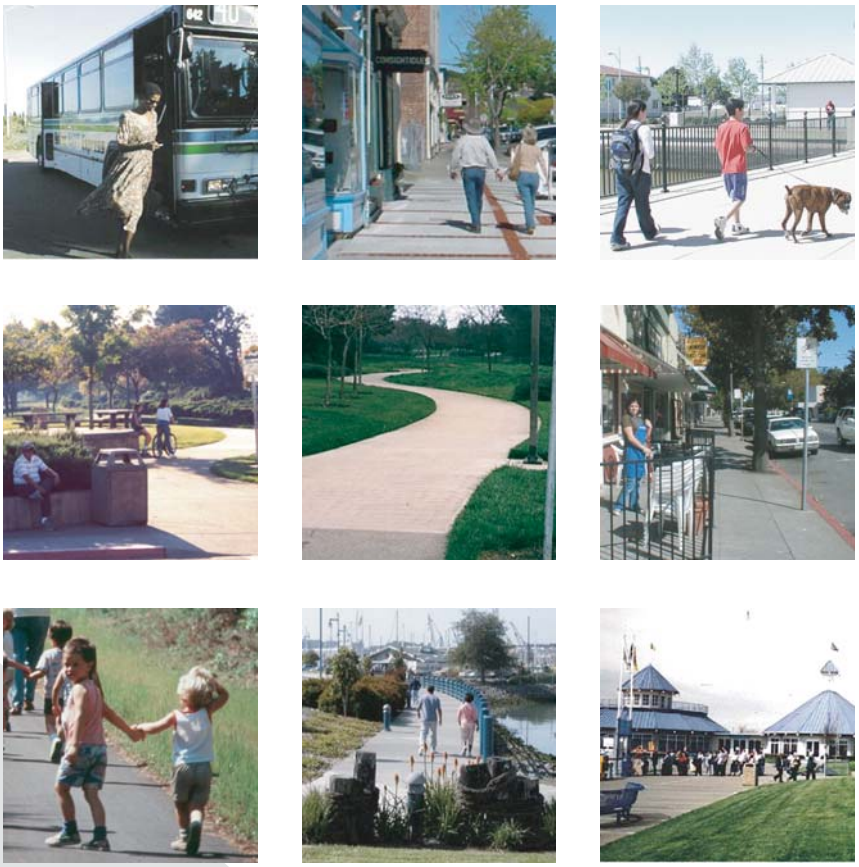
SOLANO COUNTYWIDE PEDESTRIAN PLAN



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1 INTRODUCTION

1.1 ABOUT THE COUNTYWIDE PEDESTRIAN PLAN

Vallejo Waterfront

The goal of the Pedestrian Plan is to encourage and support walking as a means of transportation in Solano County. This includes creation and enhancement of *connections* that support pedestrian movement, and the creation or enhancement of *places* that support pedestrian travel or activity. "Walking" in this context includes accommodating people using wheelchairs and other types of mobility assistance. The Plan is intended to identify general guiding policies and practices, and specific projects and priorities to be implemented by the eight Solano Transportation Authority (STA) member agencies, with assistance from the STA Pedestrian Advisory Committee.

This Plan will have a strong relationship to the STA's Transportation for Livable Communities (TLC) Program, which in addition to direct connections and enhancements, supports land use and development projects with densities and patterns that support walking and other alternative modes of transportation to the automobile.

The Pedestrian Plan is not intended to address recreational trails, which would be the purview of a regional parks or open space agency. There is some overlap with recreational trails because some existing or planned trails and pathways in urban areas also serve as important pedestrian circulation routes. The Plan does recognize existing and planned pedestrian routes to access regional open space areas.

There is also some overlap with STA's Countywide Bicycle Plan in that some Class I (separated path) bicycle facilities also serve as significant pedestrian facilities.

The Countywide Pedestrian Plan builds on many previous phases of studies and plans undertaken by STA and other agencies related to pedestrian circulation. These are detailed in Section 4.

This plan is funded by a Caltrans Community Based Planning Grant.

1.2 Pedestrian Planning Objectives

The Countywide Pedestrian Plan has two overall planning objectives:

1 To develop an overall vision and systematic plan for accommodating pedestrians in each urban area based on general shared policies, principles, and criteria, and;

2 To document existing conditions, and plans and projects that will implement the Plan, highlighting specific current or potential projects for each agency.

This Pedestrian Plan is based on information provided by the cities and the County, and developed in conjunction with the agencies. The scope of the Plan does not include detailed assessment of pedestrian needs or conditions, or preparation of detailed plans or project descriptions except by working through the agencies. It is intended to encourage the local agencies to undertake such systematic planning based on the framework provided by the Plan.

1.3 Benefits of the Countywide Pedestrian Plan

The Countywide Pedestrian Plan is intended to directly benefit local agencies by:

- Providing more attention to needs and opportunities to support walking as a means of transportation and as an integral part of community character;
- Supporting current city pedestrian plans and projects and providing a framework for creating more detailed city pedestrian plans;
- Sharing information on planning and implementing successful projects;
- Encouraging better consistency and coordination between communities on pedestrian accommodations and pedestrian-oriented projects;
- Providing a means for local citizens and groups to understand pedestrian plans and opportunities and make suggestions;
- Providing resources for planning and describing projects, and identifying and preparing grant applications to support implementation;

West Texas Street, Fairfield

- Prioritizing and coordinating Countywide projects for a better overall result and greater success in competing against other regions for project funding.

1.4 What the Pedestrian Plan Includes

- A Plan Summary (Section 2), including recommended goals, objectives and policies; a categorized and prioritized list of current projects of the STA member agencies that focus on or feature pedestrian improvements, and a list of concepts for future improvements for each of the agencies.

- A review of the physical, social, economic and environmental benefits of walking, and the opportunities presented by current federal and state policies and funding programs (Section 3.1 and 3.2);

- General information regarding pedestrian safety, and information for Solano County relative to other Bay Area counties, and for each city, if available, showing the location of pedestrian/vehicle accidents (Section 3.3);

- A review of policies and plans from each of the cities and Solano County relating to pedestrian circulation and creation or improvement of areas that are conducive to pedestrian activity (Section 4);

- Principles, policies, and guidelines for planning and designing good pedestrian places and connections, including a checklist that can be used to rate a city's existing conditions, policies and plans, and to guide development of new plans (Section 5);

- An inventory of existing and planned pedestrian connections and places in each city. Includes descriptions, maps and lists of the major existing and planned pedestrian routes, key connections, destinations and districts in each city, highlighting current and potential projects, including examples of good pedestrian projects in Solano County (Section 6);

- An Implementation Section (Section 7), including a guide to building public and policy support, tips for preparing project documentation and grant applications, general cost information for pedestrian improvements; and funding sources for different types of projects, including key information on contacts, deadlines, and criteria;

West Texas Street, Fairfield

- An extensive annotated reference list of pertinent policy and planning documents from Solano County agencies, and other pedestrian plans, guidelines, standards, and references with more detail for planning and designing projects to accommodate pedestrians (Section 8).

1.5 Public Outreach and Participation Process

Preparation of the Countywide Pedestrian Plan included extensive efforts to reach a broad cross-section of Solano County constituents, including minorities and other Title VI groups:

- Information about the Plan goals and process and a request for input into the Plan was sent to the directors of the planning, public works and parks and recreation departments, or the equivalent, of each of the cities in the County, as well as to the County departments.

- The police department of each member agency was contacted to collect pedestrian safety data and to identify needs for safety improvements.

- Information and an input request was sent to the administrator of every school district in the county.

- Through the member agencies, STA solicited appointment of representatives to its Pedestrian Advisory Committee (PAC), consisting of a broad cross-section of the several communities and stakeholder groups. The PAC reviewed and commented on the preparation of the Plan at each stage.

- Follow-up contacts were made with each city and county department and school district to encourage participation.

- Special staff and/or public presentations and discussions were offered to each member agency to focus on the needs in that community, and most of the agencies took advantage of this to provide additional concepts to current plans and projects.

- The project was explained and participation was encouraged at meetings of STA's Technical Advisory Committee, consisting of Public Works Directors, from each of the cities and the Solano County Transportation Department and Solano Planning Director's Group. The draft Plan was presented to these groups and reviewed by the member agencies.

- The Plan was reviewed at noticed public meetings of the STA Board's Alternative Transportation Modes Committee and was reviewed and approved by the full STA Board of Directors.

2 PEDESTRIAN POLICIES, PROJECTS, AND CONCEPTS

2.1 INTRODUCTION

The focus of this Countywide Pedestrian Plan is on identifying the major pedestrian routes and places, and those projects and concepts that will make a significant contribution to the regional system. The Pedestrian Plan is intended to encourage incorporation of pedestrian access and amenities in new major projects of all types, as well as to identify and encourage pedestrian-specific projects such as over crossings and safe routes to school. The countywide pedestrian circulation system consists of elements of larger transportation systems and urban development patterns within the local cities and unincorporated communities. Pedestrian facilities are very local and the details and decisions that comprise them are usually part of these larger projects or efforts. This first Countywide Pedestrian Plan provides a framework and status report, but does not fully illustrate or quantify the ultimate future countywide pedestrian system, or detail its current status versus the requirements to complete it. Working with local jurisdictions as they may undertake preparation of their own pedestrian studies and plans, STA will be able to define a more comprehensive countywide pedestrian system through future updates of the Pedestrian Plan.

The long-term benefits of a complete and effective pedestrian system, and current trends in Solano County and the nation, are discussed in detail in Section 3. Benefits range from health to environment to economics, but basic safety, especially for children and seniors, is one of the principal benefits. Among the nine Bay Area counties, Solano County has the third highest pedestrian accident rate. One of the strongest incentives to improve pedestrian systems is the relative safety, or lack thereof, of walking in the United States versus other countries. Per distance traveled, U.S. pedestrians are roughly 3 times more likely to be killed than German pedestrians, and over 6 times more likely to be killed than Dutch pedestrians.

2.2 GOALS, OBJECTIVES, AND POLICIES

This section presents specific goals, objectives, and policies to support walking as a viable alternative transportation mode, an important social and recreational activity, and a key civic amenity. The goals, objectives, and policies below are related to information in various sections of this Plan. Section numbers are noted in the column on the right for reference to more information on the subjects.

	Section numbers for relevant info
Overall Pedestrian Plan Goal: A complete, safe, and enjoyable system of pedestrian routes and zones in the places people need and want to go in Solano County, providing a viable alternative to use of the automobile, through connection to transit, and employment, health, commercial, recreational and social centers.	
Objective 1, Benefits of Walking: Secure significant benefits for Solano County by preserving, creating, and enhancing pedestrian routes and places, including:	3.1
▪ Health, including physical and mental well-being derived from regular exercise;	3.1.a
▪ Social and civic health, including preservation of the traditional form and features of communities, and better awareness and appreciation of the people and places that make each community special;	3.1.b
▪ Environmental benefits, including a reduction in the air quality and land use impacts of automobile-oriented development, and the addition of amenities that add or protect aesthetic and habitat resources;	3.1.d
▪ Economic benefits, through reduction in the cost of some auto-oriented infrastructure and direct savings in money spent on automobile travel.	3.1.b
Objective 2, Safety: Ensure that safety for pedestrians, especially young people, old people, and people with disabilities, is the highest priority among competing pedestrian improvement priorities, and a high priority among overall transportation improvement priorities.	
Policies:	
1. Collect and analyze data and citizen input regarding pedestrian/vehicular accidents and issues to identify safety improvement needs for each jurisdiction.	3.4
2. Coordinate with schools, PTA, senior centers and associations, and facilities and groups serving people with disabilities to identify their specific needs, and opportunities to address them.	3.2.d 3.3
3. Identify, plan, design and implement projects that address the most critical safety needs, working closely with user groups.	Table 2.1 6
4. Follow the latest standards and best practices for design of safe pedestrian facilities, starting from references provided in this Plan.	8.2

	Section numbers w/ relevant info
5. Assist, support or sponsor information and education programs for drivers and pedestrians to increase safety.	3.4
Objective 3, Local Plans and Actions: Formulate, use and update the Countywide Pedestrian Plan to reflect and support local agencies' plans, policies, and standards, recognizing that walking is a very local activity and each agency must determine its own needs and course of action.	Tables 2.1, 2.2 4 6
Policies:	
1. Encourage local jurisdictions to make safe, convenient, enjoyable pedestrian access a priority in their policies, plans, and projects.	5
2. Encourage the use of the Pedestrian Plan as a toolkit to help local jurisdictions identify, document, support, and implement pedestrian-friendly projects, through the digital maps, policy background, guidelines and funding information provided in the Plan.	7
3. Encourage local jurisdictions to expand on the current projects and basic framework of pedestrian routes and places in this Plan to create their own comprehensive pedestrian plans.	Table 2.2 7
4. Recognize and support pedestrian access and activity in existing zones and destinations such as downtowns, waterfronts and historic districts.	4 6
5. Acknowledge and build upon the many current efforts to improve and create places within local jurisdictions that support pedestrian circulation and activity.	4 6
6. The highest priority pedestrian improvements should be those where pedestrian facilities are lacking or deficient in close proximity (1/4 to 1/2 mile) to pedestrian destinations such as schools, parks, transit, and shopping.	5.1
7. Coordinate planning for pedestrian improvements with planning for transit and regional parking centers.	5.1

	Section numbers w/ relevant info
8. Ensure that pedestrian improvements meet applicable standards for access to people with disabilities.	3.2.d
9. Coordinate with local schools, from elementary to college level, to encourage and support walking, including preparation of Safe Routes to School studies, plans, programs and projects.	3.3
10. Encourage each local agency to collect and maintain data on pedestrian safety for reference in funding applications and future Pedestrian Plan updates.	3.4
Objective 4, Public Information and Participation: Maximize public awareness and involvement in the planning of pedestrian routes and places, through the activities of STA and its member agencies.	7
Policies:	
1. Continue to provide wide outreach to local and regional groups, agencies and organizations regarding the implementation and update of this Pedestrian Plan, and any related local plans.	7
2. Utilize the STA's Pedestrian Advisory Committee as a resource and coordinating body for local jurisdictions' input into the Pedestrian Plan implementation and update, identifying local pedestrian issues, opportunities and projects, and to communicate information and ideas back to local agencies.	7.2
3. Use this Pedestrian Plan, the Pedestrian Advisory Committee, and any related local plans or planning efforts, as sounding boards and clearinghouses for concerns and ideas about pedestrian access, safety, and amenities.	7.2
4. Prepare and distribute or post maps of pedestrian routes and districts, and general information promoting the opportunities and benefits of walking.	7.2

	Section numbers for relevant info
5. Promote walking and awareness of the benefits of walking by supporting or coordinating with local events that feature walking or that occur in pedestrian-oriented settings, such as walking and running events, historic district tours, downtown or commercial district promotional events, street fairs, and school fairs.	7.2
Objective 5, Regional Planning and Coordination: Support and coordinate the planning of pedestrian connections, improvements and pedestrian-oriented development throughout Solano County.	7
Policies:	
1. Encourage the use of the Pedestrian Plan, the Pedestrian Advisory Committee, and STA staff technical assistance for guidance, resources, incentives and countywide coordination on pedestrian improvements.	7.1
2. Identify a Pedestrian Safety Coordinator in each jurisdiction – a staff member with the responsibility to support any local committee and the STA PAC member, provide inter-departmental and inter-agency coordination, and prepare or coordinate funding applications.	7.1
3. Update the Pedestrian Plan every three to five years to ensure that it is consistent with local, regional and state conditions, needs, plans, standards, and funding opportunities.	7.1
4. Coordinate with the County-wide Bicycle Plan and the STA Bicycle Advisory Committee on routes and projects that may be shared between pedestrians and bicycles.	4.2.b
5. Support the completion of regional trails that link destinations within Solano County and beyond, including the San Francisco Bay Trail and the Bay Area Ridge Trail.	4.4.c 4.4.d
6. Coordinate with the local jurisdictions to monitor pedestrian -related accident levels annually, and target a 10% reduction on a per capita basis over the next 20 years.	3.4

	Section numbers for relevant info
7. Coordinate with the local jurisdictions to collect and organize a reference library of examples of pedestrian improvement project applications and plans, and bid and construction cost data.	7.2
Objective 6, Funding: Maximize the amount of regional, state and federal funding for pedestrian improvements received by Solano County jurisdictions.	7.4
Policies:	
1. Regularly update and disseminate the information on funding sources contained in this Plan, including STA's own Countywide Transportation for Livable Communities Program, to encourage applications.	7.4
2. Develop a prioritized regional list of projects with significant pedestrian components, along with detailed cost estimates, and identify appropriate funding sources for each proposal.	Tables 2.1, 2.2 7.3 7.4
3. Encourage multi-jurisdictional and multi-objective funding applications for pedestrian-supportive projects.	7.4.b
4. Encourage the identification or creation of reliable local, regional, and state funding sources, which can be used to leverage state or federal grant funds for pedestrian improvements.	7.4.a
5. Encourage local jurisdictions to include pedestrian improvements in their planning programs and capital improvement plans.	7.2 7.3

2.3 Solano County Pedestrian Projects and Concepts

Achieving the overall Pedestrian Plan goal of the most complete and effective possible pedestrian system for Solano County requires a long-term commitment. This Pedestrian Plan is the first effort to focus on pedestrian routes and places on a Countywide basis, and in most cases it is the first time local agencies have been encouraged to consider this subject comprehensively. The current Plan identifies many concepts and projects that together will make great strides toward implementing the ultimate complete system. Future updates of the Pedestrian Plan, coordinated with efforts by the member agencies to define their own needs and

opportunities, concepts and projects will result in a comprehensive plan for pedestrian routes and spaces that is coordinated between jurisdictions, with other transportation modes, land use plans, and public functions such as recreation, and schools.

2.4 Current Pedestrian-Supportive Projects

Table 2.1 provides an overview of current pedestrian-supportive projects in Solano County. Many of these are Transportation for Livable Communities (TLC) projects – a funding program described in more detail in Section 3.2. The projects in Table 2.1 have been classified by type according to definitions provided in the *Portland Pedestrian Master Plan* (see Figure 2.1). The highest priority projects for each agency are highlighted with bold type and borders. These projects are also briefly described in each of the agency-specific Plan sections and identified in each corresponding map, starting with Benicia in section 6.2. Figure 2.2 is an overview map of the pedestrian-oriented projects, the major on-street and off-street routes that accommodate pedestrians, and the general origin and destination areas for pedestrians.

2.5 Pedestrian Project Concepts

Table 2.2 presents a number of pedestrian improvements concepts that have not yet been formally proposed as projects. These concepts originated from various sources, including informal discussions with agency staff, specific policies found in general plans and other policy documents, studies and reports related to pedestrian issues, and public workshops held for this Pedestrian Plan. The concepts cover a wide range of pedestrian improvements, from simple sidewalks and street crossing improvements to major district-wide improvements, overcrossings, and regional route extensions. These concepts are also described in each agency's respective portion of Section 6. These concepts may not yet be commitments of the agencies, but they represent the potential next tier of pedestrian projects to work toward the comprehensive system envisioned by this Plan.

2.6 Pedestrian Project Types

A full range of project types is generally needed to complete a comprehensive pedestrian system for Solano County. The projects in Table 2.1 and the concepts in Table 2.2 have been categorized by type according to the definitions listed in Figure 2.1.

2.7 Pedestrian Improvement Costs

One of the objectives of this Pedestrian Plan is to estimate the cost of the complete future pedestrian transportation system as part of STA's overall Comprehensive

Transportation Plan (CTP). A figure of $25 million has been identified as a working budget for future pedestrian improvements, based on a relative proportion to the CTP's budget allocations for other transportation modes.

The costs for many of the current pedestrian-supportive projects are already accounted for in the Countywide Bicycle Plan, the Countywide TLC Program, or other components of the CTP. Table 2.1 identifies the project costs that are included in other CTP elements, and in a separate column, the cost for projects that are not included in other CTP elements, or pedestrian enhancements to projects that are in other elements. The total estimated cost of pedestrian improvement projects and enhancements that are not accounted for in other CTP elements is $3,622,000.

Very rough "placeholder" costs have been provided for the pedestrian improvement concepts in Table 2.2. These costs are based on other similar types of projects, but both the concepts and the costs have not been through the stages of internal and public review that will be required to clearly define and confirm the scope of the project, which would then allow a more realistic estimate of its costs. The total estimate "placeholder" cost of pedestrian improvement concepts that are not yet defined as projects is $21,550,000. Ultimately, many of these concepts may become all or part of projects in other CTP elements.

Figure 2.1: Pedestrian Project Types *(from the Portland Pedestrian Master Plan)*

A. ***Pedestrian District Projects*** and ***Main Street Pedestrian Design Projects*** are projects to plan and develop specific districts or areas that have, or are expected to have, intense pedestrian use. Projects include a wide range of improvements, such as widened sidewalks, curb extensions, street lighting and signing. The unique identity of each district will be emphasized through a coherent design and incorporated art. These projects typically involve a high level of urban design.

B. ***Pedestrian Corridor Projects*** are projects to plan and construct improvements along a street corridor. In many cases, these corridors are streets where sidewalks are missing. In other cases, corridor projects will focus on crossing improvements along the corridor. A project may include both sidewalk and crossing improvements. Where there are other transportation issues, Pedestrian Corridor Projects may also include improvements for transit and for bicycle and motorized traffic.

C. ***Pedestrian Access to Transit Projects*** are projects to plan and construct improvements that enhance access to transit. Examples of these improvements include sidewalks, crossing improvements, and curb extensions with enhanced amenities at transit stops.

D. ***Crossing Improvement Projects*** will make major changes to an intersection or intersections to improve crossing conditions for pedestrians. Examples of such improvements include elements such as curb extensions, raised crosswalks, or median refuges, as well as the installation, replacement or modification of traffic signals. Only a small number of high-profile crossing projects have been included on the project maps, but the plan also includes a large citywide project to improve pedestrian crossings over twenty years.

E. ***Pedestrian Connection Projects*** will make new connections where they are needed for access to schools, transit and shopping, with particular emphasis on areas where street connectivity is low. Examples of these projects include public stairways, pedestrian overcrossings at major impediments, and pathways linking cul-de-sacs.

Together, the pedestrian projects and enhancements, and the "placeholder" pedestrian concept budgets comprise approximately $25 million in improvements, consistent with the overall CTP pedestrian improvement budget.

As local jurisdictions pursue their projects and concepts with the assistance, incentives and coordination provided by STA and the Pedestrian Advisory Committee, they will be able to provide more detailed definitions and estimates for pedestrian project concepts and pedestrian elements of multi-purpose projects for future updates of the Pedestrian Plan.

Table 2.1: Solano County Pedestrian/TLC Projects

Note: Highlighted projects are highest current priority pedestrian improvements for each agency.

#	Name	Agency	Description (see Section 6.0 for more detail)	Project Type*	Status**	Location	Costs Accounted in Other CTP Elements	Separate Ped Project/ Enhancement Cost	Contact Info
1	Park Road Bike Lane and Sidewalks	City of Benicia	Class II bike lane along both sides of Park Road from Adams Street to Oak Road terminus of the Benicia Martinez Bridge bike path. This project improves bicycle and pedestrian safety and accessibility between downtown Benicia and the bridge bike path. This project also closes a major gap in the San Francisco Bay Trail	Connection	A/C	Park Road from Adams to Oak Street	$300,000		Tonya Gilmore, Management Assistant II 746-4334 tgilmore@ci.benicia.ca.us
2	First Street Streetscape and Parking Enhancements	City of Benicia	Construction improvements for decorative sidewalks and enhancements such as benches, decorative lighting, landmarks, signage, curb extensions, bus stop facilities, trees, and other special features in Benicia's historic downtown district on First Street.	Crossing/ Connection/ District/Transit	A/C	First Street	$2,000,000		Tonya Gilmore, Management Assistant II 746-4334 tgilmore@ci.benicia.ca.us
3	Benicia High School Access Improvement Project	City of Benicia	Installation of a traffic signal at the intersection of Military West and West 11th Street at Benicia High School, and other improvements to manage drop-off and pick-up traffic and to improve pedestrian safety.	Crossing/ Connection	A/C	Intersection of Military West & West 11th Street at Benicia HS		$350,000	Tonya Gilmore, Management Assistant II 746-4334 tgilmore@ci.benicia.ca.us
4	Benicia Intermodal Train Station	City of Benicia	Construction of a new intermodal transit station near the Benicia Industrial Park, including pedestrian facilities connecting to nearby areas.	Transit	P	West of I-680 near Lake Herman Road	$3,000,000		Tonya Gilmore, Management Assistant II 746-4334 tgilmore@ci.benicia.ca.us
5	**State Park Road/I-780 Bike/Pedestrian Bridge**	**City of Benicia**	**Widening of an existing bridge or construction of a separate Class I bridge facility at State Park Road to accommodate bicycle and pedestrian traffic from the Rose Drive/ Columbus Parkway intersection to the Benicia State Park.**	**Crossing/ Connection**	**A/C**	**State Park Road at I-780**	**$2,500,000**		**Tonya Gilmore, Management Asst. II 746-4334 tgilmore@ci.benicia.ca.us**
6	**Vallejo Ferry Station Pedestrian and Streetscape Enhancements**	**City of Vallejo**	**Project will improve pedestrian linkages between the Vallejo Baylink ferry dock, the existing terminal building, the proposed Vallejo Station parking structure, landside transit facilities including regional bus stops, and an off-street bus transfer facility.**	**District/ Transit**	**C**	**Downtown Vallejo waterfront, generally one block**	**$4,000,000**		**Brian Dolan, Planning Mgr 648-4326 bdolan@ci.vallejo.ca.us**
7	Downtown Vallejo Renaissance Project	City of Vallejo	Convert 4-lane streets in the downtown area into 2 lanes with diagonal and parallel parking; sidewalk widening; decorative crosswalks; sidewalk enhancements such as benches, decorative lighting, street trees, signage, landmarks and other special features; construction of pedestrian and vehicular gateway features; and construction of open space park areas and paseos.	District/ Crossing	A/C	Downtown Vallejo	$5,500,000		Brian Dolan, Planning Mgr 648-4326 bdolan@ci.vallejo.ca.us
8	Mare Island Bicycle and Pedestrian Access Improvements	City of Vallejo	Construction of a pedestrian and bicycle network to connect to residential, recreational, employment, and education uses throughout the island.	Corridor/ Connection	A/C	Mare Island	$10,000,000 (private)		Brian Dolan, Planning Mgr 648-4326 bdolan@ci.vallejo.ca.us
9	Wilson Avenue Improvement Project	City of Vallejo	Street corridor project includes pedestrian paths and amenities along the waterfront north of Mare Island Causeway. Includes a key segment of the SF Bay Trail/Bay Area Ridge Trail.	Corridor/ Connection	P	Wilson Avenue		$1,000,000	Brian Dolan, Planning Mgr 648-4326 bdolan@ci.vallejo.ca.us
10	River Park Project	City of Vallejo/ Greater Vallejo Recreation District	River Park is a major waterfront park and wetland restoration project including a segment of the Bay Trail, continuing north from the Wilson Avenue Improvement Project.	Corridor/ Connection	P	Vallejo waterfront from Mare Island Causeway to Sims Street		$800,000 ped elements ($8,800,000 total)	Hew Hesterman, Planner, Greater Vallejo Recreation District 648-4602 hew@gvrd.org
11	Vallejo Bay/Ridge Trail Connector	STA/City of Vallejo	Connection from the existing regional Bay Trail/Ridge Trail east of the Carquinez Bridge along and under I-80 to Highway 29, at terminus of bike/pedestrian pathway across Carquinez Bridge.	Connection	P	along I-80 from Glen Cove to Sonoma Boulevard	$600,000	$400,000	Taner Aksu, Senior Engineer, City of Vallejo 648-4300 taksu@ci.vallejo.ca.us

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Table 2.1: Solano County Pedestrian/TLC Projects (cont'd)

Note: Highlighted projects are highest current priority pedestrian improvements for each agency.

#	Name	Agency	Description (see Section 6.0 for more detail)	Project Type*	Status**	Location	Costs Accounted in Other CTP Elements	Separate Ped Project/ Enhancement Cost	Contact
12	Red Top Road Overcrossing	Solano County/ STA	Extension of Red Top Road with an overcrossing of Highway 12; part of the Highway 12 improvement project between I-80 and Rte. 29 - assumes a bike/ped addition to vehicular o.c. project	Connection	P	Red Top Road in the Green Valley area	$800,000		Mike Duncan, Director of Projects, STA 424-6075
13	Homeacres Avenue Improvement Project	Solano County	Construct a sidewalk on Homeacres Avenue to link existing sidewalks on Benicia Road to a pedestrian overcrossing over I-780, leading to a local elementary school	Connection	Cand./C	Homeacres Avenue from Benicia Road to south of Taylor Avenue		$165,000	Paul Wiese, Engineering Manager (707) 421-6072 pwiese@solanocounty.com
14	Fulton Avenue Improvement Project	Solano County	Construct a sidewalk on Fulton Avenue to provide a central pedestrian corridor for the Homeacres area of unincorporated Vallejo	Connection	Cand./C	Fulton Avenue from existing sidewalk west of Gillcrest Avenue to Old Glen Cove Road		$407,000	Paul Wiese, Engineering Manager (707) 421-6072 pwiese@solanocounty.com
15	Old Town Cordelia Improvement Project	Solano County, City of Fairfield	Project will improve pedestrian/bicycle access along Cordelia Road between Lopes Road and Pittman Road by constructing a pedestrian/bicycle path. The project also includes gateway signs, historical markers, trees and lighting.	District/ Connection	A/C&P	Cordelia Rd between Lopes Rd and Pittman Rd	$700,000		Paul Wiese, Engineer 421-6072 pwiese@solanocounty.com
16	**Jepson Parkway Concept Plan**	**Cities of Fairfield, Suisun, Vacaville; Solano County**	**The Plan includes elements for: transit, with local and express bus and a future multi-modal rail station; bicycles and pedestrians, with a 10-foot wide bike path along most of the entire 12-mile length of the planned Parkway; a landscape element; a guide to transit-compatible land use and design, and roadway phasing and management.**	**Corridor/ Transit/ Crossing**	**A/C**	**Jepson Parkway in Fairfield, Suisun City and Vacaville**	**$15,600,000**		**Fairfield, Vacaville, and Solano County Public Works staff**
17	West Texas Street Gateway Project	City of Fairfield	The project will enhance pedestrian linkages among the Fairfield Linear Bicycle/Pedestrian Trail, the Fairfield Transportation Center, and the new Park Crossing Apartment project. Specific improvements include new sidewalks, signage, public art, and new street trees.	Corridor/ Transit/ Connection	A/C	Texas Street between Oliver Road and Beck Avenue	$1,500,000		Brian Miller, Associate Planner 428-7446 bkmiller@ci.fairfield.ca.us
18	**West Texas Street Urban Village Project**	**City of Fairfield**	**Project will assist private developers create a high quality mixed use "urban village" on West Texas Street 1.5 miles from the Suisun Capitol Corridor Train Station. Includes land assembly, new sidewalks, street trees, pedestrian crosswalks, landscaping, signage, development of public plazas/ seating areas, and enhancements to transit stops.**	**District/ Corridor**	**A/C**	**Texas Street at Pennsylvania Avenue**	**$1,500,000** (private)		**Brian Miller, Associate Planner 428-7446 bkmiller@ci.fairfield.ca.us**
19	Downtown Fairfield Live-Work Center	City of Fairfield	Replacement of blighted land uses on the 1000 block of Texas Street with new mixed-use commercial/residential buildings that offer unique space attractive to downtown residents and commercial entrepreneurs.	District/ Corridor	Cand./C	Texas Street	$1,500,000 (private)		Julia Moseley, Asst. Planner 428-7040 jmoseley@ci.fairfield.ca.us
20	Vacaville-Fairfield Train Station Urban Center	City of Fairfield	Development of a master plan and ultimately construction of the Fairfield Vacaville Train Station. Elements will include: mixed used concepts, pedestrian and bicycle circulation system enhancements/ system connections, public transit -connections - stations and - facilities.	District/ Transit/ Connection	Cand./C & P	Peabody Road at Vanden	(plan) $200,000 $3,500,000 (improvements)		Dave Feinstein, Associate Planner 428-7448 dfeinstein@ci.fairfield.ca.us Kevin Daughton, Public Works 428-7647 kdaughton@ci.fairfield.ca.us
21	**Union Avenue to Main St. Streetscape Enhancements Program**	**City of Fairfield/ Suisun City/ Solano County**	**This project will involve enhancements of pedestrian corridors in the vicinity of the new County Government Center and improving the pedestrian links between downtown Fairfield and Suisun City. The project will include enhanced sidewalks, crosswalks, pedestrian scale wayfinding and transit signs, shade trees, pedestrian friendly lighting, landscaping for the new Civic Plaza, transit signs, and pedestrian gateway.**	**District/ Connection**	**A/C**	**Union Ave betw. Texas St & Suisun City; Texas St betw. Jefferson St & Union Ave; Jefferson St betw. Texas St & Broadway**	**$2,000,000**		**John Hilliard, Senior Planner 428-7447 jhilliard@ci.fairfield.ca.us**

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Table 2.1: Solano County Pedestrian/TLC Projects (cont'd)

Note: Highlighted projects are highest current priority pedestrian improvements for each agency.

#	Name	Agency	Description (see Section 6.0 for more detail)	Project Type*	Status**	Location	Costs Accounted in Other CTP Elements	Separate Ped Project/ Enhancement Cost	Contact
22	North Texas Street Transportation Center and Community Hub	City of Fairfield	This project will be a new focal point for North Texas Street and the City. Its major role will be to serve as the Central Transfer Station (CTS) for the Fairfield/Suisun Transit (FST) local bus system. It will replace the current ineffective site at the Mall. Supports the proposed Teen Center across the street, and serves major destinations and connections for pedestrian, bicycling, and transit activity.	District/ Transit Connection	A/C	North Texas Street at Acacia Avenue	$4,500,000		Dave Feinstein, Associate Planner 428-7448 dfeinstein@ci.fairfield.ca.us Kevin Daughton, Public Works 428-7647 kdaughton@ci.fairfield.ca.us
23	North Connector	STA, City of Fairfield, Solano County	Project involves roadway improvements needed to reduce congestion and improve mobility for local residents north of the Interstate (I-) 80 between State Route (SR) 12 West to Abernathy Road and SR 12 East. Improvements include bike/pedestrian path, streetscaping, landscaping, traffic calming and gateway signs.	Corridor/ Connection	A	north of I-80 between SR 12 West to Abernathy Road and SR 12 East	$5,000,000	$500,000	Dan Christians, Assistant Executive Director 424-6075 dchristians@sta-snci.com
24	**Driftwood Drive Pedestrian Project**	**City of Suisun City**	**Constructs a pedestrian walkway between Main Street and Driftwood Drive linking to existing pedestrian walkways from the residential neighborhoods east of the Suisun Slough and connecting to downtown businesses and the Suisun/Fairfield train depot that is used by Amtrak's Capitol Corridor service. Project elements include construction of walkways on both sides of the Suisun Marina and associated landscaping. This project is one phase of a larger project to create a public plaza at the waterfront.**	**District/ Transit/Connection**	**C**	**Driftwood Drive**	**$550,000**		**Gerald Raycraft, Community Development Director 421-7335 planning@suisun.com**
25	Main Street Project / Downtown Streetscape Improvement Project	City of Suisun City	The Redevelopment Agency launched a Façade Improvement Program for Main Street businesses. More than a dozen businesses participated by renovating their storefronts using matching funds provided by the Agency. The Agency has also constructed more than 300 new parking spaces between Main St. and the waterfront promenade.	District	A/C	Main Street	$1,500,000		Gerald Raycraft, Community Development Director 421-7335 planning@suisun.com
26	Highway 12 Central County Bikeway	City of Suisun City	Class I multi-use path segment will continue the existing east-west route through Suisun City, connecting at its existing terminus at Marina Boulevard and leading to the Amtrak Station on Main Street via a Class I path on the north side of Highway 12.	Connection	P	Marina Blvd to Amtrak Station	$679,000		Gerald Raycraft, Community Development Director 421-7335 planning@suisun.com
27	**Vacaville Creek Walk Extension to McClellan Street**	**City of Vacaville**	**This project will extend the Vacaville Creek Walk to McClelland Street to include extended walkway, irrigation and landscaping improvements, parking improvements, and mixed use residential and commercial development to the east and south of the project area.**	**District/ Connection**	**Cand./C**	**School St from Creek Walk Plaza to McClellan Street**	**$955,000**		**Charles Learned, Director of Housing and Redevelopment 449-5660 dhr@cityofvacaville.com**
28	Vacaville Bus Terminal and Transfer Center	City of Vacaville	Timed transfer center to allow all City Coach, and interested intercity transit services, to meet and transfer passengers at one central location. Located in downtown, off of the north end of Kendal Street, the terminal would include bus shelters, bike racks, phone booths, and other amenities to support transit use.	Transit	A	Downtown Vacaville	$2,500,000		Charles Learned, Director of Housing and Redevelopment 449-5660 dhr@cityofvacaville.com
29	Nut Tree Ranch Development Project	City of Vacaville	This city/private project will rebuild the historic 76-acre Nut Tree site just north of interstate 80. The project is envisioned to feature a range of specialty retail shops and cafes, picnic grounds and residential units. The goal is to create a special setting that will attract visitors and serve the community.	District	C	Nut Tree property	$0 (private)		Charles Learned, Director of Housing and Redevelopment 449-5660 dhr@cityofvacaville.com
30	PG&E Easement Bike Path Project	City of Vacaville	This project connects from Linwood Street to North Orchard Avenue with a bridge over Alamo Creek to link Cheyenne Drive to Shady Glen Court. The PG&E Easement Bike Route serves as a connector to the primary system to Gibson Canyon and Foothill Drive, providing bicycle access for residences in northwestern Vacaville.	Connection	A	Linwood St. to Cheyenne Dr.	$350,000		Charles Learned, Director of Housing and Redevelopment 449-5660 dhr@cityofvacaville.com
31	Downtown Streetscape Plan Phase 3	City of Dixon	Project will include constructing streetlights, bicycle racks, sidewalk replacement and additional trees on SR 113 from B St. to UPRR.	District	A/C	SR 113 from B St. to UPRR.	$300,000		Janet Koster, Senior Management Analyst 678-7031 jkoster@ci.dixon.ca.us

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Table 2.1 Solano County Pedestrian/TLC Projects (cont'd)

Note: Highlighted projects are highest current priority pedestrian improvements for each agency.

