

9.0 Implementation and Funding

This chapter focuses on implementation and funding for the Pedestrian Master Plan. This plan sets out an ambitious list of projects to be implemented over the next 20 years. The Pedestrian Master Plan and future updates should serve as the primary guide in the allocation of capital, maintenance, administrative, and matching funds. The Plan is also designed to provide staff and the public with flexibility as opportunities and needs arise. The Pedestrian Master Plan should be updated every five years as needed to reflect changes in needs and conditions. As part of this update, information on cost, feasibility, need, and other items should be included in the analysis of priorities and identification of projects.

9.1 Capital Improvement Program

Pedestrian projects and enhancements identified in this Pedestrian Master Plan and in future revisions should be included in the City's Capital Improvement Program. This may be accomplished by a combination of funding capital and maintenance efforts, providing matching monies for competitive grants, and/or integrating pedestrian features into larger public projects. The City should actively seek competitive grant sources and allocate adequate matching monies to implement pedestrian projects.

9.1.1 Cost Elements

A summary of projected cost estimates is presented in the following tables. Each of the major programs is presented in a separate table, along with an estimate of the capital or annual cost. All cost estimates are at a planning level and amounts are subject to further refinement once feasibility and engineering work has been completed, or as budget conditions change within the City.

Pedestrian unit costs are presented in **Table 9.1**. These costs are the basis for the planning-level cost estimates used in the following tables.

Table 9.1
Pedestrian Improvement Basic Unit Costs

Item	Unit	Unit Cost
Bus Stop (Shelter, Bench, Curb Cut, Bus Pad)	EA	\$40,000
Class I Path Construction	LF	\$100
Countdown Signal Heads	EA	\$800
Crosswalk - High Visibility	EA	\$1,200
Crosswalk - Tranverse	EA	\$500
Curb Extension	EA	\$100,000
Curb & Gutter	LF	\$40
Curb Ramp Retrofit (diagonal, per corner)	EA	\$2,000
Curb Ramp Retrofit (perpendicular, per corner)	EA	\$5,000
Parking Restrictions -- Red Curb	EA	\$20
Remove Curb	LF	\$4
Remove Sidewalk	SF	\$4
Remove Striping	LF	\$1
Remove Sign/Mast Arm	EA	\$120
Resurface Sidewalk - 5' Wide	LF	\$40
Sidewalk - 10' Wide	LF	\$90
Sidewalk - 5' Wide	LF	\$45
Sidewalk Widening	LF	\$46
Signs, Warning	EA	\$300
Truncated Domes (retrofit plastic)	EA	\$400

Source: Alta Planning + Design; March 2008

9.1.2 Citywide Project Costs

Costs for the citywide projects are shown in **Table 9.2**. Costs are shown for the total improvements recommended in the plan, and then an average cost over 20 years is shown. Some of the lower cost improvements such as signage and crosswalk restriping would likely be done in a phased corridor approach in less than 20 years. The total cost for the citywide projects is estimated at approximately \$14.3 million.

9.1.3 Top 15 Priority Projects Costs

Costs for the Top 15 priority pedestrian projects are presented in **Table 9.3**. The total cost for these improvements is estimated at \$5.7 million. The costs for these major projects may vary considerably depending on a variety of conditions and assumptions. Further feasibility and design work are required to refine these estimates.

Table 9.2
Citywide Project Costs

Project Category Name	Total Cost	Average Annual Cost over 20 Years
Sidewalk Gap Infill	\$12,494,610	\$624,700
Diagonal Curb Ramp Retrofit	\$1,466,000	\$73,300
ADA Truncated Domes Retrofit	\$73,600	\$3,700
Signage Improvements	\$4,500	\$200
Signal Timing Adjustments	No Cost	N/A
Audible Signal Installations	\$76,800	\$3,800
High Visibility Crosswalk Markings	\$192,000	\$9,600
Pedestrian Warning Signs	\$4,200	\$200
TOTAL COST CITYWIDE PROJECTS	\$14,311,710	\$715,500

