MONTEREY COUNTY PLANNING COMMISION

Meeting: March 27, 2013 Time: 9:00 a.m.	**Agenda Item No.: 2**
Project Description: Review sections of the 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan, containing goals, policies, implementation measures and development standards for bikeways within the unincorporated areas of Monterey County and report to the Monterey County Board of Supervisors on conformity with the adopted 2010 Monterey County General Plan and Local Coastal Program.	
Project Location: County-wide	**APN:** County-wide
Planning File Number: REF120081	**Owner: N/A**
Planning Area: County-wide	**Flagged and staked:** N/A
Zoning Designation: Varies	
CEQA Action: Categorically Exempt per Section 15378 (b)(4)	
Department: RMA – Public Works	

RECOMMENDATION:
Staff recommends that the Planning Commission adopt a resolution (**Exhibit B**) to:

1) Find the project exempt from environmental review under Government Section 15378(b)(4) of the CEQA Guidelines; and

2) Review the 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan as it pertains to the unincorporated areas of the County and report to the Board of Supervisors that it is in conformity with the adopted 2010 Monterey County General Plan and the Local Coastal Program.

PROJECT OVERVIEW:
See discussion in **Exhibit A**.

OTHER AGENCY INVOLVEMENT:
Public Works' staff worked closley with TAMC staff to update the 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan (TAMC Plan). Additionally, in 2011 TAMC and their consultant team worked closely with key stakeholders, which included members from the TAMC Bicycle and Pedestrian Committee (comprised of volunteer representatives from each supervisorial district, each incorporated cities and the public) and Technical Advisory Committee (comprised of representatives from each city and the County), representatives from each of the incorporated cities, bicycle community representatives, Agricultural Advisory Committee (AAC), Monterey County Farm Bureau and the public at large. The Monterey County Planning Department has reviewed the TAMC Plan for conformity with the 2010 Monterey County General Plan, the Local Coastal Program.

On January 24, 2013 PW staff presented the TAMC Plan to the AAC. The AAC recommended the Planning Commission review the TAMC Plan for consistency with the 2010 Monterey County General Plan, and Local Coastal Program. In addition the AAC requested staff return to the AAC with the Planning Commissions conformity determination.

Patricia A. Lopez, Management Analyst III
lopezp@co.monterey.ca.us
(831) 755-8998
March 27, 2013

cc: Front Counter Copy; Planning Commission; Public Works Department; TAMC; Caltrans; LandWatch, The Open Monterey Project, Planning File REF120081

Attachments:

Exhibit A	Project Discussion
Exhibit B	Draft Resolution
Exhibit C	Letter from Monterey County Planning Department
Exhibit D	TAMC Bicycle and Pedestrian Master Plan

This report was prepared by Jacqueline R. Onciano, Planning Services Manager, Ogarita Carranza, Management Analyst II and Patricia A. Lopez, Management Analyst III and

This report was reviewed by Paul H. Greenway, P.E., Assistant Director of Public Works, Mike Novo, Director, RMA – Planning Department, and Wendy Strimling, Senior Deputy County Counsel

EXHIBIT A
DISCUSSION

Project Description

The purpose of a bikeway plan is to integrate bicycling and pedestrian elements into the transportation system and to enable safe and efficient bicycle travelling as an everyday means of transportation. Bikeway plans also include strategies for improving connections, increasing coordination and reducing traffic congestion. The California Department of Transportation (California Streets and Highway Code Section 891.2) sets guidelines that all bikeway plans must follow if they are seeking final approval and funding from the State and requires the bicycle transportation plans be updated every five years to be eligible for funds. The following are the guidelines or mandatory elements set by the state: estimated number of bicycle commuters, land use map, existing and proposed bikeways, existing and proposed bicycle transport/parking facilities, existing and proposed location of support facilities, bicycle safety and education program, citizen and community involvement in plan development, consistency of bike plan with other local and regional plans, project listing including priority of projects, and identification of prior expenditures and future needs for bicycle safety.

Section §65401 of the Government Code requires that a determination of conformity with the adopted General Plan be made by a designated planning agency prior to recommending, preparing plans for, or constructing, major public works projects. In addition, adoption of a Bikeway Plan is required to qualify for State grant funds.

On October 26, 2011, the TAMC Plan was adopted by the Transportation Agency for Monterey County (TAMC) Board of Directors. In 2011, TAMC worked closely with local cities and the County of Monterey Public Works' staff in the preparation of the TAMC Plan adding a pedestrian component that was not included in their previous plan. The TAMC Plan identifies all existing and proposed bicycle projects of the County and jurisdictions within the Monterey County region, discusses the benefits of bicycling, contains elements including maps of existing and proposed bikeways, priority lists of bicycle and pedestrian projects, recommended pedestrian project prioritization criteria, and a funding chapter that provides implementing agencies with a list of potential sources to fund projects and programs. TAMC's Plan was approved by the California Department of Transportation as required under California Streets and Highways Code Section 891.2.

The County of Monterey Bikeway Plan was last updated in 2008. The Monterey County Planning Commission reviewed the 2008 Update of the Monterey County General Bikeways Plan and found it in conformity with the then adopted 1982 Monterey County General Plan and the Local Coastal Program on August 27, 2008, which was then adopted by the Board of Supervisors on October 7, 2008.

Project Issues

The County of Monterey Planning Department staff reviewed the TAMC Plan and found it in conformity with the adopted 2010 Monterey County General Plan and found that the document exhibits no conflicts with any policies and in fact emphasizes Policies C-4.3, and C-4.7. It should however be noted that the 2010 Monterey County General Plan only applies to the Inland Areas of the County.

The County of Monterey Planning Department staff reviewed the TAMC Plan and found it in conformity with the governing plans in the coastal zone, which are governed by the Local Coastal Program (LCP) and the 1982 General Plan. The project outlined in the TAMC document, would need to be in compliance with those documents at the time of construction, and would also be subject to any forthcoming amendments to the Coastal Land Use Plans and future adopted polices implemented during the forthcoming LCP update if those are in effect at the time the individually listed projects come forward for approval. (See Exhibit C).