#	Name	Agency	Description (see Section 6.0 for more detail)	Project Type*	Status**	Location	Costs Accounted in Other CTP Elements	Separate Ped Project/ Enhancement Cost	Contact
32	West 'B' St. Pedestrian Undercrossing	City of Dixon	Pedestrian undercrossing to replace existing at grade crossing at future train station location.	Transit/ Crossing	A/C	West 'B' Street at UPRR	$2,000,000		Janet Koster, Senior Management Analyst 678-7031 jkoster@ci.dixon.ca.us
33	**Multi-Modal Transportation Center**	**City of Dixon**	**Construction of a rail service platform to the multi-modal center to allow passenger trails to stop in Dixon per the Solano Rail Facilities Plan.**	**Transit**	**A/C**	**UPRR at West 'B' Street**	**$3,000,000**		**Janet Koster, Senior Management Analyst 678-7031 jkoster@ci.dixon.ca.us**
34	**Waterfront Plan and Improvement Project**	**City of Rio Vista**	**Designed to beautify the waterfront and link it to downtown. Project goals include a public walkway along the river from City Hall to the Highway 12 Bridge, streetscape improvements to create a memorable entry into Downtown and to preserve views of the river from Front Street, and building designs that respect the character of Downtown.**	**District**	**A/C**	**Rio Vista Waterfront**	**$2,000,000**		**Tom Bland, Planning Director 374-6451 bland@ci.rio-vista.ca.us**
35	Downtown Revitalization Project	City of Rio Vista	Includes streetscape and landscape improvements, and pedestrian and bicycle amenities.	District	A/C	Downtown Rio Vista	$1,200,000		Tom Bland, Planning Director 374-6451 bland@ci.rio-vista.ca.us
36	Highway 12 Corridor Planning Study/Improvements	City of Rio Vista	Corridor Plan will focus on design issues that need to be addressed to accommodate both future growth and projected increases in through traffic on Hwy 12 through Rio Vista, including pedestrian circulation along and across the highway. Alternative mode capital improvements will include potential bike lanes or a separate Class I multi-use path along Highway 12.	Corridor/ Crossing/ Connection	Cand./ A/C	Hwy 12 through Rio Vista	(plan) $50,000 $5,000,000 (improvements)		Tom Bland, Planning Director 374-6451 bland@ci.rio-vista.ca.us
							$84,784,000	**$3,622,000**	

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Table 2.2: Pedestrian Project Concepts

#	Name	Agency	Description (See Section 6.0 for more detail)	Project Type*	"Placeholder" Cost	Concept Source
1	Connection from Cordelia to King Ranch Open Space	Solano County	Connection from the existing trail at the south end of Cordelia to the King Ranch Open Space Area - a recreational trail	Connection	$100,000	Tri-City and Co. OS Plan/County Parks & Rec Element
2	Connection from Red Top Road to Lynch Canyon Open Space	Solano County	Connection from the planned trail on Red Top Road via McGary Road to Lynch Canyon Open Space Area - involves repair of Mc Gary Road landslide for bike/ped access (Countywide Bicycle Plan Project #6 - $500,000 estimate - add'l. cost is pedestrian enhancement)	Connection	$50,000	Highway 12 Improvement Plans - STA/Caltrans, County Parks and Rec. Element
3	Connection from Lake Herman Park to Sky Valley Open Space	Solano County	Connection from Benicia's Lake Herman Park north to Sky Valley Open Space Area - a recreational trail	Connection	$100,000	Tri-City and Co. OS Plan, County Parks and Rec. Element
4	Safe Routes to School enhancements	City of Benicia	Safe Routes to School enhancements in many locations	Connection/ Crossing	$500,000	Traffic, Pedestrian & Bicycle Safety Committee
5	I-780 overcrossing between high and middle schools	City of Benicia	Bike/pedestrian I-780 overcrossing between high school and middle school	Connection/ Crossing	$2,000,000	General Plan Circulation Element; Traffic, Pedestrian & Bicycle Safety Committee
6	Civic Center area improvements	City of Benicia	Plaza, streetscape, crossing, transit connection, and Civic Center area improvements	District/Transit /Crossing	$1,000,000	Traffic, Pedestrian & Bicycle Safety Committee
7	First Street pedestrian enhancements	City of Benicia	Additional First Street pedestrian crossing, street furniture, and parking improvements	District/ Crossing	$1,000,000	Traffic, Pedestrian & Bicycle Safety Committee
8	Waterfront and Arsenal District pathway connections	City of Benicia / Bay Trail Project	Bay Trail and other pathway connections on Waterfront and through Arsenal District to Benicia-Martinez Bridge pathway and scenic overlook	Connection	$500,000	Parks, Trails & Open Space Master Plan/Bay Trail Focus Study
9	6th Street Park crossing improvements	City of Benicia	Street narrowing, crossing improvements at 6th Street Park on Military East	Crossing	$200,000	Traffic, Pedestrian & Bicycle Safety Committee
10	East H Street ball fields parking and crossing improvements	City of Benicia	Street narrowing and angled parking at ball fields on East H Street	Crossing	$300,000	Traffic, Pedestrian & Bicycle Safety Committee
11	Sidewalk system gaps	City of Benicia	Complete gaps in the sidewalk system on major routes	Connection	$500,000	Traffic, Pedestrian & Bicycle Safety Committee
12	Traffic calming	City of Benicia	Traffic calming, improved crossing and amenities on major routes	Corridor/ Crossing	$1,000,000	Traffic, Pedestrian & Bicycle Safety Committee
13	Solano Square Circulation	City of Benicia	Improve site layout and pedestrian connections at Solano Square Shopping Center and Southampton Shopping Center (public/private project)	Connection/ Crossing	$100,000	Traffic, Pedestrian & Bicycle Safety Committee
14	West 7th & Military intersection improvements	City of Benicia	Intersection redesign at Military West and West 7th Street - potentially traffic roundabout	Connection/ Crossing	$1,000,000	Traffic, Pedestrian & Bicycle Safety Committee
15	Historic Arsenal pathway connections	City of Benicia	Pathway improvements throughout Benicia's historic Arsenal district, and connections to the waterfront, Bay Trail, and Benicia Bridge.	Connection	$500,000	Traffic, Pedestrian & Bicycle Safety Committee
16	Ped & bike improvements to East E Street parking lot	City of Benicia	Pedestrian and bicycle improvements with sidewalk, pavements, lighting, signage, and landscaping improvements.	District	$500,000	Traffic, Pedestrian & Bicycle Safety Committee
17	Glen Cove Bay Trail	Bay Trail / Ridge Trail / City of Vallejo/ GVRD	Waterfront/ Bluff top trail from Benicia S.R.A. thru Glen Cove Waterfront Park to Glen Cove Marina (using City streets - waterfront trail alt would be additional $1 million +)	Connection	$200,000	GVRD/Vallejo Trail Master Plan/Bay Trail Focus Study
18	Safe Routes to School projects	City of Vallejo	Safe Routes to School improvements to sidewalks, crossings at Lincoln Elementary School, Patterson Elementary School, Loma Vista Elementary School, Penny Cook Elementary School, Farragut Elementary School, Cave Elementary School	Connection/ Crossing	$1,000,000	City of Vallejo Public Works and Police Departments
19	Connection from Wardlow Park to Blue Rock Springs	City of Vallejo/ Solano Co.	Wardlow Park/Blue Rock Springs Park trail corridor in Vallejo	Connection	$100,000	GVRD/Vallejo Trail Master Plan/ County Parks and Rec Element
20	Intersection improvements, Sonoma Blvd & Curtola	City of Vallejo	Improvements to the intersections of Sonoma and Mini, Sonoma and Redwood, and Curtola and Lemon	Connection/ Crossing	$500,000	City of Vallejo Public Works and Police Departments

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Table 2.2: Pedestrian Project Concepts (cont'd)

#	Name	Agency	Description (See Section 6.0 for more detail)	Project Type*	"Placeholder" Cost	Concept Source
21	Sidewalks below and north of Highway 37 on Sonoma Blvd.	City of Vallejo/Bay Trail Project	Improve sidewalk or multi-use path along Sonoma Boulevard	Connection	$200,000	City of Vallejo Public Works and Police Departments
22	Linear Park extension, Fairfield Ave to Cement Hill Road	City of Fairfield	Linear Park extension from Fairfield Ave. northeast to Cement Hill Road	Corridor/ Connection	$500,000	Fairfield Master Trails Plan
23	Laurel Creek Trail extension, Foothill Pkwy to Masters Drive	City of Fairfield	Laurel Creek Trail extension from Foothill Pkwy. to The Masters Drive	Corridor/ Connection	$200,000	Fairfield Master Trails Plan
24	West Texas St pedestrian improvements	City of Fairfield	Pedestrian corridor and crossing improvements - West Texas Street from Pennsylvania Ave to Beck Ave	Corridor/ Connection	$1,000,000	City of Fairfield Planning, Public Works and Police Departments
25	Safe Routes to School railroad crossings	City of Fairfield	Railroad crossings at East Tabor Ave and Sunset Ave (supporting Safe Routes to School - replace uncontrolled crossing near Blossom Ave - needs coordination with Suisun City concepts)	Connection/ Crossing	$1,200,000	City of Fairfield Planning, Public Works and Police Departments
26	Union-Main St overcrossing	Cities of Fairfield and Suisun	Union-Main Street Pedestrian Overcrossing Enhancement	District/ Connection/ Crossing	$2,000,000	City of Fairfield Planning, Public Works and Police Departments/City of Suisun City Planning and Public Works Departments
27	Green Valley Rd path extension	Fairfield / Solano County	Extend pathway along Green Valley Road from New Neitzel Road to Neitzel Road	Connection	$100,000	Fairfield Trails Master Plan/County Parks & Rec Element
28	Mangels Blvd path extension	Fairfield / Solano County	Extend pathway on Mangels Blvd. from west end to Solano Community College	Connection	$100,000	Fairfield Trails Master Plan/County Parks & Rec Element
29	Safe Routes to School	City of Fairfield	Safe Routes to School enhancements in many locations	Connection/Crossing	$800,000	City of Fairfield Planning, Public Works and Police Departments
30	Main St Urban Renewal	City of Suisun City	Urban renewal on east side of Main Street	District	$200,000	City of Suisun City Planning and Public Works Departments
31	Safe Routes to School rail crossings	City of Suisun City	Address rail crossing safety at: Marina Blvd, Blossom Ave, Worley Road (needs coordination with Fairfield concepts)	Connection/ Crossing	$1,200,000	City of Suisun City Planning and Public Works Departments
32	Safe Routes to School	City of Suisun City	Other Safe Routes to School enhancements in addition to the railroad crossings	Connection/ Crossing	$500,000	City of Suisun City Planning and Public Works Departments
33	Multi-Use Marsh Path	City of Suisun City	Marina to Sunset on south side of Highway 12	Connection/ Corridor	$200,000	City of Suisun City Planning and Public Works Departments
34	Connection from Lagoon Valley to Paradise Valley	City of Vacaville/ Solano Co.	Connection from Lagoon Valley Reservoir south to Paradise Valley in Fairfield	Connection	$200,000	Vacaville Parks, Rec & OS Master Plan; Solano Co. Parks & Rec Element
35	Creek Walk extension	City of Vacaville	Creek Walk extension to McClellan Street, or beyond	Connection	$500,000	Vacaville Parks, Rec & OS Master Plan
36	Tri-City and County Regional Trail Connections	Solano County, Benicia, Vallejo & Fairfield	Connection from Fairfield/Rockville Hills Park, Cordelia, Benicia, and Vallejo to the growing Tri-City and County open space area and existing Lynch Canyon Preserve, Hiddenbrooke and Northgate Open Space	Connection	$500,000	Tri-City and County Cooperative Plan
37	Safe Routes to School	City of Vacaville	Safe Routes to School enhancements in many locations	Connection/Crossing	$500,000	City of Vacaville Planning and Public Works Departments
38	Safe Routes to School	City of Dixon	Safe Routes to School enhancements in many locations	Connection/Crossing	$200,000	City of Dixon Planning and Public Works Departments
39	Connection from 2nd St. to Sandy Beach Park to Rio Vista	Rio Vista/Solano County	Trail extension along Beach Drive from Second Street to Sandy Beach Park and to downtown Rio Vista	Connection	$100,000	Rio Vista Circulation & Mobility Element/Solano County Parks & Rec Element
40	Safe Routes to School	City of Rio Vista	Safe Routes to School enhancements in many locations	Connection/Crossing	$200,000	City of Rio Vista Planning and Public Works Departments
41	Loop Trail System	City of Rio Vista	Loop path/trail system extending through and around downtown, including an inner and an outer loop	Connection	$500,000	Rio Vista Circulation & Mobility Element
					$21,550,000	

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Figure 2.2: Countywide Pedestrian Plan Overview
(remove and replace with figure)

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3 WHY PLAN FOR PEDESTRIANS

photo courtesy of Dan Burden
www.pedbikeimages.org

Walking is a form of transportation that is accessible, healthy, and affordable for everyone. Virtually everyone walks (or wheels) every day. Walking promotes paying attention to local conditions, which in turn promotes a healthy community. Bicycling and walking are underutilized modes of transportation in Solano County. Together they account for approximately 2% of the County's commute transportation. However, they offer the potential for significant reductions in traffic congestion, transportation emissions, and additional community benefits, which include developing and maintaining "livable communities", making neighborhoods safer and friendlier, and reducing transportation related environmental impacts.

3.1 THE BENEFITS OF WALKING

3.1.a. HEALTH BENEFITS

Physical inactivity levels in the United States are cause for concern. According to annual statistics gathered by the Centers for Disease Control and Prevention and other health organizations, only 30% to 40% of the American population engages in regular, sustained exercise, while another 30% are completely inactive.[1] Physical inactivity starts during childhood; only about half those aged 12 to 21 years engage in regular, vigorous physical activity, and preschool children spend the majority of their playtime in sedentary activities.[2]

Physical inactivity plays a significant role in the most common chronic diseases in the U.S., including coronary heart disease, stroke, and diabetes, all of which are leading causes of death.[3] Physical activity also helps to control weight, contributes to healthy bones, muscles, and joints, reduces falls among the elderly, and helps to relieve the pain of arthritis.[4] Obesity and physical inactivity account for more than 300,000 premature deaths per year in the United States (second only to tobacco-related

[1] Center for Disease Control. "How Land Use and Transportation Systems Impact Public Health." *Active Community Environments Initiate Working Paper #1*. 2000.
[2] U.S. Department of Health and Human Services 1996; Strauss 1999.
[3] McKenna, et al. "Current Issues and Challenges in Chronic Disease Control." *Chronic Disease Epidemiology and Control*. Brownson, et al. (Eds.). Washington: American Public Health Association, 1998, p. 3.
[4] Center for Disease Control. *Factors Contributing to Obesity*. Available at http://www.cdc.gov/nccdphp/dnpa/obesity/contributing_factors.htm. Accessed February 2, 2004.

deaths). With a nationwide estimated annual cost of $117 billion, the effects of obesity and weight-related illness clearly take their toll on the economy.[5] Therefore, improving health through walking is a viable and effective way to decrease health costs in cities throughout the county, and nationwide.

Benicia State Recreation Area

Physical activity does not have to be strenuous to be beneficial. The Center for Disease Control considers 30 minutes of brisk walking 5 or more times a week moderate physical activity that reaps significant health benefits. Research shows that activities can be split into several short periods (e.g., 10 minutes 3 times a day) instead of 1 longer period (e.g., 30 minutes once a day).[6] These findings contribute to the effectiveness of walking for transportation (e.g. walking to school or work, or running errands) as well as a means of exercise. According to the World Health Organization, if all sedentary people in the United States walked or cycled the equivalent of 1/2 hour per day, the prevalence of heart disease, obesity and diabetes would be cut in half.[7]

Walking can provide Americans with a healthy alternative for everyday transportation needs, especially for the large percentage of trips that are less than a few miles. Walking is a good way for people of all ages and athletic abilities to be active because special skills and training are not needed.

Unfortunately, trends in travel behavior in the United States could hardly be worse for public health. The journey-to-work section of the US Census indicates that the percentage of all work trips made by walking fell from 10.3% in 1960 to only 2.9% in 2000[8] The percentage of all urban trips made in 1995 by walking in 9 European countries ranges from 18% in the Netherlands to 29% in Sweden. England and Wales were 12%. By comparison Canada was 10%, while the US brought up the rear with 6%.[9]

For both the elderly and the nonelderly, walking and cycling are discouraged in the United States by longer trip distances, the low cost and ease of auto ownership and use, and a range of other public policies that make walking and cycling inconvenient, unpleasant, and above all, unsafe.[24] The more compact land-use patterns in

[5] US Department of Health and Human Services. *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. 2000. pp.1,2.
[6] Center for Disease Control. "Overweight and Obesity Fact Sheet: What You Can Do." Available at http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_whatcanyoudo.htm. Accessed on February 2, 2004.
[7] World Health Organization. Available at http://www.who.int/nut/#obs. Accessed on February 10, 2004.
[8] Pucher and Renne, "Socioeconomics of Urban Travel." Table 1. Available at http://nhts.ornl.gov/2001/Documents/Pucher-Renne-Tqarticle.pdf. Accessed August 10, 2003.
[9] Pucher, John and Lewis Dijkstra. "Promoting Safe Walking and Cycling to Improve Public Health: Lessons from the Netherlands and Germany." American Journal of Public Health. pp. 1509-1514.

European cities lead to average trip distances that are only about half as long as in American cities and thus are easier to cover by foot or by bike.[10]

3.1.b. Social and Civic Benefits

In addition to physical benefits, walking can provide many social and civic benefits. Walking is one form of physical activity that lends itself to social interaction, allowing pedestrians to converse and spend time with family or friends, or to develop new relationships. In the process of walking to work or school, or running errands, pedestrians are free to explore their neighborhood and meet their neighbors in a way that is difficult – if not impossible – for automobile drivers. Increasing pedestrian activity increases the number of "eyes on the street" and enhances neighborhood safety as well.

Children who live in neighborhoods where it is safe to walk to school are more aware of their surroundings, have the opportunity to get to know their neighborhood, and gain necessary traffic and safety skills that lead to increased independence. Children who walk to school and other activities are more able to participate in supervised after school programs. Increasing students' physical activity can potentially improve alertness and behavior. California studies have shown that children who are physically active perform better academically.[11]

3.1.c. Economic Benefits

Creating and preserving walkable communities makes economic sense and may eventually be an environmental necessity. Market demand for TLC-type walkable and/or transit-oriented development is expected to continue to increase based on population and household growth and a shortfall in available housing, especially affordable housing for low and moderate-income residents. California is expected to add 11 to 16 million new residents and 4 to 6 million new households over the next 20 years.[12] This population boom brings a demand for additional housing that cannot be met by the available urban land supply in the major metropolitan areas, such as the inner Bay Area or currently urbanized Sacramento Area. This creates pressures for communities with available land like those in Solano County to grow. Higher density and mixed use development will be needed to conserve the supply of land, to make housing and commercial space affordable, to make transportation feasible and affordable, and to preserve community character and overall quality of life.

There are also direct economic benefits to supporting walking as a transportation alternative to the automobile. These include reduced wear and tear on roads, and reduced cost of injuries and property damage due to crashes.

[10] Newman, P. and J. Kenworthy. *Sustainability and Cities: Overcoming Automobile Dependence*. Washington, DC: Island Press, 1999. pp. 68-125.
[11] California Department of Education, December 2002
[12] US Census 2000 data.

3.1.d. Environmental Benefits

Pedestrian-scale communities have significant direct and indirect benefits to air and water quality, and residents' quality of life. Walkable cities reduce environmental impacts by promoting walking as a zero emissions form of transportation. Good walking routes to transit complement the role of public transit in providing an environmentally sustainable alternative to the private automobile. Although typically not counted in transportation surveys, every trip on transit is sandwiched between 2 pedestrian trips. Especially in conjunction with cycling and transit riding, walking provides a promising non-polluting transportation alternative.[13] Walking also conserves valuable and limited petroleum resources.

3.2 Government Policy and Support for Walking and Walkable Communities

First Street, Benicia

3.2.a. Transportation for Livable Communities Program

Transportation for Livable Communities (TLC) is a Bay Area grant funding program established by the Metropolitan Transportation Commission (MTC). The TLC Program, as the name implies, is focused on the transportation system aspects of community planning, and includes incentives for compact housing development. The TLC Program, particularly in the objectives that have been formulated for the program in Solano County, encompasses a wide range of project types and scales, from major new or infill transit-oriented development districts, to extension of bicycle and pedestrian pathways and enhancement of existing downtown sidewalks. Thus, TLC is a broad and flexible term, covering the most basic to the most ambitious projects that encourage and enable alternative modes of transportation. STA is in the process of establishing its own locally administered TLC program, which will further enhance these project opportunities.

3.2.b. Federal Legislation.

The TLC program, and the funding it provides to support more walkable communities and alternative transportation modes, stem from landmark federal legislation intended to reduce the nation's dependency on the car. The Intermodal Surface Transportation Efficiency Act (ISTEA), passed in 1991, for the first time set aside significant portions of the federal transportation budget for projects and enhancements to mitigate the automobile's impact on quality of life, and to support alternative means of transportation, including walking. The Transportation Equity Act for the 21st Century (TEA-21), signed into law in 1998, continued the integration of alternative modes into the transportation mainstream, and enhanced

[13] *Pedestrian Master Plan*, City of Oakland, August, 2002.

the ability of communities to invest in projects that can improve the safety and practicality of bicycling and walking for everyday travel.

3.2.c. Federal and State Policies

The federal and California state governments have adopted specific policies supporting walking as a critical mode of travel:

United States Department of Transportation, "Accommodating Bicycle and Pedestrian Travel: A Recommended Approach – A US DOT Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure" (2000):

> Congress clearly intends for bicyclists and pedestrians to have safe, convenient access to the transportation system and sees every transportation improvement as an opportunity to enhance the safety and convenience of the two modes (p. 11). [T]he design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible, and convenient (p. 14).

State of California, California Vehicle Code 21949, the Legislative Declaration on Pedestrians:

> (a) The Legislature hereby finds and declares that it is the policy of the State of California that safe and convenient pedestrian travel and access, whether by foot, wheelchair, walker, or stroller, be provided to the residents of the state.
>
> (b) In accordance with the policy declared under subdivision (a), it is the intent of the Legislature that all levels of government in the state, particularly the Department of Transportation, work to provide convenient and safe passage for pedestrians on and across all streets and highways, increase levels of walking and pedestrian travel, and reduce pedestrian fatalities and injuries.

3.2.d. Americans with Disabilities Act (ADA).

Background. The Americans with Disabilities Act, known better as the ADA, was codified in 1990, forming a legal framework designed to protect the civil rights of disabled people. One year later, the ADA Accessibility Guidelines (ADAAG) were published, which provided scoping, design, and technical requirements for accessibility to buildings and other facilities for individuals with disabilities under the ADA. These requirements apply to the design, construction, and alteration of buildings and other publicly-accessible facilities. The ADAAG were recently revised and re-published.

The Federal Access Board is an independent Federal agency devoted to accessibility for people with disabilities. It develops and distributes standards for compliance, provides technical assistance and training, and enforces accessibility standards for federally funded facilities. For more information on ADA compliance visit: http://www.access-board.gov/.

Title 24 and the Division of State Architect. California's building regulations are contained in Title 24 of the California Code of Regulations. The California Department of General Services Division of the State Architect (DSA) acts as California's policy leader for design and construction. The DSA Access Compliance section develops regulations for making buildings, structures, sidewalks, curbs, and related facilities accessible to persons with disabilities. These regulations may be more stringent than ADA (but never less so). State access compliance regulations are applicable to: 1) Publicly funded buildings, structures, sidewalks, curbs and related facilities, 2) Privately funded public accommodations and commercial facilities, and 3) Public housing and private housing available for public use statewide. Refer to Sections 101.17 and 101.17.11 of Part 2, Title 24 for more information regarding the scope and application of DSA regulations, available at:
http://www.dsa.dgs.ca.gov/CodeChanges/default.htm

Benefits of ADA Compliance. New or improved public facilities must comply with ADA standards and requirements. Beyond the obvious benefits to people with disabilities, everyone benefits when pedestrian facilities meet or exceed these standards. Accessible pedestrian signals and countdown signals, curb ramps and "bulbouts" at intersections, gently sloping walkways, and an otherwise barrier-free environment make moving about easier for the elderly, the very young, and anyone pushing a stroller, pulling a suitcase, or carrying a heavy load.

ADA codes and standards are focused on establishing a safe, direct, and barrier-free path of travel. Elements that must be addressed to comply with these standards include width, passing space, gradients and cross-slopes, short changes in level, surfaces, potential obstructions such as grates, furnishings, and traffic signals. Making pedestrian facilities ADA compliant is the law, and doing so provides benefits to all users, but the best pedestrian facilities and pedestrian friendly environments go beyond utilitarian ADA compliance to provide a generous, aesthetically pleasing space that is enjoyable to use, and consistent with the design guidelines in this Plan and the many reference documents cited.

3.3 SAFE ROUTES TO SCHOOL

Walking and biking to school provide a convenient opportunity to incorporate physical activity into a child's daily routine, yet only about one US child in nine starts the day by walking or biking to school. About one third of children take a bus to school, and half are driven in a private vehicle. Increasing the proportion of children walking and biking to school are 2 of the national health objectives for 2010. [14]

[14] Staunton, MD, Catherine E., Deb Hubsmith, BS, and Wendi Kallins, BA "Promoting Safe Walking and Biking to School: The Marin County Success Story." *American Journal of Public Health*, September 2003, p. 1431.

In 1999 the State of California, through Caltrans, implemented a Safe Routes to School (SR2S) funding program. SR2S is a construction program intended to improve and enhance the safety of pedestrian and bicycle facilities and related infrastructure. However, costs for programs or activities related to education, enforcement or encouragement (often referred to as "3E" by school safety and law enforcement officials) are eligible for reimbursement when those costs are related to the construction improvement and incidental to the overall cost of the project.[15] The program has been reauthorized and is now scheduled to sunset on January 1, 2008.

In Solano County, several agencies have implemented a Safe Routes to School Program, and/or applied for Caltrans grants to improve pedestrian facilities near schools. Solano County has obtained three Safe Routes to School grants, which helped fund pedestrian improvements benefiting Tolenas Elementary School in unincorporated Solano County near Fairfield, Grange Middle School in Fairfield, and Benjamin Franklin Middle School in Vallejo.

Benicia is developing a Safe Routes to School Program under the direction of their Public Works Department. With grant money, the City constructed sidewalks and curb ramps, and installed crosswalk pavement markings and traffic signs to improve safety at Robert Semple Elementary. The department also developed maps of suggested routes to school for the City's five elementary schools. The maps show appropriate street crossings and routes, traffic signals, crossing guards, all-way stops and crosswalks. The maps have been distributed to the schools and are available at the Benicia Unified School District website at www.benicia.k12.ca.us/.

The City of Suisun City applied for and received funds to make improvements to Crystal Middle School. Rio Vista installed traffic signals near three schools with state funds. The City of Vacaville received money from the program to make improvements to various locations in the vicinity of all schools in the district.

The Safe Routes to School Program in Marin County, CA is a successful example that can be used as a model for establishing local programs. In August 2000, the Marin County Bicycle Coalition and Walk Boston, with funding from the National Highway Traffic Safety Administration (NHTSA), started to create a national model Safe Routes to School program. The program was endorsed by the NHTSA as a means to decrease traffic congestion around schools and promote healthy alternatives to parents driving children to school singly.[16] Using a multi-pronged approach, the program identifies and creates safe routes to schools and invites

[15] Caltrans Local Assistance Program Guidelines, Safe Routes to School Program, March 11, 2002. p. 24-1.
[16] National Highway Traffic Safety Administration. *Safe Routes to School Program*., May 2002. p. 4.

communitywide involvement. By its second year (2000-2001), the program was serving 4,665 students in 15 schools.

Participating public schools reported an increase in school trips made by walking (64%), biking (114%), and carpooling (91%) and a decrease in trips by private vehicles carrying only one student (39%).[17]

To show the benefits of the Safe Routes to School program, the Marin County Bicycle Coalition recruited nine pilot schools. Each school received guidance and promotional materials. Every school held regular Walk and Bike to School Days and participated in contests which rewarded children who came to school walking, biking, by carpool, or by bus. At the end of the pilot program there was a 57% increase in the number of children walking and biking to school and a 29% decrease in the number of children arriving by car (those not in a carpool).[18]

A toolkit resulted from the experiences of the Marin County pilot program and from other Safe Routes to School programs in the United States, in the Canadian province of British Columbia, and in the United Kingdom. The toolkit is offered by the NHTSA to communities that wish to start local Safe Routes to School programs (see Section 8.2 for information).

3.4 PEDESTRIAN SAFETY

It is much more dangerous to walk or cycle in American cities than to travel by car. Per kilometer traveled, pedestrians were 23 times more likely to get killed than car occupants in 2001 (140 versus 6 fatalities per billion kilometers).[19] Walking and cycling in American cities are also much more dangerous than in many other countries. For example, nonmotorist fatality rates in the United States are much higher than in The Netherlands and Germany. Per kilometer and per trip walked, American pedestrians are roughly 3 times more likely to be killed than German pedestrians and over 6 times more likely than Dutch pedestrians.[20]

One of the most important objectives in planning for better pedestrian routes and places is to improve safety. Pedestrians are highly vulnerable to vehicles, and safety concerns are a big deterrent to walking, especially for children and the elderly. Some significant statistics regarding pedestrian safety are provided below:

[17] Marin County Safe Routes to School. Available at www.saferoutestoschools.org/. Accessed on March 15, 2004.
[18] National Highway Traffic Safety Administration. *Safe Routes to School Program*. May 2002. p. 4.
[19] The authors Pucher and Dijkstra calculated fatality rates based on official mode-by-mode fatality and travel statisitics of the US Department of Transportation.
[20] Pucher, John and Lewis Dijkstra. "Promoting Safe Walking and Cycling to Improve Public Health: Lessons from the Netherlands and Germany." American Journal of Public Health. pp. 1509-1514.

- There were 71,000 pedestrians injured, and 4,808 killed, in traffic crashes in 2002 nationwide.[21]
- It is estimated that each year, 80,000 to 120,000 pedestrians are injured and 4,600 to 4,900 die in motor vehicle crashes in the United States.[21,22]
- One-fourth of the children between 5 and 9 years old killed in traffic crashes in 2002 were pedestrians, and 6% of all youth under age 16 injured in traffic crashes were pedestrians.[21]
- Older pedestrians (ages 70+) accounted for 17% of all pedestrian fatalities and 6% of all pedestrians injured in 2002. In California, pedestrian fatalities were 17% of total fatalities in the same year. 5% of pedestrian fatalities were in the age group 5-15.[23]
- Pedestrians account for 11% of all motor vehicle deaths, and in cities with populations exceeding 1 million, they account for about 35%.[24]
- Children aged 5 to 9 years have the highest population-based injury rate, and people older than 80 years have the highest population-based fatality rate.[25]
- Pedestrians older than 65 years are more likely to be struck at intersections.[26,27]

3.4.a. Solano County

To provide more specific incentive and information for pedestrian improvements, the following sections provide statistical and site-specific accident data for Solano County and its cities.

Solano County is a relatively safe place to walk compared to other Bay Area Counties as indicated in Tables 3.1 and 3.2, which show accident ratios relative to population and vehicle miles traveled. At the same time, Solano County has the third highest pedestrian accident rate per population among the 9 Bay Area counties, showing that there is room for improvement. However, the rate of pedestrian accidents per vehicle miles traveled is the second lowest. This disparity may reflect Solano County's status as an urbanizing area.

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[21] National Highway Traffic Safety Administration. *Traffic Safety Facts 2001*. Washington, DC: 2002.
[22] National Center for Injury Prevention and Control. *National Electronic Injury Surveillance System – All Injury Program Operated by the US Consumer Product Safety Commission*. Atlanta, GA: 2002.
[23] National Highway Traffic Safety Administration. "Pedestrian & Bicycle Safety" from www.nhtsa.dot.gov, accessed April 20, 2004.
[24] Insurance Institute for Highway Safety. *Fatality Facts 2001: Pedestrians*. Available at www.hwysafety.org/saffety_facts/fatality_facts/pedestrians.pdf. Accessed January 31, 2003.
[25] National Highway Traffic Safety Administration. *Safe Routes to School Program*. May 2002. p. 4.
[26] Pucher, John and Lewis Dijkstra. "Promoting Safe Walking and Cycling to Improve Public Health: Lessons from the Netherlands and Germany." American Journal of Public Health. pp. 1509-1514.
[27] Knoblauch, R, et al. *Older Pedestrian Characteristics for Use in Highway Design*. Washington, DC: US Dept of Transportation; 1995. DOT publication FHWA-RD-93-177.

Tables 3.3 and 3.4 indicate the relative pedestrian accident rates among Solano County cities based on population and vehicle miles. Because the available data only covers one year, 2001, and the numbers are very small, a few incidents can significantly change the relative standings. Data was sought from each Solano County city to provide a better picture of pedestrian safety.

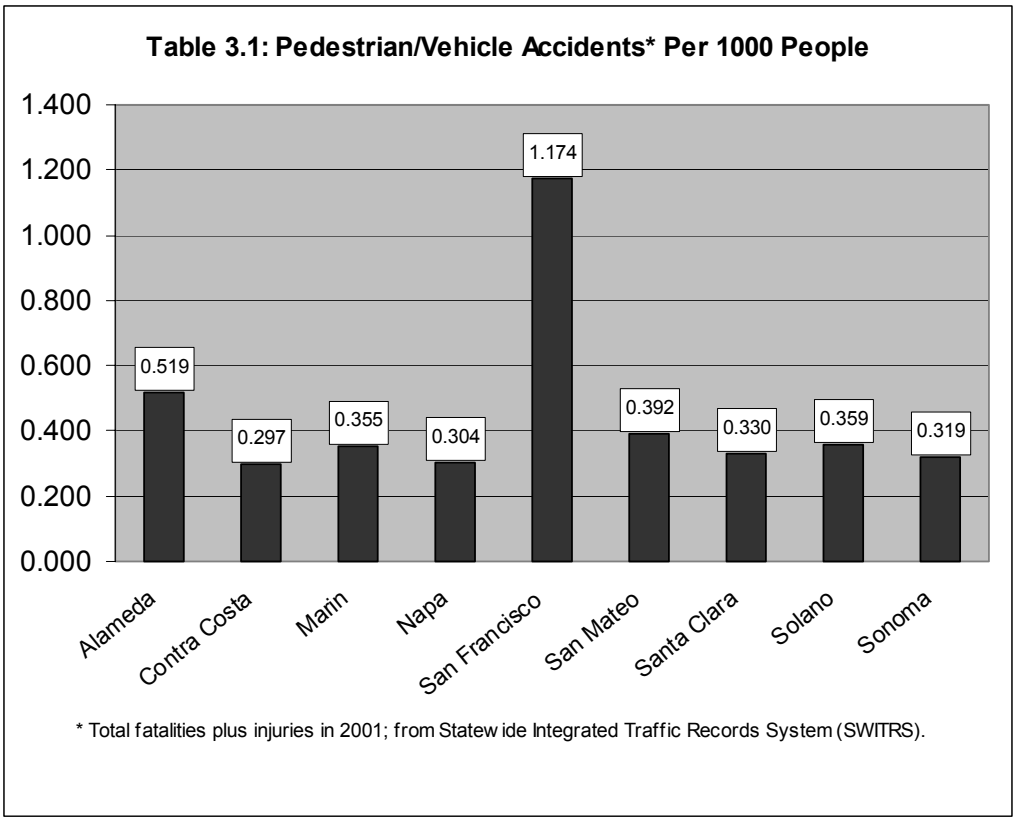


Table 3.1: Pedestrian/Vehicle Accidents* Per 1000 People
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
0.519
0.297
0.355
0.304
1.174
0.392
0.330
0.359
0.319
Alameda
Contra Costa
Marin
Napa
San Francisco
San Mateo
Santa Clara
Solano
Sonoma
* Total fatalities plus injuries in 2001; from Statewide Integrated Traffic Records System (SWITRS).

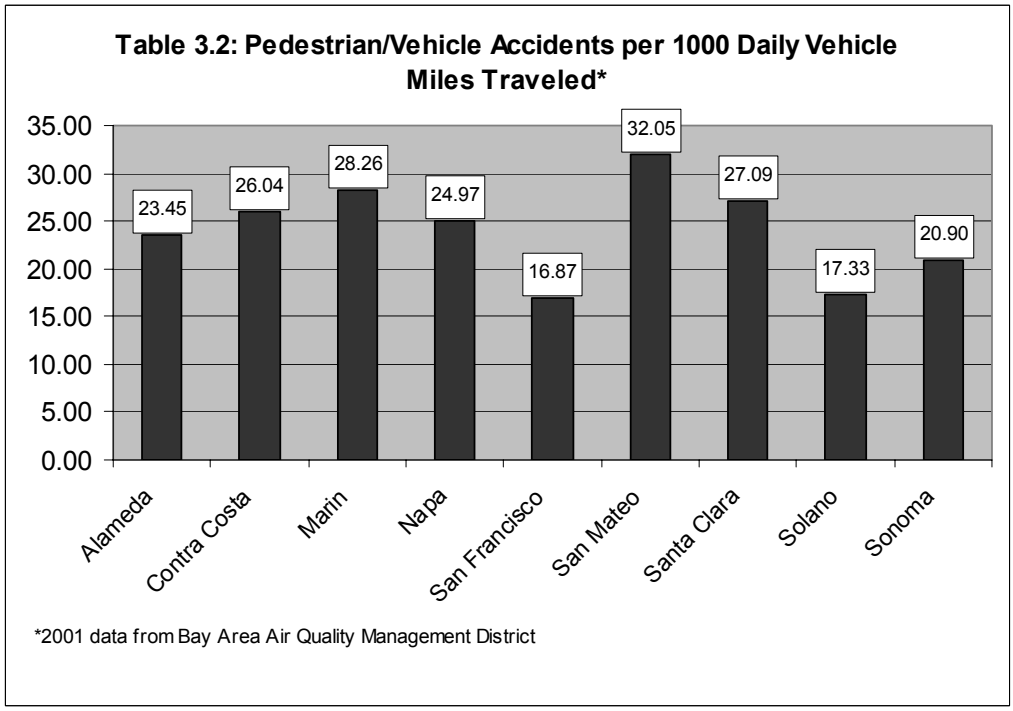
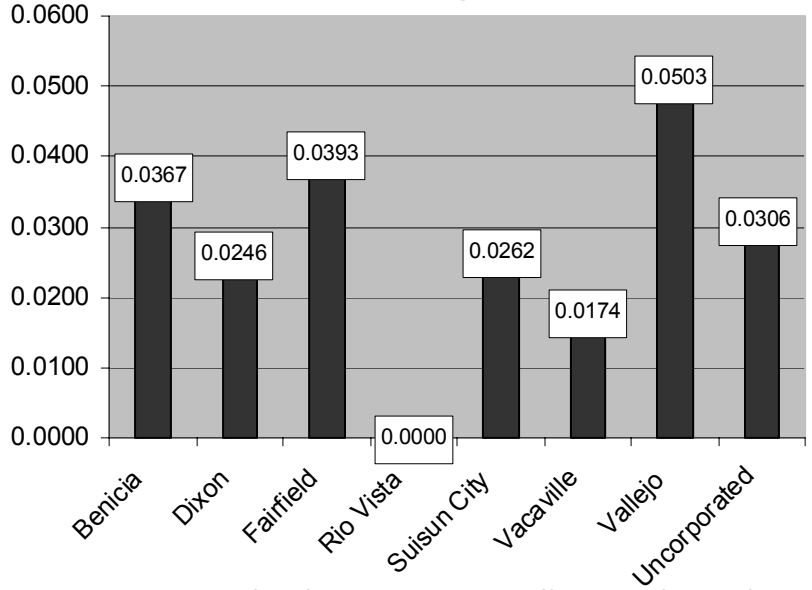


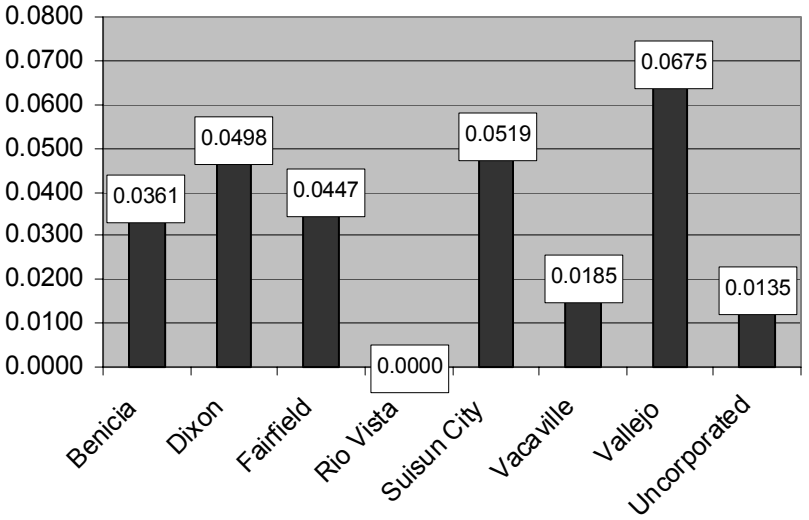
Table 3.2: Pedestrian/Vehicle Accidents per 1000 Daily Vehicle Miles Traveled*
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
23.45
26.04
28.26
24.97
16.87
32.05
27.09
17.33
20.90
Alameda
Contra Costa
Marin
Napa
San Francisco
San Mateo
Santa Clara
Solano
Sonoma
*2001 data from Bay Area Air Quality Management District

Table 3.3: Pedestrian/Vehicle Accidents* per 100,000 People



* Total accidents in 2001; from Statewide Integrated Traffic Recods System (SWITRS)

Table 3.4: Pedestrian/Vehicle Accidents per 1000 Daily Vehicle Miles Traveled*



* 2001 data from Caltrans, Office of Travel Forecasting & Analysis; www.dot.ca.gov/hq/tsip

3.4.b. BENICIA

The Benicia Police Department provided statistics on the number and location of vehicle versus pedestrian accidents in the years 2001 and 2002.[28] Compared to the 2000 statewide average of .4 pedestrian-related accidents per 1,000 people[29], Benicia's 2001 rate of .3 accidents per 1,000 people is a relatively low number (Benicia population was 26,865, per Census Bureau 03/2001 data). However, the data does show a comparative concentration of accidents centered on the intersection of Military and First Street.