Source: Alta Planning + Design; March 2008

Table 9.3
Priority Intersection and Corridor Project Costs

Location	Project Type	Project Cost
Plaza Camino Real	Sidewalk Infill, Wayfinding	\$139,706
Jefferson Street Corridor	Sidewalk Infill, Wayfinding	\$150,675
Carlsbad Boulevard (Lagoon Crossing)	Sidewalk Infill, Wayfinding	\$69,435
Buena Vista Elementary	Sidewalk Infill, Signage, Crosswalks	\$482,403
Carlsbad Village and Transit Center	Mid-block Crossing, Wayfinding	\$89,453
Chestnut Avenue Corridor	Sidewalk Infill, Bus Stop Improvements, Wayfinding	\$131,473
Harding Street Corridor	Stop Sign Control, Curb Extensions, Signage	\$374,143
Carlsbad High and Surrounding Schools	Sidewalk Infill, Curb Extensions, Crosswalks, Wayfinding	\$2,362,560
Jefferson Elementary	Crosswalks, Curb Extension	\$48,880
Calaveras Elementary & Middle Schools	Sidewalk Infill, Trail Connection, Wayfinding	\$237,374
Kelly Elementary	Trail Connection, Sidewalk Infill, Crosswalk	\$360,044
South Carlsbad Boulevard Corridor	Multi-use path	\$724,832
Palomar Airport Road Corridor	Mid-block Crossing, Wayfinding	\$76,553
Aviara Elementary and Middle School	Curb pad, Trail Connection, Wayfinding	\$277,610
La Costa Canyon and Surrounding School	Sidewalk Infill, Wayfinding	\$180,516
TOTAL COST TOP 15 PROJECTS		\$5,705,657

Source: Alta Planning + Design; March 2008

9.1.4 Program Costs

Costs associated with the program related recommendations are shown in **Table 9.4**. The budgets for recommended programs, while annualized in the table, are likely to vary considerably from year to year and are subject to grant awards and budget conditions.

Table 9.4
Costs of Programs Recommended in the Plan

Program Name	Annual Cost	Cost over 20 Years
<i>Maintenance</i> (see note)	\$100,000	\$2,000,000
<i>Promotional Efforts</i>		
Printed material (posters, brochures, maps)	\$20,000	\$400,000
Public Service Announcements	\$2,000	\$40,000
Website	\$2,000	\$40,000
Annual Events	\$50,000	\$1,000,000
Presentations	\$5,000	\$100,000
<i>Enforcement</i>	\$10,000	\$200,000
TOTAL COST PROGRAMS	\$189,000	\$3,780,000

Source: Alta Planning + Design; March 2008

Note:

Maintenance for new facilities recommended in plan. This estimate does not include costs to alleviate the spiral sidewalk repair backlog or emergency repairs.

9.2 Financial Plan

9.3 Funding Sources

Funding that can be used for pedestrian projects, programs, and plans come from all levels of government. This chapter covers federal, state, regional and local sources of pedestrian funding, as well as some non-traditional funding sources that have been used by local agencies to fund pedestrian infrastructure and programs.

9.3.1 Federal Funding Sources

The primary federal source of surface transportation funding—including pedestrian facilities—is SAFETEA-LU, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. SAFETEA-LU is the fourth in a series of Federal transportation funding bills. The \$286.5 billion SAFETEA-LU bill, passed in 2005, authorizes federal surface transportation programs for the five-year period between 2005 and 2009.

SAFETEA-LU funding is administered through the State (Caltrans and Resources Agency) and regional planning agencies. Most, but not all, of these funding programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections.

Specific funding programs under SAFETEA-LU include:

Congestion Mitigation and Air Quality (CMAQ) – This program funds projects that are likely to contribute to the attainment of national ambient air quality standards. Funds are available for projects and programs in areas that have been designated as non-attainment or in maintenance for ozone, carbon monoxide or particulate matter.

Recreational Trails Program – This program provides \$370 million nationally through 2009 for non-motorized trail projects.

Safe Routes to School Program – A relatively new program with \$612 million nationally through 2009.

Transportation, Community and System Preservation Program – This program provides \$270 million nationally over five years (2006-2011) reserved for transit-oriented development, traffic calming and other projects that improve the efficiency of the transportation system, reduce the impact on the environment, and provide efficient access to jobs, services and trade centers.

Federal Lands Highway Funds – Federal Lands Highway funds may be used to build pedestrian facilities in conjunction with roads and parkways at the discretion of the department charged with administration of the funds. The projects must be transportation-related and tied to a plan adopted by the State and MPO. Approximately \$1 billion dollars are available nationally for Federal Lands Highway Projects through 2009.