Currently the Moss Landing Community Plan is under revision/update, which contains an area where the California Coastal Trail is planned for the future. In addition, the Del Monte Forest Land Use Plan is expected to be updated in the future, and the North County Land Use Plan could also see future revisions.

At such time that the LCP and Land Use Plans are updated, the projects contained within the TAMC Plan would also need to be updated or rechecked for General Plan and Land Use Plan consistency.

Environmental Review

Bike Plans are exempt from environmental review, according to §15378(b)(4) of the CEQA Guidelines, which provides an exemption for, "The creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment." The TAMC Plan does not provide a commitment to construct any one project; the list is used to apply for state funds. Each project requires approval and CEQA review.

Recommendation

Staff recommends that the Planning Commission, pursuant to Government Code §65401, review and report to the Monterey County Board of Supervisors that the 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan is in conformity with the adopted 2010 Monterey County General Plan and the Local Coastal Program.

On January 24, 2013 PW staff presented the TAMC Plan to the AAC. The AAC recommended the Planning Commission review the TAMC Plan for consistency with the 2010 Monterey County General Plan, and Local Coastal Program. In addition the AAC requested staff return to the AAC with the Planning Commissions conformity determination.

EXHIBIT B
RESOLUTION

Before the Planning Commission in and for the County of Monterey, State of California

In the matter of the application of:
COUNTY OF MONTEREY – PUBLIC WORKS (REF120081)
RESOLUTION NO. _____
Resolution by the Monterey County Hearing Body:

Recommending to the Monterey County Board of Supervisors that the 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan as it pertains to the unincorporated areas of the County and report to the Board of Supervisors that it is in conformity with the adopted 2010 Monterey County General Plan and the Local Coastal Program. [REF120081, County of Monterey – Public Works (County-Wide)]

I. RECITALS

1. Section 65401 of the California Government Code requires that the Planning Commission review and report to the Board of Supervisors on the conformity with the adopted General Plan prior to recommending, preparing plans for, or constructing, major public works projects.

2. In October 2011 the Transportation Agency for Monterey County (TAMC) Board of Directors adopted the 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan (TAMC Plan).

3. Portions of the TAMC Plan apply to the unincorporated areas of the County and are within the discretion and purview of the Board of Supervisors.

4. The California Department of Transportation certified the TAMC Plan. Local jurisdictions can adopt the TAMC Plan to be eligible for grant funds.

5. The Planning Commission has reviewed those sections of the TAMC Plan under the County of Monterey's purview and found those sections consistent with the 2010 General Plan and Local Coastal Plan.

6. The California Department of Transportation (California Streets and Highway Code Section 891.2) sets guidelines that all bikeway plans must follow if they are seeking final approval and funding from the State and requires the bicycle transportation plans be updated every five years to be eligible for funds.

7. Adoption of the TAMC Plan as applicable to the unincorporated area of the County is not a project under §15378(b)(4) of the CEQA Guidelines, which provides an exemption for, "The creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment." The TAMC Plan does not provide a commitment to construct any one project; the list is used to apply for state grants. Each project requires approval and CEQA review.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Planning Commission does hereby:

1. Find the project exempt from environmental review under Government Section 15378(b)(4); and

2. Report to the Monterey County Board of Supervisors that the 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan as it pertains to the unincorporated areas of the County is in conformity with the adopted 2010 Monterey County General Plan and the Local Coastal Program.

PASSED AND ADOPTED this _____ day of _____, 2013 upon motion of _____, seconded by _____, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Mike Novo, Secretary

Form Rev. 05-09-2012

EXHIBIT C
LETTER FROM PLANNING DEPARTMENT

MONTEREY COUNTY

RESOURCE MANAGEMENT AGENCY – PLANNING DEPARTMENT

MEMORANDUM

Date: September 23, 2012

To: Ogarita Carranza, Management Analyst II

From: David J. R. Mack, Associate Planner, Long Range Planning

Subject: December 2011 TAMC Bicycle and Pedestrian Master Plan

Thank you for allowing the RMA – Planning Department to review the 2011 (December) TAMC Bicycle and Pedestrian Master Plan and provide comments.

After reviewing the document for consistency with the Monterey County 2010 General Plan, the document exhibits no conflicts with any policies and in fact emphasizes Policies C-1.6, C-4.3, and C-4.7.

It should be noted however that the 2010 General Plan only applies to the Inland Areas of the County. The County of Monterey Planning Department reviewed the TAMC Plan and found it in conformity with the Coastal zoned areas, which remain governed by the 1982 General Plan, the Local Coastal Program (LCP), and applicable Land Use Plans. The project outlined in the TAMC document, would need to be in compliance with those documents at the time of construction, and would also be subject to any forthcoming amendments to the Coastal Land Use Plans and future adopted polices implemented during the forthcoming LCP update.

Currently the Moss Landing Community Plan is under revision/update, which contains an area where the California Coastal Trail is planned for the future. In addition, the Del Monte Forest Land Use Plan is expected to be updated in the future, and the North County Land Use Plan could also see future revisions.

At such time that the LCP and Land Use Plans are updated, the projects contained within the TAMC Plan would also need to be updated or rechecked for General Plan and Land Use Plan consistency.

Transportation Agency for Monterey County

Bicycle and Pedestrian Master Plan

August 2011

PREPARED BY:
Alta Planning + Design

PREPARED FOR:
Transportation Agency for Monterey County

FUNDED IN PART BY:
Monterey Bay Unified Air Pollution Control District

TAMC
TRANSPORTATION AGENCY FOR MONTEREY COUNTY

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

alta
PLANNING + DESIGN

Transportation Agency for Monterey County

Bicycle and Pedestrian Master Plan

August 2011

Prepared for:

Transportation Agency for Monterey County

Funded in part by:

Monterey Bay Unified Air Pollution Control District

Prepared by:

Alta Planning and Design

Acknowledgements

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1. Introduction

This Plan presents recommended countywide bicycle and pedestrian projects for Monterey County. The Transportation Agency for Monterey County (Agency) is the County's Transportation Commission, the Regional Transportation Planning Agency, the Congestion Management Agency and the Service Authority for Freeways and Expressways and is responsible for distributing regional, state and federals funds related to bicycle and pedestrian projects. The Agency, in coordination with member agencies, developed this Plan to identify bikeways of countywide significance and focused areas for pedestrian improvements in order to prioritize funding and facilitate implementation of the countywide network.