	2001	2002
January	530 Getty Court	none
February	none	none
March	Benicia State Park; 500 Military East	none
April	150 Military West; 1200 First Street; 570 East H Street; 20 Solano Square	none
May	none	505 Military East
June	none	50 Solano Square
July	none	1100 First Street
August	none	1400 East 2nd Street
September	1000 Military West	427 East L Street; 506 Laurel Court
October	1997 Elm Road	none
November	none	300 East H Street
December	550 West K Street	none

3.4.c. VALLEJO

According to the accident statistics supplied by the City of Vallejo Police Department Criminal Records there were 48 vehicle-pedestrian accidents in 2001 and 43 in 2002.[30] In 2001 the Census Bureau estimated the population of Vallejo to be 119,342, making the 2001 per capita accident rate 0.4 accidents per 1,000 people. The records show that there are several intersections with concentrations of accidents. To highlight these "hotspots," the table below lists only those intersections with multiple accidents in 2001 and 2002. Vallejo's areas of concern, according to these statistics, are the intersection of Curtola and Lemon and several busy intersections along Sonoma Boulevard, however since 2002, Sonoma Boulevard at Capitol has been improved and signalized. The intersection of Curtola and Lemon

[28] Data provided by Kelly Bothello, Benicia Police Department, via facsimile November 25, 2003.
[29] California accident data courtesy of Statewide Integrated Traffic Records System (SWITRS).
[30] Data provided by Jo Ann Alcantara, Vallejo Police Department, via facsimile December 30, 2003.

is signalized, but is a candidate for improvement because it does not have a complete sidewalk.

	2001	2002
January	Sonoma/Capitol (2)	-
February	-	-
March	-	Sonoma/Mini (2)
April	-	-
May	Sonoma/Capitol Sonoma/Mini(2)	-
June	-	-
July	-	-
August	Lemon/Curtola	-
September	-	-
October	Lemon/Curtola Sonoma/Mini (2)	Sonoma/Tennessee (2) Lemon/Curtola
November	-	
December	Sonoma/Redwood (2)	

3.4.d. FAIRFIELD

Fairfield Police Department provided pedestrian-related accident statistics.[31] From 1997-2002 a total of 241 accidents involving pedestrians and vehicles occurred, with 7 of them fatal, 224 resulting in injuries, and 6 accidents described as non-injury. The information provided indicates that Fairfield has several hotspots, specifically along the main arterials of West and North Texas Streets, Travis Boulevard, and Dover Avenue. The list below shows the intersections and routes with multiple accidents:

Intersection/Route	# of accidents from 1997-2002
N. Texas/Air Base Pkwy	2
N. Texas/E. Tabor	3
N. Texas/Travis Blvd	3
Along N. Texas	12
Along W. Texas	18
Dover Ave/Air Base Pkwy	1
Dover Ave/E. Tabor	1
Dover Ave/Travis Blvd	2
Along Dover Ave	6
Along E. Tabor	9
Along Travis Blvd	21

[31] Information provided by Officer Ed Gebing, Fairfield Police Department, via email, November 19, 2003.

3.4.e. Suisun City

Information pending from the Suisun City Police Department regarding the number and location of vehicle-pedestrian accidents in the past five years. (Sergeant Pitts contacted January 9, 2004.)

3.4.f. Vacaville

The Vacaville Police Department contributed numbers for the years 1998 though 2003,[32] and location details for 1999-2003. For comparative purposes the following table lists pedestrian-related accidents in 2001 and 2002. Taking into consideration Vacaville's estimated 2001 population of 91,885, the City's accident rate in 2001 was .2 pedestrian accidents per 1,000 people, half the statewide rate. Of note however, are the number of accidents involving Nut Tree Road and Alamo Drive, and their cross streets.

[32] Data provided by Chris Schaub, Vacaville Police department, via November 2003 telephone conversation and February 5, 2004 letter.

	2001	2002
January	891 Markham; Hartford/Andrea	Kendal/West
February	Marshall/Oak Creek	Rocky Hill/Highland
March	101 Peabody; Homewood/Cottonwood; Morning Glory Dr; Davis St/Davis Pl; Callen/Hazel	none
April	none	none
May	Nut Tree/Drake; Deelard/Marshall; 631 Orange; Nut Tree/Summerfield	Nut Tree/Alamo; 991 Alamo; Sereno/La Cruz
June	898 Alamo	Phillips/Scoggins; Bedford/Cambridge
July	108 Elmira; 200 Prairie	Youngsdale/Peregrine; 901 Mason
August	Ruby/Foxboro	Markham/Vine
September	1143 East Monte Vista; Alamo/Marshall; Keith/Canvasback	none
October	Christine/Temple; Madison/California; Alamo/Nut Tree; Nut Tree/Portsmouth	Green Tree/Ponderosa; Markham/Vine; Elmira/Nut Tree
November	Beythe/Alamo; Depot/Mason; Alamo/Peabody	415 Chelan; Grand Canyon/El Dorado; Davis/Porter; 810 Merchant; Callen/East Monte Vista
December	none	Markham/Vine; Merchant/Camellia

3.4.g. Dixon

The City of Dixon Public Works Department reported 3 pedestrian-related accidents in 2002: South 1st near East Walnut; A Street and South 1st; and C Street at North 4th Street. There was one pedestrian-vehicle accident in Dixon in 2003, at C Street near North 4th Street.

3.4.h. Rio Vista

Information pending from the Rio Vista Police Department regarding the number and location of vehicle-pedestrian accidents in the past five years. (Lieutenant James Knapp contacted January 9, 2004.)

4 REVIEW OF CURRENT PEDESTRIAN POLICIES AND PLANS

4.1 OVERVIEW

Many existing policy and planning documents of Solano County, the Solano Transportation Authority, Solano County cities, and regional agencies contain pertinent policies or references for accommodating pedestrians. The key documents and statements are summarized below.

4.2 SOLANO COUNTY PLANS AND POLICES

4.2.a SOLANO COUNTY

Solano County General Plan (completed in 1980 and amended through 1999). Solano County's unincorporated areas are generally rural; therefore the County's policy and planning documents tend to discuss recreational pedestrian trails rather than urban pathways. The Land Use and Circulation Elements of the Solano County General Plan do not have specific policies relating to pedestrians. The primary importance of the Solano County General Plan is in the Land Use Element's strong emphasis on maintaining urban growth limits and protecting agriculture. This helps control sprawl-type development that is counter-productive for creating walkable communities and connections. Solano County does have its own TLC project within the City of Fairfield and the unincorporated portion of "Old Cordelia." This is discussed in Section 6.3.e.

4.2.b SOLANO TRANSPORTATION AUTHORITY (STA)

Transportation for Livable Communities (TLC) Plan. The Transportation for Livable Communities Plan, contained in the Alternative Modes Element of the Solano Comprehensive Transportation Plan focuses on the relationship between transportation and land use. By creating communities that offer transportation options and promoting development patterns that foster multi-modal transportation through this program, residents can decrease their dependence upon automobiles. These changes eventually lead towards less pollution, decreased traffic congestion, and healthier lifestyles. Transportation for Livable Communities (TLC) projects can include a variety of improvements that encourage and enable alternative modes of transportation, ranging from major new or infill transit-oriented developments, to extensions of bicycle and pedestrian pathways, and enhancement of downtown sidewalks. The common theme in all TLC projects is an emphasis on using alternative forms of transportation, such as transit, bicycling or walking, to better promote land use-transportation linkages.

The TLC Plan sets a goal of providing a balanced transportation system to enhance quality of life, support economic development, and improve accessibility for all members of the community by efficiently linking transportation and land uses utilizing multiple transportation modes. To carry out this goal, the TLC Element lists the following objectives:

- Prepare a TLC Plan that identifies policies, programs, and projects for transportation/land use linkages in Solano County.
- Develop a TLC Plan that:
  - Identifies TLC concepts
  - Identifies candidate TLC and enhancement projects
  - Develops a competitive grant process, which the STA's member agencies can apply to for TLC or enhancement projects.

Alternative Modes Element. The Alternative Modes Element recognizes the significant benefits of small-scale investments that link transportation and land uses. This Element contains policies and strategies to implement local TLC projects, encourage redevelopment efforts, add housing and economic vitality to older business and community centers, and provide pedestrian, bicycle and transit links to these centers.

Within the Alternative Modes Element, STA has identified the following goal: "Emphasize that Alternative Transportation Modes are an integral part of travel and commuting in Solano County, by implementing and maintaining a transportation system that provides for transit integration and makes the use of alternative modes convenient, safe, efficient, and cost effective." A pedestrian-related objective defined for that goal is to "Implement Short and Long Range Bicycle and Pedestrian Trail Systems." The following policy actions are stated for this objective:

1. Update the Countywide Bicycle Plan periodically and develop a Countywide Pedestrian Plan to maintain eligibility for State and Federal funding.
2. Provide funding only for bicycle and pedestrian projects included in the Countywide Bicycle Plan and Countywide Pedestrian Plan.
3. Coordinate with local jurisdictions to ensure that appropriate opportunities for bicycle and pedestrian connections are planned, constructed, and maintained.

Countywide Bicycle Plan. The main purpose of the Countywide Bicycle Plan is to encourage the development of a unified bicycle system throughout Solano County, with connections between all major origins and destinations and links to surrounding counties. The Plan is overseen by STA's Bicycle Advisory Committee. The Solano Countywide Bicycle Plan was originally adopted in 1995. Through implementation efforts and a series of updates, it has been used successfully to develop regional bikeway segments and secure regional, state, and federal funding. The Bicycle Plan contains policies and design standards to support the planning and implementation

of bicycle transportation improvements. Because many of the planned bicycle routes are Class I multi-use paths, the Bicycle Plan has an important relationship to the Pedestrian Plan.

Other Pedestrian-Related Studies. The Countywide Pedestrian Plan builds on several previous phases of studies and plans related to pedestrian connections undertaken by the STA:

Solano Countywide Trails Plan. Completed in May 2002, this was an inventory and prioritization of all existing and planned trails and pathways in Solano County. This included routes and plans of all the STA member agencies, and regional trail groups such as the San Francisco Bay Trail Project and the Bay Area Ridge Trail Council.

Vallejo Bay/Ridge Trail Connector Project. Completed in June 2004, this study included preliminary engineering, environmental documentation and Caltrans encroachment permit application/negotiation for a specific key pedestrian connection project. This trail will connect the Bay Trail, Ridge Trail and local neighborhoods along and across I-80 to the new multi-use trail on the Carquinez/Al Zampa Memorial Bridge. It will be a key part of a bridge-to-bridge pathway system that ultimately would be part of a loop around the Carquinez Strait.

Transportation and Land Use Toolkit. This document is a "toolkit" guide for creating transit, bicycle and pedestrian-friendly communities. This was completed for a conference on Transportation for Livable Communities hosted in April 2003 by STA, the Yolo-Solano Air Quality Management District, and the Yolo County Transportation District.

Bay Trail Focus Element. Completed in February 2004 as an element of the Countywide Trails Plan, this document identified potential routes and alternatives for the regional San Francisco Bay Trail in Solano County. This addresses routes in Benicia and Vallejo to close gaps in a route from the planned multi-use path on the Benicia-Martinez Bridge to the path on the new Carquinez Bridge. The ultimate goal of the Bay Trail Project (see Section 4.4.c for more information on the Bay Trail Project) is to complete a multi-use path, or sidewalks/pedestrian paths and bike lanes, through this entire alignment and north to Napa County as close as possible to the Bay and linking historic, recreational, and environmental features along the Bay. Although primarily recreational, the Bay Trail also benefits local pedestrian and bicycle transportation. In Solano County, much of the Bay Trail alignment is shared with the Bay Area Ridge Trail (see Section 4.4.d).

4.3 CITY PLANS AND POLICIES

4.3.a BENICIA

Benicia General Plan (1999). The Circulation Element states, "Certain areas of Benicia are very walkable. The Downtown, lower Arsenal, and waterfront areas provide closely spaced land uses and relatively flat topography, as well as a pleasant physical environment. The northern residential and industrial areas are less pedestrian-friendly, with hilly terrain and longer distances between uses."

The following list of goals excerpted from the General Plan relate to the enhancement of Benicia's small-town atmosphere of pedestrian-friendly streets and neighborhoods:

- Give priority to pedestrian safety, access and transit over automobile speed and volume.
- Where feasible redesign corner radii to corners with tight radii to slow vehicles and alert drivers to pedestrians in crosswalks.
- Consider reducing lane width, as one method of slowing traffic and making room for parking, wider sidewalks, or bike lanes.
- Where feasible, provide pedestrian sidewalks in all residential areas along both sides of the street.
- Evaluate the feasibility of finishing sidewalks along streets where they are currently lacking.
- Identify areas where sight distance for vehicle drivers and pedestrian safety can be improved with signs, tree placement, landscaping, parking policy, building design, and streetscape. Prepare a program and schedule for implementing these improvements.
- Identify areas where crosswalk safety can be improved through better lighting and striping, prohibiting right turns on red at specific intersections, installing pedestrian-activated push buttons for signals, installing a textured or raised paving material, and employing crossing guards for school children. Prepare a program and schedule for implementing these improvements.
- Make pedestrian and bicycle circulation, and safety improvements a high priority for transportation funding, utilizing locally generated revenues and State and Federal grants.
- Improve safety and pedestrian movement by building curb extensions that narrow the overall width required by pedestrians to cross the street at major pedestrian waiting areas at street intersections, sidewalks, and landscaped areas.
- Identify where adequate lighting for pedestrians in urban areas is needed. Install additional lighting as appropriate.

- Encourage the development of pedestrian paths in hill areas as a way to link neighborhoods to schools, parks, employment centers, and convenience commercial destinations.

The General Plan further notes that the need for and feasibility of a pedestrian bridge linking the middle and high school should be studied.

Arsenal Historic Conservation Plan (1993). In the section titled "Designation and Improvements of Pedestrian Ways," it is noted that there are a number of existing pedestrian ways in the Arsenal District, principally concrete stairways, which connect different sites and subareas. Most of these stairways are on private property and many are blocked for safety or security. The Arsenal Plan recommends taking the possible public access of these stairways into consideration when issuing new permits, if public access is feasible.

The Plan notes that the roadway connecting Jefferson and Adams Streets has no sidewalks, so future development of pedestrian access should be considered. Other potential sites for pedestrian access are along Jefferson Street connecting the Officer's Duplex with the Commanding Officer's Quarters and Clocktower, as well as in the upper Arsenal, connecting the Camel Barns with the Magazine.

Benicia Parks, Trails and Open Space Master Plan (1997). This document is a very thorough and extensive master plan for the City of Benicia's parks, trails, and open space. Chapter 4, dealing with the City's trail system, begins with a list and definition of the five types of trails within the system. The five trail types are: on-road bicycle routes, on-road bicycle lanes, paved community trail/bike paths, improved community trails, and interpretive trails. Paved community trail/bike paths are the type most pertinent to the Countywide Pedestrian Plan

The document contains several maps and figures of the trails, parks, and open space. It closes with costs, phasing, and suggested funding for implementation of the Master Plan.

Downtown Streetscape Design Plan (1990). This plan includes the following design standards that affect pedestrians:

- Elements should be of pedestrian scale and of historical character but should not be overly ornamental.
- Inconsistent sidewalk paving on First Street will be gradually replaced until it is all composed of exposed aggregate with a uniform aggregate mix and red brick banding.
- Existing cobra head light fixtures should be replaced with smaller, pedestrian-scaled fixtures.
- Varied benches along First Street will be replaced with uniform furnishings.

4.3.b VALLEJO

Vallejo General Plan (1999). The Circulation and Transportation Element (CTE) records a non-motorized transportation goal of having safe and pleasant access for pedestrians throughout the community. To carry out that goal, the City has instituted the following policies:

- Provide wide sidewalks, plazas, street furniture, street trees, and arcades in intensive shopping areas to increase pedestrian movement and comfort.
- Provide safe pedestrian crossing, e.g., signalized crosswalks and pedestrian overpasses, on major streets where day-to-day activities warrant them. Pedestrian walkways should be provided between residential neighborhoods and high use areas such as schools, parks, and commercial centers. The walkways should be safe for adjoining property owners and users.
- Ramps should be installed in all public facilities and at all sidewalk corners and midblock crossings so that disabled persons may participate more easily in routine community activities. New development should follow the handicapped regulations of the Office of the State Architect (Title 24) and the Americans with Disabilities Act (ADA).

The CTE also states, "Increasing pollution levels, energy consumption and travel costs can be expected if the private automobile continues to be the primary mode of transportation. Transit, including public and private and non-motorized forms such as bus systems, vanpooling and bicycle and pedestrian ways, are emphasized as alternatives to the private automobile." The CTE goes on to recommend that when evaluating future expansion of streets and highways, planners should consider incorporation of public transit, bicycle and pedestrian rights-of-way, and distribution of goods and services as a system to maintain the community, rather than as a system devoted solely to the accommodation of the private automobile.

The Natural Resources Element (NRE) includes an air quality goal of reducing the air quality impact associated with future development in Vallejo. One method by which this shall be achieved is by promoting mixed land use development. The NRE states, "The provision of commercial services such as day care, restaurants, banks and stores near to employment centers can reduce auto trip generation by promoting pedestrian travel. Providing neighborhood commercial and park uses within residential developments can reduce short auto trip generation by making pedestrian and bicycle trips feasible."

The Educational Facilities Element of the General Plan states that the basis for dividing the Vallejo City Unified School District (VCUSD) into attendance areas is a

"neighborhood school" concept, with a centrally located school facility in each area within a recommended walking distance for students attending that school. VCUSD policies for the distances are the following: 1.5 miles for elementary school students; 2.25 miles for junior high or middle school students; and 3.0 miles for senior high school students.

Vallejo Trails Master Plan (1988). This document, prepared for the Greater Vallejo Recreation District, speaks about the benefits of having trails for non-motorized traffic and sets forth the goal of this Master Plan as providing, "…the residents of the City/District with an integrated network of recreation trails for hikers and joggers, bicyclists, and equestrians that will enable them to move from the urban landscape to the rural and natural landscape, around the City, along the water's edge (where feasible) and from one recreational facility to another."

The document provides goals, policies, guidelines, and actions as well as general design guidelines. The document also defines trail types, staging areas and trailheads and gives specific design recommendations for hiking and equestrian trails and bikeways and bicycle trails. Many of the trails on the Master Plan map are urban or suburban trails in landscape or open space corridors that have been or will be implemented by City-operated improvement districts funded by development projects.

Mare Island Specific Plan (1999). The section covering transportation states, "There are 8.3 miles of sidewalks on the island, translating into about 24% of the street system. Sidewalks are provided on at least one side of all residential streets and on many of the central island streets. The Mare Island Causeway provides a sidewalk into Vallejo. Pedestrian-activated signals and crosswalks are well developed."

The Mare Island Specific Plan also states that the pedestrian and bicycle system is part of the traffic mitigation program for the island to minimize auto traffic and required roadway capacity. Two key components of this system, "…are bicycle and pedestrian facilities, capitalizing on the unique conditions imposed by the island itself and the history of bicycle usage on the island. Ideally, residents would be able to walk or ride a bike to work and for shopping purposes." Specific elements of the planned pedestrian circulation system are described in the Vallejo Pedestrian Routes and Destinations section of the Countywide Pedestrian Plan.

4.3.c FAIRFIELD

Fairfield General Plan (2002). The Land Use Element (LUE) encourages pedestrian and/or transit-oriented projects at unit densities that make transit feasible. According to the LUE, planned land uses should be evaluated around transportation centers to assess the feasibility of a high-density residential project oriented to transit.

The LUE also advocates revising the City's zoning ordinance to permit residential and higher-end commercial land uses within the same district, provided the uses are integrated as a mixed-use development with shared parking and pedestrian-oriented amenities. There will be a greater emphasis than in the past on pedestrian-oriented development (POD) and transit-oriented development (TOD).

The Urban Design Element (UDE) promotes pedestrian and bicycle orientation through separated sidewalks, bicycle paths, interior walkways, planting of canopy trees adjacent to pedestrian paths, etc. The UDE also encourages the use of traffic circles, hardscape treatments at crossroads, and other traffic-calming devices in the street layout and land plans for new residential subdivisions, in order to make new neighborhoods friendlier to the pedestrian.

The Circulation Element (CE) includes several pedestrian-related policies:

- Seek to establish a mix of land uses throughout the City that will be conducive to the use of alternative modes of transportation, such as transit, paratransit and bicycle. Pedestrian travel shall be encouraged through the location of employment centers and commercial development within proximity of residential areas.
- Continue to provide multi-use trails which accommodate pedestrian and bicycle use where appropriate and work toward providing separate trail facilities for pedestrian and bicycle use.
- Minimize bicycle/pedestrian/motor vehicle conflicts by providing proper trail, street and intersection design and separation.
- Provide pedestrian facilities that are safe and pleasant to use.
- Implement street standards that include sidewalk or walkways on both sides of streets, where appropriate.
- Consider using landscaping or physical barriers on high-capacity arterials to separate vehicles and pedestrians.
- Consider constructing pedestrian overpasses where heavily traveled pedestrian routes cross busy intersections.
- Design access ways to school facilities that will ensure the safety of children.
- In conjunction with local school districts, develop public education programs to promote pedestrian safety.
- Require new commercial and residential developments to provide walkways that are safe and pleasant to the user.
- Encourage the location of basic shopping and services within approximately 1,300 feet of residential and industrial areas.

The CE also addresses the types of pedestrian traffic in the City.

> Pedestrian traffic in the City is primarily generated by children; however, many adults walk for pleasure, and walking is often a secondary means of short distance travel. In addition, persons

> operating wheelchairs are considered pedestrians. Since children comprise the largest portion of pedestrians, areas with a large concentration of children, such as schools and playgrounds, demand additional attention to the separation of pedestrians and vehicular traffic. The pedestrian is often intimidated by traffic passing by, noise from traffic, extreme weather conditions, air pollution, and fear of attack. Pedestrians need to be able to move about comfortably and freely. Neighborhood design and the relative proximity to basic goods and services can promote pedestrian travel and safety.

The Public Facilities Element states that, "Wherever possible, school sites shall be integrated with recreation parks and community recreation corridors to maximize the benefits of recreation experience as part of the education process and to permit pedestrian and bicycle access with a minimum of interruption by the street system."

Fairfield Master Trails Plan. Fairfield's Master Trails Plan is a comprehensive document that discusses the existing trails and a proposed trail system, and sets forth design guidelines and implementation suggestions. As well as listing the existing trails, activity centers are noted because these are places that can attract trail users. These activity centers are broken into the following categories: commercial centers, community centers, employment centers, golf courses, open space areas, parks, and schools.

The plan proposes that there are "…three general trail routes that are central to the overall trail system in and around the city." These three trail routes are: Fairfield Open Space Route, Lagoon Valley-Laurel Creek Route, and the Fairfield Linear Park Route. The Fairfield Linear Park Route is the pathway most important to the Countywide Pedestrian Plan.

Fairfield Design and Development Guidelines. Published early in 2004, the Fairfield Design and Development Guidelines are intended to guide staff and project proponents to an understanding of the City's expectations for new development. The Guidelines encourage pedestrian-oriented design, including mixed-use development, pedestrian-friendly streetscapes, and commercial districts with outdoor community gathering places.

4.3.d SUISUN CITY

Suisun City General Plan (1992). Suisun City's General Plan briefly addresses pedestrians by noting that there is, at present, a system of bicycle routes that vary from off-street bicycle paths to designated routes along streets. With the completion of the City's arterial and collector street system, the opportunity exists to designate additional bicycle and pedestrian circulation routes and to "fine-tune" existing routes.

Suisun Railroad Avenue Pedestrian Safety Study (2002). The Study notes that high school and middle school students are the most frequent users of unofficial and often dangerous railroad crossings. Other children and adults are noted as frequent users in order to access community destinations across the tracks. The study identified three problem areas where pedestrians are using unofficial and uncontrolled crossings to travel between destinations in Suisun City and Fairfield:

- Marina Boulevard
- Blossom Avenue
- Worley Road

The study proposed a number of improvement alternatives that mitigate or eliminate the unauthorized crossings.

4.3.e VACAVILLE

Vacaville General Plan (1990). The Land Use Element contains provisions for an Urban High Density Overlay in the Downtown Zone District, to provide opportunities for an intensive form of residential development in and adjacent to Downtown, including townhouses, condominiums, and apartments with relatively high land coverage, subject to appropriate standards. This overlay is also permitted in several of the City's commercial districts as a mixed use development.

The Transportation Element discusses pedestrian traffic, and states the need to develop bike and pedestrian routes that provide access to schools, historic sites, governmental services, major commercial centers, parks and regional open space. Significant pedestrian-related policies include:

- Develop bike and pedestrian routes that provide access to schools, historic sites, governmental services, major commercial centers, parks and regional open space.
- Ensure safe, pleasant and convenient pedestrian paths, sidewalks, and trails to accommodate all segments of the population.
- Develop a series of continuous pedestrian walkways within Downtown and residential neighborhoods.

Vacaville Comprehensive Parks, Recreation and Open Space Master Plan (1990). This Plan is a thorough document that provides background information on open space, trails and pathways, and sets forth a master plan with policy recommendations, development programs, and implementation suggestions.

The pertinent sections of this document for the Countywide Pedestrian Plan are the Trail Policies section and the Trails and Bikeways section in the Development Programs chapter. The Policy section discusses the applicable and guiding policies for establishing a trail system. Policy 4.6-I6 states: "Develop a Trails and Trail head System. These trails should provide access to and linkage of recreation sites and

facilities. Provide an alternative circulation system where more feasible and appropriate."

The Policy section is further broken down into purpose, planning, design, implementation, trailhead areas, management, trail naming and trail use sections. Within the Planning section, on page 119, one important policy states: "Coordinate with neighboring communities, Solano County, utility districts and other local agencies to provide connecting trail easement that link Vacaville's trails to open space, regional parks, local parks, the downtown area, and other trail systems."

The Program section describes the different types of trails and then lists existing and proposed options for each type. The same is done for bikeways and the different classes of bikeways.

Neighborhood Traffic Management Policy (1999). The City of Vacaville's Traffic Management Policy defines neighborhood traffic management as a "Study of the current traffic characteristics of neighborhoods and development of the means to impact these characteristics positively to better meet the needs and desires of the neighborhood." The term "neighborhood traffic management" focuses the consideration on residential streets, directly involving pedestrians. The Traffic Calming Study conducted prior to implementing the Policy concluded that there are two major complaints by Vacaville residents about residential streets: "Speeding on my street," and, "Too much traffic on my street." Therefore, the goals and objectives of the Policy include:

- Affect driver behavior, and improve driver concentration and awareness;
- Improve neighborhood livability by encouraging adherence to the speed limit and seek to remove incentive for use of residential streets as "short-cuts";
- Encourage citizen involvement in solutions to neighborhood traffic problems;
- Educate citizens as to the advantages and disadvantages of traffic calming devices;
- Effectively allocate limited public resources by prioritizing traffic mitigation requests;
- Appropriately apply traffic calming measures in existing and proposed residential developments; and
- Balance the conflicting public safety interests of traffic calming and emergency response.

4.3.f DIXON

Dixon General Plan (1993). The Transportation and Circulation Element of the Dixon General Plan states, "The City shall support walking as a transportation mode, which promotes personal health and recreational enjoyment while minimizing energy

consumption and air pollution. The City shall improve and expand existing pedestrian facilities and provide connections to newly developed areas, where feasible."

4.3.g RIO VISTA

Rio Vista General Plan (2001). The Circulation and Mobility (CM) section of the Plan extensively covers pedestrian traffic and pedestrian-related issues. According to the CM section, "Pedestrian traffic in the City is primarily generated by children; however, many adults walk for pleasure, and walking is often a secondary means of short distance travel. In addition, persons operating wheelchairs are considered pedestrians." The CM section also notes that where development maintains a pedestrian-oriented environment and locates destinations within a 5- to 10-minute (1/4 to 1/2 mile) walking distance, many short-distance automobile trips can be eliminated.

The CM section goes on to state that the relationship of street frontage, sidewalks, trees, front yards and house design is considered critical to creating the traditional "village" character of Rio Vista. It is important that neighborhoods accommodate the automobile without sacrificing pedestrian ease. The General Plan envisions that all new streets constructed in Rio Vista will have "parkways" separating sidewalks from vehicles, with, in most cases, 5 feet of landscaped parkway and street trees planted at 30-foot intervals.

The CM section notes, "Street improvements should be viewed as an opportunity to enhance the existing bicycle and pedestrian system. Sidewalk width, intersection configuration, and proximity to heavy traffic will be considered in assessing the need for connector trails and pathways. The City will consider the use of alternatives, such as continuous sidewalks, pedestrian and bicycle bridges, underpasses, and designated routes through large developments to prevent long detours for bicyclists and pedestrians."

The CM section emphasizes the need to use planning to encourage people to walk to and from and within developments. Clustering buildings around a core, placing parking behind buildings, or separating parking areas into smaller lots or courts all reduce the distances between buildings. The City will encourage the use of landscaping, shade trees, benches and lighting to make walking more pleasant.

Regarding Pedestrian and Bicycle Mobility, the CM section lists the following policies:

- The City shall provide a continuous system of sidewalks along streets.
- The City shall complete the comprehensive pedestrian and bicycle systems, including off-street multipurpose paths and trails linking major new development areas with the waterfront.

- The City shall develop pedestrian and bicycle paths in the trail corridor and along the waterfront.
- The City shall require maintenance assessment districts, lighting and landscaping districts, homeowner associations, and other appropriate funding mechanisms for maintenance of bikeways and trails.
- The City shall require nonresidential developments to build clearly identified internal walkways that are distinct from roadways and directly connect building entrances to public sidewalks and transit stops.
- The City shall ensure that developments are designed carefully to prevent parking lots, loading and delivery areas, and sound walls and buffers from becoming barriers to pedestrians and bicyclists.

4.4 Regional Plans and Policies

4.4.a North Bay Corridor Study

The North Bay Corridor Study was completed in December 1997 for the Metropolitan Transportation Commission. This study covered the area between Route 101 and I-80, including Highways 12, 116, 121 in Napa and Sonoma Counties, and Highway 37 in Solano County. The major issues addressed by the Study, which was associated with a proposal to widen Highway 37 to four lanes, were future transportation needs, enhancement of wetlands and wildlife habitat, and opportunities for trails.

The Study describes the existing roadway conditions for bicycles and pedestrians along the corridor and makes detailed recommendations for implementation of planned Bay Trail routes and other potential future trail routes as part of future transportation improvements, including trails in and connecting to urban areas of Vallejo.

4.4.b Caltrans Rail Right-of-Way Study

The Caltrans-sponsored Rail Right-of-Way Study, projected for completion in October 2004, is intended to discover the potential for joint use and reuse of existing and abandoned rail rights-of-way for non-motorized uses, as well as passenger rail and other transit. This study was funded by a Caltrans Community Based Transportation Planning Grant. The project will develop criteria for evaluating the utility of these rights-of-way for joint use and/or reuse and identify "high potential", "moderate potential" and "no or low potential" corridors for reuse and joint use operations for all modes. This will be useful for the potential creation of public trails from former rail lines (rails-to-trails) for walkers, cyclists, hikers, runners, and physically challenged individuals to exercise in the Bay Area's urban, suburban and rural environments. These corridors can serve as community recreation facilities and

as transportation facilities by linking neighborhoods and schools to parks, waterfronts, recreational centers and other facilities.

A primary result of this project is a comprehensive database of current and abandoned rights-of-way in Geographic Information System (GIS) format (see Figure 4.1).

4.4.c THE BAY TRAIL PROJECT

In 1987, then-State Senator Bill Lockyer conceived of a plan for a so-called "Ring around the Bay," a hiking and bicycling trail that would encircle San Francisco and San Pablo bays. He authored Senate Bill 100 (SB 100) authorizing the Association of Bay Area Governments (ABAG) to "develop and adopt a plan … for a continuous recreational corridor which will extend around the perimeter of San Francisco and San Pablo bays."

SB 100 required that the plan include a specific trail route; the relationship of the route to parks and other recreational facilities; links to existing and proposed public transportation facilities; an implementation and funding program for the trail; and provisions for implementing the trail without adversely affecting the natural environment of the bay. The Bay Trail Plan was adopted by ABAG in July 1989, and its policies and proposed alignment continue to guide the development of the Bay Trail. The San Francisco Bay Trail Project, a nonprofit organization administered by ABAG, was created in 1990 to plan, promote and advocate implementation of the Bay Trail. By 2004, more than one-half of the Bay Trail's ultimate alignment has been developed.

The Bay Trail route in Solano County is highlighted on the Benicia and Vallejo maps. Some of these routes are under study for improvement or realignment. With funding from the San Francisco Bay Trail Project, the Solano Transportation Authority commissioned a study, the *Bay Trail Focus Element*, during 2003 to determine potential trail routes and feasibility to close gaps in the current Bay Trail alignments in Benicia and Vallejo. These routes are all shared by the Bay Area Ridge Trail in this area. The overall objective of the study was to create a continuous trail connection between the planned or existing pedestrian/bike trails on the Benicia-Martinez and Al Zampa Memorial (Carquinez) Bridges.

4.4.d THE BAY AREA RIDGE TRAIL

The Bay Area Ridge Trail Council is a non-profit organization working to create a 500 mile ridgeline trail system connecting the San Francisco Bay Area's remarkable greenbelt of parks and open spaces with its diverse communities. It was founded in 1987, and has been active in Solano County since 1989. The Council is dedicated to planning, promoting, acquiring, constructing and maintaining the multi-use Bay Area Ridge Trail that, when complete, will connect over 75 parks and open spaces. Already 265 miles of Ridge Trail have been dedicated and opened to the public

throughout Bay Area's 9 counties. In Solano County, a significant portion of the current Ridge Trail Route is shared with the Bay Trail Route. The existing and planned routes are highlighted on the Benicia and Vallejo maps.

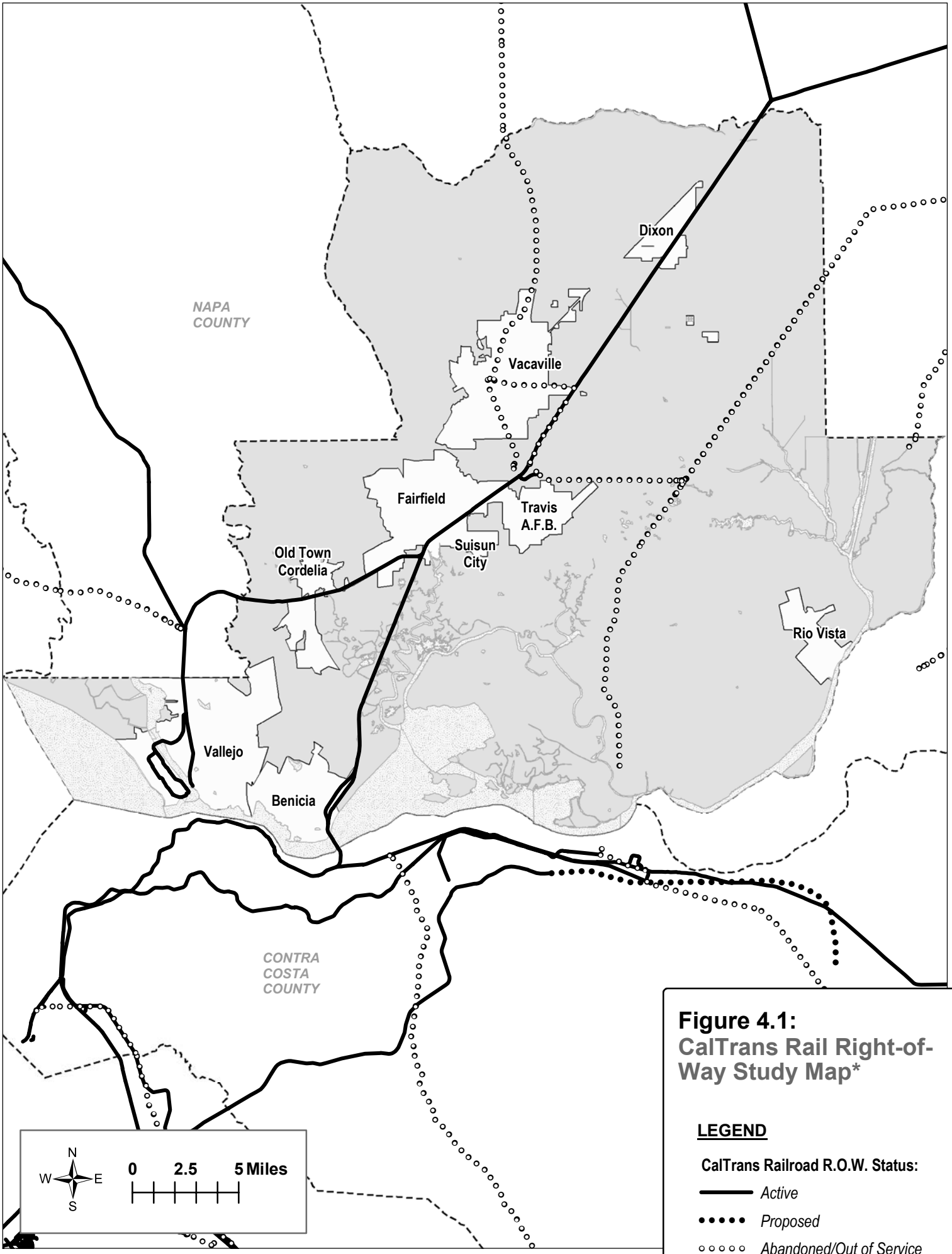


Figure 4.1:
CalTrans Rail Right-of-Way Study Map*

LEGEND

CalTrans Railroad R.O.W. Status:

Active

Proposed

Abandoned/Out of Service

** Data derived from the CalTrans Rail Right-of-Way and Abandoned Rail Corridors Evaluation database, last updated on February 3, 2004. (see http://cal-rail-row.info/ for more details)*

5 GUIDELINES FOR PLANNING & DESIGNING PEDESTRIAN ROUTES & PLACES

Planning and design must occur at all stages and scales to successfully encourage and facilitate pedestrian activity and circulation. Information on planning and designing for pedestrians is organized into four different topic areas:

1. Land Use
2. Site Planning & Design
3. Street System Planning & Layout
4. Pedestrian Routes, Spaces, & Amenities

5.1 LAND USE

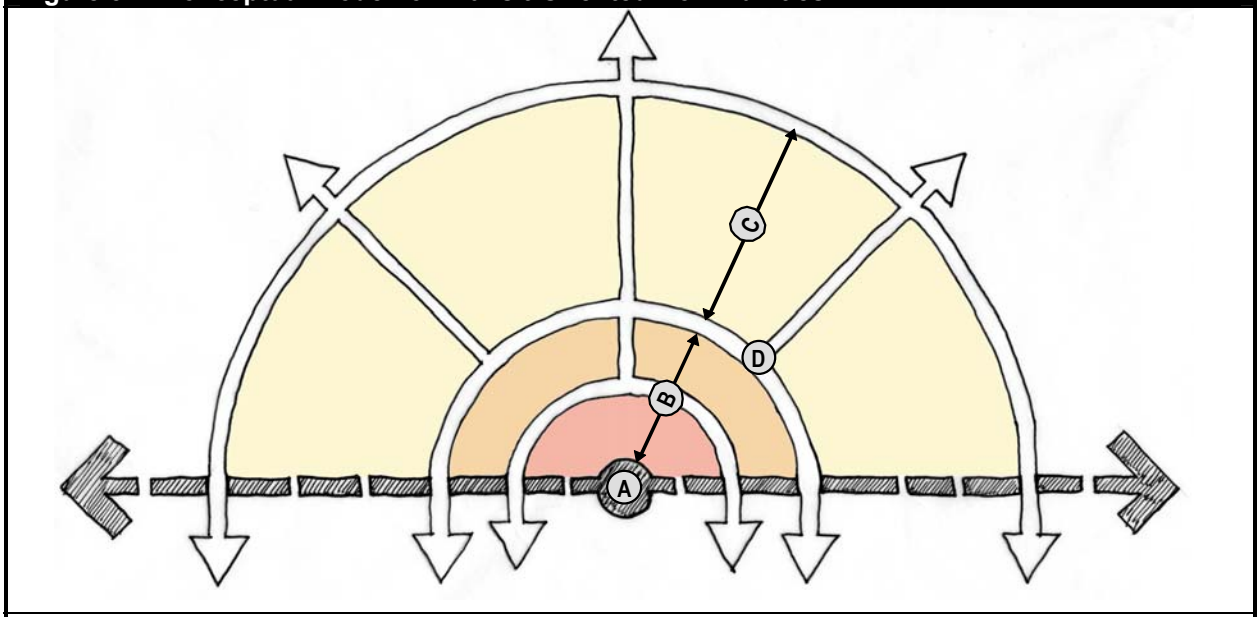
Land use planning is the foundation for creating and encouraging pedestrian activity. It shapes the way land is used and laid out, and guides the policies that drive retail, residential, and transportation zones.