9.3.2 Statewide Funding Sources

The State of California uses both federal sources (such as the Recreational Trails Program) and its own budget to fund pedestrian projects and programs. In some cases, such as Safe Routes to School, Office of Traffic Safety, and Environmental Justice grants, project sponsors apply directly to the State for funding. Statewide funding sources are described below:

Recreational Trails Program (RTP) – The Recreational Trails Program (RTP) provides funds to States to develop and maintain Recreational Trails and trail-related facilities for both non-motorized and motorized Recreational Trail uses. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) defines the program at the federal level. In 2005, Congress reauthorized the RTP nationwide for \$60 million in Federal Fiscal Year (FFY) 2005, \$70 million in FFY 2006, \$75 million in FFY 2007, \$80 million in FFY 2008, and \$85 million in FFY 2009. Seventy percent of the funds received by California will be available for nonmotorized projects on a competitive basis to cities, counties, districts, state agencies, federal agencies and nonprofit organizations with management responsibilities over public lands. The RTP match amount is based on the cost of the total RTP Project. The maximum amount of RTP funds allowed for each project is eighty-eight (88) percent. The applicant is responsible for providing a match amount that is a minimum of twelve (12) percent. In California, RTP funds are administered by the California State Parks Department.

Recreational Trails Program funds may be used for the following:

- Maintenance and restoration of existing trails;
- Purchase and lease of trail construction and maintenance equipment;
- Construction of new trails;
- Acquisition of easements of property for trails; and
- Operation of educational programs to promote safety and environmental protection related to trails (limited to 5 percent of a State's funds).

Land and Water Conservation Fund – The Land and Water Conservation Fund is a federal program that provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. The Fund is administered by the California State Parks Department and has been reauthorized until 2015. Cities, counties and districts authorized to acquire, develop, operate and maintain park and recreation facilities are eligible to apply. Applicants must fund the entire project, and will be reimbursed for 50 percent of costs. Property acquired or developed under the program must be retained in perpetuity for public recreational use. The grant process for local agencies is competitive. Annual apportionment allocates 60 percent of the funds to local agencies. Sixty (60) percent of those grants are reserved for Southern California.

Eligibility Criteria:

- Application package
- The Project must be consistent with issues identified in the California Outdoor Recreation Plan
- The applicant must have an assured source of eligible matching funds to meet the non-federal share of the cost of the project
- The applicant must have adequate land tenure for Development Projects

Project Proposal Criteria:

- Priority Statewide Recreation Needs
- Identification of CORP Priority Issues
- Outdoor Recreational Opportunities
- Public Involvement
- Population and Population Density
- Cost-Use Benefit
- Accessibility
- Priority Acquisitions (Acquisition Projects only)
- Suitability (Development Projects only)
- Readiness
- Performance
- Operation and Maintenance

California State-Legislated Safe Routes to School (SR2S) Program – Established in 1999, the State Safe Routes to School (SR2S) program came into effect from the passage and signing of Assembly Bill 1475 (AB 1475). In 2001, Senate Bill 10 (SB 10) was enacted which extended the program for three additional years. In 2004, SB 1087 was enacted to extend the program three more years. A new bill, AB 57, was introduced in December 2006 to extend the program until January 1, 2013. With the passage of SAFETEA-LU in 2005, federal Safe Routes to School funds were made

available to states nationwide. For this reason, current statutes will be revised to reflect SAFETEA-LU provisions as the State program is phased out. A call for projects for the seventh and final cycle of the State program will be posted shortly as soon as the funding amount is determined. This program is intended to improve the safety of walking and bicycling to school as well as encourage students to walk and bicycle to school by identifying existing and new routes to school and implementing pedestrian and bicycle safety and traffic calming projects.

Evaluation Criteria (Based upon 7th cycle of the program):

- Provide a detailed description of the project scope and locations targeted for improvement.
- Describe the reasons you are applying for SR2S funds.
- Describe how your proposed solution was developed, e.g. were alternatives explored or other remedies (such as educational or enforcement measures) tested?
- Describe any ongoing and/or planned Safe Routes to School program efforts specifically targeted towards education, encouragement and enforcement activities.
- Describe how the proposed project would encourage more students to walk or bicycle to and from school more frequently.
- If the proposed project has funding sources from other agencies or grant providers, identify the funding sources, their amounts, and how the funds will complement the SR2S funds, either in additional infrastructure improvements or in the development of education, enforcement and encouragement activities.
- Describe any environmental issues or concerns that may impact the delivery of the project.
- Attach the following (a general project map; site plan for each improvement; detailed engineer's estimate; letters of support; applicable 'warrants'; and photographs).