The Monterey County region has consistently implemented safe and efficient bikeways and pedestrian facilities as part of its goal to reduce traffic volumes and enhance traffic safety. In 2005, the Transportation Agency for Monterey County adopted a Bicycle Master Plan. This Plan included a set of goals, objectives, and policies to guide the development in implementation of bikeway projects in Monterey County. Since then, a number of incorporated cities have adopted or updated their bicycle master plans, new regional policy documents were adopted and bicycling and walking increased in importance to the County's overall transportation system. This updated Bicycle Plan and appended Pedestrian Plan reinforces the region's goals for bicycle and pedestrian oriented projects and programs.

This 2011 Transportation Agency for Monterey County Bicycle and Pedestrian Plan identifies all existing and proposed bicycle projects and facilities of jurisdictions within the Monterey County region; and satisfies the General Bikeways Plan requirements set by the California Department of Transportation (California Streets and Highways Code Section 891.2). Many bicycle grants require applicants to have a state-approved Bikeways Plan. Without this plan, project applications may not be eligible.

The following member agencies are represented in this Plan and those with an asterisk have adopted bicycle and/or pedestrian plans:

- Carmel
- Del Rey Oaks
- Gonzales
- Greenfield
- King City
- Marina*
- Monterey*
- Pacific Grove
- Salinas*
- Sand City
- Seaside*
- Soledad
- County of Monterey*

This plan identifies regionally significant bicycle and pedestrian projects that will help guide the allocation of Transportation Agency for Monterey County (Agency) administered funds towards the regionally significant projects. These funds include the Transportation Development Act (TDA) Article 3 funds, which sets aside two percent per year for bicycle and pedestrian projects, Transportation Enhancement (TE) funds, and Congestion Mitigation and Air Quality (CMAQ) funds. The Agency developed this plan with help from the following agencies, departments and organizations.

- Transportation Agency for Monterey County Bicycle and Pedestrian Facilities Advisory Committee (BPC)
- County of Monterey Public Works Department
- Bicycling community representatives
- Representatives from each of the incorporated cities in Monterey County

This plan contains a discussion of the benefits of bicycling and the state-mandated elements of the bikeways plan, including land use maps, existing and proposed bikeways, the priority listing of bicycle projects, and population information for the Monterey County region.

1.1. Plan Purpose

This Plan addresses the planning, design, funding, and implementation for a variety of bicycle and pedestrian infrastructure projects and programs in three ways:

- This Plan provides a new policy framework to guide the implementation and evaluation of this Plan's recommendations.
- The Plan updates and refines the countywide bicycle network. To maximize funding for bikeway projects, this plan prioritizes projects that close network gaps, improve high collision areas, and make connections to cities and activity centers.
- The Plan establishes geographic focus areas for countywide investment in pedestrian infrastructure, based on the Association of Monterey Bay Area Government's Priority Development Areas and need throughout the County. To assist jurisdictions with identifying specific pedestrian projects, the Plan describes minimum design guidelines for these focus areas.

1.2. Vision, Goals, Objectives and Policies

This section presents the vision, goals, objectives and policies to support bicycling and walking in Monterey County for years to come. The vision is a broad inspirational statement that presents desired future conditions. Goals and objectives direct the way the public improvements are made, including the allocation of resources, operation of programs, and determination of countywide priorities. Policies identify specific action areas to achieve this Plan's objectives. This Plan presents a framework of how to create and expand programs and improvements to increase bicycling and walking in Monterey County

1.2.1. Vision

The following vision statement expresses the desired bicycling and walking environment in Monterey County.

> *This Plan envisions Monterey County with a transportation system that supports sustainability, active living and community where bicycling and walking are an integral part of daily life. The system will include a comprehensive, safe, and convenient bicycle and pedestrian network that will support bicycling and walking as a viable, convenient, and popular travel choice for residents and visitors.*

1.2.2. Goals

The six goals presented are broad statements of purpose; each addresses a topic designed to support the vision for bicycling and walking in Monterey County. These goals identify a strategy for improving non-motorized transportation.

1. Increase and improve bicycle and pedestrian mobility across Monterey County.
2. Maintain and improve the quality, operation and integrity of bikeway and walkway network facilities.
3. Improve bicycle and pedestrian safety.
4. Increase the number of commute, recreation and utilitarian bicycle and pedestrian trips.
5. Increase the number of high quality support facilities to complement the bicycle network and walkway facilities.
6. Increase education and awareness of the value of bicycle and pedestrian travel for commute and non-commute trips.

1.2.3. Objectives

Objectives are specific measurable action items that evaluate progress towards a goal. The following objectives identify actions developed to help the Plan's goals to be achieved.

1. Increase the mileage of transportation related bicycle facilities miles in Monterey County by 10 percent from 175 miles to 192 miles by the year 2015.
2. Complete the Monterey Bay Sanctuary Scenic Trail by the year 2025.
3. Implement the Bicycle and Pedestrian Master Plan over the next twenty (20) years.
4. Increase the number of trips made by bicycle from the existing 0.8 percent to three (3) percent by the year 2015.
5. Increase the number of walking trips from the existing 3.8 percent to 5 percent by the year 2015.
6. Reduce the number of bicycle and pedestrian related collisions, injuries and fatalities.
7. Provide maintained bikeways and walkways that are clean, safe, and encourage use.
8. Increase the number of bicycle and pedestrian support facilities.
9. Work with local agencies to institutionalize and promote education, encouragement and outreach bicycle and pedestrian programs.

1.2.4. Policies

The following policies identify specific action areas to achieve this Plan's objectives.

Policy 1. Update the Agency Bikeways and Pedestrian Master Plan and Monterey County Bicycle Map in concert with the 5-year update schedule for the Regional Transportation Plan to document gaps on the regional bicycle and pedestrian facilities network and set priorities for funding projects.

Policy 2. Implement the 2011 Bikeways and Pedestrian Master Plan over the next twenty (20) years.

Policy 3. Prioritize the top ten Bikeways and Pedestrian Master Plan projects for funding.