Plan for Walkable Communities. A key pedestrian planning principle is to adopt land use policies that facilitate walkable communities. As a rule-of-thumb, walkable zones or neighborhoods contain a mix of housing, shopping, and commonly used civic services (e.g. post office, public library) within 1/4 mile to 1/2 mile of one another. The spatial extent of walkable projects and communities ranges from 8 to 400 acres. An 8-acre project is just large enough to accommodate a mutually supportive mix of uses and compact residential densities, while a 400-acre project is just small enough to place all housing, retail, and other uses within a comfortable walk of each other. See Figure 5.1 for a good model for planning and designing walkable communities.

The Promenade Live-Work (9 du/ac) subdivision in downtown Suisun City creates a pleasurable walking environment.

Plan for Higher Densities. Walkable neighborhoods and projects typically have compact residential densities. Compact densities are the 'fuel' behind walkable communities. They add to the vibrancy and character of a community and generate the amount and frequency of pedestrian traffic needed to sustain adjacent businesses, services, and transit ridership. Compact density does not necessarily translate to *high* density. Successful pedestrian-oriented projects have been created using residential densities as low as 8 dwelling units per acre (du/ac) or as high as 30 du/ac. Typically, compact densities range from 12 du/ac to 24 du/ac in walkable, transit-oriented developments.

Figure 5.1: Conceptual Model for Transit-Oriented Communities



Transit Oriented Developments (TOD)serve as useful models for planning and designing walkable communities. They are characterized by mixed-use, walkable developments with convenient and direct connections to express transit service. TOD's can occur as infill developments within existing cities or as new developments within urban growth boundaries. As such, they are built along either existing or planned transit routes that afford residents convenient access to local and regional destinations without the use of an automobile.

A. TRANSIT HUB.

TODs are built around a viable transit hub, with express transit service in 10-15 minute intervals. Alternatively, TOD transit hubs can be served by a feeder bus line within 10 minutes of express transit service.

B. PRIMARY / CORE TOD AREA.

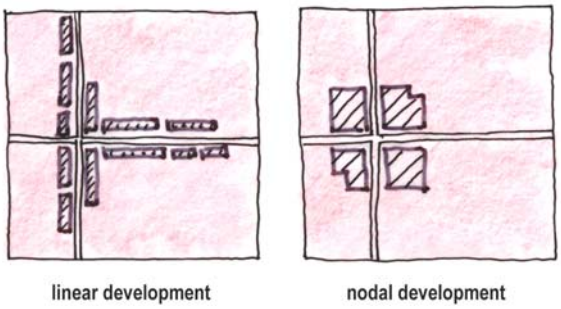
The mixed-use primary area has an approximately 1/4 mile extent to facilitate a comfortable 5-10 minute walk from the transit hub to its outer edges. The higher residential densities (about 12 units or more per acre) and wealth of commercial activities and retail spaces support the transit hub and create a vibrant community.

C. SECONDARY AREA.

Secondary areas should complement and help support the TOD core. The uses found in this surrounding area may be lower density housing, employment centers, park-and-ride lots, schools, and community parks. Uses that may compete with and subtract from primary area uses are generally discouraged.

D. CIRCULATION ROUTES.

Circulation within the primary and secondary areas should be direct and uninterrupted. Bicycle and pedestrian circulation is emphasized in the primary area, and auto traffic is accommodated in the secondary area.



Think Nodal – Not Linear. The configuration of successful pedestrian-oriented developments is nodal rather than linear. That is, they are developed in concentrated nodes or centers rather than long, stretched-out corridors. Linear developments accommodate cars and discourage pedestrian access by creating long retail and commercial strips that extend beyond a comfortable walking distance. Linear developments discourage pedestrian activity by their very nature because they are surrounded by parking lots and are usually located along busy thoroughfares with high traffic volumes and speeds. Therefore, pedestrian-oriented developments should occur in nodes that concentrate activity and allow pedestrians to reach their desired destination within a comfortable walk.

Provide a Range of Densities and Uses. Pedestrian-oriented neighborhoods should consist of a gradient of densities and uses. Gradual transitions between uses and densities are desirable over abrupt changes because they minimize and buffer potential impacts on adjacent uses. For example, an existing low-density single-family residential neighborhood can be buffered from a new high-density residential development by placing medium-density housing or a park in between.

Promote Pedestrian-Oriented Uses and Relax Parking Requirements. Pedestrian-oriented areas avoid uses such as drive-through businesses, gas stations and light industrial parks, and certain retail uses that are geared toward the use of the car and can disrupt or discourage pedestrians by requiring expansive parking lots, consuming large parcel sizes, and otherwise creating an uninviting pedestrian environment. Parking standards and requirements can be relaxed in pedestrian-oriented neighborhoods because the need for auto use has been reduced by providing services, housing, and retail within walking distance of one another. Specific ways a city can relax parking requirements in pedestrian-oriented areas while meeting parking needs include:

Large expansive parking lots disrupt pedestrian circulation and diminish the quality of the walking environment.

- Allowing on-street parking to count towards the parking requirements of a given zone (residential, office, or commercial).
- Allowing parking reductions in exchange for pedestrian amenities.

- Enabling time-dependent parking standards (i.e. parking spaces can be for retail or office use during typical work hours and for residential use during after hours).
- Requiring the use of valet parking for popular areas or areas with limited parking.
- Increasing transit services and restricting parking within the immediate area of a transit station to increase pedestrian activity and use. This encourages drivers from outlying areas to park along the fringes of a pedestrian-oriented neighborhood, walk through it and make use of its services (i.e. buy coffee and a newspaper, mail a parcel at the post office) on their way to the transit hub.

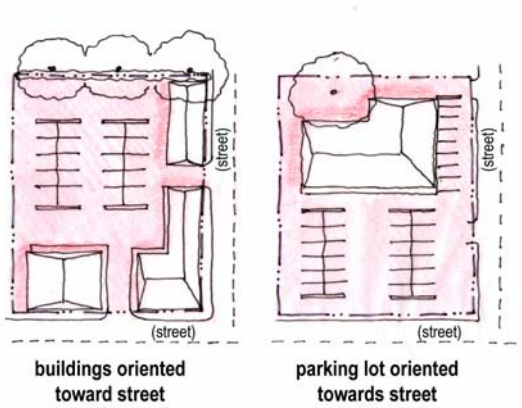
Integrate Transit. Walkable communities are built around or within walking distance of public transit. Ideally, they are built around rail, bus, or ferry transit hubs that have frequent (i.e. 15-30 minutes) public transit connections to outlying areas. At a minimum, walkable communities are located within walking distance of a bus stop that connects to a larger transit hub.

The Fairfield Transportation Center (left) and the Suisun City Amtrak Station (right) are good examples of transit hubs that feature frequent transit service.

5.2 Site Planning & Design

Reduce Building Sizes and Footprints. In general, larger building sizes correspond with larger parking lots. Large, retail, grocery, and home improvement centers may not be compatible with pedestrian-oriented neighborhoods. The maximum building footprint for larger buildings in pedestrian zones should be approximately 30,000 sq. ft. (50,000 sq. ft. for supermarkets) to avoid expansive parking lots and distances between store entries that exceed comfortable walking distances. Larger buildings can be made more pedestrian friendly by requiring that they be two-story. Two-story buildings reduce building footprints and walking time and help to define the streetscape and street frontage. In addition, adding large, transparent display windows along the street frontage can enhance pedestrian interest and comfort.

Orient Buildings to the Street. Placing parking lots along the street frontage reduces streetscape character. Moreover, large parking lots located along sidewalks are uninviting for pedestrians and serve to separate buildings from foot traffic. Locating buildings closer to the street encourages window shopping and strolling, defines the streetscape, and reduces the perceived width of the road, which encourages slower traffic speeds.



Orient buildings toward the street to screen parking, define the streetscape, and improve pedestrian circulation and experience.

Express Local Identity. Provide or reflect a unique neighborhood or district identity by using a shared architectural style throughout a project or by highlighting historical and cultural themes or local environmental features. Consistent themes and styles unify areas, enhance their appearance and walkability, and can aid in wayfinding.

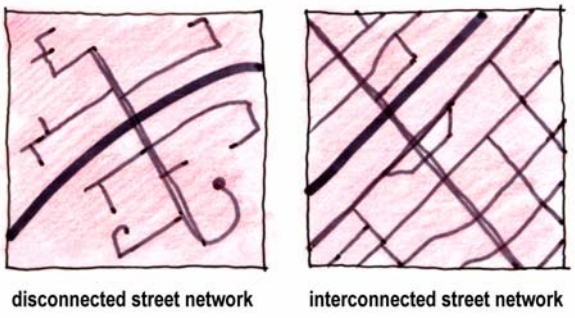
Provide Pedestrian Amenities. Integrate pedestrian-scale design and amenities into residential, retail, commercial, office/employment, and government or civic centers. These amenities encourage pedestrian activity by creating a more comfortable and enjoyable walking environment (see Section 5.4 for more detailed guidelines on pedestrian amenities).

Coordinated plantings, furnishings, and other pedestrian amenities unify the streetscape and enhance the pedestrian experience along West Texas Street in Fairfield.

5.3 STREET SYSTEMS

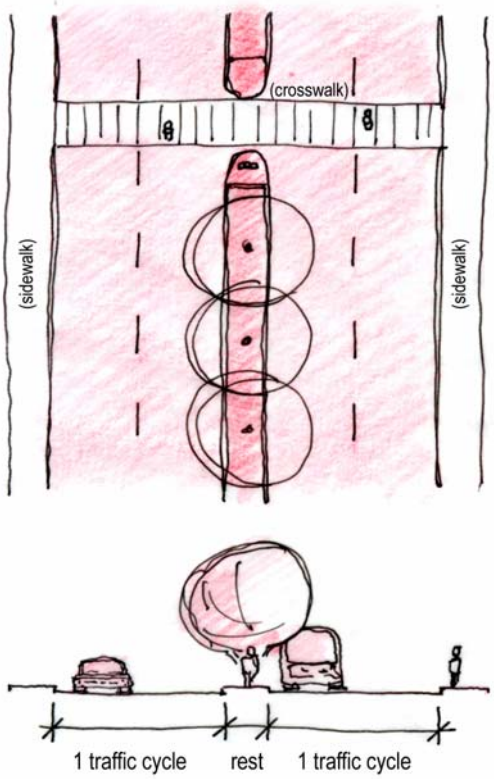
Provide an Interconnected Street System. Pedestrian environments are best accommodated by an interconnected grid-type street network with frequent intersections that allow for better transit coverage and efficient pedestrian access and circulation. Maximum block length should be approximately 340-440 feet. Shorter blocks encourage walking and minimize travel times when navigating the street network on foot. Pedestrian connections should be provided through longer preexisting blocks every 250-300 feet. Intersection spacing should be approximately 600 feet or less for pedestrian zones located along arterial streets, or 1000 feet or less apart in areas with intervening pedestrian connections. To avoid conflicting with pedestrian circulation, driveways should be consolidated where possible to minimize the number of driveways crossing the sidewalk. It may be possible to locate

driveways along less busy cross streets or along alleyways if consolidating them is impractical.



An interconnected street network supports pedestrian circulation by providing frequent connections to adjacent streets, alleys, and other important destinations like transit hubs and retail centers.

Leave Enough Width for Sidewalks and Amenities. Sidewalks are key transportation corridors in pedestrian-oriented districts. When designing new streets, street width should be based on reserving an appropriate amount of right-of-way to include sufficient space for sidewalks and landscaping as well as the desired number of vehicle lanes. Narrow traffic lanes may be preferred over wider lanes in pedestrian zones to slow traffic, minimize the lengths of pedestrian crossings, and improve pedestrian safety. Right-of-way widths should accommodate on street parking because it reduces the need for and size of parking lots and creates a buffer between pedestrians and the traveled way. This buffer increases both the physical and perceived safety of pedestrians, which is an important in successful pedestrian environments. Therefore, vehicle lanes should be 10-11 feet wide and parking lanes should be approximately 7 feet wide.

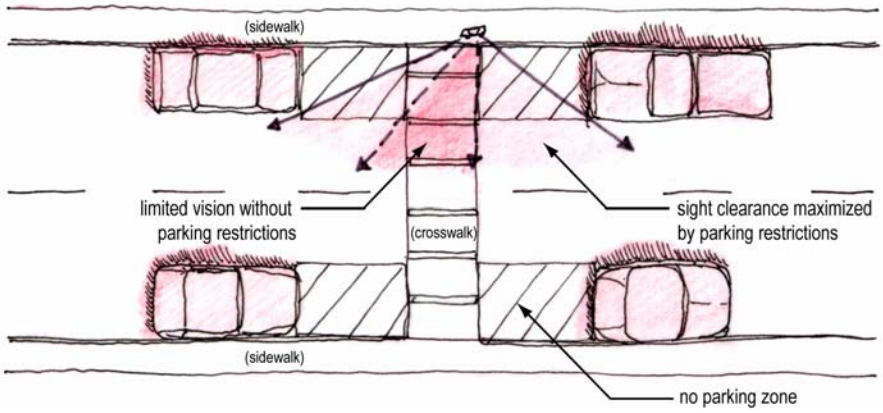


Use median or refuge islands to increase pedestrian safety by providing safe resting spots in the middle of long street crossings.

Provide Frequent, Safe, and Accessible Street Crossings. Without proper pedestrian crossings, streets tend to divide and attenuate pedestrian access and circulation. Therefore, the number of pedestrian crossings should be maximized to prevent streets from dividing a walkable neighborhood. Streets with pedestrian generators such as schools, transit stops and civic centers should include pedestrian crossings as close as possible to controlled intersections and entrances to destinations. In addition, street crossings must be safe, as they account for nearly half

(40%) of all pedestrian-vehicle accidents.[33] The duration of signal intervals should be long enough to allow the average pedestrian to complete a street crossing in one cycle. Provide pedestrian refuge islands or bulb-outs at wide road crossings where pedestrians may be unable to cross during one signal interval, and at wide roads where there are no pedestrian signals. This allows pedestrians to safely cross long stretches of road using two crossing cycles. This increases the safety of all pedestrians, especially the young, elderly, and physically disadvantaged.

There are a number of design interventions that can be used to increase pedestrian safety as well. At intersections, smaller street corner radii should be used to reduce the crossing distance for pedestrians. Prohibit right turns on red signals in busy pedestrian areas – many automobile/pedestrian accidents occur when a driver's attention is directed to oncoming traffic instead of pedestrians entering the intersection on the right. Restrict parking near crosswalks to avoid obstructing the line of sight of pedestrians and drivers. Provide pedestrian-activated warning lights in locations where the number of pedestrians does not warrant a permanent traffic signal and existing traffic signals are spaced far apart. Such lights can be located overhead or embedded in the road surface.[34]



Use median or refuge islands to increase pedestrian safety by providing safe resting spots in the middle of long street crossings.

Incorporate Traffic Calming. Traffic calming is the use of physical roadway interventions to decrease traffic speed and volume. It is frequently used in residential neighborhoods that are subject to through traffic, but is also very useful when creating or preserving pedestrian-friendly districts. Successful traffic calming projects begin with public outreach. Public outreach is crucial because creating street closures or altering street widths and configurations change the public realm and require understanding and support to avoid public distrust and opposition. It is also

[33] FHWA, *"Pedestrian Accidents With Left-Turning Traffic at Signalized Intersections: Characteristics, Human Factors, and Unconsidered Issues"*, p. 1, publication date unknown. (accessible online at: http://safety.fhwa.dot.gov/fourthlevel/pdf/00674.pdf)

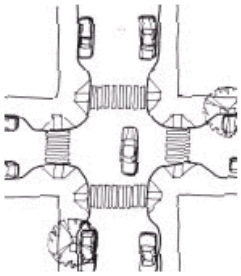
[34] The *Caltrans Traffic Manual* warrants a minimum of 100 pedestrian crossings per hour for any 4 hours or 190 or more during any 1 hour.

important that traffic calming does not benefit some residents at the expense of others. Basic traffic calming guidelines include:

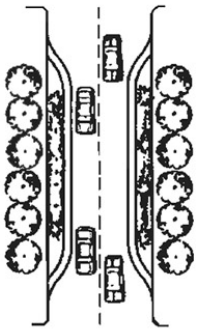
- Consider street closures, one-way streets or traffic diversions, which may be necessary to reduce the level and speed of traffic and provide space to create a pedestrian corridor or district.
- Provide continuous traffic calming measures to maintain low speeds and deter unnecessary acceleration and braking, especially where desired speed limits are less than 25 mph. This may include landscaping or narrowed lanes, speed humps or tables or horizontal deflections every 200-300 feet.
- Post low speed limits (e.g. 15 or 20 mph) and other signage in zones of high pedestrian activity areas to remind drivers that they are entering a pedestrian zone. Speed limits up to 25 to 30 mph may be acceptable on major streets where traffic impacts on pedestrians have been mitigated with parked cars, landscaping, and specialized crossings.
- Use special paving (e.g. textured, colored, unit pavers) or speed humps or tables to slow traffic and remind drivers they are in a pedestrian-oriented area.
- Consider use of traffic circles, chicanes or lateral offsets, neckdowns, bulbouts, center islands, and other traffic diversion measures in pedestrian zones.
- Incorporate landscaping and other decorative features to make traffic calming more attractive and to enhance the environment for pedestrians, cyclists and motorists.

TRAFFIC CALMING TYPOLOGIES

Chicane



Curb Extensions/Bulb-Outs



Neck-Down or 'Choker'

Traditional Narrow Street

Provide Connections to Transit. Streets should accommodate transit stops and shelters to provide maximum connectivity between pedestrian-oriented neighborhoods and outlying areas. In pedestrian areas, streets serving as transit routes should have frequent stops for timely and convenient pedestrian access. Regular openings in walls and landscaping should be provided near transit stops to provide pedestrian access to transit from adjacent areas.

Provide regular access to transit to maximize transit ridership and increase the viability of pedestrian districts.
Photo courtesy of Dan Burden www.pedbikeimages.org

5.4 PEDESTRIAN ROUTES, SPACES, AMENITIES, & LANDSCAPING

Provide Functional Pedestrian Routes. Sidewalks should be located on both sides of the street, except where constrained by topography or unique natural features or resources. In rural settings less formal pathways may be appropriate and pedestrian access on both sides of the street may not be feasible or necessary. Sidewalks should strive to achieve ADA standards where feasible and must take into account the entire range of pedestrian needs (e.g. people confined to a wheelchair, the elderly, and children). Design at least 8 feet of clear pedestrian through space in pedestrian-oriented districts. The 8 foot 'pedestrian through zone' should be clear of any obstructions (see Fig. 5.2 "Anatomy of a Sidewalk" for details). Place utilities such as lighting, electrical, and storm drains, and site furnishings and features outside the pedestrian through zone to avoid interfering with pedestrian circulation and space. Utilities should be underground or, at a minimum, located outside the pedestrian through zone.

Public pathways should be provided through the interiors of blocks to maximize pedestrian connectivity. These pathways should be a minimum of 6 feet wide if they are for pedestrians only, and 12 feet wide if they are to be shared with bicyclists. Twelve-foot multi-use paths should be accompanied by striping and signage to indicate the directions of travel and who should yield to whom. Install safety signage at intersections of streets and multi-use paths to warn cross-traffic and to indicate who yields to whom (refer to Chapter 1000 of Caltrans' *Highway Design Manual* for standards).

Cyclists and pedestrians should be separated where possible by creating a bicycle lane or signed bicycle route on the street. Cyclists should be warned to slow down and yield to those on foot in areas of high pedestrian activity. Sidewalks within the public right-of-way and pathways through the interiors of blocks should be accompanied by adequate pedestrian-scale lighting for nighttime use.

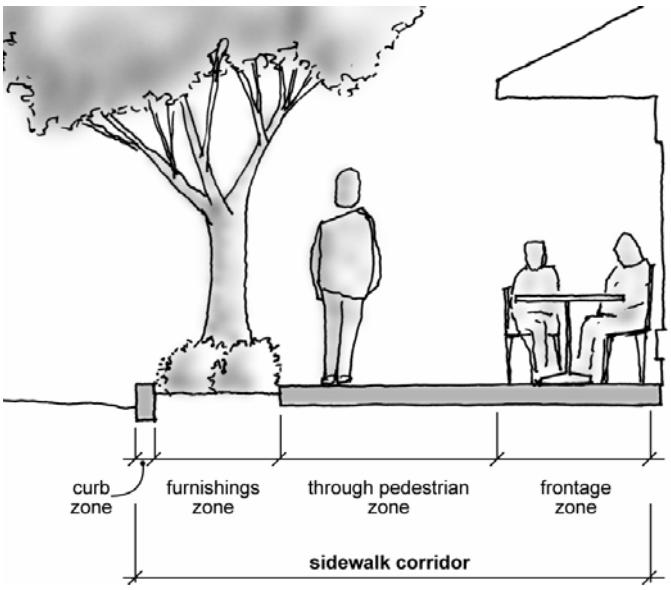
Provide Spaces for Activities and Events. Reserve small to medium sized gathering areas at frequent intervals along city blocks for informal and planned

events. These gathering areas are important nodes in pedestrian districts that provide a rich civic and social atmosphere as well as resting areas and opportunities for vending and other 'booth' retail outlets. Vibrant, bustling gathering areas encourage people to get out onto the streets and walk. They can also enhance transit stops and other 'secondary' street activities.

Figure 5.2: The Anatomy of a Sidewalk

(adapted from the *Portland Pedestrian Design Guide*, pp. A-6 to A-11)

Sidewalks are important allies for planners and designers because they are the main infrastructure improvement that facilitates pedestrian movement. The sidewalk corridor consists of four zones: *the curb zone, furnishings zone, through pedestrian zone,* and *frontage zone.* Each zone plays a critical role in pedestrian movement, sense of security, and enjoyment of one's trip afoot.



Curb Zone

The curb zone keeps water off the sidewalk, provides a grade separation between the roadway and sidewalk corridor, and makes street sweeping more convenient and efficient. Most importantly, it separates the roadway and sidewalk corridor, thereby buffering pedestrians from adjacent traffic.

Furnishings Zone

The furnishings zone provides space for street trees, utilities (e.g. power poles, light standards, parking meters), and pedestrian amenities (e.g. benches). A generous array of street trees is important because they provide pedestrians with physical barriers from traffic and solar exposure. As such, the furnishings zone is essential for creating a sense of protection and safety for pedestrians.

Through Pedestrian Zone

The through pedestrian zone is solely for pedestrian movement. In order to facilitate and maintain consistent pedestrian movement, the through pedestrian zone should be kept clear from any obstructions at all times. The general rules of thumb for sidewalk width apply to this zone:

- 8'-0" min. in pedestrian districts
- 6'-0" min. on city walkways
- 5'-0" min. on local service walkways

Generally speaking, the width of the through pedestrian zone should increase as the volume of pedestrian traffic increases.

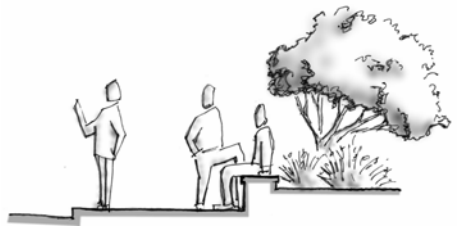
Frontage Zone

The frontage zone occurs between the property line and the through pedestrian zone. This serves to buffer pedestrian traffic from adjacent buildings, doorways, and building projections. Temporary outdoor seating for cafes can also occur in this zone. Oftentimes utilities are placed in the frontage zone when there is no furnishings zone in the sidewalk corridor.

Provide Pedestrian Amenities. Pedestrian amenities should be provided in proportion to the level of use that is expected or desired. Provide amenities and

furnishings in areas of concentrated pedestrian activity. Types of amenities and furnishings include benches and seatwalls, planters, newspaper stands, and water or drinking fountains. Pedestrian improvements should be coordinated with projects. As a place is conceptualized, designed, and constructed, walls, railings, seats, and other pedestrian improvements should be included as integral parts of the public and private realms to provide interest and function for pedestrians. Pedestrian improvements should be integrated into public places and located in highly visible areas to improve security and deter undesirable uses.

Pedestrian improvements call for durable, high-quality materials and furnishings. All improvements should be coordinated with new and existing streetscapes, and consistent design styles and themes should be used to unify pedestrian routes and areas. Pedestrian improvements can be used to buffer pedestrians from busy streets by constructing planters or low walls between the curb and pedestrian through zone. Planters and walls can be combined with lighting and, if constructed low and wide enough, can double as seatwalls. All furnishings, utilities, and other objects located within the sidewalk corridor should be located where they will not obstruct the sight distance of pedestrians or motorists.



Seatwalls can be integrated with planting areas to provide spaces for pedestrians to rest or gather.

Features such as utility and service areas can be screened with planting, decorative walls or screens (or a combination thereof) to shield pedestrians and to preserve or create an attractive, walkable streetscape. For additional pedestrian safety, install decorative bollards at the edges of pedestrian spaces to prevent motorized access in courtyards, plazas, and other pedestrian zones. Bollards help control and delineate pedestrian drop-off and service points, while maintaining access for emergency vehicles.

EXAMPLES OF PEDESTRIAN AMENITIES[35]

benches

seatwalls

planters

public art

fountains

[35] Photos courtesy of Dan Burden, www.pedbikeimages.org.

A Little Landscaping Goes a Long Way. Landscaping is an important element of the overall pedestrian experience. Even a limited amount of planted area can greatly improve the ambiance of pedestrian routes and spaces. Plantings can be used to define spaces, to provide shelter for pedestrians (e.g. shade or wind protection), and to screen or buffer undesirable views or uses.

For projects within pedestrian districts, mature landscaping should be preserved as much as feasible. New plantings should reflect or define the identity of a district or project, and should consist of species that are adapted to local climate conditions and site-specific microclimates. Develop standards or guidelines that ensure new plantings are provided with adequate soil preparation and amendment, irrigation, space to grow, and protection from car doors and foot traffic. Avoid species that are known to produce messy fruit or seeds and that are prone to cause pavement damage or heaving.

Regular planting areas with groundcovers, flowers, and shrubs help define and enliven pedestrian areas. Provide planting strips between the curb and sidewalk where room is sufficient. Regular openings should be provided in long strips of landscaping adjacent to the roadway so pedestrians can access parked cars. Use hedges or trellises with vines to screen or separate parking lots and other undesirable views from pedestrian areas.

Provide street trees – especially large, canopied shade trees – at regular intervals to provide shade and visual interest, and to define the pedestrian corridor and streetscape. Landscaping should not interfere with buildings, signage, and the overall streetscape. Plant size, spacing, and placement must maintain visual and physical access to transit stops, building entries, and signage. Tree gates should be used in active pedestrian zones to keep people from falling into tree wells, to expand the walkable area around trees, and to protect tree root systems.

6 COUNTYWIDE PEDESTRIAN FACILITIES AND PROJECTS

Mare Island, Vallejo

Descriptions, maps and corresponding lists have been prepared to show the existing and planned major pedestrian destinations, activity areas and routes in the urban area of each City. This information is the key element of the Countywide Pedestrian Plan because pedestrian transportation is by its nature very local. While regional agencies such as STA and the Metropolitan Transportation Commission (MTC), and their member agencies, can help guide planning by providing funding and guidance, only local agencies have the knowledge and responsibility to plan pedestrian connections and preserve and create pedestrian-friendly places.

6.1 ABOUT THE INVENTORY

The descriptions, maps and lists contained in this section are intended to be a framework for agencies to use to plan, prioritize and track their own pedestrian programs. The Geographic Information Systems-based (GIS) maps and lists will be maintained at STA and will be available to the cities to review, update, and use for their own planning efforts. The advantage of GIS is that data added by the agencies can be incorporated into a seamless Countywide Plan. This is particularly important for planning and identifying large scale or regional pedestrian projects.

The format of the maps for the Pedestrian Plan is constrained by some factors:

- They need to be reproducible in black and white (although they could be made available in color on STA, city or county web sites).
- Because these maps are part of a continuous countywide GIS coverage, a consistent page format and orientation is required.
- The maps have been oriented to focus on the urban areas of the cities and county, where the most significant pedestrian circulation and activity takes place.
- The individual map scales can and do vary slightly, but generally the scale is optimized to be legible while allowing a reasonable number of maps to cover the region.

6.2 DESCRIBED FEATURES

The descriptions, maps, and tables combine to describe a range of features related to the pedestrian system.

6.2.a PEDESTRIAN-ORIENTED LAND USE

This category includes:
Civic. Government and civic centers are typically a part of downtown districts, these complexes typically include city halls, county offices, courts, and recreation and community centers, including youth and senior centers. These complexes are often combined with parks. Not every civic building is identified, but complexes of buildings and facilities that may serve as regional pedestrian destinations and generators of pedestrian activity in their own right are shown.

Commercial. Pedestrian-oriented or accessible commercial districts include historic downtowns, urban waterfronts and other districts with denser mixed or adjacent commercial and residential use. Virtually every city, and some unincorporated areas, features at least one such district. Each city has major plans to protect and enhance its historic downtown, waterfront, and/or commercial districts. Newer commercial districts may be pedestrian-oriented by virtue of their design, their regional scale (such as major shopping malls), or their proximity to higher density residential populations.

Higher Density Residential. The term 'higher density residential' is used to denote apartment complexes, condominium and town home housing developments. Existing or planned higher density residential developments support greater pedestrian activity and amenities than lower density suburban types of development. The areas shown do not include all high-density designated lands. Only the larger areas that have a close proximity to significant commercial zones, civic centers, or transit stops such that walking between them would be feasible have been mapped.

Regional Destinations. This includes tourist attractions (such as Marine World in Vallejo) that are significant enough to draw local pedestrian traffic from adjacent residences, local hotels, or parking areas. Historic military districts such as the Benicia Arsenal and Mare Island are also mapped. Current military bases such as Travis Air Force Base are responsible for their own planning, and are not referenced in detail in the Pedestrian Plan.

6.2.b OTHER PEDESTRIAN DESTINATIONS AND GENERATORS

A key objective of preparing the Countywide Pedestrian Plan is to identify other projects that would contribute to overall pedestrian goals, and to develop a complete

prioritized list, cost estimate, and phasing plan for the projects, and provide information to match them to funding sources.

Schools. Public and private schools from elementary through high school, community colleges and university campuses or extensions are indicated on the maps and listed in the database. Schools are major pedestrian generators and activity zones, not only during school hours, but also for a full range of extra-curricular, community and recreational activities.

Civic Buildings. The map and lists cover major civic buildings as available from Census data. Not every civic building is shown, but major complexes of civic buildings are indicated.

Transit Routes and Transit Hubs. Convenient connection to transit is important to facilitate walking. Existing transit routes and major transit hubs or stations are shown, including bus, train, and ferry.

Parks and Open Space. The maps indicate parks and urban open space areas. These are important pedestrian destinations and activity generators, and often include pathways that are part of local or regional pedestrian routes.

6.2.c Major Pedestrian Routes

Existing and planned major pedestrian routes are identified from city general plan circulation elements, trails and pathways master plans, and from observation of existing improvements in each city.

Major Street Routes. In most cases the major pedestrian routes parallel major streets connecting key destination centers. The major streets are indicated on the maps and those that function as major pedestrian routes are noted in the descriptions. Several types of pedestrian routes and connection improvements may be included in this category, such as conventional sidewalks, parkway-type sidewalks with landscaping and amenities, separated Class I multi-use paths in the right-of way, and improved urban streetscapes in pedestrian districts and projects. The latter often feature wider sidewalks, special paving, street lighting, signage, street trees and other landscaping, and traffic calming features such as bulb-outs at intersections. Many such areas include decorative structures, outdoor art, seating and sidewalk dining. It is not feasible to differentiate the different types of on-street routes on the maps, but they are noted in the descriptions of specific projects.

photo courtesy of Dan Burden
www.pedbikeimages.com

Off-Street Pedestrian Routes. These routes are located outside of street right-of-ways in former utility or rail corridors, creek corridors, or in parks and open space. Typically these facilities are paved multi-use paths featuring landscaping or natural open space. Existing or planned trails in rural areas are considered recreational and are not shown on the pedestrian facilities maps.

Fairfield Linear Park

Overcrossings and Undercrossings. Special pedestrian and ped/bike over- or undercrossing facilities are shown on the maps. Major streets that provide pedestrian connections across freeways, rail lines and other barriers are noted in the text.

6.2.d TLC and Other Pedestrian-Oriented Projects

The descriptions, maps, and lists indicate projects for each jurisdiction based on information provided by STA and the agencies. These are indicated on the maps as points, lines, or areas depending on their physical configuration. They include some projects that are fully or partially completed, and projects that are in planning stages. They include a wide range of project types that together address the objectives of the Countywide Pedestrian Plan. The project numbers correspond to those in Table 2.1.

6.3 Pedestrian Routes, Zones, and Destinations

6.3.a Benicia

Overview. Downtown Benicia, centered around First Street, is the primary pedestrian district in Benicia. The older portion of town, with its traditional grid street system, generally extends from East 7th Street west to West 14th Street, and is generally south of the I-780 freeway, except for the area between East 2nd and East 7th. This area extends ±1,000 feet north of the I-780 freeway and contains relatively dense single-family housing interspersed with many multi-family units and complexes. Major condominium complexes and a mobile home park are located near the Benicia Marina east of First Street. The historic downtown, former State Capitol Historic Park (civic building #1), and the surrounding historic district attract visitors and local residents to a traditional pedestrian-oriented setting. Benicia City Hall (civic building #2), the library (civic building #3), senior center, youth center, community pool, and the adjacent Veteran's Hall, post office, and City Park comprise a major civic complex south of Military, at the north end of First Street.

Arsenal District. The Benicia Arsenal District is a historic complex of structures and grounds remaining from the first U.S. military facility on the west coast. It operated

from 1851 to the 1960s. Now primarily in private hands, the Arsenal District includes the Clocktower Building, Camel Barns and the Commanding Officer's Quarters that are used for many public and private events, various office and commercial uses, and a complex of buildings housing artists' studios. Although not designated or normally used as a pedestrian destination or district, the Arsenal District has many interesting and historic structures and scenic views. During semi-annual Open Studios events, the District draws large numbers of visitors. Visitors typically arrive by auto, but the District is close enough to other pedestrian zones in Benicia to attract locals and visitors to walk if better connections existed.

Parks and Recreation Areas. A series of pocket parks and water access points, as well as the improved 9th Street Park and boat launch ramp and Mathew Turner Park at West 12th Street, are part of a popular walking zone for local residents and visitors. The Benicia Marina and the adjacent condominium improvements include a public waterfront promenade that connects to partially developed public waterfront areas at the First Street Green, the restored Railroad Depot, and the Benicia Peninsula that once served ferries across the Carquinez Strait. The new Benicia-Martinez Bridge improvements will include a bicycle/pedestrian path that will terminate at Oak Road and Park Road in the Arsenal District. The designated Bay Trail and Ridge Trail route through Benicia extends from this point along Military East to East 5th, down East 5th Street to the Marina, along the Marina promenade, the First Street Green, and north along First Street to West F Street. It then winds along west Benicia residential streets to connect to Benicia State Recreation Area, where trails connect to Glen Cove in Vallejo.[36] Benicia State Recreation Area is a regionally popular walking, biking and running destination, and it also provides an important pedestrian connection to Benicia and Vallejo neighborhoods across I-780 via State Park Road, Rose Drive, and Columbus Parkway.

Major Pedestrian Routes. First Street is the major pedestrian route in downtown Benicia. In addition, the following roads provide viable pedestrian connections:

- Military West and Military East
- West 7th Street north of Military
- Southampton Road
- East 2nd Street
- East 5th Street

West 7th Street and Southampton Road provide important pedestrian connections underneath I-780, and, along with Military West, form a loop route at the west end of Benicia that carries many students from the adjacent schools.

[36] Ultimately the Bay/Ridge Trail route in eastern Benicia may be located off major streets and closer to the water, depending on future development plans for private property, including portions of the Port of Benicia, as evaluated in the *Bay Trail Focus Element* of the Solano Countywide Pedestrian Plan, prepared by LandPeople, December 2003.

Pedestrian Destinations. In addition to downtown Benicia and the primary First Street Corridor, major pedestrian destinations in Benicia include commercial and retail areas, including the Solano Square Shopping Center at the north end of First Street, the Southampton Shopping Center, and the Rose Drive Shopping Center at Columbus Parkway. Much of the residential development in Benicia is low to medium-density in very hilly terrain, primarily in the Southampton development. Due to terrain and development type and patterns these areas are not conducive to concentrated pedestrian activity, though they are well supplied with sidewalks and feature connecting paths and trails though open space areas. A few pockets of higher density residential development such as mobile home parks and larger blocks of apartment and condominium housing are identified on the Benicia maps. They are identified as potential generators of pedestrian traffic because of their higher densities and relative proximity to retail/commercial centers. The Benicia Industrial Park south and east of East 2nd Street is also not suited to pedestrian activity.

