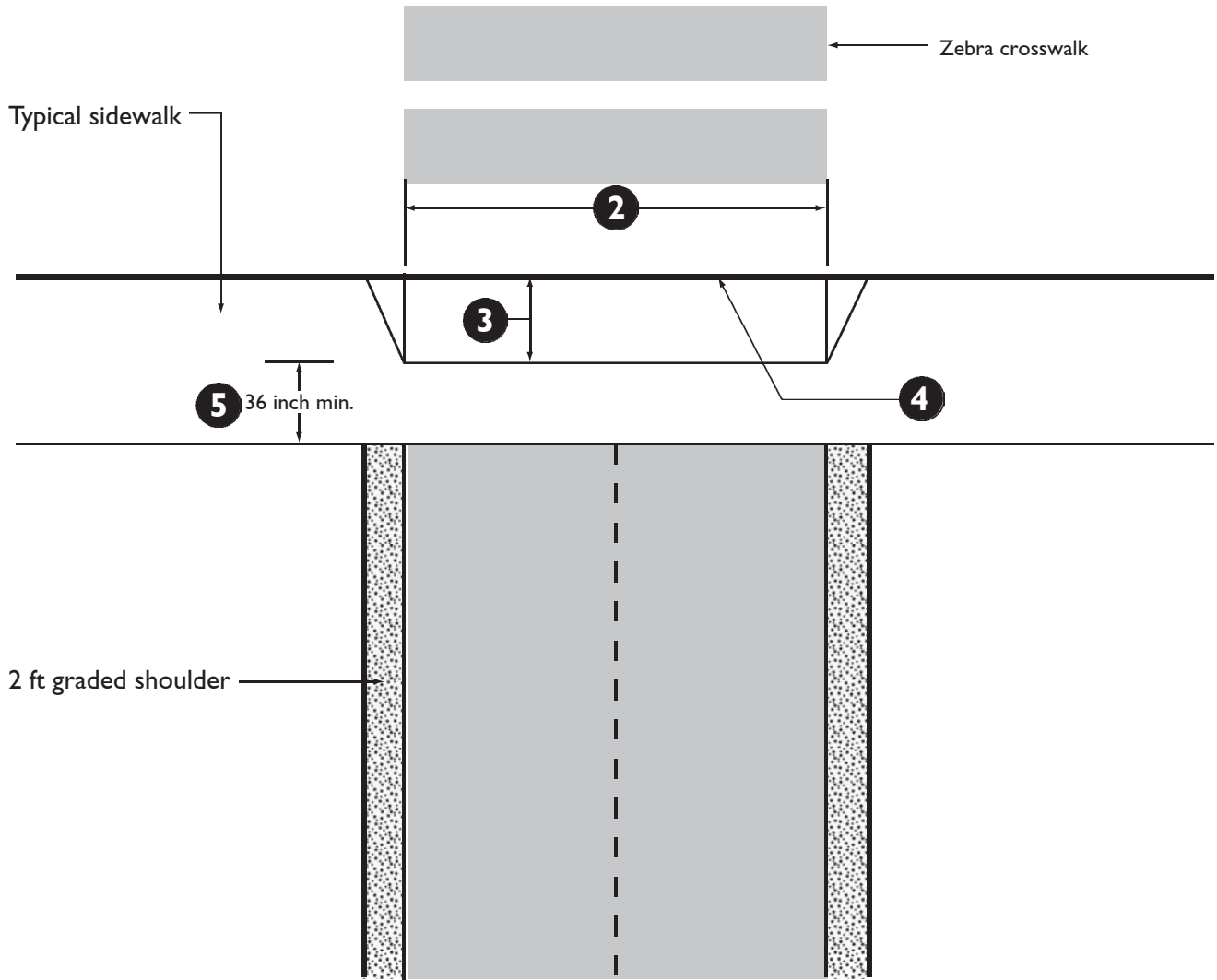
Width: _____ ft Adequate lighting? Day? Yes No Night? Yes No Tunnel Location:

Bridges: Is there a bridge?

Width: _____ ft Bridge Location: _____ Surface Material: _____

Comments:

Figure 9-1
RAMPS



1. Ramp should align with trail and crosswalk.
2. Ramp width should be same as trail width.
3. Ramp slope should be 5% maximum.
4. Ramp lip should be flush with pavement (vertical difference of 0.25 inch maximum).
5. All applicable ADA or Title 24 guidelines should be met such as maintaining 36 inch clear space or design flair in accordance with ADA guidelines.

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ACRONYMS

Bicycle Technical Guidelines

ACRONYMS

AASHTO	American Association of State Highway Transportation Officials
ABAG	Association of Bay Area Governments
ABC	Across Barrier Connection
ADA	American with Disabilities Act
ADT	Average Daily Traffic
APBP	Association of Pedestrian and Bicycle Professionals
BAC	Bicycle Advisory Committee
BART	Bay Area Rapid Transit
BEP	Bicycle Expenditure Program
BPAC	Bicycle Pedestrian Advisory Committee
BRT	Bus Rapid Transit
BTG	Bicycle Technical Guidelines (VTA)
Caltrans	California Department of Transportation
CBD	Central Business Districts
CBP	Countywide Bicycle Plan
CDT	Community Design and Transportation Program (VTA)
CIP	Capital Improvement Program
CTCDC	California Traffic Control Devices Committee
CVC	California Vehicle Code
DD	Deputy Directive (Caltrans)
DOT	Department of Transportation
FHWA	Federal Highway Administration
HDM	Highway Design Manual (Caltrans)
HOV	High Occupancy Vehicle
ISTEA	Intermodal Surface Transportation Efficiency Act (1991)
ITE	Institute of Transportation Engineers
MPH	miles per hour
MTC	Metropolitan Transportation Commission
MUTCD	Manual of Uniform Traffic Control Devices
MUTCD-CA	California Manual of Uniform Traffic Control Devices
NCHRP	National Cooperative Highway Research Program
ODOT	Oregon Department of Transportation
PCC	Portland Cement Concrete
PTG	Pedestrian Technical Guidelines (VTA)
PVC	Polyvinyl Chloride
ROW	Right-of-Way
RTP	Regional Transportation Plan (MTC)
SAFETEA-LU	Safe Accountable Flexible Efficiency Transportation Equity Act: A Legacy for Users (2005)
SHC	Streets and Highways Code
SPVD	Self-Powered Vehicle Detector
SR	State Route

TAC	Technical Advisory Committee
TCD	Traffic Control Device
TDMG	Uniform Interjurisdictional Trail, Design, Use, and Management Guidelines (Santa Clara County Parks Department)
TEA-21	Transportation Equity Act for the 21st Century (1998)
TOD	Transit-oriented Development
TTC	Temporary Traffic Control
US	DOT United States Department of Transportation
VPD	Vehicles Per Day
VPH	Vehicles per Hour
VTA	Valley Transportation Authority
VTP	Valley Transportation Plan (Santa Clara County's Long-Range Transportation Plan)

ACKNOWLEDGEMENTS

2012 Bicycle Technical Guidelines

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2007 Bicycle Technical Guidelines

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Page 7-3 : "Buffered Bike Lane" John Brazil

Page 9-8: Yves Zsutty, City of San Jose

Page 9-12: Lorenzo Lopez, City of Santa Clara

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Page 10-3 Figure 10-1: Renderings and some of the photos by the following bike rack manufacturers:

The Palmer Group, San Francisco; PromoRack of San Diego; and Creative Pipe, Inc. of Rancho Mirage, CA

Page 10-16: John Ciccarelli

Page 10-17: Ellen Fletcher



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