Policy 4. Identify gaps in the countywide regional bicycle facilities network and needed improvements to and within key pedestrian activity centers and county community areas, and define priorities for eliminating these gaps by making needed improvements.

Policy 5. Support and encourage local efforts to require the construction of bicycle and pedestrian facilities and amenities, where warranted, as a condition of approval of new development and major redevelopment projects as part of Agency's goal to coordinate land use decision-making with regional transportation planning.

Policy 6. Accommodate, and encourage other agencies to accommodate, the need for mobility, accessibility, and safety of bicyclists and pedestrians when planning, designing, and developing transportation improvements. Such accommodations could include:

a. Reviewing capital improvement projects to make sure that needs of non-motorized travel are considered in planning, programming, design, reconstruction, retrofit, maintenance, construction, operations, and project development activities and products.

b. Accommodating the needs of all travelers through a "complete streets" approach to designing new transportation improvements that includes sidewalks, bicycle lanes, crosswalks, pedestrian cut-throughs, or other bicycle and pedestrian improvements.

c. Designation of low-traffic bicycle boulevards incorporating traffic calming features to facilitate safe, direct, and convenient bicycle travel within jurisdictions.

Policy 7. In order to facilitate regional travel by bicycle, encourage member agencies to construct bicycle facilities on new roadways as follows:

a. In coordination with regional and local bikeways plans,

b. According to the specifications in Chapter 1000 of the Department of Transportation Highway Design Manual,

c. With consideration of bicycle lanes (Class 2 facilities) on all new major arterials and on new collectors with an Average Daily Traffic (ADT) greater than 3,000, or with a speed limit in excess of 30 miles per hour, and

d. With special attention to safe design where bicycle paths intersect with streets.

Policy 8. Work to have some of the County's bike routes incorporated into the United States Bicycle Route System, administered by the Adventure Cycling Association.

Policy 9. Work with agencies with jurisdictions over actuated intersections to:

a. Conform with Caltrans requirements for bicycle detection at all new and modified actuated intersections, and

b. Encourage Caltrans conforming bicycle detection at all existing actuated intersections on designated bikeways.

Policy 10. Continue to administer the Bike Protection Program to subsidize the cost of bike racks and lockers in locations most heavily used by bicyclists.

Policy 11. Work with local agencies to develop a coordinated approach to bicycle signage, the system for which could include:

a. Directional and destination signs along bikeways and shared use trails,

b. Location maps in downtown areas and other major pedestrian districts

c. A route identification system and common set of signs for the regional bicycle network identified in this Bicycle and Pedestrian Master Plan.

Policy 12. Determine funding needs for expanding and improving bicycle and pedestrian facilities, and seek funding for those needs.

Policy 13. Encourage routine maintenance of bikeway and walkway network facilities, as funding and priorities allow, including regular sweeping of bikeways and shared-use pathways. Programs to support these maintenance efforts could include:

a. Sidewalk repair programs, including incentive to property owners to improve adjoining sidewalks beyond any required maintenance,

b. Continued administration of the Bicycle Service Request Form Program to alert public works departments to bicycle-related hazards,

c. Develop and administer a Pedestrian Service Request Form Program similar to the Bicycle Service Request Form,

d. "Adopt a Trail" programs that involve volunteers for trail clean-up and other maintenance,

e. Enforcement of sweeping requirements of towing companies following automobile accidents,

f. Encourage those who drive from fields onto highways and roads to minimize the transfer of mud, dirt, gravel and sand from fields and dirt roads to the public roadways,

g. Encourage the removal of mud, dirt, gravel and sand that is transferred to the public roadways as soon as possible, and

h. Encourage active identification of funding for bikeway maintenance from potential sources including the Bicycle Transportation Account and prioritizing street sweeping on roadways with bikeways.

Policy 14. Support the development and implementation of effective safety programs for adults and children to educate drivers, bicyclists, and pedestrians as to their rights and responsibilities, and adult and youth pedestrian and bicycle education and safety programs, including:

a. Enforcement of pedestrian- and bicycle-related laws by local police departments,

b. Teaching of bicycle and pedestrian safety to school children and drivers, and

c. Informing interested agencies and organizations about available education materials and assistance such as those programs administered by the National Bicycle Safety Network and the National Safe Routes to School Partnership.

Policy 15. Support programs being developed, or in place in Monterey County, that encourage and promote bicycle and pedestrian travel. These programs could include:

a. Producing and distributing the Agency's Monterey County Bicycle Map as resources allow,

b. Supporting programs that would encourage more students to walk or bicycle to school,

c. Continuing the encouragement of bicycling and walking as part of transportation demand management and commute alternatives programs, and

d. Continuing to work with local jurisdictions and partner agencies to sponsor Monterey County Bike Week as a mechanism for promoting bicycle travel and bicycle safety.

Policy 16. The Agency's Bicycle and Pedestrian Facilities Advisory Committee (Committee) will continue to review development proposals from local agencies and provide comments to public works staff to help resolve bicycle and pedestrian issues of concern and make sure that the proposed facilities are practical, safe and usable. The committee will develop countywide or sub-regional approaches that would help overcome obstacles standing in the way of achieving Agency's bicycle and pedestrian planning goals.

Policy 17. Minimize trail impacts to private lands including agricultural, residential and other land uses.

Policy 18. Avoid trail development on private lands when a feasible alternative alignment exists on adjacent public properties.

Policy 19. Provide amenities such as restrooms, drinking fountains, benches, lighting and others at major trailheads to enhance user experience.

1.2.5. Performance Measures

Performance measures monitor the progress made towards achieving the goals of the Bicycle and Pedestrian Master Plan, as listed on page 1-3. The measures outlined below should be reviewed and updated on a regular basis. Many of the performance measures include target dates. The 2015 target dates are those identified in the 2010 Regional Transportation Plan and have not been changed for consistency purposes. The 2016 target dates assume a five year time frame from Plan adoption and the expected time until the next Plan update.