Pedestrian Projects. Current and planned TLC or enhancement projects to improve pedestrian facilities and safety in Benicia include: the **Park Road Bike Lanes and Sidewalks Project** (project #1) to improve the connection from the new multi-use path on the Benicia-Martinez Bridge; the **First Street Streetscape and Parking Enhancements Project** (project #2), part of an ongoing effort to improve pedestrian amenities in the downtown area; the **Benicia High School Access Improvement Project** (project #3) to install a traffic signal on Military West at West 11th Street; and the **State Park Road Bicycle and Pedestrian Bridge** (project #5), which will provide a safer over crossing of I-780 at the west end of the City.

The City is also planning the development of a rail/multi-modal transit station near the northeast City limits (**Benicia Intermodal Train Station**, project #4). The City is conducting environmental and transit studies to help determine the best strategies to implement increased transit services along I-680 and the Benicia Industrial Park. Opportunities to provide improved pedestrian and bicycle access and transit services in this part of the community will be considered. The Benicia General Plan calls for a study of the need for and feasibility of a pedestrian bridge linking the middle school and high school across I-780, but this is not a current project.

A recent study commissioned by the San Francisco Bay Trail Project (see Section 4.4.c for more information) evaluated opportunities for improvement or realignment of Bay/Ridge Trail routes in Solano County. In Benicia, the study focused on connections through the Arsenal District to the Marina. The following alternative routes were identified in the study for Benicia:[37]

1. Along Park Road to connect the Arsenal District with the future northern terminus of the bicycle/pedestrian trail on the new Benicia-Martinez Bridge.

[37] Please refer to the original document for a complete listing and annotated inventory of potential gap closures: *Bay Trail Focus Element of the Solano Countywide Pedestrian Plan*, March 2004.

2. Along Military East and East 5th to the Marina.
3. Local connections within the Arsenal District to connect the existing historical structures and sites and various art studios.
4. Through the Arsenal District to connect to East H Street or East L Street, crossing or following an unused oil pipeline.
5. Through the Port of Benicia, along the Bayshore Road right of way.
6. Along or across a former industrial property between the Port and an existing trail at the City's sewage treatment plant.

Pedestrian Improvements Concepts. In April 2004, Benicia's Traffic, Pedestrian, and Bicycle Safety Committee participated in a bus tour and held two public meetings to help identify potential pedestrian access needs and opportunities. The tour and discussion centered on 17 pedestrian focal point areas depicted in the map in Figure 6.1. The Committee also reviewed the Bay Trail Focus Element, which had previously been reviewed by the City's Park and Recreation Commission. A list depicting the character of each pedestrian area, its existing qualities and features, and future improvement possibilities, was generated and is reproduced in Table 6.1.

A broader concept that was discussed relates to the major pedestrian routes that connect under the I-780 freeway, including East 5th, East 2nd, West 7th, and Southampton Road. These routes are important connections between neighborhoods, schools, public parks and buildings, and commercial districts. Exposure of pedestrians to heavy traffic on these critical cross-freeway connectors creates a perceived lack of safety that tends to discourage pedestrian activity. A concept that may improve this condition includes creating landscape strips between the walkway and the traffic.

Generally, it would improve the pedestrian environment to place landscaping and trees on the side of roads to buffer and shade pedestrians rather than in median strips adjacent to traffic.

Figure 6.1: Benicia Pedestrian Focus Areas

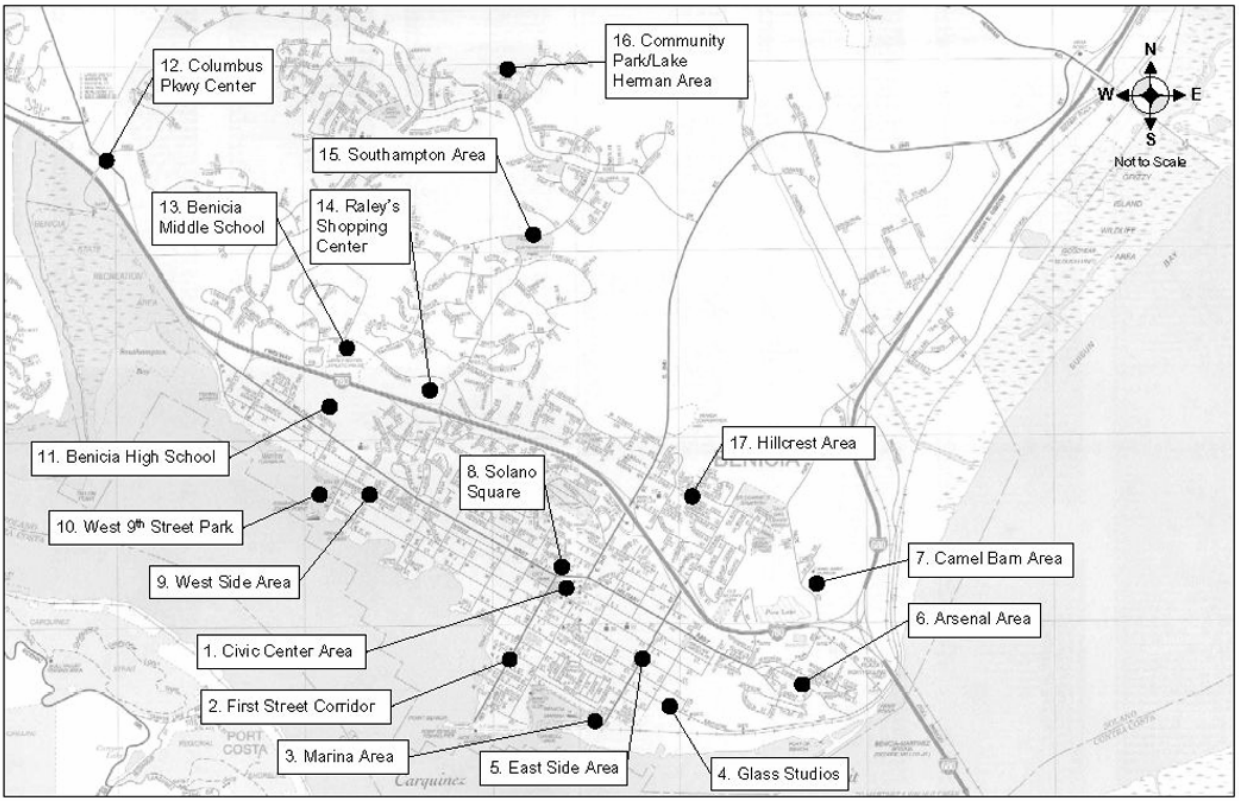


Table 6.1: Setting and Concepts for Future Benicia Pedestrian Improvements

1. **Civic Center Area**

Existing:

- Campus-like complex
- Mixed use government/public facilities
- Plaza turn-around at Library
- Pathway connections to First Street, Park, Library, Senior Center, Veterans Hall, Post Office, Pool and Youth Center
- Transit services on First Street

Future Possibilities:

- Improved layout with on-site pathway connections
- Street narrowing, raised crosswalk at K Street crosswalk to Youth Center
- Plaza at East 2nd/L Street
- Civic Center/Police Department project will include pedestrian improvements

2. **First Street Corridor**

Existing:

- 14' wide decorative walks with cafes, benches and trees
- Curb extensions at D Street
- Promenade project with decorative sidewalk, planters, railing, palm trees (street narrowed)
- Special events, temporary street closures, farmers market, fairs, parades
- Angled parking on side streets (D,F, and H – same width as First Street but don't have heavy traffic)
- Historic facilities
- Waterfront Village (former Anderson Hotel) project will complete Bay Trail between West E and F Streets
- Waterfront recreational activities
- Transit service along First Street

Future Possibilities:

- Angled parking on First Street (one side)
- More curb extensions (corners and mid-block)
- Decorative or raised crosswalks (E Street is already raised to curb height)
- More street furniture
- More angled parking on West D Street, West H Street
- Restricted hours for truck loading (avoid 11:30 to 1:30 period)
- Waterfront improvements and pathways – a more delineated Bay Trail route from the Marina

3. **Marina Area**

Existing:

- Pedestrian-oriented common space
- Waterfront pathways
- Special events in common areas
- Transit service along B Street and East 2nd Street

Future Possibilities:

- Waterfront pathway connections to First Street and Glass Studios Area
- Solutions for speeding on East E between East 2nd and East 5th

4. **Glass Studios Area** (East H Street between East 5th and East 7th Streets)

Existing:

- Limited pathway connections
- Existing trail from East 5th Street south of Sewage Treatment Plant ends at private property to east

Future Possibilities:

- Complete sidewalk connections to East 5th Street
- Pathway connection to lower Arsenal Area
- Vehicle connection to lower Arsenal Area

5. **East Side Area**

Existing:

- Grid street network with alleys
- Narrow side streets
- Discontinuous sidewalks
- Transit service on East 5th Street and East H Street
- Rancho Benicia Mobile Home Community
- Ball fields and other neighborhood parks
- Case de Villerassa Senior Housing Complex
- Mills and St. Dominic's traditional neighborhood schools
- East K Street closure at Mills School connects school to playground
- Bike route (Class III) on East 5th Street, East H Street and Military East
- Mixed use commercial areas along Military East

Future Possibilities:

- Complete gaps in sidewalks (Safe Routes to School grant-funded project)
- Curb extensions at school crosswalks
- Street narrowing/improved crosswalk on Military East at East 6th Street Park
- Traffic calming measures for Military East and East 5th Streets.
- Additional pathway connection from Rancho Benicia
- Street narrowing and angled parking on East H Street at ball fields

6. **Arsenal Area**

Existing:

- Historic military facilities
- Remnants of stairs and pedestrian paths – sidewalks inconsistent
- Community center (Clocktower)
- Artist community – live/work studios
- Mixed uses (residential, office, commercial)
- Commanding Officer's Quarters – focal point and activity center

Future Possibilities:

- Pathway on new bridge and connection to scenic overlook (Caltrans project)
- Park Road Bike and Pedestrian Improvements (see project list)
- Complete gaps in sidewalks
- Open up pathways/roadways to public access (e.g. Jefferson St. and others)
- Improve connections between historic facilities (i.e. from Artist's live/work area to Clocktower)
- Provide bike/pedestrian connections to new Benicia Bridge and overlook
- Enhance and activate use of Commanding Officer's Quarters (re-establish restaurant use?).

7. **Camel Barn Area**

Existing:

- Historic facility
- Community center

Future Possibilities:

- Improve on-site parking and connections between buildings
- Improve pathway and vehicle connection between Arsenal Area
- Provide bike/pedestrian connections to new Benicia Bridge and overlook (widen for sidewalk on one side, bike lanes on both sides)

8. **Solano Square Area** (north of Military between East 2nd and West 2nd)

Existing:

- Neighborhood shopping center
- Countdown type crossing signal, battery back-up traffic signals at Military and East 2nd.
- Recent improvements for better pedestrian access in conjunction with remodel
- Recent median and pedestrian crossing sign at West 2nd
- Transit service

Future Possibilities:

- Improve on-site parking layout and pedestrian connections
- Landscape medians for Military
- Create path from West 2nd Street to Cemetery (City owns easement along private driveway)
- Improve path along First Street to Overlook Park

9. West Side Area

Existing:

- Grid street network with alleys
- Narrow side streets
- Transit service along West 7th Street and along Military, east of West 7th Street
- Bike lanes, landscape medians and walks along Military
- Bike Routes and walkways along W 7th, W K Street and the Bay Trail
- Recent neo-traditional subdivision on W K Street at W 8th Street
- Bike/pedestrian bridge over Military to Farmar School

Future Possibilities:

- Complete gaps in sidewalks
- Traffic roundabout at Military/W 7th Street intersection
- Additional landscape medians on Military

10. West 9th Street Park

Existing:

- Neighborhood park with bike/pedestrian pathways (including portion of Bay Trail and Ridge Trail)

Future Possibilities:

- Additional landscape area in parking lot
- Improved pedestrian access to beach

11. Benicia High School

Existing:

- Special transit service
- Flashing crosswalk
- Bike lanes, landscape medians and walks along Military
- Special drop-off zones along Military

Future Possibilities:

- New traffic signal and modified drop-off areas
- Bike/pedestrian bridge between Benicia High School and Benicia Middle School over 780 freeway
- School access safety enhancements

12. Columbus Parkway Center (at Rose Drive)

Existing:

- Freeway oriented commercial center
- Walkway connections to Rose Drive
- Inadequate connection across I-780 freeway to State Park

Future Possibilities:

- Provide bike/pedestrian bridge improvement over 780 freeway for enhanced State Park (Vallejo bike trail, Bay trail and Ridge trail connections) – see project list
- Provide transit service
- Provide park and ride facility

13. Benicia Middle School

Existing:

- Transit service along Southampton Road
- Bike lanes and landscape medians and walks along Southampton Road
- Special drop-off zones along Southampton Road

Future Possibilities:

- Enhance crosswalk at Turner/Southampton Road
- School access safety enhancements.

14. Southampton Shopping Center (Raley's, etc.)

Existing:

- Neighborhood shopping center
- Transit service

Future Possibilities:

- Improve on-site parking layout and pedestrian connections

15. Southampton Area

Existing:

- Single family suburban layout
- Very hilly terrain with open space buffers
- Sidewalk and trail network provided

Future Possibilities:

- Address speeding concerns on area streets
- Create sidewalk connections from apartment complexes to Southampton Drive
- Improve path on bench for sewer line from London Circle to Palace
- School access safety enhancements
- Enhance trail network

16. Community Park/Lake Herman Area

Existing:

- New complex with major recreational facilities
- Good pathway connections to Southampton Area
- Good pathway connection to Lake Herman Area
- Good school drop off facilities

Future Possibilities:

- School access safety enhancements

17. Hillcrest Area

Existing:

- Older suburban style neighborhood
- Narrow streets
- Neighborhood school
- Pedestrian undercrossing connection to downtown area

Future Possibilities:

- Complete gaps in sidewalks (Safe Routes to School grant funded project)
- School access safety enhancements

Table 6.2: Benicia Pedestrian Destinations

SCHOOLS

#	Name
3	Benicia High School
4	Benicia Middle School
29	Liberty High School
32	Mary Farmar Elementary School
33	Mills Elementary School
36	Robert Semple Elementary School
39	Saint Dominics Priory School
113	Turner Elementary School
114	Henderson Elementary School

CIVIC

#	Name
1	Benicia Capitol State Historical Monument
2	Benicia City Hall
3	Benicia Public Library
4	California House (historical)
11	Fischer-Hanlon House

PEDESTRIAN ZONES & DESTINATIONS
9th Street Park
Arsenal District
Benicia Marina
Benicia State Recreation Area
Downtown (from East 7th St. west to West 14th St.)
First Street Green
Mathew Turner Park
Rose Drive Shopping Center
Solano Square Shopping Center
Southampton Shopping Center

PEDESTRIAN ROUTES
East 2nd Street
East 5th Street
Military West and Military East
Southampton Road
West 7th Street north of Military

Figure 6.2: Benicia Map
(remove and replace with figure)

(remove and replace with figure)

6.3.b VALLEJO

Overview. The older portion of Vallejo, consisting of the grid street system around the historic downtown, comprises an extended pedestrian-oriented district with a core in the downtown area an along the waterfront. A major civic building and park complex, including City Hall and the library, extends from Santa Clara Street to Mare Island Way. A waterfront promenade/linear park extends from Curtola Parkway to Mare Island Causeway, and is being extended and expanded in conjunction with the Wilson Avenue Corridor Project and River Park Project. The Vallejo Waterfront Plan is a new specific plan being prepared for the Downtown and Waterfront area.

Major Pedestrian Routes and Destinations. Major north-south pedestrian routes within central Vallejo include Mare Island Way to Wilson Avenue; Sacramento Street; and Sonoma Boulevard/Highway 29, which serves a major auto-oriented commercial district north of downtown that also functions as a pedestrian destination. Broadway forms a parallel route to the east, and Tuolumne Street and Mariposa Street are major north-south routes west of the I-80 freeway.

Major east-west pedestrian routes connecting central Vallejo across I-80 include Redwood Street/Redwood Parkway, Tennessee Street, Springs Road to Florida Street and Solano Avenue; Georgia Street, and Benicia Road to Lemon Street, and Magazine Street. Major north-south routes east of I-80 include Admiral Callaghan Lane to Humboldt Street, Miller Avenue, Steffan Street, and Laurel Street, which parallel I-80 and connect south across I-780; Maple Avenue, Oakwood Drive, Rollingwood Drive, Columbus Parkway, and Ascot Parkway.

North of Highway 37, Mini Drive is a major north-south route that curves to the west across Highway 29, while Fairgrounds Drive is an important north-south route that extends under Highway 37. Though they are primarily automobile destinations, Six Flags/Marine World and the County Fairgrounds, along with Dan Foley Park, are pedestrian destinations for those who live nearby.

Pedestrian Projects. Major TLC or enhancement projects to improve pedestrian districts and routes in Vallejo include the **Vallejo Ferry Station Pedestrian and Streetscape Enhancements Project** (project #6) – a near-term complement to the **Vallejo Station TLC Project**, and the **Downtown Vallejo Renaissance Project** (project #7) that will provide wider sidewalks and improved pedestrian spaces and amenities. The former, a multi-modal waterfront transportation facility, will be the principal transit hub serving the Vallejo area and a gateway to the North Bay and Solano County. Comprised of an integrated mix of improvements serving water, bus and potentially rail transit, Vallejo Station is intended to address the City's principal goals of reconnecting the downtown to the waterfront, mixing private investment/redevelopment opportunities with public open space, and strengthening

Vallejo's identity by highlighting its diverse cultural and maritime heritage, and the North Bay's unique ecological resources.

The **Mare Island Bicycle and Pedestrian Access Improvements** TLC project (project #8) will complement new land uses to be developed by Lennar, a development company that holds the master lease for the redevelopment of the former naval shipyard into new planned commercial and residential uses. An early phase will include new multi-use paths on both sides of G Street. The City is also working with Caltrans on pedestrian access at the Highway 37 bridge at the north end of the island. Currently Mare Island Causeway is the only pedestrian connection to Mare Island. Mare Island is a potential pedestrian destination and circulation zone due to its close proximity to downtown Vallejo, its unique mix of industrial buildings, wetlands, historic districts, current uses, and unique views. The Mare Island Specific Plan, under review by the City of Vallejo, envisions a mixed-use development area with new parks and open spaces, a bike and pedestrian-oriented main street, and an island-wide network of looped bike and pedestrian paths. There will be a waterfront promenade the entire length of the island along Mare Island Strait, except where public access will conflict with waterfront industrial activities. A pedestrian-bicycle corridor is proposed for Walnut Avenue between G Street and Cedar Avenue to serve as the pedestrian link between the promenade, Neighborhood Center and Historic Core. Trails will connect the ferry terminus with on-island routes. Pedestrian circulation will be established along Railroad Avenue and the waterfront promenade. In the Regional Park, walking, cycling, and equestrian trails will be linked to other areas on the island.

The **Wilson Avenue Improvement Project** (project #9) includes pedestrian paths and amenities along the waterfront north of Mare Island Causeway. Phase 1 was completed in 1998, and Phase 2 is planned with different fixtures to accentuate a different neighborhood. This will extend from Hichborn Street to Hwy 37, with paths on both sides, trees, lighting, and general pedestrian amenities.

The **River Park Project** (project #10) is a major waterfront park and wetland restoration project undertaken by the City of Vallejo and the Greater Vallejo Recreation District. It includes a segment of the Bay Trail, which continues north from the Wilson Avenue Improvement Project. The project runs parallel to Wilson Avenue from Mare Island Causeway at the southern extent, to approximately Sims Street at the north end. The construction estimate for this project was $8.8 million in 2001. A large part of the cost is earthwork – moving dirt to permit tidal flushing in former baylands. The proposed section of the designated Bay Trail route is approximately 4,200' feet long, but there are a number of other meandering waterfront trails that could function as part of a "bay trail" system.

The **Vallejo Bay/Ridge Trail Connector** (project #11) is planned to connect the existing regional Bay Trail and the Bay Area Ridge Trail east of the Al Zampa Memorial (Carquinez) Bridge along and under I-80 to Highway 29, where the

bike/pedestrian pathway across the new bridge ends. The Bay/Ridge Trail route extends along the Vallejo waterfront and north along Highway 29 or Broadway. Ultimately the route may extend along Meadows Drive to the city limits/county line, where it could be connected to Bay Trail segments in American Canyon/Napa County.

The San Francisco Bay Trail Project and the Bay Area Ridge Trail are regional trails that pass through Vallejo, and include important inter-city connections as well as connections to regional parks and open space. The City coordinates with these groups, and the Greater Vallejo Recreation District (GVRD) to plan, implement, and manage these trails and other connections contained in the City of Vallejo/GVRD Trails Master Plan.

Pedestrian Improvement Concepts. In discussions with City of Vallejo staff, the highest priority category of additional pedestrian improvements is safe routes to school. The City has previously approached the school district about organizing such a study or plan, but the project has not been initiated due to other pressing city and school district issues and priorities. The City Police Department's liaison officer to the schools, Officer Jim Kapoot, has identified the top priority locations to improve access to schools:

1. Lincoln Elementary School, on Carolina Street, between Sonoma Boulevard and Sutter Street;
2. Patterson Elementary School, on Porter Street, between Magazine Street/Sonoma Boulevard and Sandy Beach Road;
3. Loma Vista Elementary School, on Corcoran, between Mini Drive and Fairgrounds Drive;
4. Penny Cook Elementary School, on Fernwood Drive, between Georgia Street and Baywood Drive;
5. Farragut Elementary School, on Farragut Street, between Sacramento and Wilson Avenue; and
6. Cave Elementary School, on Tregaskis Avenue, between Springs Road and Eastwood Street/Maple Avenue.

In response to the pedestrian safety conditions discussed in Section 3.4.c, improvements are envisioned to the intersections of Sonoma and Mini, Sonoma and Redwood, and Curtola and Lemon. Sidewalk improvements are also desirable along Sonoma Boulevard.

The Bay Area Ridge Trail Council is working to establish a trail connection from near upper Ascot Parkway to Columbus Parkway at Lake Herman Road.

The Greater Vallejo Recreation District (GVRD) and the City are currently working to extend the Blue Rock Springs Open Space Corridor trail east to Columbus Parkway at Lake Herman Road.

The GVRD/Vallejo Trails Master Plan proposes a path along Columbus Parkway from Blue Rock Springs Park, to Redwood Parkway and between Redwood Parkway and Highway 37.

A recent study commissioned by the San Francisco Bay Trail Project (see Section 4.4.c for more information) evaluated opportunities for improvement or realignment of some existing and planned Bay/Ridge Trail routes in Vallejo:

1. Benicia State Recreation Area to Glen Cove Marina. Part of this route will be implemented in conjunction with Glen Cove Waterfront Park, currently being master planned by the Greater Vallejo Recreation District.
2. Glen Cove Marina to bluff above Al Zampa Memorial (Carquinez) Bridge (start of project #11, the Vallejo Bay/Ridge Trail Connector).
3. Along Highway 29/Sonoma Boulevard from Maritime Academy Drive to Mare Island Way – opportunity to provide bike lanes and improved sidewalks.
4. From and along Highway 37 from Wilson Avenue along Highway 29 or Broadway to Meadows Drive and other local streets to connect to American Canyon and Napa County.

Table 6.3: Vallejo Pedestrian Destinations

SCHOOLS

#	Name	#	Name
0	Admiral David Glascow Farragut Elementary School	**31**	Mare Island Elementary School
1	Annie Pennycook Elementary School	**34**	North Hills Christian Church
5	Beverly Hills Elementary School	**35**	Peoples High School
6	California Maritime Academy	**37**	Saint Basils School
10	Dan Mini Elementary School	**38**	Saint Catherine of Siena School
11	Doctor James R Hogan Senior High School	**40**	Saint Patricks High School
13	Elmer Cave Elementary School	**41**	Saint Vincents School
14	Elsa Widenmann Elementary School	**43**	Seventh Day Adventist School
15	Everest School	**45**	Solano Junior High School
20	Federal Terrace Elementary School	**46**	Springstown Junior High School
21	Franklin Junior High School	**47**	Steffan Manor Elementary School
22	Glen Cove Elementary School	**49**	Vallejo Adult School
23	Grace Patterson Elementary School	**50**	Vallejo Junior High School
25	Highland Elementary School	**51**	Vallejo Senior High School
26	Hilltop Christian School	**119**	Jesse Bethel High School
28	Johnston Cooper Elementary School	**120**	Wardlaw Elementary School
30	Lincoln Elementary School	**121**	Touro University
		137	Mare Island Technical Academy
		138	Reignierd Elementary

CIVIC

#	Name
5	California Maritime Academy Library
12	John F Kennedy Branch Solano County Public Library
13	King-South Vallejo Community Center
18	Saint Vincents Memorial Building
23	Vallejo City Hall
24	Vallejo Naval and Historical Museum
25	Veterans Memorial Building
27	Senior & Community Centers

PEDESTRIAN ZONES & DESTINATIONS

Downtown
Marine World/Fairgrounds
Waterfront Promenade

PEDESTRIAN ROUTES

Admiral Callahan Lane
Broadway
Fairgrounds Drive
Georgia Street & Benicia Road to Lemon and Magazine Streets
Mare Island Way to Wilson Avenue
Mariposa Street
Mini Drive
Redwood Street/Redwood Parkway
Sacramento Street
Sonoma Boulevard/Highway 29
Tennessee Street & Springs Road to Florida Street & Solano Avenue
Tuolumne Street

Figure 6.3: Vallejo Map
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6.3.c FAIRFIELD

Major Pedestrian Routes and Destinations. In Fairfield the major districts and corridors are along West and North Texas Street, and to a lesser extent along Travis Boulevard. These corridors serve many higher-density residential developments, major commercial areas, public buildings, parks, and schools. They are well served by transit routes, and provide important pedestrian connections over or under I-80. Other major streets that serve as major north-south pedestrian routes include Beck Avenue, Pennsylvania Avenue, Union Avenue, and Dover Avenue east of I-80, and Oliver Road and Hillborn Road west of I-80. Key east-west routes include Atlantic Avenue/Cement Hill Road, Tabor Avenue and East Tabor Avenue, and Waterman Road west of I-80.

West Texas Street features the existing Fairfield Transportation Center and major shopping centers. Moving east, Alan Witt Park, existing high-density residential developments, and commercial uses along West Texas Street are significant pedestrian destinations and generators.

Travis Boulevard features significant pedestrian destinations and generators including commercial uses west of I-80 near Oliver Road, the regional Solano Mall, and higher density residential developments near Lee Bell Park and along Union Avenue. North Texas Street is comprised of an extensive commercial corridor that is auto-oriented, but also serves adjacent single-family neighborhoods and higher-density residential at walkable distances.

Major off-street pedestrian routes include the Fairfield Linear Park, which extends from Solano Community College at the west end under I-80 and traveling in PG&E power line right-of-way northeast approximately 5 miles to a point between North Texas Street and Dover Avenue a bikeable but not a walkable distance). Ultimately it is planned to extend the entire distance to the east to comprise part of a regional trail system. The portion of the Linear Park in Central Fairfield functions as a major pedestrian connection between residential, commercial and public areas. The Laurel Creek Trail exists from Railroad Avenue to north of Dickson Hill Road. This serves primarily as a recreational trail, but also connects between neighborhoods and parks.
Fairfield downtown between Pennsylvania Avenue and Jefferson Street has already seen significant pedestrian amenities and a center for the arts installed as part of a major streetscape improvement project completed during the 1980s. Major projects are planned or underway to improve and expand the Solano County Government Center, including the Jefferson Street Corridor Project and the Union Avenue Streetscape Improvement Program. The entire older grid street system and residential neighborhoods north and south of downtown comprise complementary pedestrian-oriented mixed commercial and residential district.

Fairfield Civic Center (civic building #9) comprises an extensive complex of city offices and parks, recreation, and cultural facilities just two blocks north of downtown between Utah Street and Kentucky Street to the north and south respectively, and Pennsylvania Avenue and Webster Street to the west and east. This is the primary focal point of community and government activities, as City Hall (civic building #8), the Community Center, Library (civic building #10), and Senior Center are all located here.

Pedestrian Projects. The **Jepson Parkway Concept Plan** (project #16) is a multi-jurisdictional TLC or enhancement project being developed by Vacaville, Fairfield, Suisun City and Solano County. The Parkway, when complete, will extend from I-80/Leisure Town Road interchange in Vacaville to the State Route 12/Walters Road intersection in Suisun City. This parkway will provide a separated north-south corridor in the County for pedestrian and bicycle travel. More detail on the project is provided in the Vacaville pedestrian facilities description.

The **West Texas Street Gateway Project** (project #17) will enhance pedestrian linkages among the Fairfield Linear Bicycle/Pedestrian Trail, the Fairfield Transportation Center, and the new Park Crossing Apartment project. Specific improvements include new sidewalks, signage, public art, and new street trees.

The **West Texas Street Urban Village Project** (project #18) will assist private developers in creating a high quality mixed use "urban village" on West Texas Street, approximately 1.5 miles from the Suisun Capitol Corridor Train station. Funding will be used for land assembly, planning and architectural services, public investment in sidewalks, street trees, pedestrian crosswalks and landscaping, signage, development of public plazas/seating areas, and enhancements to transit stops.

The **Downtown Fairfield Live-Work Center** (project #19) is a TLC project to replace blighted land uses in the 1000 block of Texas Street with mixed-use commercial/residential buildings that will attract new residents and businesses to Downtown.

An important future pedestrian district and destination will be the **Vacaville-Fairfield Train Station Urban Center** (project #20) at Vanden Road and Peabody Road. This City of Fairfield TLC project is a transit-oriented development associated with the planned train station, implementing the vision provided by the Jepson Parkway Concept Plan. The plan includes new neighborhoods and commercial districts organized at a walkable distance from the development's core, which will feature plazas, landscaping and amenities to make it a popular gathering place. Commuters will be given a number of transportation choices at the site, including biking, walking, park-and-ride, bus, and rail. The site is connected via bus routes to central Fairfield, Suisun City and Vacaville. The planned railway station will be served by Amtrak Capitol Corridor trains to connect the site to regional destinations from San Jose to Auburn, including Oakland, San Francisco, and other Bay Area

employment and cultural centers. Future phases of joint public/private development are envisioned to create mixed commercial and retail uses south of the site.

The **Union Avenue Streetscape Enhancements Program** (project #21) is a City TLC Project to enhance pedestrian connections near the new County Government Center and improve the links between downtown Fairfield and downtown Suisun City. It will improve sidewalks, crosswalks, provide street trees and landscaping, pedestrian-scale lighting and signage, and a formal pedestrian gateway structure. With potential extension to Main Street, this project could become a joint effort between Fairfield, Suisun City, and Solano County.

The **North Texas Street Transportation Center and Community Hub** (project #22) will be a new focal point for North Texas Street and the City. Its major role will be to serve as the Central Transfer Station (CTS) for the Fairfield/Suisun Transit (FST) local bus system. It will replace the current ineffective site at the mall.

With the development of the proposed Teen Center across the street, the improvement of the Fairfield Linear Trail and Gateway Garden, and links to the adjoining business district, the project will be a major center for pedestrian, bicycling, and transit activity. To support this activity, the project will incorporate pedestrian and bicycle signage, bus islands, bus canopies, shade trees, streetscape, pedestrian-friendly lighting, bike lockers, bathroom facilities, and drinking fountains.

The **North Connector** (project #23) is a joint project between STA, City of Fairfield and Solano County that involves roadway improvements needed to reduce congestion and improve mobility for local residents north of the Interstate 80 between State Route 12 West to Abernathy Road and State Route 12 East. Improvements include bike/pedestrian path, streetscaping, landscaping, traffic calming and gateway signs.

Pedestrian Improvement Concepts. The TLC projects mentioned above employ key pedestrian improvement concepts that can improve the pedestrian environment and provide additional pedestrian connections and destinations. To help guide and direct pedestrian-oriented development, the City has authored numerous policies and guidelines. These documents, discussed in further detail in Section 4.3.c, include:

- Fairfield General Plan Elements
  - Land Use Element
  - Urban Design Element
  - Circulation Element
- Fairfield Master Trails Plan
- Fairfield Design and Development Guidelines

In addition, Fairfield has identified a number of priority areas that are in need of pedestrian enhancements:

- West Texas Street (from Pennsylvania Avenue to Beck Avenue) and the downtown section of Texas Street. Both of these areas are major pedestrian routes and destinations but have insufficient and dangerous pedestrian crossings relative to the volume of pedestrian and automobile traffic.
- Railroad Crossings at East Tabor Avenue and Sunset Avenue. Because of their close proximity to pedestrian destinations, housing, and schools, there is a high volume of uncontrolled and unprotected pedestrian railroad crossings at these two intersections. The absence of safe railroad crossings create unsafe pedestrian corridors, which are likely to become more vulnerable as the volume and frequency of railroad traffic is expected to increase in the near future. Suisun City has identified these two intersections as possible pedestrian crossings that could replace the existing uncontrolled crossing near Blossom Avenue (see Section 6.3.d for details).
- Union-Main Street Pedestrian Overcrossing Enhancement. This is a joint project with Suisun City).

Two significant urban trail improvements are envisioned in local plans;

- Extension of the Linear Park from Fairfield Avenue northeast to Cement Hill Road. The Linear Park is detailed in the Fairfield Trails Master Plan.

- Continuation of the Laurel Creek Trail route from Foothill Parkway to The Masters Drive is called for in the Fairfield Trails Master Plan and the Vacaville Parks and Open Space Master Plan.

Table 6.4: Fairfield-Suisun Pedestrian Destinations

SCHOOLS

#	Name
2	Fairfield-Suisun Adult School
8	Crescent Elementary School
9	Crystal Middle School
12	E Ruth Sheldon Elementary School
17	Armijo High School
18	Fairview Elementary School
24	Green Valley Middle School
27	Holy Spirit School
42	Sem Yeto Continuation High School
48	Suisun Elementary School
53	Amy Blanc Elementary School
54	Anna Kyle Elementary School
55	Bransford Elementary School
58	Charles L Sullivan Middle School
59	Cleo Gordon Elementary School
61	Dover Middle School
65	Fairfield High School
69	Grange Middle School
70	H Glenn Richardson Elementary School
72	K I Jones Elementary School
73	Mary Bird High School
79	Solano Christian Academy
82	Travis Elementary School
101	Scandia Elementary School
117	Angelo Rodriguez High School
118	Oakbrook Elementary
122	Trinity College
123	Nelda Mundy Elementary
124	Chapman University
125	Chapman University
126	Laurel Creek Elementary
127	Gale B Wilson Elementary
130	Dan O. Root Elementary
139	St. Mary's College Extension
140	University of Phoenix

CIVIC

#	Name
8	Fairfield City Hall
9	Fairfield Civic Center
10	Fairfield-Suisun Comm.Branch Solano Co.Public Library
14	Memorial Building
28	Suisun City Hall

PEDESTRIAN ZONES & DESTINATIONS

Alan Witt Park
Commercial zone along Sunset Avenue
Downtown and Waterfront
Downtown between Pennsylvania Ave. & Jefferson St.
Fairfield Linear Park
Fairfield Transportation Center
Heritage Park
Laurel Creek Trail
Lee Bell Park
Suisun City Train Station

PEDESTRIAN ROUTES

Atlantic Avenue/Cement Hill Road
Beck, Pennsylvania, Union and Dover Avenues
Buena Vista Avenue/Pintail Drive
Civic Center & Marina Boulevards & Drifwood Drive
Emperor Drive/Law;er Ranch Parkway
Main & Cordelia Streets
Oliver and Hillborn Roads
Tabor and East Tabor Avenues
Travis Boulevard
Walters Road
Waterman Road
West and North Texas Street

Figure 6.4: Fairfield-Suisun Map
(remove and replace with figure)

(remove and replace with figure)

6.3.d SUISUN CITY

Major Routes and Destinations. Suisun City's pedestrian routes, destinations and projects are shown on Figure 6.4 and listed in Table 6.4. Suisun City's primary pedestrian destination is its historic downtown and waterfront. The Suisun Slough, Highway 12, the Union Pacific Railroad, and the southern city limit line bound this area. A promenade walkway provides public access along the entire waterfront overlooking the 150-berth marina. Main Street, Civic Center Boulevard, Driftwood Drive, Cordelia Street, and Marina Boulevard, which provides an undercrossing of Highway 12, are key roads in this area that also serve as significant pedestrian routes. Outside of downtown, the primary pedestrian activity zone is the commercial district along Sunset Avenue. Sunset Avenue also provides an important connection north across the Union Pacific Railroad line to Fairfield. Sunset Avenue is near to Heritage Park with its Community Center and sports facilities, and higher density residential development. Other major roads that also are important pedestrian routes in eastern Suisun City are Buena Vista Avenue/Pintail Drive, Emperor Drive/Lawler Ranch Parkway, and Walters Road.

Because of their proximity, Suisun City's pedestrian districts and routes have important relationships to those in Fairfield. The Suisun City downtown, Marina, and Civic Center are all located within walking distance of the Solano County Government Center and Fairfield's downtown, though access requires using a long pedestrian overcrossing. The Suisun City Train Station is an important pedestrian destination/activity generator and transit connection that serves both Suisun City and Fairfield. The old train station has been rehabilitated to a full multi-modal transportation facility within walking distance of the renovated waterfront.

The entire Suisun City downtown is an area that was historically pedestrian-oriented, and that has been enhanced and expanded through new development. Main Street and the promenades around the harbor provide attractive and functional pedestrian connections between residential, commercial, office and public uses. East of the harbor, new higher density single-family developments and upgraded older multi-family developments are in easy walking distance of Main Street and City Hall.

Pedestrian Projects. The **Driftwood Drive Pedestrian Project** (project #24) will construct a pedestrian walkway between Main Street and the terminus of Driftwood Drive east of Suisun Slough. This will connect neighborhoods to the east to downtown and the train station. Improvements will include walkways and landscaping on both sides of the Suisun Marina. It is a phase of a larger project to create a public plaza at the waterfront to help revitalize the historic downtown area.

The City's **Main Street Project/Downtown Streetscape Improvement Project** (project #25) is a façade improvement program for businesses. The City has also

constructed more than 300 new parking spaces between Main Street and the waterfront promenade to support downtown business and recreational use.

A good example of recent pedestrian-oriented development is Promenade, a "live-work" subdivision of 23 single-family homes adjacent to Suisun City downtown and waterfront. These higher density single-family homes feature two-story, turn of the century style architecture. Each contains approximately 400 square feet for commercial activity such as a professional office, retail or service business.

The **Highway 12 Central County Bikeway** (project #26), a separate multi-use path in the right-of way of Highway 12, is a City project to connect from the suburban neighborhoods in eastern Suisun City to the Sunset Avenue Shopping Plaza and to downtown. An existing Class I bikeway and pedestrian path extends west from Walters Road to Marina Boulevard. A new segment is being planned from Marina Boulevard to the downtown Capitol Corridor Amtrak Station, and from Emperor Drive to Walters Road. The widening of Walters Road from Highway 12 to East Tabor Avenue will include a Class I bikeway/path that will be part of the Jepson Parkway multi-use path. This portion of bike route from State Route 12 to East Tabor Avenue is under construction and will be completed in 2004. Jepson Parkway, a multi-agency TLC project described in more detail in the Fairfield and Vacaville sections, is a proposed new north-south regional transportation connection from Suisun City to Vacaville. It will provide multi-modal travel opportunities, including separated bike/pedestrian paths and transit service.

Railroad/Pedestrian Crossing Conflicts Study. In 2002, the city commissioned a study to examine pedestrian safety along the railroad corridor in Suisun City. The *Suisun Railroad Avenue Pedestrian Safety Study*[38] notes that high school and middle school students are the most frequent users of unofficial and often dangerous railroad crossings. Other children and adults are noted as frequent users in order to access community destinations across the tracks. The study identified problem areas at Marina Boulevard, Blossom Avenue, and Worley Road, where pedestrians are using unofficial and uncontrolled crossings to travel between destinations in Suisun City and Fairfield.