Environmental Justice: Context Sensitive Planning Grants – The Caltrans-administered Environmental Justice: Context Sensitive Planning Grants Program funds planning activities that assist low-income, minority, and Native American communities in becoming active participants in transportation planning and project development. Grants are available to transit districts, cities, counties, and tribal governments. This grant is funded by the State Highway Account and an estimated \$3,000,000 million in grants and up to \$250,000 per application are available annually, budget permitting.

Project Criteria:

- Project Description
- Grant Objective
- State Transportation Planning Grant Goals
- Public Participation

- Project Outcomes

Office of Traffic Safety (OTS) Grants – The California Office of Traffic Safety distributes federal funding apportioned to California under the National Highway Safety Act and SAFETEA-LU. Grants are used to establish new traffic safety programs and expand ongoing programs to address deficiencies in current programs. Pedestrian safety is included in the list of traffic safety priority areas. Eligible grantees include governmental agencies, state colleges and state universities, local city and county government agencies, school districts, fire departments, and public emergency services providers. Grant funding cannot replace existing program expenditures, nor can traffic safety funds be used for program maintenance, research, rehabilitation, or construction. Grants are awarded on a competitive basis, and priority is given to agencies with the greatest need.

Evaluation Criteria:

- Potential Traffic Safety Impact
- Collision Statistics and Rankings
- Seriousness of Problems
- Performance of on Previous OTS Grants

9.3.3 Regional and Local Funding Sources

Regional pedestrian grant programs come from a variety of sources, including SAFETEA-LU, the State budget, vehicle registration fees, bridge tolls and local sales tax. Most regional funds are allocated by regional agencies such as the San Diego Association of Governments (SANDAG).

FY 2008 TDA and TransNet Bicycle and Pedestrian Projects Call for Projects – Each year, the SANDAG Board of Directors allocates funds under the Transportation Development Act (TDA) and the TransNet local sales tax program to support non-motorized transportation projects in the San Diego region. For FY 2007, approximately \$3.5 million to \$4.0 million was available for allocation.

These funds serve as part of the Regional Housing Needs Incentive Program. Board Policy No. 033 (Implementation Guidelines for SANDAG Regional Housing Needs Assessment Memorandum) sets forth guidelines for incentives related to the Regional Housing Needs Assessment (RHNA) for the 2005-2010 Housing Element cycle.

Eligibility for the TDA/*TransNet* bicycle and pedestrian funds depend upon compliance with Board Policy No. 033, TDA Project Eligibility, and *TransNet* Project Eligibility.

In addition to the eligibility requirements, if applicable, certain SANDAG Claim Requirements must be met. The application must be completed and received in early February.

Key Pedestrian Criteria:

- Community Support/Consistency with Community Plan
- Minimum Design Standards
- Connect to Regional Transportation Corridor/Transit Linkage
- Completes Connection/Linkage in Existing Pedestrian Network
- Project Readiness
- Geographic Factors/GIS Analysis
- Safety Improvements
- Innovation and Design
- Regional Housing Needs Incentive
- Matching Funds
- Cost Benefit

Pilot Smart Growth Incentive Program (SGIP) – This innovative pilot program is based on the SANDAG Regional Comprehensive Plan (RCP) using funding incentives to encourage coordinated regional planning to bring transit service, housing, and employment together in smart growth development. Initially, the Pilot SGIP was funded with federal Transportation Enhancement (TE) Funds. Total funding included \$19 million for 14 approved local projects in September 2005, with a \$2 million cap per project. A longer-term, smart growth incentive program will be funded through the local *TransNet* half-cent sales tax program. It will provide \$6 million in FY 2009 and grow over time as sales tax revenues increase.

Carlsbad has four Smart Growth Place Type classifications within the Smart Growth Concept Map: one Existing/Planned Town Center, one Potential Town Center and two Potential Community Centers. These designations qualify for application for future incentive program funds.

Project Screening Criteria:

- Local Commitment/Authorization
- Funding Commitment
- Funding Eligibility

Project Evaluation Criteria:

- Project Readiness (Level of Project Development)
- Smart Growth Area Land Use Characteristics (Intensity of Development; Land Use and Transportation Characteristics of Project Area; Urban Design Characteristics of Project Area; Related Land Development Projects; Affordable Housing)
- Quality of Proposed Project (Pedestrian Access Improvements; Bicycle Access Improvements; Transit Facility Improvements; Streetscape Enhancements; Traffic Calming Features; Parking Improvements)
- Matching Funds
- Low Income Household Bonus Points