Table 1-1: Performance Measures

Goal	Performance Measure
Goal 1. Increase and improve bicycle and pedestrian access across Monterey County.	Measure 1.A – Complete on average five percent of the regional system every year; system completion by 2031.
Goal 2. Maintain and improve the quality, operation and integrity of bikeway and walkway network facilities.	Measure 2.A - Encourage the development and administration of maintenance programs and service request forms.
Goal 3. Improve bicycle and pedestrian safety.	Measure 3.A - Reduce bicyclist and pedestrian related injuries and fatalities by five (5) percent by 2016.
Goal 4. Increase the number of commute, recreation and utilitarian bicycle and pedestrian trips.	Measure 4.A - Increase the number of bicycle trips from the existing 0.8 percent to three (3) percent by the year 2015. Measure 4.B - Increase the number of walking trips from the existing 3.8 percent to five (5) percent by the year 2015.
Goal 5. Increase the number of high quality support facilities to complement the bicycle network and walkway facilities.	Measure 5.A - Increase the number of public bicycle parking spaces by twenty-five (25) percent by 2016. Measure 5.B - Develop a coordinated bicycle and pedestrian wayfinding system and implement by 2021.
Goals 6. Increase education and awareness of the value of bicycle and pedestrian travel for commute and non-commute trips.	Measure 6.A - Increase distribution of the Agency Monterey County Bicycle Map by fifty (50) percent by 2016. Measure 6.B - Increase the number of Monterey County Bike Week participants by ten (10) percent by 2016. Measure 6.C - Increase the number of employers participating in Monterey County Bike Week Team Bike Challenge by fifty (50) percent by 2016.

1.3. Public Involvement

The Agency Board appoints representatives to the Committee from each of the twelve cities, the five supervisory districts and from area agencies including:

- Monterey Peninsula Regional Parks District (MPRPD)
- Monterey Bay Unified Air Pollution Control District (MBUAPCD)
- Monterey-Salinas Transit (MST)
- Association of Monterey Bay Area Governments (AMBAG)
- County of Monterey Public Works Department
- Salinas Bicycle and Pedestrian Advisory Committee
- The Velo Club of Monterey and the Pebble Beach Company

Figure 1-1: Agency Bicycle and Pedestrian Facilities Advisory Committee

This committee provides input to Transportation Agency for Monterey County and its member agencies on key bicycle issues and projects. The BPC also helps build widespread community awareness, understanding and support for the bicycle and pedestrian transportation planning process, and continually seeks to encourage citizen participation in this process. The BPC has the ongoing task of recommending ways to implement the General Bikeways Plan as well as the Regional Transportation Plan's goals and objectives.

The Agency has forwarded the General Bikeways Plan to each of its member agencies for their review and public comment. Each local agency that adopts the plan will include public comment as part of their adoption process. The Agency Bicycle and Pedestrian Facilities Advisory Committee and the Agency Technical Advisory Committee have also reviewed and commented on the plan, providing public involvement from all the member agencies within Monterey County.

2. Existing Conditions

This chapter presents a review of existing conditions for bicycling and walking in Monterey County. The examination of the County's setting, land use, transit connections, existing bicycle and pedestrian facilities and support programs and barriers to multimodal travel in Monterey County identifies key opportunities and constraints.

2.1. Setting

Located at the northern end of California's central coast, Monterey County offers an ideal setting for bicycling and walking. Topography varies from flat lands near the coast to Fremont Peak at 3,169 feet of elevation.[1] Monterey County has a moderate climate, with temperatures typically falling between 55 and 70 degrees Fahrenheit year round. The Mediterranean climate is characterized by dry summers and wet winters.

Agriculture is a main industry in Monterey County, representing vast areas of potential bike routes through scenic landscapes. In 2004, the Agency began working with agricultural industry representatives and the bicycle community to develop policies that would support bicycle and pedestrian friendly facilities in agricultural land.

Monterey County's communities have concentrated populations that offer employment, shopping and entertainment destinations for commuting bicyclists and pedestrians. **Table 2-1** lists the communities in Monterey County and their populations. Salinas, located in the northern county, is the most populated community with 150,724 residents.

Monterey County's diversity in communities and geography lends itself to being one of the most popular destinations in California. The County offers the following tourist attractions:

- Monterey Bay Aquarium
- Laguna Seca Raceway
- 25 golf courses, including Pebble Beach
- Salinas California Rodeo
- Monterey Jazz and Blues Festivals
- California International Air Show
- 368,000 acres of National Wilderness Forest Areas
- National Marine Sanctuary

Table 2-1: Population by Community

Community	Population
Salinas	150,724
Unincorporated County	100,167
Seaside	31,786
Monterey	29,773
Marina	25,052
Pacific Grove	15,459
Greenfield	12,628
Soledad	11,283
King City	11,235
Gonzales	7,726
Carmel-by-the-Sea	4,075
Del Rey Oaks	1,650
Sand City	204
Total	401,762

Source: American Community Survey 2005-09

[1] http://www.waymarking.com/waymarks/WM2YHW_Fremont_Peak_Top_of_Monterey_County_CA

In addition to the tourist attractions listed above, Monterey County hosts the following bicycling events.

- Sea Otter Classic
- 24-hours of Adrenaline
- AIDS Life Cycle

2.2. Land Use, Development and Activity Centers

Monterey County has a diverse range of land uses including resource conservation areas, agriculture, and cities with commercial areas and residential densities of five to 20 units per acre. The majority of development is in the north, near the Monterey Bay Peninsula. To the east and south are agriculture and smaller communities. Employment centers and transit hubs are in the County's larger cities in the north such as in Salinas and Monterey. Smaller activity centers also exist in the more rural parts of the County along Highway 101.

Figure 2-1 through **Figure 2-3** present maps of existing land use in north county, the Greater Monterey Bay Area and the south county from the Monterey County General Plan.

The County's wide range of development patterns, from urban to rural, preclude a one-size-fits-all approach to bicycle and pedestrian planning. This Plan prioritizes regionally significant improvements that close network gaps, improve high collision areas, and make connections to cities and activity centers.

The diversity in landscapes attracts bicyclists of all trip purposes and skill levels. Recreational bicyclists likely ride in open and scenic landscapes. Commuter bicyclists likely ride in developed areas near activity centers near employment, shopping and entertainment.