The study proposed a number of improvement alternatives that mitigate or eliminate the unauthorized crossings. They are shown in the table below, ranging from lowest estimated cost (per crossing) to highest estimated cost to implement:

[38] *Suisun Railroad Avenue Pedestrian Safety Study*, Kimley-Horn and Associates, Inc. September, 2002.

Table 6.5: Suisun Railroad Avenue Improvements
(from *Suisun Railroad Avenue Pedestrian Safety Study*)

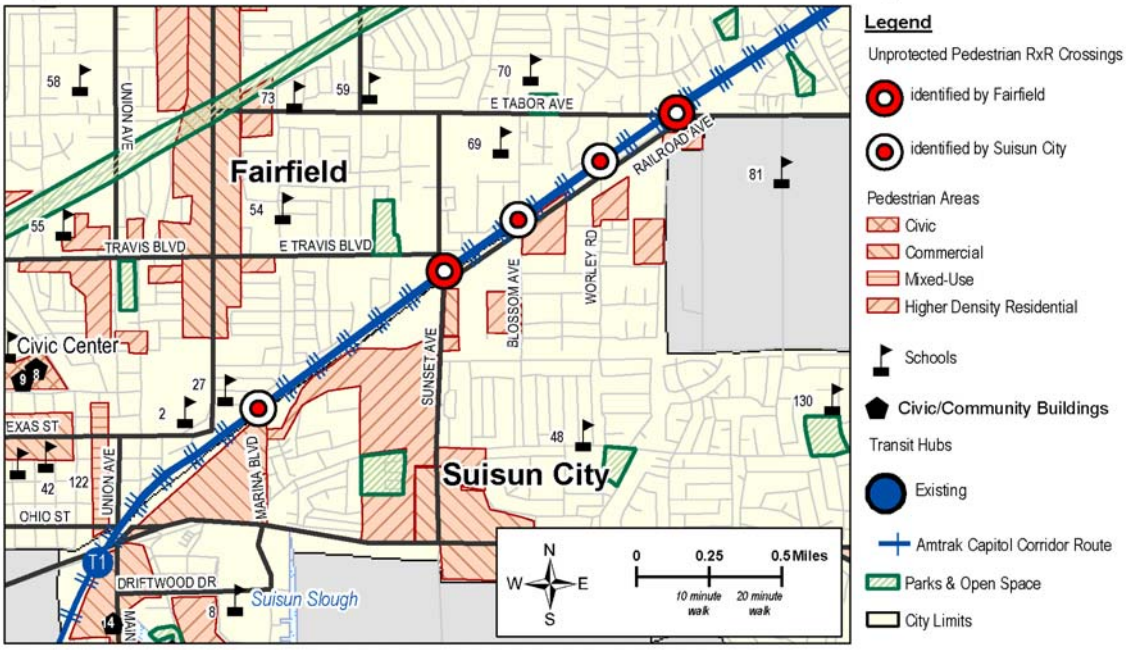
Number	Description	Est. Cost
1	**Eliminate Crossing and Bus Students to School.** Construct vandal resistant walls/fencing at crossing location to eliminate unauthorized crossing potential.	$187,000-$260,000 + unknown bus service costs
2	**Eliminate Crossing and Change School Boundaries**	$187,000-$260,000 + unknown bus service costs
3	**Construct At-Grade Crossing.** Construct an at-grade crossing with train activated gates, lights, and audible signals with fencing to help direct pedestrian traffic to crossing.	$285,000 - $415,000
4	**Construct Undercrossing.** Undercrossing options include cast-in-place tunnel, precast tunnel, or a bridge supporting the tracks. Fencing is also required to direct pedestrian traffic to crossing.	$1.1 million - $1.2 million
5	**Construct Overcrossing.** Overcrossing above the tracks would require fencing to direct pedestrian traffic to crossing and keep pedestrians on overcrossing.	$1.3 million - $1.5 million

In addition to these improvement concepts, the study recommended that the Blossom Avenue crossing be eliminated by constructing pedestrian and bicycle improvements along Railroad Avenue and directing pedestrian traffic to the existing railroad crossings at Sunset Avenue and East Tabor Avenue. However, as shown in Table 6.5, this recommendation directs pedestrians to railroad crossings that the City of Fairfield has identified as unsafe and in need of improvement (refer to Section 6.3.c for details).

Pedestrian Improvement Concepts. Pedestrian improvement concepts identified for Suisun City include:

- Railroad Avenue at Blossom Safe Route to School Crossing and/or other crossing improvements, as noted in Table 6.5.
- Other Safe Routes to School enhancements at many locations.
- Main Street to Union Avenue Pedestrian Overcrossing Enhancement (this is a joint project with Fairfield).
- State Route 12 (south side) pedestrian path, between Marina Boulevard and Sunset Avenue.
- Urban renewal on east side of Main Street.

Figure 6.5: Railroad Crossings in Fairfield/Suisun City



6.3.e Solano County, including Cordelia, Green Valley, Rockville

Major Pedestrian Routes and Destinations. Part of the Cordelia, Green Valley and Rockville area is within City of Fairfield limits, and part is within incorporated Solano County. It consists primarily of low to medium density suburban development and large-scale office and commercial development that is not pedestrian-oriented. However, pedestrian connectivity is a particular concern in this area because it is divided by the I-680 freeway, the I-80 freeway, and Highway 12, and impacted by heavy commute traffic that spills over onto local streets. This relates to access to elementary, middle and high schools from neighborhoods on the opposite side of the freeway. Also, this area features two historical town centers that were at one time local pedestrian destinations and could be again: "Old Town" Cordelia and the small commercial district of Rockville. Both areas are in the unincorporated County Area, but in walking distance of newer developments within Fairfield city limits.

Major roads that also function as pedestrian routes include Gold Hill Road, Oakbrook Drive, Cordelia Road, Central Road, Green Valley Road, Mangels Boulevard, Rockville Road, and Suisun Valley Road.

Rockville consists of a gas station, a few restaurants, offices and shops at the junction of Suisun Valley Road and Rockville Road, near the popular Rockville Hills Park. Although small, it is scenic, is at an important junction for recreational and

local traffic, and is within walking distance of existing and planned suburban neighborhoods. It has the potential to be preserved and enhanced as a pedestrian destination.

An existing alignment of the Bay Area Ridge Trail follows a PG&E transmission line northwest across Green Valley Road, to and through Rockville Hills. Ultimately, this trail is intended to be connected via Red Top Road and Mc Gary Road to other Ridge Trail segments in Vallejo's Hiddenbrooke development, and the Lynch Canyon Open Space Preserve (see Pedestrian Improvement Concepts, below).

Pedestrian Projects. **Old Town Cordelia** (project #15) is the subject of a Solano County-sponsored, City of Fairfield-partnered, TLC project that has the objective of improving bicycle and pedestrian access along Cordelia Road between Lopes Road and Pittman Road. The project also includes gateway signs, historical markers, trees, lighting, and historical interpretive plaques to enhance the pedestrian experience and knowledge and appreciation of Old Cordelia, which actually predates Fairfield as a town. This portion of Cordelia Road also serves as a key pedestrian connection between portions of Fairfield on the east and west side of I-680, particularly since the middle school is on the east side, and the high school is on the west.

Gold Hill and Lower Green Valley. In the Gold Hill area of Cordelia to the west of I-680 and south of I-80, a system of existing and planned separated paths along the foothills connects the suburban neighborhoods to the high school and to Cordelia Road.

Pedestrian connections are afforded across I-80 at Green Valley Road and Pittman/Suisun Valley Road, via the freeway overcrossings, although these connections have minimal width. North of I-80, Green Valley Road and Mangels Boulevard have broad, parkway-type landscaped buffers with sidewalks, and the more rural portion of Green Valley Road to the north has a recently completed separated multi-use path. Solano Community College is located on Suisun Valley Road, and is the western terminus of the Fairfield Linear Park trail. In conjunction with the future improvement of Highway 12, the extension of **Red Top Road** with an overcrossing (project #12) will offer the opportunity to connect to existing pedestrian/bike paths in the Green Valley Area along Mangels Boulevard and a PG&E right-of-way.

Unincorporated Vallejo Area. Homeacres, an unincorporated County area surrounded by City of Vallejo in the vicinity of Benicia Road (see Figure 6.3), is the focus of two County-sponsored pedestrian improvement projects. The **Homeacres Avenue Improvement Project** (project #13) will provide sidewalks to link Benicia Road to an important connection to a local elementary school. The **Fulton Avenue Improvement Project** (project #14) will construct a sidewalk on Fulton Avenue to provide a central pedestrian corridor for the Homeacres area of Vallejo.

Pedestrian Improvement Concepts. Generally the unincorporated County area is not the focus for formal pedestrian improvements, but there are some long-standing developed areas in the unincorporated areas of "Old Town" Cordelia, Green Valley, and Rockville, and there are several important points of pedestrian connection to regional parks and open space that are planned on the fringes of the cities.

The *Tri City and County Cooperative Plan for Agriculture and Open Space* (the Cooperative Plan) is a joint project of the cities of Benicia, Fairfield, and Vallejo and Solano County. Its intent is to create a physical and visual buffer of up to 10,000 acres between these cities in the area between I-80, I-680, and Lake Herman Road. The Solano Land Trust (the Trust), a private organization, has acquired and is managing the land with funding from grants and the participating agencies. Areas acquired to date include the 1039 acre Lynch Canyon Open Space Preserve and the 1200 acre King Ranch. Mc Intyre Ranch, the Hiddenbrooke (also known as Sky Valley) and Northgate open space areas, and Blue Rock Springs Park managed by the Greater Vallejo Recreation District are also part of the Cooperative Open Space Area. Grants and local funding have been secured toward other major acquisitions. The Trust manages Lynch Canyon, the King Ranch and other properties in Solano County that have some degree of public access, although the Trust's goal is to transfer responsibility for public access management to public agencies.

The Cooperative Plan is adopted by the member agencies as a component of their respective General Plans, including concepts for future trails and trail connections. Planned trail connections to the Tri-City and County Open Space Area are shown on Figure 2.2 and on the respective local area maps, including:

- Connection from the existing trail at the south end of Cordelia to the King Ranch:
- Connection from the planned trail on Red Top Road via Mc Gary Road to Lynch Canyon;
- The Wardlow Park/Blue Rock Springs Park trail corridor in Vallejo;
- Connection from Benicia's Lake Herman Park north to Sky Valley.

Another trail concept identified in the unincorporated area in the *Solano County Park and Recreation Element* is a connection from Paradise Valley in Fairfield to Lagoon Valley in Vacaville. The existing trail along I-80 in Paradise Valley terminates at the north end of that development at the Fairfield city limits. A short stretch of Nelson Road extends north to Lagoon Valley in Vacaville, where trails are planned to connect to existing Lagoon Valley Park trails and north to the central part of the City. A pedestrian pathway along Nelson Road would connect the Fairfield and Vacaville pedestrian systems together (see Figure 2.2).

The Solano County Park and Recreation Element also delineates a trail route that includes an existing gravel road west of Ledgewood Creek extending north from Rockville Road. The route extends to Waterman Road, but there is currently a gap across private property. This is also a designated route of the Bay Area Ridge Trail.

The County Park and Recreation Element includes a proposal (Proposal #6) to provide a trail connection between Sandy Beach County Park and downtown Rio Vista (see Figure 6.9).

Other trail or pathway connection projects identified in County plans will provide important regional pedestrian connections to regional parks or open space and between urbanized areas:

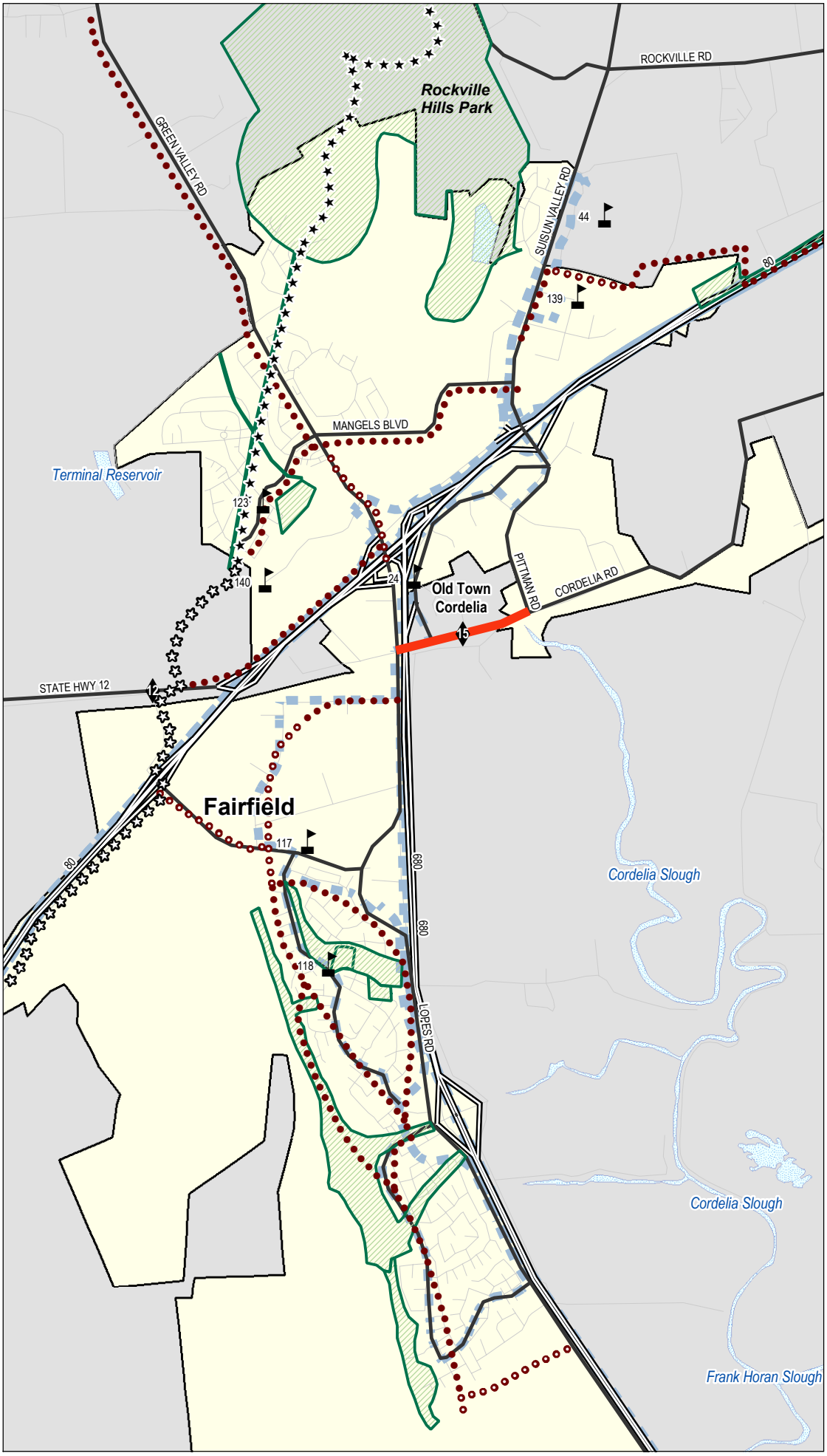
- Pedestrian path or sidewalk along Fulton Avenue in the Homeacres unincorporated area near Vallejo.
- Trails or paths in:
  - the English Hills area
  - the Pleasants Valley area
  - the Allendale area

Note: For features on Figure 6.6, Cordelia/Green Valley/Rockville, refer to Table 6.4: Fairfield-Suisun Pedestrian Destinations.

Figure 6.6:

Cordelia/Green Valley/ Rockville

Pedestrian Projects, Routes, & Destinations



Legend

Pedestrian Areas
- Civic
- Commercial
- Mixed-Use
- Higher Density Residential

Designated Pedestrian Routes
- Existing
- Planned
- Planned Bay/Ridge Trail route
- Existing Bay/Ridge Trail route

Schools*

Special Pedestrian Crossing
- Overcrossing
- Undercrossing

Project Number *(see Table 2.1 for project details)*

Project

Civic/Community Buildings*

Transit Hubs
- Existing
- Planned

(see Table 6.4 for a key to civic buildings and schools)

Public Transit Routes

Amtrak Capitol Corridor Route

Parks & Open Space

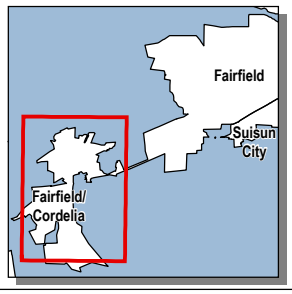
City Limits

Unincorporated County

N W E S

0 0.25 0.5Miles

10 minute walk 20 minute walk



6.3.f VACAVILLE

Major Pedestrian Routes and Destinations. The historic downtown area of Vacaville, located northwest of Interstate 80 and centered around the intersection of Merchant and Main Streets, is a significant pedestrian destination. The older residential areas of Vacaville located west of downtown comprise a larger pedestrian district that also includes commercial uses along Merchant Street and East Monte Vista Avenue. Commercial and higher density residential uses are clustered along Monte Vista Avenue north of downtown, including many within walking distance of downtown. Existing and planned higher-density residential areas are clustered along Brown Street and Browns Valley Road in the northern portion of the City, and along Alamo Drive, Peabody Road, Allison/Ulatis Drive and Nut Tree Road in the southern portion of the City.

Major north-south roads that also function as major pedestrian routes include Alamo Drive, Orchard Avenue, West Street, Gibson Canyon Road, Brown Street/Browns Valley Parkway, Davis Street, Peabody Road, Nut Tree Road and Leisure Town Road. Major east-west roads that function as major pedestrian routes include Vaca Valley Parkway, Monte Vista Avenue, Buck Avenue and Main Street, Mason Street/Elmira Road, Marshall Road and Alamo Drive. Roads that cross I-80 with pedestrian facilities include Alamo Drive, Davis Street, Mason Street/Elmira Road, Allison Drive, Nut Tree Road, and Leisure Town Road. Vaca Valley Parkway provides a crossing over I-505.

Vacaville also features a growing system of urban creekside and corridor multi-use pathways connecting outlying neighborhoods and the downtown area. These routes are being implemented in accordance with the City's 1991 *Comprehensive Parks, Recreation, and Open Space Master Plan*. The Creek Walk that runs next to the downtown area is an attraction that draws many visitors and is an important setting for community events. Stretching along Ulatis Creek for a quarter of a mile, the Creek Walk ends in a large community plaza. The plaza, located within Andrews Park between East Monte Vista Drive and Main Street, is the setting for free concerts in the summer and other events throughout the year.

Connecting with the eastern end of the Creek Walk at McClellan Road, a proposed path will meander along Ulatis Creek east to Leisure Town Road. Two segments of this route already exist. In addition, an existing bike and pedestrian path runs along Alamo Creek south of I-80, providing a nearly continuous off-street pedestrian route through the southern portion of the City connecting several community and neighborhood parks. It connects Marshall Road in the west to Nut Tree Road, winding through designated open space along the creek, and following a short segment of sidewalk along Nut Tree Road north to Nelson Park. In Nelson Park, the path continues along the creek to the eastern limits of the City on Leisure Town

Road. Another existing pathway is in a former railroad right-of-way that runs from I-80 to Alamo Road, intersecting the Alamo Creek Trail. A City-proposed pathway will extend north along Ulatis Creek from the western end of the Creek Walk, paralleling Gibson Canyon Road to Vaca Valley Road.

Pedestrian Projects. The **Vacaville Creek Walk Extension** (project #27) is a current City TLC project that will extend the Creek Walk from its current eastern end to McClelland Street, including the walkway, irrigation, landscaping, additional parking, and a related mixed-use residential and commercial development to the east and south of the project area that will complement the Creek Walk and other downtown-area pedestrian scale improvements.

Vacaville has adopted a *Downtown Conceptual Plan* that identifies community-oriented improvements for its downtown area. Plan components include pedestrian amenities, downtown transportation linkages and transit improvements, and a park-and-ride facility located at I-80/Davis-Hickory Street. The Town Square project creates a comfortable public place to:

- Energize and focus the downtown experience.
- Provide a rich pedestrian destination with a "sense of place."
- Provide a gateway to the new library and existing Creek Walk via a strong link to Main Street.

The **Davis Street Entrance Way Project** is a City TLC project in the implementation stage that includes improvements between two vital areas: a freeway frontage recently converted to a commercial and entertainment center, and a historic main street district. The phased improvements include colored/textured crosswalks and street corners, landscaped street bulb-outs, and a number of pedestrian amenities such as pedestrian-scale streetlights, water features, historic plaques, benches, kiosks, and a grand entry arch over the street. The TLC funds will also be used to implement a number of infrastructure improvements and upgrades to the street, sidewalk, irrigation, and electrical components. The project will help calm traffic, making Davis Street safer, more pleasant, and convenient for pedestrians. The project will also provide a vital link between the office space, 16-screen movie theater, ice rink, and restaurants in the redeveloped former Basic American Foods industrial site and the historic Main Street district's numerous shops and restaurants, and the Creek Walk and the Town Square. The Phase 1 improvements were completed in 2004.

Vacaville's plans for transit facility improvement will also support pedestrian activity. The **Vacaville Bus Terminal and Transfer Point** (project #28) would be a new timed transfer center to allow all City Coach, and interested intercity transit services, to meet and transfer passengers at one central location. The facility will be located in downtown at the southeast corner of East Monte Vista Avenue and Cernon Street. The terminal would include bus shelters, bike racks, phone booths and other amenities to support transit use.

A City/private project that is a potential pedestrian zone is the **Nut Tree Ranch Development Project** (project #29). The project will rebuild the historic 76-acre

Nut Tree site just north of Interstate 80. The project is envisioned to feature a range of specialty retail shops and cafes, picnic grounds and residential units. The goal is to create a special setting that will attract visitors and serve the community. An open plaza would be the focal point of the project, with a new Nut Tree restaurant and sign, complete with carousels, train rides, hobby horses and an ice cream pavilion. The project includes 350 multi-family residential units, 200,000 square feet of office space, a 200 room hotel connected to a 20,000 square-foot conference center, and another 120 room hotel. The City Council has approved the project and construction is anticipated in the summer of 2005.

The **Linwood Street PG&E Trail Gap Closure** (project #30) will connect Linwood Street to North Orchard Avenue with a bridge over Alamo Creek to link Cheyenne Drive to Shady Glen Court. This project will serve as a connector to the primary system to Gibson Canyon and Foothill Drive, providing bicycle access for residences in northwestern Vacaville.

The **Jepson Parkway Concept Plan** (project #16) is a multi-jurisdictional TLC and enhancement project being developed by Vacaville, Fairfield, Suisun City and Solano County. The Parkway, when complete, will extend from I-80/Leisure Town Road interchange in Vacaville to the State Route 12/Walters Road intersection in Suisun City. This parkway will provide a separated north-south corridor in the County for pedestrian and bicycle travel. The project includes provisions for local and express bus service and a future multi-modal train station; bicycles and pedestrians, with a 10-foot wide multi-use path along most of the 12-mile length of the planned Parkway; extensive landscape buffers; transit-compatible, pedestrian-friendly land use and design, and roadway phasing and management. Portions of the pedestrian and bike path improvements are already completed, while planning for the Fairfield-Vacaville multi-modal train station and transit-oriented development is underway, as highlighted in the description for Fairfield.

The project includes staging areas that can serve as rest stops and recreational starting points. Each staging area would feature bicycle parking, rest rooms, special landscaping, parking for autos, picnic areas, and other amenities. Three of the staging areas are located to provide a connection between Jepson Parkway and other planned or existing multi-use pathways, while the fourth offers an important non-motorized connection to the Fairfield/Vacaville Multi-modal Train Station.

Pedestrian Improvement Concepts. In addition to the current project proposals mentioned above, the following pedestrian improvement concepts have been identified for Vacaville.

- Connection along Ulatis Creek from McClellan to Leisure Town Road and north from the western end of the Creek Walk, paralleling Gibson Canyon Road to Vaca Valley Road..
- Additional Creek Walk extension to the east and south to include a pedestrian plaza.

- Connection from Lagoon Valley Park south to Paradise Valley and Fairfield (consistent with Solano County concept).
- Safe Routes to School project in a number of locations.

Table 6.6: Vacaville Pedestrian Destinations

SCHOOLS

#	Name
52	Alamo Elementary School
62	Edwin Markham Elementary School
63	Elm Elementary School
64	Eugene Padan Elementary School
66	Fairmont Elementary School
71	Hemlock Elementary School
74	Montessori Childrens School
77	Orchard Elementary School
83	Country High School
84	Vacaville Christian Academy
85	Vacaville High School
86	Vacaville High School Annex
88	Will C Wood High School
89	Willis Jepson Middle School
91	Cambridge Elementary School
93	Cooper Elementary School
96	Jean Callison Elementary School
100	Notre Dame Parochial School
102	Sierra Vista Elementary School
105	Vaca Pena Middle School
131	Browns Valley Elementary
132	Ulatis Elementary
133	Foxboro Elementary
134	Elise P. Buckingham
135	Faith Academy
141	Solano Community College (Vacaville Center)

CIVIC

#	Name
19	Vacaville Town Square
20	Vacaville City Hall
21	Vacaville Museum
22	Vacaville Town Hall (historical)
29	Vacaville Ulatis Community Center
30	Three Oaks Community Center/Walter Graham Aquatic Center
31	Lagoon Valley Park
32	Centennial Regional Park
33	Arlington Regional Park
34	Al Patch Sports Park
35	Keating Ball Fields
36	Nelson Park

PEDESTRIAN ZONES & DESTINATIONS

Alamo Creek Trail
Andrew's Park
Creek Walk
Downtown (intersection of Merchant & Main Streets)

PEDESTRIAN ROUTES

Alamo Drive
Allison/Ulatis Drive
Brown Street and Browns Valley Road
Buck Avenue
Davis Street
East Monte Vista Avenue
Gibson Canyon Road
Liesure Town Road
Mason Street/Elmira Road
Merchant Street
Nut Tree Road
Orchard Avenue
Peabody Road
Vaca Valley Parkway
West Street

Figure 6.7: Vacaville Map
(remove and replace with figure)

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6.3.g DIXON

Major Pedestrian Routes and Destinations. The two major pedestrian zones within Dixon are the historic downtown and Hall Memorial Park to the southeast of the downtown area. The downtown district constitutes several blocks centered around First Street and A Street. City Hall (civic building #6), the Senior Multi-Use Center, Hall Memorial Park, and the Dixon May Fairgrounds are located just southwest of downtown and comprise part of the City's primary pedestrian zone. Major north-south streets that also serve as major pedestrian routes include North First Street/Highway 113, North Adams Street, Almond Street, and Pitt School Road. Major east-west routes include West H Street, West F Street, and West and East A Street.

Pedestrian Projects. Dixon has three pedestrian-oriented TLC and enhancement projects in stages of planning and implementation. The **Downtown Streetscape Plan** (project #31) is now in its second phase. It include streetlights, sidewalk replacement and additional street trees on Highway 113 from B Street to the Union Pacific Railroad. The **West B Street Pedestrian Undercrossing Project** (project #32) will replace the existing at-grade crossing with a new bicycle and pedestrian undercrossing to create a safer connection for commuters between the future Multi-Modal Station and downtown. The **Dixon Multi-Modal Transportation Center** (project #33) is being developed in 3 phases. The project includes parking and landscape improvements adjacent to the transfer station on the northwest side of the tracks (Phase I). Future improvements include a multi-modal train and transfer station at Jefferson and B Streets (Phase II), transit services, and additional park-and-ride spaces (Phase III). The project also includes adjacent open space and a mini-park.

Pedestrian Improvement Concepts. In addition to the current projects mentioned above, Safe Routes to School enhancements in many locations are envisioned for Dixon.

Table 6.7: Dixon Pedestrian Destinations

SCHOOLS

#	Name
90	C A Jacobs Intermediate School
94	Dixon High School
97	Linford L Anderson Elementary School
99	Neighborhood Christian School
103	Silveyville Primary School
115	Gretchen Higgins Elementary School
142	Tremont Elementary
143	Maine Prarie High Continuation

CIVIC

#	Name
6	Dixon City Hall
7	Dixon Public Library
26	Veterans Memorial Hall

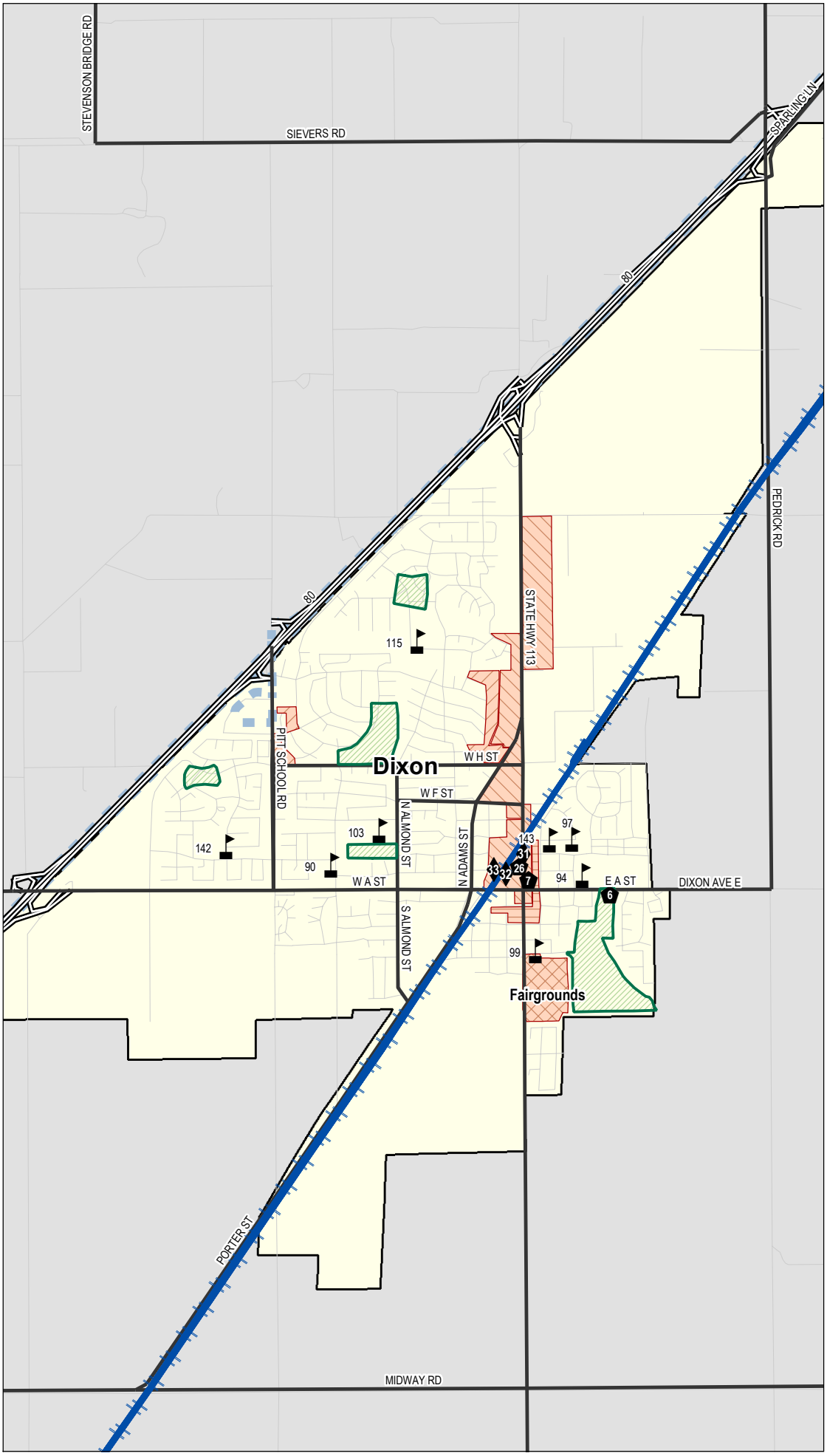
PEDESTRIAN ZONES & DESTINATIONS

Dixon May Fairgrounds
Downtown (centered around First & A Streets)
Hall Memorial Park
Senior Multi-Use Center

PEDESTRIAN ROUTES

North Adams & Almond Streets & Pitt School Road
North First Street/Highway 113
West H and F Streets, West and East A Street

Figure 6.8:
Dixon
Pedestrian Projects, Routes, & Destinations



Legend

Pedestrian Areas
- Civic
- Commercial
- Mixed-Use
- Higher Density Residential

Designated Pedestrian Routes
- Existing
- Planned

Schools*

Special Pedestrian Crossing
- Overcrossing
- Undercrossing

Project Number *(see Table 2.1 for project details)*

Project

Civic/Community Buildings*

Transit Hubs
- Existing
- Planned

Public Transit Routes

Amtrak Capitol Corridor Route

Parks & Open Space

City Limits

Unincorporated County

** (see Table 6.7 for a key to civic buildings and schools)*

N
W E
S

0 0.25 0.5Miles

10 minute walk *20 minute walk*

6.3.h RIO VISTA

Major Pedestrian Routes and Destinations. Rio Vista's historic downtown area on Main Street is a significant pedestrian destination. The waterfront area, extending from Main Street to the Rio Vista Bridge, complements the activity in the historic downtown core. The older portion of town, with its original grid street layout, is all within easy walking distance of downtown and the waterfront. Major roads that also function as major pedestrian routes include Highway 12, Main Street, Second Street and Beach Drive, and Front Street.

The Sacramento River and Delta lie east of the City. The river is a major resource and amenity from the northern city limits along Highway 84, to the Helen Madere (Rio Vista) Bridge at Highway 12, and south to the former Army Reserve Base. Great potential exists for public access and enjoyment of the riverfront in the area between City Hall (civic building #15), Main Street and the bridge. There is also great opportunity at the former Army Base, located south of the City. The area is not yet annexed, but a Base Reuse Plan has been prepared and the land is presently being prepared for transfer to the City. Possible uses of this 23 acre site include a San Francisco Bay-Delta research center and private/public recreation. With transfer and redevelopment, the base could become an important pedestrian destination.

Pedestrian Projects. The City of Rio Vista has three TLC and enhancement projects in various stages that directly or indirectly address pedestrian circulation. The **Waterfront Plan and Improvement Project** (project #34) is designed to beautify the waterfront and link it to downtown. Public elements of this plan include a pedestrian boardwalk connecting Main Street and the Rio Vista Bridge and an upgrade of the fishing pier adjacent to the bridge. Project goals include a public walkway along the river from City Hall to the Highway 12 Bridge, streetscape improvements to create a memorable entry into downtown and to preserve views of the river from Front Street, and building designs that respect the character of Downtown. The **Downtown Revitalization Project** (project #35) includes streetscape and landscape improvements, and pedestrian and bicycle amenities. The Main Street Streetscape portion of the project has recently been completed. A **Highway 12 Corridor Planning Study** (project #36) will focus on designing to accommodate future land uses and anticipated growth in traffic along Highway 12. As an outcome of the study, Highway 12 alternative mode capital improvements are to be identified.

Pedestrian Improvement Concepts. Several trails in and around Rio Vista are included in the *Circulation and Mobility Element, Rio Vista General Plan*. A path is planned along Beach Drive from Second Street to Sandy Beach Park. The trail continues along Second Street from Beach Drive to Main Street, then along Main

Street to Waterfront, and along Waterfront to Highway 12. A loop is planned from Highway 12 at the bridge around the downtown area. The path will extend from Second Street west to Church Road. From Church Road the trail will continue on the shoulder east to White School Road. There will be a sidewalk along Airport Road from the city limit line east to Church Road and south along Church to complete a larger loop.

In addition to the project proposals mentioned above, the *Circulation and Mobility Element,* calls for a strong pedestrian and bicycle link between the Sacramento River, existing neighborhoods, downtown, and other future destinations. Specific project concepts in the *Circulation Element* include:

- A grade-separated highway crossing between Drouin Drive and Church Road.
- A connection along Beach Drive from Second Street to Sandy Beach Park (consistent with Solano County pedestrian connection concepts).
- A trail loop around the central part of the City.
- A second trail loop to the northwest that passes through a high density housing area.
- A connection to planned residential development areas to the north.

Table 6.8: Rio Vista Pedestrian Destinations

SCHOOLS

#	Name
108	Rio Vista High School
109	Riverview Elementary School
111	White Elementary School
129	Riverview Middle School

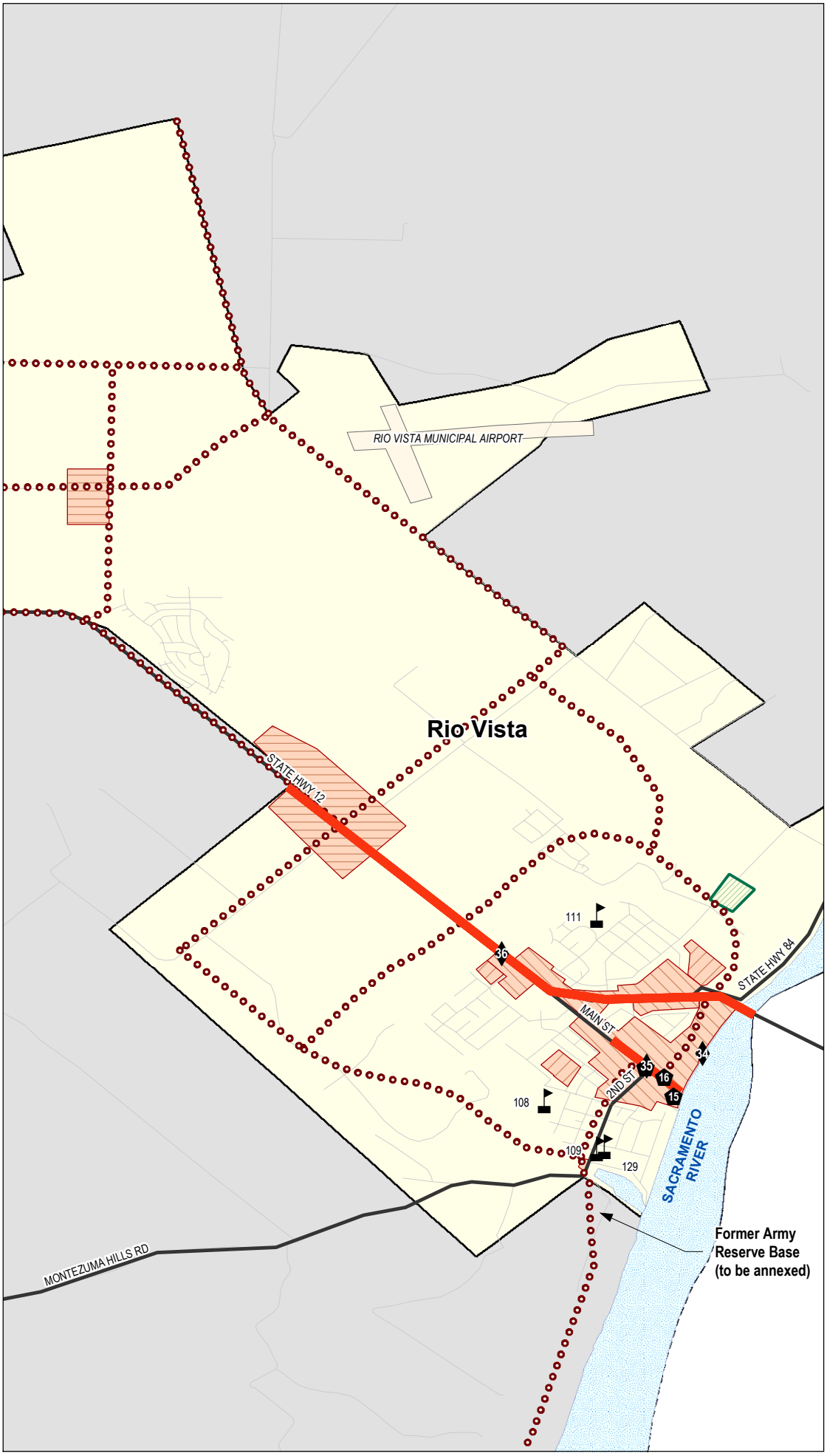
CIVIC

#	Name
15	Rio Vista City Hall
16	Rio Vista Museum
17	Rio Vista Public Library

PEDESTRIAN ZONES & DESTINATIONS
Downtown (Main Street)
Waterfront

PEDESTRIAN ROUTES
Front Street
Highway 12
Second Street and Beach Drive

Figure 6.9:
Rio Vista
Pedestrian Projects, Routes, & Destinations



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Public Transit Routes

Amtrak Capitol Corridor Route

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City Limits

Unincorporated County

** (see Table 6.8 for a key to civic buildings and schools)*

N W E S

0 0.25 0.5Miles

10 minute walk *20 minute walk*

7 IMPLEMENTATION

First Street, Benicia

This section provides an overview of key planning steps and considerations for implementing pedestrian-supportive projects. Gaining public and decision-maker support for pedestrian projects is the initial challenge to creating pedestrian-friendly communities. Obtaining funding for planning, design, and construction depends on this support, but holds its own challenges. Planning to enhance or create pedestrian-friendly communities involves efforts at all stages, from regional planning and visioning, to analyzing needs and opportunities for housing, jobs and transportation; preparation of local plans and policies such as general plans, zoning codes, and design guidelines; and in project-specific planning, design, and review. Implementation is the responsibility of local governments, but it is encouraged and supported by federal, state and regional studies, plans, policies, incentives and funding sources, including STA's own efforts and TLC funding program.

A "bottom-up" approach to regional pedestrian planning. The measures in this Plan are provided to assist Solano County agencies in developing and implementing pedestrian projects. Encouraging walking does not require sweeping change. Improvements can be made in appropriate places where traffic calming is required, pedestrian facilities are needed, or a new or improved project, district, or neighborhood is planned. Pedestrian access and amenities can be integrated into many types of transportation and development projects, often at little or no additional cost, if there is foresight to incorporate them early in the planning or design process. The role of federal, state, and regional agencies is not to impose pedestrian principles on local governments, but to encourage and partner with them, offering guidance, resources, incentives and regional or countywide coordination of connections and design consistency.

7.1 BUILDING PUBLIC SUPPORT

Although pedestrian-friendly design concepts vastly pre-date automobile-friendly design, they often are unfamiliar to or misunderstood by the public. Many myths persist regarding the alternative forms of development or circulation system enhancements. Local governments should make every effort to build community understanding and support for pedestrian-friendly design principles as part of any implementation effort. There are many references and resources to support these efforts contained in Section 8 of this Plan. An excellent example is the *VTA Community Design & Transportation Program: A Manual of Best Practices for Integrating*

Transportation & Land Use. This manual recommends the following strategies for building community support:

- *Support the 'Big Picture' Decision-Making Process*. Allow citizens to provide input early on in the process regarding larger, planning-related issues. Citizen input is often restricted to specific project details rather than broader reaching planning concerns.
- *Early and Frequent Public Input*. Build trust by holding visioning, scoping, and introductory project meetings while the project is still in its infancy. This is a much stronger trust-building exercise than waiting until the last minute to present final drawings for public review.
- *Design Charettes*. Build community consensus by including citizens in the design process.
- *Design Competitions*. Holding design competitions can help build community excitement and support for a project. Design competitions – especially for public projects – can also be an effective means to save public funds.
- *Form Partnerships*. Forming partnerships with various community groups will enlist the help and promote input from minority groups, churches, business or trade associations, and neighborhood associations.
- *Create Photosimulations*. Photosimulations will help the public understand how pedestrian concepts will work in their community.
- *Conduct Field Trips*. Nothing compares to seeing the finished product. Tours with an educated guide can help citizens envision a final as-built project in their own community.

7.2 Local Policies & Plans

Change begins with the fundamental policies that shape local communities, including documents such as the general plan, specific plans, zoning codes, transit village plans, subdivision regulations, and design guidelines. Pedestrian-friendly communities are best achieved by revising these planning instruments to include specific policies that accommodate and promote pedestrian principles and that strike out policies that inhibit or prohibit the principles found in this Plan.

General Plan. As an adopted document that guides the formation of city policies and practices, and that ultimately guides the physical formation of the city, the general plan can implement pedestrian policies throughout its seven required elements: *Land Use, Circulation, Housing, Conservation, Open Space, Noise,* and *Safety*. Each element provides opportunities to establish specialized goals, objectives, and implementation measures that foster pedestrian principles. The general plan serves as the origin and basis for most other city planning-related policies, and these policies must be consistent with the general plan as required by state law. Therefore, it is essential that the general plan set the stage for pedestrian-supportive policies.

Pedestrian policies that are poorly defined or altogether absent from the general plan could hinder future efforts to implement effective zoning or specific plans.

Specific Plans. Specific plans are useful because they combine policy statements with development regulations.

Subdivision Regulations. Local governments can encourage, direct, and partially fund pedestrian-friendly improvements by adopting subdivision regulations that incorporate the principles discussed in this Plan. These regulations can require that subdivisions comply with the pedestrian principles, objectives and policies found in the general plan. This includes the authority to "approve and design street alignments, street grades and widths, drainage and sanitary facilities, lot size and configuration, traffic access, and other measures as may be necessary or convenient to insure consistency with, or implementation of the general plan." Flexible or specific standards that support pedestrian circulation should be considered. In addition, local governments can require dedications of public improvements or in-lieu of payments for infrastructure improvements. The scope of improvement requirements is outlined in Figure 7.1.

Figure 7.1: Types of dedications allowed via Subdivision Regulations

1. Streets, alleys, drainage, public utility easements, and public easements (§66475);
2. Bicycle paths (limited to subdivisions containing 200 or more parcels) (§66475.1);
3. Local transit facilities, such as bus turnouts, benches, shelters, and landing pads (applies to subdivisions with 200 dwelling units or more, or 100 acres or more) (§66475.2);
4. Parks and recreational facilities if the city's general plan or specific plan contains policies and standards for park and recreation facilities (Quimby Act — §66477);
5. School sites (this is actually a reservation with a right to purchase at a later date) (§66478);
6. Access to waterways, rivers, and streams (§66478.11);
7. Access to coastline or shoreline (§66478.11);
8. Access to public lakes and reservoirs (§66478.12);
9. Drainage and sanitary sewer facilities (§66483); and
10. Bridges and major thoroughfares (§66484).

Source: General Plan Guidelines, Antero Rivasplata and Gregg McKenzie for State of California Governor's Office, November 1998, pg. 115.

Design Guidelines. Design guidelines are useful for guiding the form of proposed developments and improvements within a city or county and for directing a local government's discretionary review process. Pedestrian-supportive design guidelines can provide specific standards for creating streets and accommodations for pedestrians. The guidelines can range from infrastructure improvements and pedestrian-scale building design, to the design of landscaping and site amenities.

Other Projects and Programs. The above measures can provide the policy and plan framework to support pedestrian projects, but the best opportunity to implement them may be to "piggyback" on other projects. Consider the relationships between pedestrian access and amenities and

other projects and purposes such as roads, freeways, transit, parks and recreation, environmental protection, and public utilities and infrastructure. All of these types of projects offer opportunities to enhance pedestrian connections and amenities. To incorporate pedestrian improvements into other projects, seek funding to augment project budgets in order to add these features, and/or incorporate these improvements into the project scope. At a minimum, leave space or infrastructure for future improvements.

7.2.a Pedestrian Principles Planning Checklist

The checklist below is provided to help guide the pedestrian planning process. It highlights the key principles and best practices covered in this Plan, for use in conceiving and adopting new policies and plans, and to assist in the discretionary review process of individual projects to achieve pedestrian principles, and related design objectives.

Building Public Support and Understanding

- Have measures been taken to build public support and understanding?
  - Are the public, elected officials, and staff knowledgeable and an active part of the process?
  - Are staff, council, and commission members actively reviewing projects located in key areas using pedestrian principles?
  - Have local government officials performed a community outreach and visioning process?
  - Has the public been afforded early and frequent participation opportunities on specific proposals?

Planning and Policy

- Are policy makers creating new policies or revising old policies to accommodate pedestrian principles?
  - Have urban design guidelines and standards been drafted to support pedestrian principles?
  - Have zoning codes been revised and upgraded to support pedestrian principles?
- Has the permitting process been revised in order to emphasize & streamline pedestrian projects?
  - Do policies create greater certainty for projects that conform to pedestrian-friendly criteria?
- Have specific target areas (e.g. zones, corridors, and hubs) been identified and have specific plans been drafted to guide pedestrian principles in these

areas?

  - Are key sites along existing and/or planned transit corridors and hubs designated for pedestrian-friendly uses and densities?

- Are uses that encourage pedestrian traffic concentrated within walking distance of transit (approximately ½ mile)?
- Are basic services (i.e. restaurants, drug stores, grocery, hardware, etc.) located within walking distance of homes, jobs, and transit?
- Are policies in effect that promote the retrofitting of existing auto-oriented suburbs?
  - … to add shared use paths that are separate from roadways?
  - … to provide safe pedestrian linkages across major highways and rail lines?
  - … to connect neighborhoods, districts, and activity corridors that are otherwise only safely accessible by car?
- Do overarching standards and guidelines or individual project proposals provide spaces for landscape areas, and amenities that encourage public gathering (e.g. public plazas, courtyards, greens, squares)?
- Are major transit hubs planned or in place in areas of concentrated population and activity?
  - Can pedestrians access these central hubs and get to outlying areas?
- Does transit integrate with and accommodate pedestrians, bicycles, and the handicapped? (i.e. are bus stops outfitted with shelters?)
- Are pedestrians safe from real and perceived dangers?
  - … from high traffic volumes?
  - … from high traffic speeds?
- Are pedestrian circulation routes and areas functional?
  - Are they in good repair?
  - Are they accessible to do the disabled?
  - Are they connected to other modes of transportation?
  - Do they connect with relevant and desirable destinations?
- Are sidewalk corridor widths sufficient enough for the intensity of uses and foot traffic?

- Is pedestrian pleasure optimized?
  - Are street trees provided at frequent distances to provide shade and separation from the street?
  - Are there supportive pedestrian amenities (i.e. benches at regular intervals, pedestrian-scale street lighting, and textured paving at intersections)?
  - Do sidewalk corridors connect with plazas, courtyards, squares, and other places of activity?
  - Are these routes well lit?

7.2.b Measures of Success

Successful implementation of pedestrian planning, principles, and design can be measured in many ways. Overall, successful pedestrian-friendly communities are vibrant, economically viable, and aesthetically pleasing places. Underlying these general surface qualities are some specific key measures of success that reflect how these places are planned, how they are used, and how they function. These measures of success can also be used as objectives for planning policies and standards, and design guidelines:

- *Allied Public Support*. The first step towards success is for local governments to gain public support and partnership. Such a partnership fosters understanding and mutual goal-building toward creating a successful community that everyone will like.
- *Connectivity*. Local, easily accessible connections are provided to and from homes, work, retail, and civic services such as schools and libraries.
- *Diversity of People and Activity*. Pedestrian-friendly communities contain a wide range of users at all times – from young to old, and rich to poor. Activity in these areas is diverse and occurs throughout most hours of the day – with people walking, sitting in cafes, waiting for buses, and stopping to talk on sidewalks. An increased presence of people creates a sense of security with more 'eyes' on the street.
- *Creating A Civic Stage*. The end result of a successful pedestrian principles community is a community that has a rich sense of place. In these communities, the public arena is no longer an area to drive through quickly, but a place to stop and participate in an unfolding civic 'drama'.

7.3 Guide to Estimating Pedestrian Project Costs

The following checklist reviews the basic categories of requirements and costs that make up a typical local improvement project. Most pedestrian projects will be part of larger projects where these items are accomplished as part of very detailed work

plans and estimates. This checklist may be most helpful to those who are developing estimates for budgeting and grant application purposes, or for smaller projects that are exclusively focused on accommodating pedestrians.

7.3.a Project Cost Estimate Checklist

- *Preliminary Research and Design Studies*. This includes coordination with other agencies such as Caltrans and utility companies, and adjacent property owners where there are private improvements in the right-of-way, and/or acquisition of right-of-way may be required, or when the pedestrian improvements are part of a larger public or private project.
- *Public Outreach and Participation*. Public and stakeholder contact and participation should be a part of the preliminary research and design study process when the improvements are not already a part of a plan or project that has undergone public review.
- *Property and Topographic Surveys*. It may be possible to complete preliminary studies and plans based on general information from assessor's maps and city or county-wide aerial photo and topographic data, and/or old plans for the area. Ultimately, accurate property and physical features of the site or route will be required, and it may be most effective to obtain them at an early stage.
- *Environmental and Technical Studies*. Often the form and feasibility of a project hinges on conditions that can only be determined through formal studies such as geotechnical, biological, wetland delineation, or traffic analysis, and environmental research for site contamination. In addition, some of these studies may be necessary for environmental compliance later in the process.
- *Environmental Compliance*. The process of complying with the California Environmental Quality Act (CEQA), consists of an Initial Study on individual projects or an entire program prepared by the lead agency (typically the planning department of the local jurisdiction). Depending on the type of project and the identified potential for impacts, the CEQA document could consist of a simple Statutory or Categorical Exemption, a Negative Declaration (there are no potential significant impacts), a Mitigated Negative Declaration (there are potential significant impacts but measures have been included in the project to mitigate them), a focused Environmental Impact Report (EIR) analyzing a limited set of potentially significant impacts, or a full EIR analyzing the full range of impacts. Projects with federal funding may require a process and document complying with the National Environmental Policy Act (NEPA), which has somewhat different terminology and process, and is usually combined with the CEQA document.

  The requirements and process for environmental compliance should be identified early by knowledgeable parties, as this can be the most difficult and time-consuming part of the process, or even kill the project. However the

environmental document cannot be prepared unless the project is well defined, so the timing and approach to this preparation should be carefully considered.

- *Permits and Fees*. Often the project needs to account for certain permits and fees from the sponsoring agency for bookkeeping purposes, in addition to fees to regional and state agencies for environmental permits, to utility companies for connections, etc. Special permits, such as for construction in wetlands or in or near jurisdictional waters, or if any special status species are involved, can require extensive work and time.
- *Right-of-Way Acquisition*. Land acquisition may be through outright purchase, easement, long-term lease, property exchange, or other means. Projects that will require right of way acquisition should include cost estimates based on local property values. In addition to the cost of the property, completing the right-of-way acquisition may require title reports, appraisals, consultant assistance with negotiations, and preparation and recording of new maps.
- *Plans, Specifications and Estimate (PS&E)*. The construction documents will need to cover each aspect of the project. For planning purposes construction costs are usually estimated as a percentage of the construction cost for standard types of work. However, the percentage can vary significantly for special types of projects or smaller projects.
- *Construction Costs*. Costs must include all the anticipated items of work (Table 7.1 provides a sample of the types and amounts of costs that may be incurred), plus consideration of project mobilization and access, contractor's overhead and profit, any special requirements of the contractor such as traffic, control, bonding, and prevailing wage, and contingencies for unanticipated conditions.
- *Construction Period Services*. Construction surveying and staking, assistance during bidding and contracting, construction observation and contract administration are some of the services that will need to be provided by the sponsoring agency or contracted out during the construction of the project.

7.3.b Sample Project Cost Items

For planning purposes in developing new pedestrian access or amenity projects, or for adding these elements to larger projects, Table 7.1 provides a selection of unit prices for common pedestrian improvements and amenities. These are based on estimates prepared for other pedestrian plans and projects. Compiling and sharing actual bid/construction cost items from completed pedestrian-oriented projects in Solano County would be an excellent measure to support planning of new pedestrian improvements. This measure is included as an implementation policy in the Plan.

Table 7.1: Sample Project Cost Items

Item	US Unit	Cost per Unit	Metric Unit	Cost per Unit
Clearing, grubbing (clear brush & tree limbs)	SF	$0.10	SM	$1.08
Rough Grading (6" avg. depth)	SF	$0.35	SM	$3.77
Fine grading/soil prep (6" avg. depth)	SF	$0.20	SM	$2.15
Remove existing asphalt concrete (AC) paving, sidewalk	SF	$7.50	SM	$80.73
Sawcutting	LF	$1.35	LM	$4.43
Cyclone fencing (chain link, 6' high)	LF	$13.00	LM	$42.65
Split rail fencing	LF	$15.00	LM	$49.21
AC paving (2" A.C., 6" base)	SF	$2.97	SM	$32.00
Baserock trail surface	SF	$2.50	SM	$26.91
Concrete sidewalk (6'-wide)	SF	$4.60	SM	$49.51
Concrete curb and gutter	LF	$7.90	LM	$25.92
Sidewalk only (1.9 m, curb existing)	LF	$47.50	LM	$155.86
Sidewalk and new curb (1.9 m)	LF	$97.80	LM	$320.88
Sidewalk with paving bricks (1.9 m)	LF	$150.90	LM	$495.07
Wheel chair ramp flatwork	SF	$3.72	SM	$40.00
Wheel chair ramp retaining wall	LF	$201.17	LM	$660.00
K-Rail (42"-high jersey bill)	LF	$45.00	LM	$147.64
PCC retaining wall	LF	$76.20	LM	$250.00
Small retaining wall (2 m, modular)	SF	$35.35	SM	$380.47
Large retaining wall (4 m, concrete)	SF	$71.65	SM	$771.26
Gate	EA	$1,500.00		
BMP devices (straw bales, straw rolls & hydroseeding)	LF	$0.76	LM	$2.50
Bike lane/pedestrian path striping/symbols	LF	$11.12	LM	$36.48
Bike lane/pedestrian path route signage	LF		LM	$0.00
Install parallel type crosswalk	LF	$3.84	LM	$12.61
Install ladder type crosswalk (3 m wide)	LF	$15.37	LM	$50.42
Brick paving at crosswalk (3 m wide)	LF	$299.70	LM	$983.27
Small median refuge	EA	$1,054.32		
Large median refuge with landscaping	EA	$37,818.00		
Add ped head, post and phase to signal	EA	$8,044.92		
Add ped call button	EA	$1,071.51		
New signal	EA	$257,162.40		
Stairway on grade (1.8 m wide)	LF	$291.32	LM	$955.76

Key	
EA	each
LF	linear foot
LM	linear meter
SF	square foot
SM	square meter

7.4 FUNDING FOR PEDESTRIAN PROJECTS

This Pedestrian Plan is intended to be a useful tool to help planners, decision-makers and advocates get pedestrian-friendly concepts and projects "off the ground". Simply having a Countywide Pedestrian Plan and showing funding agencies that a project or program is incorporated in or consistent with that Plan will distinguish Solano County projects from many others. In addition, this Plan offers useful resources for identifying, refining, documenting, and funding pedestrian-related projects:

- The background information on benefits, government policy, and current conditions contained in Section 3 may be useful for specific project proposals and general discussions.
- In Section 4 the Plan includes a useful summary of policy documents of each agency and the region that generally or specifically support pedestrian transportation and activity.
- The Principles and Guidelines contained in Section 5 can be incorporated directly into projects and proposals. These tips have technical merit to make pedestrian routes and places successful, and they are consistent with the criteria and priorities of many funding programs that will support such projects.
- The maps and description of local conditions, current projects, and opportunities in Section 6 show the framework of key pedestrian routes and destinations for each agency, and the relationships between cities. The maps would need to be edited and updated to highlight specific project proposals or evaluate issues or opportunities. This is enabled because they are prepared in ArcGIS, and are available to the participating agencies and can easily be adapted for other projects and purposes.
- The overall vision of Countywide pedestrian projects and costs provided in Section 7.3
- An overview of funding programs available to support pedestrian-friendly projects is contained in Section 7.4, and detailed information, including, criteria, amounts, limitations, contacts, deadlines, etc. is contained in Appendix A. Grant programs often change, and this information should always be verified before proceeding with a specific grant proposal, but this information provides a head start for identifying and strategizing opportunities, and matching projects to funding sources.
- The reference information contained in Section 8 provides links to boundless data and ideas to support the conception, planning, design, and implementation of pedestrian-oriented projects.

7.4.a FUNDING SOURCES

The funding and assistance programs that follow are divided into the categories of Regional, State, Federal and Special Environmental or Recreational Programs. This section is intended as an overview of available resources for implementing the goals and policies of this Countywide Pedestrian Plan. Appendix A contains application information and additional project criteria details for the most relevant programs.

Regional Programs

- **MTC Transportation for Livable Communities.** The TLC program provides funding for planning projects, capital projects, and incentives for land use projects. Planning and capital funding are for projects that include transportation-related improvements such as streetscapes, transit villages, bicycle facilities, and pedestrian plazas.

  For more information on the TLC program, visit MTC's website at http://www.mtc.ca.gov/projects/livable_communities/tlc_grants.htm, or contact the TLC Project Manager at 510.464.7809.

- **MTC Regional Bicycle and Pedestrian Program.** This program was formed to fund the construction of the Regional Bicycle Network, and regionally significant pedestrian projects (to be determined). Solano County's share, based on county population, in the upcoming four-year funding cycle is $1,395,835.

  For more information, visit MTC's website at http://www.mtc.ca.gov/

- **STA Transportation for Livable Communities Program.** Recently, MTC revised the TLC program to include a separate Countywide TLC component that allows Congestion Management Agencies, such as STA, to administer a percentage (based on population) of the TLC funds for countywide priority projects. Two thirds of the new TLC program will now be available each cycle for a regionally competitive planning, capital, and Housing Incentive Program (HIP) projects, and one third for local planning and capital funds for county projects that otherwise would not be as competitive in the regional TLC program.

  In addition to project field reviews, STA staff has developed draft Countywide TLC Program guidelines which include eligibility information, project requirements, funding information, and a description of the application process. The draft TLC Guidelines closely mirror MTC's Regional TLC Guidelines.

For more information, visit STA's website at
http://www.solanolinks.com/

- **San Francisco Bay Trail.** The Bay Trail Grant Program offers competitive grants to local governments, special districts and qualified nonprofit groups to build or design new Bay Trail segments. The program is structured to: speed Bay Trail construction by targeting high-priority, ready-to-build sections and closing critical gaps; leverage state dollars with significant matching funds and in-kind contributions; foster partnership by encouraging cooperative partnerships and creative design solutions; and employ the California Conservation Corps (CCC) for construction, landscaping and maintenance where possible.

  For more information, contact the Project Manager for Solano County at 510.464.7900, or visit their website at
  http://baytrail.abag.ca.gov/index.html.

- **Bay Area Ridge Trail.** The Bay Area Ridge Trail Council plans, promotes, and constructs the Bay Area Ridge Trail, a 400-mile multiple-use trail connecting parks and preserved open spaces along the ridgelines surrounding California's San Francisco Bay. Through the state Coastal Conservancy's Bay Area Program, the Ridge Trail Council has received significant program funding. While the Ridge Trail Council does not maintain a formal grant program, they may be willing and able to participate in specific projects that implement Ridge Trail segments.

  For more information contact the Bay Area Ridge Trail Council office, at 415.561.2595, or visit their website at http://ridgetrail.org/index.htm.

State Programs

- **State Transportation Improvement Program (STIP).** The STIP is specifically for capital projects that improve transportation. STIP funds also can be used for project development costs. Pedestrian-related eligible projects funded by STIP can include improving local roads, public transit (including buses), pedestrian and bicycle facilities, sound walls, intermodal facilities, safety, and environmental enhancement and mitigation.

  For more information, contact Caltrans District 4 at 510.286.5226.

- **Transportation Development Act (TDA) Program.** There are three types of TDA funding categories in the Bay Area: (1) TDA Article 4 & 8 - Transit operating assistance and capital projects; if there are no unmet

transit needs, then local street and road maintenance and rehabilitation projects are eligible; (2) TDA Article 4.5 - Paratransit operating assistance and capital projects; (3) TDA Article 3 - Bicycle and pedestrian facilities, safety programs, and bicycle/ pedestrian planning.

For more information, contact the MTC at 510.464.7332.

- **State Transportation Enhancements Activities (TEA) Program.** Eligible projects include pedestrian and/or bicycle facilities and related signage; safety activities for pedestrians and/or bicycles; acquisition of historic sites; historic/scenic highway programs (including tourist and welcome centers); landscaping, streetscapes, and other scenic beautification; historic preservation; rehabilitation of historic transportation buildings, structures or facilities; preservation of abandoned railway corridors (including the conversion for use as bicycle and pedestrian trails); and transit shelters or amenities related to a transit village or pedestrian-oriented development.

  For more information, contact Rich Monroe in the Caltrans District 4 office, at 510.286.5226 or visit http://www.dot.ca.gov/hq/TransEnhAct/.

- **Environmental Enhancement and Mitigation Program.** The Environmental Enhancement and Mitigation Program (EEMP) was established by the State Legislature in 1989 to be run by The Resources Agency. It offers a total of $10 million each year for grants to local, state, and federal governmental agencies and to nonprofit organizations for projects to mitigate the environmental impacts caused by new or modified state transportation facilities.

  For more information, contact the state EEMP coordinator at 916.653.5656 or visit http://resources.ca.gov/eem/.

- **Safe Routes to School.** On September 9, 2004 Governor Schwarzenegger signed SB 1087 (Soto) extending the Safe Routes to School program until January 1, 2008. The SR2S program is a construction program. It is intended to improve and enhance the safety of pedestrian and bicycle facilities and related infrastructure. However, costs for programs or activities related to education, enforcement or encouragement (often referred to as "3E" by school safety and law enforcement officials) are eligible for reimbursement when those costs are related to the construction improvement and incidental to the overall cost of the project.

For more information, please visit California Department of Transportation's (Caltrans) Local Assistance website at http://www.dot.ca.gov/hq/LocalPrograms/saferoute2.htm.

- **Bicycle Transportation Account (BTA).** The BTA is a Caltrans program that funds city and county projects that improve safety and convenience for bicycle commuters. To be eligible for BTA funds, cities and counties must have a Bicycle Transportation Plan (BTP). This fund is applicable to the Countywide Pedestrian Plan because most paths and trails designed for bicyclists also accommodate pedestrians (with the exception of on-street bike lanes) and therefore applying for funds to construct bicycle facilities can further the goals of this Pedestrian Plan.

  For more information please visit http://www.dot.ca.gov/hq/LocalPrograms/bta/btaweb%20page.htm.

- **California Conservation Corps (CCC).** The CCC does not provide funding, but can make grants of labor assistance for projects such as planting trees, cutting trails, clearing streams, etc. Projects must have environmental benefits, provide public benefit and/or use, and give corps members on-the-job training.

  For more information, contact the CCC at 916.341.3149. Or visit the CCC website at http://www.ccc.ca.gov/cccweb/Index.htm.

Federal Programs

- **Congestion Mitigation and Air Quality (CMAQ) Program.** Eligible projects relevant to this Pedestrian Plan include public transit improvements; employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); bicycle and pedestrian facilities; flexible work-hour programs; and outreach activities establishing Transportation Management Associations (TMAs).

  For more information, STA at 707.424.6075 or visit http://www.fhwa.dot.gov/environment/cmaq/index.htm.

- **Federal Community Development Block Grant (CDBG) Program.** Grantees may use CDBG funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses,

such as costs related to developing a Consolidated Plan and managing CDBG funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.

The program provides annual grants on a formula basis to entitled cities and counties. In Solano County, the eligible cities are Fairfield, Vacaville and Vallejo.

For the City of Fairfield, contact Housing Authority at 707.428.7385.

For the City of Vacaville, contact the Department of Housing and Redevelopment at 707.449.5660.

For the City of Vallejo, contact the Department of Community Development at 707.648.4395.

Special Environmental and Recreational Programs

The following funding programs may not directly apply to the goals and policies of the Countywide Pedestrian Plan due to their environmental and/or recreational nature. However, because many pedestrian-related facilities may serve both transportation and recreation, and many Solano County pedestrian routes occur in or near natural areas, the programs listed below could be relevant to some projects.

- **Recreational Trails Program.** The Recreational Trails Program (RTP) is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds benefit recreation by making funds available to the States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. Each state administers its own program. Many recreational trails can be incorporated into this Pedestrian Plan because they also provide links to shopping, schools, civic buildings, and other pedestrian destinations.

  For more information, contact California State Parks, at 916-653-8174.

- **Bay Area Conservancy Program.** The San Francisco Bay Area Conservancy Program (Bay Program), administered by the Coastal Conservancy, was established in 1998 to address the natural resource and recreational goals of the nine-county Bay Area in a coordinated and comprehensive way. The Conservancy may award grants to help achieve the following Bay Program goals: (1) protect, restore, and enhance natural habitats and other open-space resources of regional significance throughout the nine-county area; (2) improve public access and related facilities to and around the Bay, its surrounding hills, and the coast,

through completion of bay, coast, and ridge trails that are part of a regional trail system; and (3) promote projects that provide open space that is accessible to urban populations for recreational and educational purposes.

Visit www.scc.ca.gov for more information.

- **Coastal Conservancy Non-Profit Grants Program.** Since its establishment in 1976, the Conservancy has completed over 600 projects, including construction of trails and other public access facilities, restoration and enhancement of wetlands and other wildlife habitat, restoration of public piers and urban waterfronts, preservation of farmland, and other projects in line with the goals of California's Coastal Act, the San Francisco Bay Plan, and the San Francisco Bay Area Conservancy. Land trusts, non-profits and government agencies are eligible to apply.

  For more information, contact the Coastal Conservancy Access Program Manager at 510.286.1015 or visit http://www.coastalconservancy.ca.gov/Programs/pandp.htm.

- **Wildlife Conservation Board.** The State of California Wildlife Conservation Board awards grants within four categories relevant to the Pedestrian Plan: land acquisition; habitat enhancement and restoration; public access; riparian habitat conservation; and inland wetlands conservation.

  For more information call 916.445.8448, or visit http://www.dfg.ca.gov/wcb/california_riparian_habitat_conservation_program.htm.

- **Habitat Conservation Fund.** The program funds efforts for conservation of habitats that are either wetlands, riparian, or support recreational trails. Each grant cycle funds several different categories such as: wetlands; riparian; rare, threatened and endangered; and trails programs.

  For more information, visit http://www.parks.ca.gov/default.asp?page_id=21361.

- **Roberti-Z'berg-Harris Competitive Grants Program.** This Proposition 40 financed program, run by California Department of Parks and Recreation funds the acquisition, development, rehabilitation, and special major maintenance of park and recreation lands and facilities, and

creation of innovative recreation programs to meet the urgent need for safe, open and accessible local park and recreation facilities.

For more information, contact Albert Ventura at 916.651.8579 or avent@parks.ca.gov.

- **Urban Park Act.** This program is also a Proposition 40 financed program, run by California Department of Parks and Recreation for acquisition and/or development of property for new urban parks or new recreational or multipurpose facilities in neighborhoods that are currently least served by park and recreation providers.

  For more information, contact Albert Ventura at 916.651.8579 or avent@parks.ca.gov.

- **Land and Water Conservation Fund (LWCF).** Created by Congress in 1964, and administered locally by the California Department of Parks and Recreation, the LWCF provides money to federal, state and local governments to purchase land, water and wetlands. Lands and waters purchased through the LWCF are used to: provide recreational opportunities; provide clean water; preserve wildlife habitat; enhance scenic vistas; protect archaeological and historical sites; and maintain the pristine nature of wilderness areas.

  For more information, contact Albert Ventura at 916.651.8579 or avent@parks.ca.gov or visit http://www.parks.ca.gov/default.asp?page_id=21360.

7.4.b Grant Application Tips

The following general tips are adapted from material provided by the Grants Contracts Management Branch of the U.S. Environmental Protection Agency Region 2, http://www.epa.gov/region02/grants/tips.htm. They are oriented to writing grant applications to public funding agencies, but they are generally applicable to formally organizing and presenting any program or project to reviewers and decision-makers, such as planning commissions and city councils.

Program or project planning and grant planning are intimately linked. Ideally planning for obtaining funding should be only one phase in the planning or capital improvement program development, implementation, and evaluation cycle. Too often, it is treated as something separate and catch as catch can. The best results in securing funding will come when your funding solicitation strategies are closely intertwined with your goals and program strategies.

Getting Organized

1. **Determine if your project is eligible.** Read the solicitation notice to determine if your project falls within the scope of the grant program purpose and goals. Table 7.2 matches Solano County pedestrian-oriented projects to the criteria of potential funding programs *(this table is a general guide – review the specific program criteria carefully, and if in doubt, contact the agency to determine whether your project is eligible).*
2. **Determine what is required for submitting an application.**
3. **Give yourself a reasonable amount of time to prepare the application.** Build in time for doing background research; bringing partners together; securing financial match, if required; actual writing time; review of your proposal by a colleague; and preparation of the final application. You might consider forming a work group or team to develop the project proposal and budget.
4. **Carefully read and re-read the solicitation notice and follow the directions exactly.** Pay attention to the following: due date, maximum dollar amount you can request, maximum page length, page size and margins, budget format, where and to whom to mail the application, mandatory attachments, and the number of copies to submit.
5. **Collect sample successful grants to use as boilerplate models.** Many funding agencies will send you, on request, proposals from past funded projects, or at least will give you the addresses of past grant recipients, so you can ask them directly for copies of successful proposals. The more good proposals you read, the more you'll understand how clear writing and following guidelines leads to funding.
6. **Get to know the individuals who work for the agencies to which you're applying.** Talk to grant program staff as much as is politely possible. Typically, little suggestions and hints you'll pick up, even from a phone conversation, will make major differences in the final form and focus of your proposal. The more personal contacts you make, the better for your project's chances.
7. **Have your environmental papers in order.** Environmental documentation, including compliance with the California Environmental Quality Act (CEQA), and the National Environmental Policy Act (NEPA) when federal funds are involved, is a critical part of the process that may or may not be eligible for grant funding, or may need to be completed in order to apply. Other environmental permits and clearances may be necessary for the project to be eligible or to proceed. Be sure to identify these requirements well in advance and be sure you can comply.
8. **Round up your support.** A resolution from the responsible governing body is typically required. Letters of support from legislators, project partners, and local beneficiaries and advocates can make the difference

between a successful application and an also-ran. Get started early to arrange for the required resolution and supporting letters (though the latter can often be submitted as follow-up, it looks better to have them included).

Preparing the Application

1. **Describe how your project will achieve the goals of the grant program.** Do not simply restate the goals of the grant program. Give enough detail or examples to show how your project clearly addresses the goals and criteria of the program.
2. **Use the same terms in your proposal that the agencies used to describe what they want to fund.** Buzz phrases push important buttons. If they tell you what to tell them: listen, and be convincing as to how your project dovetails with their posted guidelines.
3. **Write clearly and concisely.** Keep in mind that reviewers may not be familiar with your topic area. If complex terms and processes are part of your project – be sure to explain in lay terms what you are proposing to do, how and why. At the same time, "less is more." Reviewing stacks of proposals is a difficult job. Grant reviewers quickly learn to scan text to get a quick overview of exactly what you expect to do, with whom, when, how, and toward what measurable outcome. If you are short and to the point, and you've answered the key questions, your grant will be viewed as comprehensible and fundable. If you bog down the reviewer with too much ambling detail they'll have a hard time understanding your proposal and it is likely to end up in the "NO" pile.
4. **Make it easy for the reviewer to find ways to give you the credit you deserve.** Provide information on all the topics required and use the scoring criteria as headers for your paragraphs. The goals and objectives should be summarized in the introduction so the reviewer does not have to hunt for them.

Project Estimating and Grant Budgeting

1. **Brainstorm all foreseeable costs.**
2. **Review the proposal solicitation notice to determine what costs can be covered and what expenses are not allowable.**
3. **Prepare a thorough, realistic cost estimate.** Prepare your estimate with the format and categories called for in the proposal solicitation. Use general or unit prices from recent comparable projects, ideally with actual final costs for the units and finished product. Other local agencies and STA may be able to help you obtain such cost estimates, or if consultants are involved on the project, they can do this for you.
4. **Get the most out of your grant award.** Whether or not a matching share is required it is good practice to include significant dollar and in-

kind contributions by the sponsoring agency. By taking advantage of grant opportunities whenever possible you can stretch limited general funds. Be creative, resourceful and network with potential partners and beneficiaries of your project.

Finishing and Submitting the Application

1. **Dress your application for success.** Your application should be neat and professional. Use the scoring or program criteria as headers for your paragraphs. Number the pages of the entire application. This is helpful in case parts of your proposal get separated. Put extensive technical information, details, photographs, etc. in appendices or attachment so the main body of the document is neat and concise.
2. **Check spelling and grammar repeatedly.** Sometimes when proofreading documents, the reader goes too fast and does not catch mistakes, or sometimes the computer "spell check" does not recognize a particular word and mistakenly substitutes another word in its place.
3. **Re-read the final copy of your proposal slowly and carefully.** Double check that you have corrected any mistakes. Ask yourself if the proposal is presented in logical order. Think about whether a new reader will fully understand your project based on what you are presenting.
4. **Mail in a complete application package.** Due to the competitive nature of many of the grant programs, grant coordinators are unable to call applicants regarding missing or incomplete information. Review your application to make sure it is complete. If you omit mandatory attachments your proposal may be withdrawn from the applicant pool.
5. **Mail your application to the appropriate contact and mail it on time.** Be sure to read the grant announcement carefully. Some applications must be **postmarked** by the due date, others **received** by the due date. Failure to note this detail can result in disqualification of the application.

Follow-Up

1. **Contact the funding source about the status, evaluation, and outcome of your proposal.** It is important to request feedback about a proposal's strengths and weaknesses, although this information is sometimes unavailable, especially with a large volume of submissions.
2. **Document the process you use to prepare the proposal.** It is important to document the steps taken in preparing the grant application, including who was involved in writing and reviewing the proposal. This is important in case the author of the proposal changes jobs and the grant is awarded after the grant writer has left. This is also helpful if questions come up regarding budget categories. Reference information may also be

useful if you choose to approach the same or different funder again with your project.