The intensity and type of development influence pedestrian activity levels in Monterey County. Typically, people walk up to a quarter mile to a destination if a route has a modest level of pedestrian accommodations, e.g. sidewalks and safe crossings. Most pedestrian activity in Monterey County is concentrated in activity centers near transit, retail and places of employment. Cities with compact commercial districts e.g. Carmel-by-the-Sea and the City of Monterey, have high pedestrian activity levels for shopping and commute purposes.[2]

This Plan considers the County's land uses and setting as they relate to existing and potential bicyclist and pedestrian demand, focusing to improve regional bikeway connections and pedestrian conditions around regional attractions, i.e. commercial and employment centers.

[2] Carmel-by-the-Sea and the City of Monterey have 10 percent and 16 percent walk to work mode shares, respectively. (US Census, 2000)

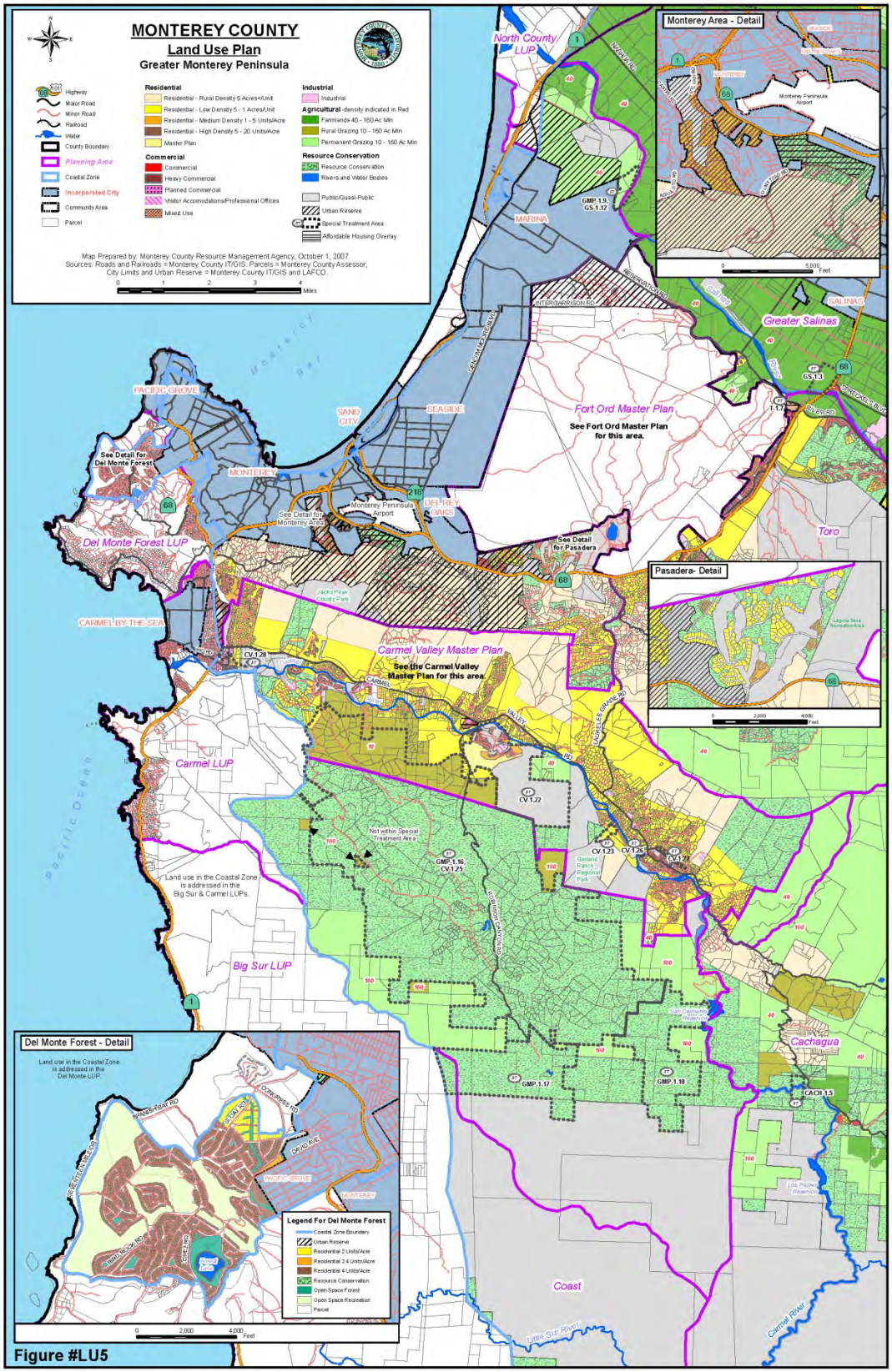


Figure 2-1: Greater Monterey Peninsula Land Use Map

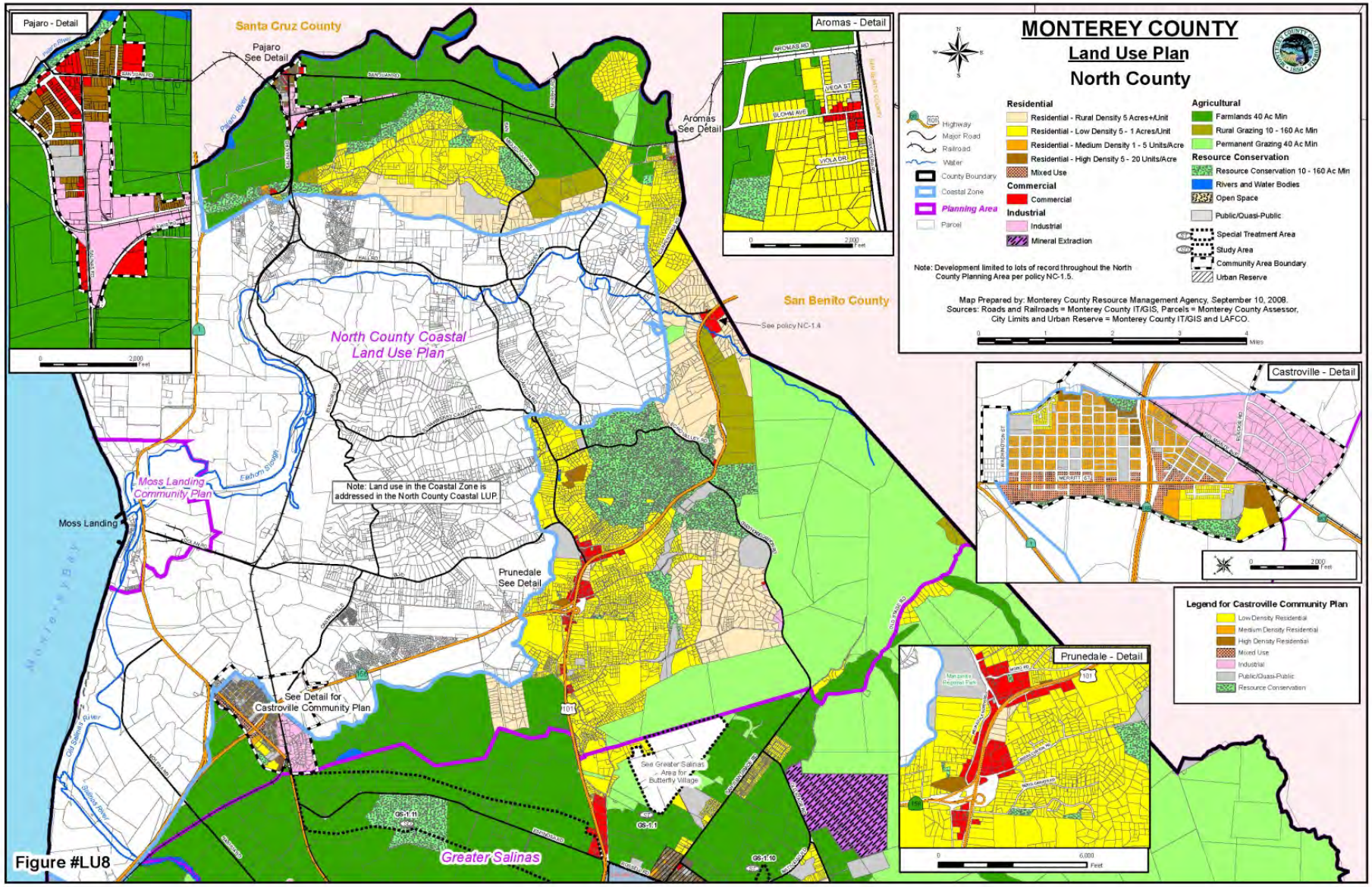


Figure 2-2: North County Land Use Map

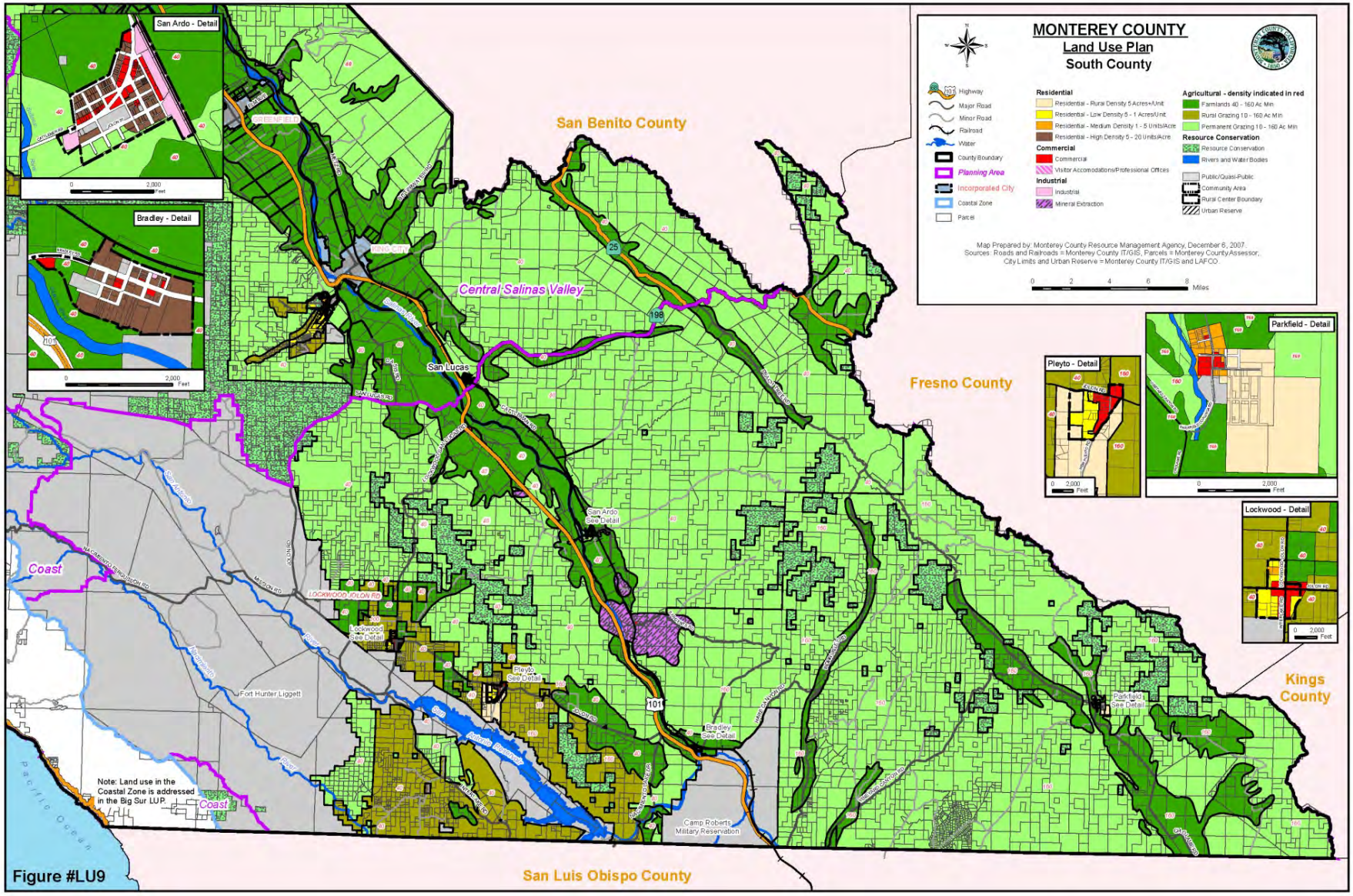


Figure 2-3: South County Land Use Map

2.3. Transportation System

Monterey County's transportation system is based largely two highways and County roadways connecting local roadway networks, which vary by community.