Table 7.2 Projects and Potential Funding Programs

Funding Program

good match ■
potential match ▒
no match □

	Agency	Project Name	MTC TLC Program	Solano County TLC Program	MTC Regional Bike & Ped Program	STIP	Safe Routes to School	Clean Air Programs	Transp. Development Act	Transp. Enhancements Activities	Env. Enhancement & Mitigation	Bicycle Transp. Acct.	CA Conservation Corps	Congestion Mitigation & Air Quality	Comm. Dev. Block Grants	Recreational Trails Act Program	SF Bay Trail	Bay Area Ridge Trail	RZH Competitive Grants	Urban Park Act
1	City of Benicia	Park Road Bike Lane			■	■			■	■	▒	■	▒	■		▒	▒	▒		
2	City of Benicia	First Street Streetscape and Parking Enhancements	▒	▒						▒					▒					
3	City of Benicia	Benicia High School Access Improvement Project					▒	▒		▒										
4	City of Benicia	Benicia Intermodal Train Station	■	■		■		▒	■	■	▒			■	▒					
5	City of Benicia	State Park Road Bike/Pedestrian Bridge	■		■	■			■	■		■	▒			▒	▒	■	▒	
6	City of Vallejo	Vallejo Ferry Station Pedestrian and Streetscape	■	■	■					▒					▒	▒	▒			
7	City of Vallejo	Downtown Vallejo Renaissance Project	▒	■		▒			▒	▒					▒					
8	City of Vallejo	Mare Island Bicycle and Pedestrian Access	■		■	■				▒	▒			■	▒		▒			
9	City of Vallejo	Wilson Avenue Improvement Project	▒							▒			▒		▒					
10	City of Vallejo	River Park Project																		
11	STA/City of Vallejo	Vallejo Bay/Ridge Trail Connector	■		■				■	▒			▒		▒		■	■		
12	Solano County, STA	Red Top Road Overcrossing		▒		▒						▒			▒					
13	Solano County	Homeacres Ave. Improvement Project		■											▒					
14	Solano County	Fulton Avenue Improvement Project		■											▒					
15	Solano County, City of Fairfield	Old Town Cordelia Improvement Project	▒		■		▒		▒	▒			▒		▒					
16	Cities of Fairfield, Suisun, Vacaville; Solano County	Jepson Parkway Concept Plan	■	▒	■	■		▒	▒	▒	▒	▒	▒	■	▒					
17	City of Fairfield	West Texas Street Gateway Project	▒	▒	▒				▒	▒					▒					
18	City of Fairfield	West Texas Street Urban Village Project	▒																	
19	City of Fairfield	Downtown Fairfield Live-Work Center	▒			▒				▒					▒					
20	City of Fairfield	Vacaville-Fairfield Train Station Urban Center	■			▒		▒	■	▒		▒		▒						
21	City of Fairfield	Union Avenue Streetscape Enhancements Program	▒							▒					▒				▒	
22	City of Fairfield	North Texas Street Transportation Center	■	■		▒		■	▒					▒						
23	STA, City of Fairfield, Solano County	North Connector	▒		▒	▒	▒		▒	▒		▒		▒	▒					
24	City of Suisun City	Driftwood Drive Pedestrian Project	■	▒			▒			■			▒							
25	City of Suisun City	Main Street Project / Downtown Streetscape Improvement Project	■			■			■	▒										
26	City of Suisun City	Highway 12 Central County Bikeway	■	■	■				■	▒	▒	■	▒		▒					
27	City of Vacaville	Vacaville Creek Walk Extension to McClellan Street	▒							▒	▒		▒						▒	
28	City of Vacaville	Vacaville Bus Terminal and Transfer Point	■			▒		▒		▒				▒						
29	City of Vacaville	Nut Tree Ranch Development Project		▒								▒	▒	▒		▒			▒	
30	City of Vacaville	PG&E Easement Bike Path Project		▒	▒		▒	▒					▒				▒			
31	City of Dixon	Downtown Streetscape Phase 3		▒						▒				▒						
32	City of Dixon	West 'B' St. Pedestrian Undercrossing	▒	▒	▒		▒	▒	▒				▒							
33	City of Dixon	Multi-Modal Transportation Center	■	▒		▒	▒	▒		▒			▒	▒						
34	City of Rio Vista	Waterfront Plan and Improvement Project		▒				▒	▒	▒	▒		▒	▒	▒					
35	City of Rio Vista	Downtown Revitalization Project		■											▒					
36	City of Rio Vista	Highway 12 Corridor Planning Study/Improvements	▒	■	▒							▒								

Note: this table is a general guide – review the specific program criteria carefully, and if in doubt, contact the agency to determine whether your project is eligible.

8 REFERENCE INFORMATION

8.1 BIBLIOGRAPHY

8.1.a SOLANO COUNTY DOCUMENTS

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City of Benicia. Benicia General Plan, from 1847 into the 21st Century. June 15, 1999.

City of Benicia. Downtown Historic Conservation Plan. Cannon Design Group. November 1990.

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City of Benicia. Final Benicia Parks, Trails and Open Space Master Plan. EDAW, Inc. July 1997.

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City of Dixon. Dixon 1993 General Plan. Duncan & Jones Urban & Environmental Planning Consultants. December 1993.

City of Fairfield. Fairfield Master Trails Plan. November 1998.

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City of Rio Vista. Draft Rio Vista General Plan. 2001.

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City of Vacaville. Comprehensive Parks, Recreation, and Open Space Master Plan. 1992.

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City of Vallejo. Vallejo General Plan. July 1999.

Greater Vallejo Recreation District. Vallejo Trails Master Plan. Arbegast Newton & Griffith. June 1988.

Solano County Planning Department. Solano County Land Use and Circulation Element. December 1980, as amended through June 2001.

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Solano County Environmental Resources Management. Resource Conservation & Open Space Plan. May 1973, amended October 1996.

Solano Transportation Authority. Solano Countywide Trails Plan, Phase 1: Status of Existing and Planned Trails. LandPeople. April 2002.

Solano Transportation Authority. Jepson Parkway Concept Plan. Moore Iacofano Goltsman, Inc. May 2000.

Solano Transportation Authority. Solano Countywide Bicycle Plan. Alta Transportation Consulting. March 2001.

Tri-City and County Cooperative Planning Group. Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation. The Planning Collaborative, Inc. March 1994.

8.1.b Other Documents

City of Oakland. Pedestrian Master Plan. August 2002.

City of Portland Office of Transportation Engineering and Development Pedestrian Transportation Program. Pedestrian Design Guide. June 1998.

The purpose of Portland's Pedestrian Design Guide is to integrate the wide range of design criteria and practices into a coherent set of new standards and guidelines that, over time, will promote an environment conducive to walking.

City of Portland Office of Transportation Engineering and Development Pedestrian Transportation Program. Pedestrian Master Plan. June 1998.

The purpose of the Pedestrian Master Plan is to establish a 20-year framework for improvements that will enhance the pedestrian environment and increase opportunities to choose walking as a mode of transportation.

Metropolitan Transportation Commission. North Bay Corridor Study. December 1997.

San Francisco Bay Trail Project. The Bay Trail, Planning for a Recreational Ring Around San Francisco Bay. July 1989, reprinted 2001.

SANDAG, San Diego's Regional Planning Agency. Planning and Designing for Pedestrians. Community Design + Architecture, Inc. and W-Trans. June 2002.

The document presents model guidelines that are intended to assist local governments and other interested entities in the creation and redevelopment of pedestrian areas and corridors throughout the San Diego region.

US Department of Transportation Federal Highway Administration. Designing Sidewalks and Trails for Access, Part II of II: Best Practices Design Guide. September 2001.

8.1.c WEBSITES

Abandoned Rail Corridors Evaluation
http://www.cal-rail-row.info/validation.htm

This is the California Department of Transportation's update and expansion of the 1994 Proposition 1165 rail right-of-way survey to identify abandoned rail corridors that have potential for use by nonmotorized transportation and as links to improve access to public transit.

Association of Bay Area Governments
http://www.abag.ca.gov/

The Association of Bay Area Governments (ABAG) is one of more than 560 regional planning agencies across the nation working to help solve problems in areas such as land use, housing, environmental quality, and economic development.

Bay Area Air Quality Management District
http://www.baaqmd.gov/index.asp

The Bay Area Air Quality Management District is an organization committed to achieving clean air to protect the public's health and the environment in the region surrounding San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco,

San Mateo, Santa Clara, the western half of Solano and the southern half of Sonoma counties.

Bay Area Census
http://census.abag.ca.gov/transportation.htm

The Bay Area Census is a joint effort between the Association of Bay Area Governments and the Metropolitan Transportation Commission (MTC) to provide selected data from the 2000 Census that pertains to the nine-county Bay Area.

California Department of Education
http://www.cde.ca.gov/

The California Department of Education has conducted studies on children's health, physical activity, and the relation between physical activity and academic performance.

California's Statewide Integrated Traffic Records System (SWITRS)
http://www.chp.ca.gov/html/aiuswitrs.html

California's Department of Transportation (Caltrans), Department of Motor Vehicles (DMV), and CHP formed a committee to act as caretakers of SWITRS, which was developed as a means to collect and process data elements from a collision scene.

Census Transportation Planning Package (CTPP)
http://www.mtc.ca.gov/datamart/census/ctpp2000/

CTPP 2000 is a special tabulation of responses from households completing the Census long form. The data extraction for the nine-county San Francisco Bay Area is intended to provide data to support a wide range of transportation planning activities.

Centers for Disease Control and Prevention
http://www.cdc.gov/

The Centers for Disease Control and Prevention (CDC) is recognized as the lead federal agency for protecting the health and safety of people.

California Safe Routes to School Clearinghouse
http://www.4saferoutes.org/

The Clearinghouse exists to offer support to local activists and public agency staff in their quest to develop Safe Routes to School in their California communities.

Metropolitan Transportation Commission
http://www.mtc.ca.gov/

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area.

San Francisco Bay Area Pedestrian Education Group
http://www.baypeds.org/index1.html

The San Francisco Bay Area Pedestrian Education Group is a coalition of pedestrian advocacy groups in Bay Area cities with the common goals of promotes walking as a safe and sustainable form of transportation enhances public life and improves public and environmental health.

Surface Transportation Policy Project
http://www.transact.org/

The Surface Transportation Policy Project is a diverse, nationwide coalition working to ensure safer communities and smarter transportation choices that enhance the economy, improve public health, promote social equity, and protect the environment.

Transportation and Land Use Coalition
http://www.transcoalition.org/

The Transportation and Land Use Coalition is a partnership of over 90 groups working together for an environmentally sustainable and socially just Bay Area.

World Health Organization
http://www.who.int/country/usa/en/

The World Health Organization, the United Nations specialized agency for health, was established to help all peoples reach the highest possible level of health.

8.2 Pedestrian Planning and Design References

Active Living By Design
http://www.activelivingbydesign.org/index.cfm

A national program by the Robert Wood Johnson Foundation, this private organization's website has e-Resources for planning and community development that encourage active living.

California Walk to School Headquarters
http://www.cawalktoschool.com/

This website promotes National Walk to School Week in October and has resources for starting a Walk to School program in communities.

Designing Sidewalks and Trails for Access, Part II of II: Best Practices Design Guide
US Department of Transportation Federal Highway Administration

This guidebook is the second part of a two-phase project focused on designing sidewalks and trails for access. It was created to provide planners, designers, and transportation engineers with a better understanding of how sidewalks and trails should be developed to promote pedestrian access for all users, including people with disabilities. Part I, A Review of Existing Guidelines and Practices, is a compilation of data and designs gathered during a comprehensive literature search and site visits conducted throughout the United States. The guidebook is out of print but can be viewed at the following website:
http://www.fhwa.dot.gov/environment/sidewalk2/contents.htm

Federal Highway Administration
http://safety.fhwa.dot.gov/fourthlevel/ped.htm

This site is designed to make it easier for the pedestrian safety practitioner and advocate to locate and acquire the most appropriate resources to meet their particular planning, design, and operation needs for pedestrian facilities.

Kids Walk-to-School
http://www.cdc.gov/nccdphp/dnpa/kidswalk/resources.htm

A subsidiary of the Center for Disease Control website, this site has resources for communities that want to start walk to school programs.

National Center for Biking and Walking
http://www.bikewalk.org/walking/pedestrian_design_guide_intro.htm

This site explains how to help create neighbor-hoods and communities where people walk and bicycle.

National Highway Traffic Safety Administration
http://www.nhtsa.dot.gov/nhtsa/whatis/regions/Region09/09pedbike.html

This site contains pedestrian accident statistics, as well as a Safe Routes to School Toolkit.

Pedestrian and Bicycle Facilities in California (Draft) Technical Reference Report
Caltrans Non-Motorized Transportation Technology Transfer

This draft publication is not yet available to the public, but is expected to be finalized in 2004. For more information, contact Richard Haggstrom, Caltrans Pedestrian and Bicycle Safety Branch, 1120 N Street, Room 4500, Sacramento, CA 95814, (916) 654-6600.

Pedestrian Resource Guide
Regional Pedestrian Committee, Metropolitan Transportation Commission

This guide was developed in 2001 to provide brief summaries of a variety of reports, articles, and websites on pedestrian safety in an attempt to help guide people to the resources that best meet their needs. It is available at http://www.mtc.ca.gov/publications/PEDSAFETYRESOURCEGUIDE.doc

Walk to School Day
http://www.walktoschool-usa.org/

This website helps organizers of local Walk to School programs plan an annual event.

APPENDIX A:
ADDITIONAL INFORMATION ON FUNDING SOURCES

1 REGIONAL PROGRAM

1.1 MTC TRANSPORTATION FOR LIVABLE COMMUNITIES

The TLC program provides funding for planning projects, capital projects, and incentives for land use projects. Planning and capital funding are for projects that include transportation-related improvements such as streetscapes, transit villages, bicycle facilities, and pedestrian plazas.

MTC offers two kinds of financial assistance to city and county agencies that are applicable to this Pedestrian Plan. Projects in the early or conceptual stage of their development are eligible for TLC planning grants (up to $75,000 per project), which are awarded to help sponsors refine and elaborate promising project ideas. Projects with completed plans are eligible for capital grants ($150,000 to $2 million per project), which directly support construction and help turn plans into reality.

Planning Grant criteria:

- A collaborative planning process with community stakeholders (e.g., residents, business proprietors, property owners, local agencies, neighborhood associations), the project sponsor(s), the local jurisdiction and the local transit operator(s) will be undertaken.
- The project supports one or more of the objectives of MTC's adopted Transportation/Land Use Connection policy to promote the development/redevelopment of livable communities in the Bay Area.
- The project pertains to a defined physical location.
- The project pertains to a physical setting where deficiencies exist (or will exist) which if remedied will provide significant community benefit (e.g., walkability; safety and security; traffic calming; economic development; protection of community cultural, historic, or environmental resources; public transit access or amenity; parking design, streetscape design; gap closure of an essential pedestrian/bicycle route or network, and access to daily needs).
- The overall project will have identifiable and likely synergistic effects (provision of any single community benefit will likely induce additional community benefits) such as increased housing opportunities in the project area at densities to encourage transit, bicycling, and pedestrian trips.
- As appropriate during the development of the project, the following issues will be evaluated: accessibility as it relates to the Americans with Disabilities Act, economic development opportunities, environmental impacts, economic/financial considerations, safety and security, and potential adverse impacts, if any, to local trips made by commercial delivery vehicles, public transit, and other forms of transportation.

- The project will result in a discrete and clear work product, which will guide the overall project to the next level of planning, and/or form the basis to compete for funding for the overall project.
- The project is structured to be completed within one year. The project sponsor commits to begin the project immediately if the project is approved by the Commission.
- The project is unlikely to be fully funded other than through MTC's program.
- The sponsor commits to pursuing the project recommendations, including subsequent planning activities, and to pursue the overall project to the extent feasible.

If the project meets the criteria, the following further factors are noted:

- Project innovation: To what degree does the project set new ground as called for in the TLC program? To what degree does the project involve the participation of community organizations and local jurisdictions? Does the project involve mixed-use development, particularly housing?
- Project readiness: When does the project need funding? When is construction of the overall project expected to begin?
- Local match: To what degree is local match offered as part of the proposed project's total cost?
- Advisory Council comments: The Advisory Council's TLC subcommittee will have the opportunity to comment on community planning projects as they are evaluated.

Capital Grant criteria (three part process):

Part 1: Project Readiness Criteria. The following criteria will be used to evaluate whether a TLC capital project will be able to meet the fund obligation deadline:

- Is the project dependent upon other funding? How realistic is the project financing?
- Is the project dependent upon another uncompleted major capital project?
- Is right-of-way available and/or when would it be acquired (from non-TLC sources) if needed?
- Is the project difficult to engineer (or has engineering has been completed)?
- Is there a difficult environmental process? Is there any local opposition?
- Are there any pending lawsuits related to the project?

Part 2: Capital Screening Criteria. All screening criteria below must be met before a project can be reviewed according to the evaluation criteria shown on the next page.

- A collaborative planning process with a variety of community stakeholders who would be affected by the project (such as residents, business proprietors, property owners, neighborhood associations, schools), the project sponsor, the local jurisdiction, and the local transit operator(s) has

taken place. (This process may include special neighborhood meetings and design workshops. If a planning process has not been undertaken, please consider applying in future cycles once the process is completed.)

- The project will: encourage pedestrian, transit and/or bicycle trips; provide for compact development of housing and downtowns/regional activity centers; support a community's development or redevelopment activities; and/or enhance a community's mobility, identity and quality of life.
- The funding request is greater than $150,000 and less than $2 million.
- The project sponsor assures that local match of at least 11.5 percent of the total project cost will be available.
- The project is well-defined and results in a usable segment/project.
- The project sponsor agrees to abide by all applicable regulations, including the National Environmental Protection Act (NEPA) and the Americans With Disabilities Act (ADA).
- The project funds will be obligated by September 30, 2004.
- Project sponsor agrees to an on-site visit if needed as part of project evaluation.
- Project sponsor agrees to acknowledging TLC support prominently in design and construction activities and will provide "before" and "after" photographs of the project.
- Project management mechanisms are in place to maintain cost, schedule, and scope.

Part 3. Capital Evaluation Criteria

Overall Project Evaluation. The purpose of the Transportation for Livable Communities Program is to support transportation projects that 1) have been developed through a collaborative and inclusive planning process; 2) encourage pedestrian, transit and/or bicycle trips; 3) provide for compact development of housing and downtowns/regional activity centers; 4) are part of a community's development or redevelopment activities; and/or 5) enhance a community's mobility, identity and quality of life.

If a project meets all of the screening factors, it is evaluated according to the criteria shown below. Funding priority is based on the degree to which the project meets these criteria.

Community Involvement. (High, Medium, or Low) The quality and inclusiveness of collaborative planning process with community stakeholders.

Project Impact. (High, Medium, or Low) The project remedies a current or anticipated problem, and will result in significant community benefits in:

- Walkability
- Public transit access

- Safety and security
- Community-friendly parking
- Bicycle facilities
- Streetscape improvements
- Traffic calming
- Pedestrian-friendly economic development / access to daily needs
- Protection of community, cultural, historic, or environmental resources
- Socio-economic benefits to lower income communities and consideration of adverse impacts, if any, to local trips made by commercial delivery vehicles and public transit

Transportation, Community Development/Redevelopment and Land Use: (High, Medium, or Low)

- The project supports a community's development and/or redevelopment activities.
- The project ensures that streets and other transportation facilities and amenities are integrated into the overall community design and are conducive to a sense of community identity and pride.
- The project provides for the development of housing and regional activity centers that are accessible to the regional transit network and/or serve downtowns and main streets.
- The project provides for the development of housing, regional activity centers, downtowns and/or main streets within a pedestrian/bicycle-oriented development or network.
- Housing opportunities are provided at densities to encourage transit, bicycling, and pedestrian trips, which are demonstrated by one or more of the following:
    - project area involves specific area plan or rezoning for housing
    - land in overall project area is zoned for mixed-use and/or multi-unit development
    - project is part of a larger development project that will create new housing
    - project is part of a larger development project that will create affordable housing
    - other (please describe)

Internal Community Mobility: (High, Medium, or Low)

- The project enables residents to use a range of travel modes, including transit, walking, and biking to access jobs, shopping, recreation, education and other daily needs.
- The project provides that the streets, transit, pedestrian, and bicycle ways are part of a system of integrated routes.
- The project involves development of community-oriented transportation strategies designed to limit the extent to which it is necessary to travel from one community to another to access the basic necessities of living.

- The project is designed to accomplish one or more of the following:
  - provides safe & convenient pedestrian/bicycle access to destinations such as shops, homes, schools, work, and transit
  - increases number of bicycle, walking, and transit trips
  - slows surrounding automobile traffic through the use of traffic calming completes a physical gap or provides an essential link in a bicycle/pedestrian route or network
  - reduces number of pedestrian and bicycle injuries and fatalities
  - minimizes or reduces need for parking, which may be demonstrated by reduced parking requirements in the project area

For more information on the TLC program, visit MTC's website at http://www.mtc.ca.gov/projects/livable_communities/tlc_grants.htm.

2 STATE PROGRAMS

2.1 STATE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

The STIP is a funding source available to all jurisdictions, specifically for capital projects that improve transportation. STIP funds also can be used for project development costs. Pedestrian-related eligible projects funded by STIP can include improving local roads, public transit (including buses), pedestrian and bicycle facilities, sound walls, intermodal facilities, safety, and environmental enhancement and mitigation.

The STIP is a biennial (evaluated each odd numbered year by July 15th) fund estimate whereby Caltrans submits to the California Transportation Commission a proposed fund estimate for the following 5-year STIP period. Not later than April 1 of each even numbered year the Commission shall adopt a five-year STIP and submit it to the legislation and Governor. The adopted STIP shall remain in affect until a new STIP is adopted for the next two-year STIP cycle.

Securing STIP funds for city projects involves preparing applications, Project Study Reports (PSR's), programming / phasing studies, environmental documents, design studies, plans, specifications, and estimates.

A financial plan, or program, is an important element of the project approval process. For a project to receive regional funds it must be included in a financially constrained Regional Transportation Plan (RTP). Likewise, eligibility for state funds requires inclusion in the State Transportation Improvement Plan (STIP). If the project is to receive federal funds or is subject to federally required actions, such as review for its impact on air quality, it must also be included in the federally required Transportation Improvement Program (TIP).

For more information, contact Caltrans District 4 at 510.286.5226.

2.2 STATE TRANSPORTATION ENHANCEMENTS ACTIVITIES (TEA) PROGRAM

The State of California receives Federal Transportation Enhancement Funds each year. This money is divided into four shares (regional, conservation lands, Caltrans, and statewide transportation enhancement). Regional Transportation Planning Agencies receive 75 percent of the TEA dollars in California. Each region receives a TEA share by formula. The other 25 percent goes to the state.

For the regional share, project sponsors submit applications to Regional Transportation Planning Agencies (RTPAs).

Eligible projects include pedestrian and/or bicycle facilities and related signage; safety activities for pedestrians and/or bicycles; acquisition of historic sites; historic/scenic highway programs (including tourist and welcome centers); landscaping, streetscapes, and other scenic beautification; historic preservation; rehabilitation of historic transportation buildings, structures or facilities; preservation of abandoned railway corridors (including the conversion for use as bicycle and pedestrian trails); and transit shelters or amenities related to a transit village or pedestrian oriented development.

TEA projects must:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Increase the safety and security of the transportation system for motorized and non-motorized users
- Increase the accessibility and mobility options available to people and for freight
- Protect and enhance the environment, promote energy conservation, and improve quality of life
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system

For more information, contact the Caltrans District 4 office at 510.286.5226 or visit http://www.dot.ca.gov/hq/TransEnhAct/.

2.3 Environmental Enhancement and Mitigation Program

The Environmental Enhancement and Mitigation Program (EEMP) was established by the State Legislature in 1989 to be run by The Resources Agency. It offers a total of $10 million each year for grants to local, state, and federal governmental agencies and to nonprofit organizations for projects to mitigate the environmental impacts caused by new or modified state transportation facilities.

Eligible projects:

- Roadside Recreation – Projects which provide for the acquisition and/or development of roadside recreational opportunities, including parks and greenways, roadside rests, scenic overlooks, trails, and sno-parks.
- Resource Lands – Projects for the acquisition, restoration or enhancement of resource lands to mitigate the loss of, or the detriment to, resource lands lying within or near the right-of-way acquired for proposed transportation improvements. Resource lands include natural areas, wetlands, forests, woodlands, meadows, streams or other areas containing fish or wildlife habitat. Enhancement of resource lands may include the restoration of

wildlife corridors and fish passages. Additionally, resource lands may contain features of archaeological or historical value.

- Highway Landscape and Urban Forestry – Projects designed to offset vehicular emissions of carbon dioxide through the planting of trees and other suitable plants.

Projects may be within or outside the right-of-way of a related transportation facility.

To be eligible for consideration, each environmental enhancement and mitigation project must be directly or indirectly related to the environmental impact of the modification of an existing transportation facility or construction of new transportation facility. For purposes of this program, a transportation facility is defined as a public street, highway, mass transit guideway or their appurtenant features (e.g. park and ride facilities, high-occupancy vehicle lanes, transit stations, etc.) Additionally, the related transportation facility must be 1) a project where construction began after January 1, 1990; or 2) a project which is not yet under construction, but is included in an adopted State transportation program or in a locally adopted and certified capital outlay program.

For more information, contact the state EEMP coordinator at 916.653.5656 or visit http://resources.ca.gov/eem/.

2.4 Safe Routes to School

Established in 1999, the Safe Routes to School (SR2S) program came into effect from the passage and signing of Assembly Bill 1475 (AB 1475). It is now scheduled to sunset on January 1, 2008.

The SR2S program is a construction program. It is intended to improve and enhance the safety of pedestrian and bicycle facilities and related infrastructure. However, costs for programs or activities related to education, enforcement or encouragement (often referred to as "3E" by school safety and law enforcement officials) are eligible for reimbursement when those costs are related to the construction improvement and incidental to the overall cost of the project. Reimbursement for incidental costs will be limited to 10 percent of the construction cost.

Each February or March, Caltrans will solicit project applications from local agencies. Interested local agencies may submit an application to the Caltrans District Office by the due date established by the district. Applicants that are proposing a project on a freeway, state highway or county road are encouraged to obtain the CHP's approval of the project prior to submitting the application to Caltrans.

The SR2S program is a 'reimbursement' program. The reimbursement ratio for all projects will be 90 percent (maximum) with the local agency providing a 10 percent (minimum) local match. The maximum reimbursement amount for any single project

is $450,000. Applications with a total project cost that exceeds $500,000 must identify elements or components of the project that are being financed with other funding sources. Section 6 of the Application Form (Exhibit 24-A) allows the applicant to address this situation in detail.

There are six general categories for SR2S projects. They represent program areas that are broad in nature and are typical of the range of approaches used to address pedestrian and bicyclist safety issues. The six categories are:

- **Sidewalk improvements:** Includes new sidewalks, widened sidewalks, sidewalk gap closures, sidewalk repairs, curb cuts for ramps, curbs and gutters, etc.
- **Traffic calming & speed reduction:** Includes roundabouts, traffic circles, neck downs, sidewalk bulb-outs, speed humps, raised crosswalks, raised intersections, narrowed traffic lanes, full or half-street closures, and other speed reduction techniques. May also include traffic signs, stripes and pavement markings.
- **Pedestrian/bicycle crossing improvements:** Includes new or upgraded traffic signals, crosswalks, median refuges, pavement markings, traffic signs, traffic stripes, lighted crosswalks, pedestrian and/or bicycle over-crossings and under-crossings, flashing beacons, traffic signal phasing extensions, bicycle-sensitive signal actuation devices, pedestrian activated signal upgrades and sight distance improvements.
- **On-street bicycle facilities:** Includes new or upgraded bikeways, widening outside traffic lanes and/or roadway shoulders, geometric improvements, curve corrections, turning lanes, channelization and roadway realignment. May also include traffic signs, stripes and pavement markings.
- **Off-street bicycle/pedestrian facilities:** Includes exclusive bicycle and/or pedestrian trails and pathways, bicycle parking facilities, bicycle racks and lockers, etc. May also include traffic signs, stripes and pavement markings.
- **Traffic diversion improvements:** Includes improved pick-up/drop-off areas, separation of pedestrians and bicycles from vehicular traffic adjacent to school facilities, and traffic diversion away from school zones or designated routes to school. May also include traffic signs, stripes and pavement markings.

2.5 Bicycle Transportation Account (BTA)

The BTA is a Caltrans program that funds city and county projects that improve safety and convenience for bicycle commuters. This fund is applicable to the Countywide Pedestrian Plan because most paths and trails designed for bicyclists also accommodate pedestrians (with the exception of on-street bike lanes) and therefore applying for funds to construct bicycle facilities can further the goals of this Pedestrian Plan.

To be eligible for BTA funds, cities and counties must have a Bicycle Transportation Plan (BTP) that discusses items (a) through (k) in Section 891.2 of the Streets and Highways Code. The city or county local agency governing board must adopt the BTP or certify that it has been updated and complies with Section 891.2 and the regional transportation plan. The BTP must have been adopted no earlier than four years prior to July 1 of the fiscal year in which BTA funds are granted. (Local agencies applying for 2004/05 BTA funds must have a BTP adopted July 1, 2000 or later) The local agency must submit the BTP to the appropriate Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA) for review and certification that it complies with Section 891.2 of the Streets and Highways Code and the regional transportation plan (RTP). Following regional approval, the local agency must submit the BTP to Caltrans Bicycle Facilities Unit (BFU) for review and approval.

To fulfill the criteria for BTA, applicants must be able to answer the following questions:

- Will bicycle commuters be the primary users of the proposed project?
- Does the proposed projects have the potential to increase bicycle commuting?
- Is the proposed project the best alternative for the situation?
- Will the proposed project improve continuity with existing bikeways?
- Will the proposed project provide a direct route to activity centers such as schools employment centers, shopping, etc.?

A minimum 10% local match and evidence of CEQA compliance are required.

Applications are due December 1, 2004 for the 2005/2006 cycle. For more information and the Bicycle Transportation Account application, please visit http://www.dot.ca.gov/hq/LocalPrograms/bta/btaweb%20page.htm.

2.6 California Conservation Corps (CCC)

The CCC does not provide funding, but can make grants of labor assistance for projects such as planting trees, cutting trails, clearing streams, etc. Projects must have environmental benefits, provide public benefit and/or use, and give corps members on-the-job training.

Agencies that can partner with the CCC:

- Federal Agencies
- County Agencies
- School Districts
- State Agencies
- City Agencies

- Nonprofit Organizations
- Private Industry

Projects provided by the CCC:

- Energy Auditing and Retrofitting
- Trail Building
- Energy Conservation
- Recycling
- Erosion Control
- Irrigation System Installations
- Environmental Presentations
- Public Works Projects
- Tree Planting
- Park Maintenance and Restoration

Project guidelines:

- Projects must provide a natural resource or other public benefit
- Projects must provide corps members with education and training in employable skills
- The sponsor provides the technical plans/specifications, materials and on-site technical supervision.

For more information visit the CCC website at http://www.ccc.ca.gov/cccweb/Index.htm.

3 Federal Programs

3.1 Congestion Mitigation and Air Quality (CMAQ) Program

Eligible projects relevant to this Pedestrian Plan include public transit improvements; employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); bicycle and pedestrian facilities; flexible work-hour programs; and outreach activities establishing Transportation Management Associations (TMAs).

CMAQ funding may also be used to increase public knowledge of transportation-related emissions and opportunities to reduce them through mitigation strategies and improved transportation choices.

A typical 80 percent federal and 20 percent state or local funding match is required.

For more information contact Mike Duncan at STA at 707.424.6075, or visit http://www.fhwa.dot.gov/environment/cmaq/index.htm.

3.2 Federal Community Development Block Grant (CDBG) Program

Grantees may use CDBG funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a Consolidated Plan and managing CDBG funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.

Over a 1, 2, or 3 year period selected by the grantee not less than 70% of the CDBG funds must be used for activities that benefit low- and moderate-income persons. All activities must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevention or elimination of slums or blight, community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community.

The program provides annual grants on a formula basis to entitled cities and counties. In Solano County, the eligible cities are Fairfield, Vacaville and Vallejo.

For the City of Fairfield, contact Ms. Janet Murray, Deputy Executive Director, Housing Authority, at 707.428.7385 or jmurray@ci.fairfield.ca.us.

For the City of Vacaville, contact Mr. Charles R. Learned, Director, Department of Housing and Redevelopment at 707.449.5660 or clearned@ci.vacaville.ca.us.

For the City of Vallejo, contact Mr. Guy Ricca, Analyst, Department of Community Development at 707.648.4395 or gricca@ci.vallejo.ca.us.

4 Special Environmental and Recreational Programs

The following funding programs may not directly apply to the goals and policies of the Countywide Pedestrian Plan due to their environmental and/or recreational nature. However, because many pedestrian-related facilities may serve both transportation and recreation, and many Solano County pedestrian routes occur in or near natural areas, the programs listed below are relevant.

4.1 Recreational Trails Program

The Recreational Trails Program (RTP) is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds benefit recreation by making funds available to the States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. Each state administers its own program. Many recreational trails can be incorporated into this Pedestrian Plan because they also provide links to shopping, schools, civic buildings, and other pedestrian destinations.

Cities, counties, districts, state agencies and nonprofit organizations with management responsibilities over public lands may apply.

RTP (Department of Transportation) share may not exceed 80 percent. The local match may include local, state, or private funds, as well as materials and services.

Eligible costs:

- Personnel or employee services
- Consultant services
- Construction equipment
- Construction supplies and materials
- Signs and interpretive aids
- Construction
- Acquisition
- Relocation costs
- Non-Fixed Equipment
- Other expenditures - In addition to the major categories of expenditures, reimbursements may be made for miscellaneous costs necessary for execution of the project

For more information, California State Parks at 916.653.8174.

4.2 BAY AREA CONSERVANCY PROGRAM

The San Francisco Bay Area Conservancy Program (Bay Program), administered by the Coastal Conservancy, was established in 1998 to address the natural resource and recreational goals of the nine-county Bay Area in a coordinated and comprehensive way. The Conservancy may award grants to help achieve the following Bay Program goals: (1) protect, restore, and enhance natural habitats and other open-space resources of regional significance throughout the nine-county area; (2) improve public access and related facilities to and around the Bay, its surrounding hills, and the coast, through completion of bay, coast, and ridge trails that are part of a regional trail system; and (3) promote projects that provide open space that is accessible to urban populations for recreational and educational purposes.

Additionally, projects are evaluated on whether they meet the following criteria:

- Is the project supported by an adopted local or regional plan?
- Is the project multi-jurisdictional or does it serve a regional constituency?
- Can the project be implemented in a timely way?
- Does the project provide opportunities for benefits that could be lost if the project is not quickly implemented?
- Are there matching funds from other sources of funding or assistance?

Prospective applicants are advised to discuss their projects with Conservancy staff prior to submitting applications. Visit www.scc.ca.gov for more information.

4.3 WILDLIFE CONSERVATION BOARD

The State of California Wildlife Conservation Board awards grants within four categories relevant to the Pedestrian Plan: land acquisition; habitat enhancement and restoration; public access; and riparian habitat conservation.

Land Acquisition. The Wildlife Conservation Board (WCB) acquires real property or rights in real property on behalf of the Department of Fish and Game (DFG) and can also grant funds to other governmental entities or nonprofit organizations to acquire real property or rights in real property. All acquisitions are made on a "willing seller" basis pursuant to a fair market value appraisal as approved by the Department of General Services (DGS). The acquisition activities are carried out in conjunction with the DFG, with the DFG recommending priorities for proposed acquisitions. Following the DFG site evaluations, recommendations are submitted to the WCB for consideration for funding. For information on the Land Acquisition process contact the Department of Fish and Game's Region 3 Headquarters at 707.944.5500.

Habitat Enhancement and Restoration. Eligible enhancement and restoration projects must provide for the long-term maintenance of the restored and/or enhanced habitat. Eligible applicants for restoration projects include nonprofit conservation organizations and federal, state or local governmental agencies. Habitat enhancement and restoration projects, like the acquisition and public access projects,

are carried out pursuant to recommendations from the DFG. Restoration and public access projects may be located on Department-owned or other lands. For more information including an application, visit http://www.dfg.ca.gov/wcb/habitat_enhancement_and_restoration_program.html or call 916.445.8448.

Public Access. Financial assistance is available to cities, counties and public districts or corporation for development such as fishing piers or floats, access roads, boat launching ramps, trails, boardwalks, interpretive facilities and lake or stream improvements. Support facilities such as restrooms and parking areas are also eligible for funding under this program. For more information including an application, visit http://www.dfg.ca.gov/wcb/public_access_program.htm or call 916.445.8448.

Riparian Habitat Conservation:
Grant Program Requirements

- Grant request must meet one or more of the program's goals;
- Grantee must provide a matching contribution: cash or in-kind services;
- Grantee/landowner must agree to manage and maintain habitat;
- Grantee must obtain all required environmental permits; and
- Encourage partnerships and public involvement to complete, protect, and maintain projects.

Eligible Projects (Note: These are representative of what can be done):

- Bank stabilization and re-vegetation to control erosion and establish riparian corridor
- Convert existing flood plain agricultural crops to riparian vegetation
- Fence riparian corridor to control and/or manage livestock or wildlife impacts on habitat/channel stability
- Implement changes in land uses to allow natural stream function to return (for example, breach levee or set levee back to reconnect the stream with its flood plain)

For more information call 916.445.8448, or visit
http://www.dfg.ca.gov/wcb/california_riparian_habitat_conservation_program.htm

4.4 Habitat Conservation Fund

The program funds efforts for conservation of habitats that are either wetlands, riparian, or support recreational trails. Each grant cycle funds several different categories such as: wetlands; riparian; rare, threatened and endangered; and trails programs.

Project criteria depends on the grant cycle's categories. City and county governments are eligible to apply.

Eligible costs:

- Personnel or employee services
- Consultant services
- Construction equipment
- Construction supplies and materials
- Signs and interpretive aids
- Construction
- Acquisition
- Relocation costs
- Non-Fixed Equipment
- Other expenditures - In addition to the major categories of expenditures, reimbursements may be made for miscellaneous costs necessary for execution of the project

For more information, visit http://www.parks.ca.gov/default.asp?page_id=21361.

4.5 Roberti-Z'berg-Harris Competitive Grants Programs

Non-Urbanized Area. This Proposition 40 financed program, run by California Department of Parks and Recreation, funds the acquisition, development, rehabilitation, and special major maintenance of park and recreation lands and facilities, and creation of innovative recreation programs to meet the urgent need for safe, open and accessible local park and recreation facilities in non-urbanized cities.

Eligible applicants in Solano County are the cities of Dixon and Rio Vista. This program requires a Match of at least 3/7 of the State grant amount.

For more information, contact Albert Ventura at 916.651.8579 or avent@parks.ca.gov. Visit http://www.parks.ca.gov/pages/1008/files/02rzhnonurbanguide.pdf for the procedural guide with detailed application information.

Urbanized Area. This program has the same criteria and parameters as the Non-Urbanized Area program.

Eligible applicants in Solano County are the cities of Benicia, Fairfield, Suisun City, Vacaville and Vallejo. This program requires a Match of at least 3/7 of the State grant amount.

For more information, contact Albert Ventura at 916.651.8579 or avent@parks.ca.gov. Visit http://www.parks.ca.gov/pages/1008/files/02rzhurbanguide.pdf for the procedural guide with detailed application information.

4.6 URBAN PARK ACT

This program is also a Proposition 40 financed program, run by California Department of Parks and Recreation for acquisition and/or development of property for new urban parks or new recreational or multipurpose facilities in neighborhoods that are currently least served by park and recreation providers. The match requirement is evaluated in terms of its proportionality in relation to the economic resources of the applicant.

Eligible cities are those with a population of 100,000 or more that are not in a Heavily Urbanized County, and Districts, Nonprofit Organizations, and Joint Power Authorities within these cities. Fairfield and Vallejo are Solano County's eligible cities.

For more information, contact Albert Ventura at 916.651.8579 or avent@parks.ca.gov. Visit http://www.parks.ca.gov/pages/1008/files/02upaguide.pdf for the procedural guide with detailed application information.

4.7 LAND AND WATER CONSERVATION FUND (LWCF)

Created by Congress in 1964, and administered locally by the California Department of Parks and Recreation, the LWCF provides money to federal, state and local governments to purchase land, water and wetlands. Lands and waters purchased through the LWCF are used to: provide recreational opportunities; provide clean water; preserve wildlife habitat; enhance scenic vistas; protect archaeological and historical sites; and maintain the pristine nature of wilderness areas.

LWCF funds can be used for Acquisition or Development Projects. Acquisition Projects shall be for public outdoor recreation. These can be new areas, additions to existing areas, wildlife areas, beaches, open spaces, or similar properties. Acquisition can be of fee title that will accomplish the desired use and perpetuity. Development Projects shall include the construction of new and/or renovation of existing Facilities for outdoor recreation. Associated support Facilities such as lighting, parking, and restrooms are eligible. Indoor Facilities which support outdoor recreation activities in the Project area are also eligible. Cities, counties and districts may apply. The program requires a dollar for dollar match.

For more information, contact Albert Ventura at 916.651.8579 or avent@parks.ca.gov or visit http://www.parks.ca.gov/default.asp?page_id=21360.