Highway 101 runs the length of the Monterey County, linking the cities of Salinas, Gonzales, Soledad, Greenfield and King City. Within these cities, Highway 101 creates barriers for bicyclists and pedestrians. Highway over- and under-crossings constrict roadway width and limit potential bicycle and pedestrian improvements. At-grade crossings commonly have multiple lanes and are challenging to cross by foot or bike.

Highway 1 runs the length of Monterey County's coastline. Much of Highway 1 runs through rural and rugged landscapes and provides two travel lanes with shoulders. As Highway 1 runs through the Monterey Bay Area, it becomes a freeway with two separated travel lanes in both directions. The highway's scenic views of the Pacific Ocean and access to beaches attract recreational motorists and bicyclists.

County roads such as Old Stage Road and Crescent Bluff Road outside of Salinas and Metz Road outside of Greenfield are potential regional bicycle connections. County roads vary in geometry, but commonly have two travel lanes with narrow shoulders. Farm equipment operators have the right to use county roadways and their needs were considered in developing bicycle facility recommendations.

Local roadways are where most bicycle and pedestrian activity occurs. The type and connectivity of roadways influence bicyclist and pedestrian travel patterns and levels of activity. Most communities in Monterey County have gridded roadway networks, which increases bicycle and pedestrian access to community destinations. Typically, gridded networks also disperse traffic over many roadways. This dispersion generally increases bicyclist and pedestrian comfort by avoiding concentrated areas of heavy traffic volumes. While many factors influence pedestrian activity, grid street networks connecting residents to compact commercial districts in Carmel-by-the-Sea and the City of Monterey are potential factors to these cities' high walk to work rates. Marina and Salinas, by comparison, have disconnected street networks that channel users onto arterial roadways and have low walk and bicycle to work rates. The roadway network types were considered in developing bicycle and pedestrian recommendations for communities.

2.4. Transit

Transit provides long distance mobility for bicyclists and pedestrians. Transit accommodations for pedestrians focus on transit station and stop access, i.e. ensuring pedestrians can walk comfortably to transit stops. Accommodations for bicyclists also focus on station and stop access. However, it also includes accommodations for transit riders to securely store their bicycles at transit stops and on or in transit vehicles. **Figure 2-5**, **Figure 2-6** and **Figure 2-7** show the major transit stations in Monterey County.

2.4.1. Monterey-Salinas Transit

Monterey-Salinas Transit (MST) is the major bus transit provider in Monterey County and provides 1,322 stops along 58 routes.

MST gave away pedestrian strobe lights October 27, 2010 to promote walking safely at night.

2.4.1.1.Bicycle Accommodations

MST bicycle transport service began in 1991. Two bicycles fit on the front mounted rack, and two inside the bus in the wheelchair locked area. The space inside the bus is available as passenger loads permit. Maximum bicycle size is 80" long by 40" high. Motorized bicycles are not allowed on MST buses. According to the 1996 Monterey Peninsula Airport Passenger Survey, MST currently carries more than 2,200 bicycles on buses every month.

2.4.1.2.Pedestrian Accommodations

Pedestrian accommodations at transit stops include engineering treatments that improve pedestrian access and support facilities and programs that make stations and stops more attractive and comfortable to walk to.

MST offers an Adopt-a-Spot program for volunteers to maintain stops. Maintenance includes regular clean up and red curb painting.

In an effort to promote safe pedestrian access to transit stops, MST gave away pedestrian strobe lights in October 2010. Pedestrians wear the lights at night to increase their visibility.

2.4.2. Amtrak

Amtrak provides passenger rail and bus service throughout California and the United States. It has one rail station in Salinas and bus stops in Prunedale, Monterey, Seaside and Carmel.

Its Coast Starlight route from Seattle to Los Angeles stops at the Salinas Station on West Market Street at Lincoln Avenue. The Salinas Station provides one bicycle rack that accommodates seven bicycles. Amtrak permits passengers to check bicycles in and stow in the undercarriage or bring folding bicycles in train cars.

Amtrak provides detailed information about traveling with bicycles on the website below.

http://www.amtrak.com/servlet/ContentServer?c=AM_Content_C&pagename=am%2FLayout&cid=1241267294303

2.5. Bicycle Planning and Existing Bikeways in Monterey County

General Plans for the Monterey County region include goals to provide for a safe, convenient bicycle transportation system integrated with other modes, and policies to encourage bicycle use. In addition, the plans include policies to consider the needs of bicyclists and, where appropriate, provide for bicycles in the public right of way. Chapter 3 presents a review of relevant planning and policy documents.

Transportation Agency for Monterey County's Regional Transportation Plan (RTP) includes goals for maximizing the effectiveness of the transportation system to include better facilities for alternative transportation modes. Facilities pertinent to cycling include bikeways, Bike and Ride service (racks on buses), and bicycle racks and lockers.

Local, regional, and state bicycling programs have become stronger in recent years, due in part to:

- Increased funding available for bicycle programs
- Environmental concerns
- Limits of nonrenewable resources (fuel)
- Health and exercise trends

Most bicycle use occurs on streets and roads shared with motor vehicles and are not designated bikeway facilities, as described below. **Figure 2-4** presents cross-sections of each Caltrans bikeways classification.

Class 1: Dedicated bicycle/pedestrian path

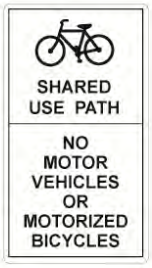
Class 2: Striped and signed bicycle lane

Class 3: Signed bike route without lanes

Caltrans District 5, the district that includes Monterey, emphasizes alternative transportation modes, including bicycling, transit, and park and ride lots. Caltrans District 5 has worked with local and regional levels to promote safe access for commuter cyclists by improving bicycle facilities on state routes and responding to issues raised by Agency staff and the Bicycle and Pedestrian Facilities Advisory Committee.

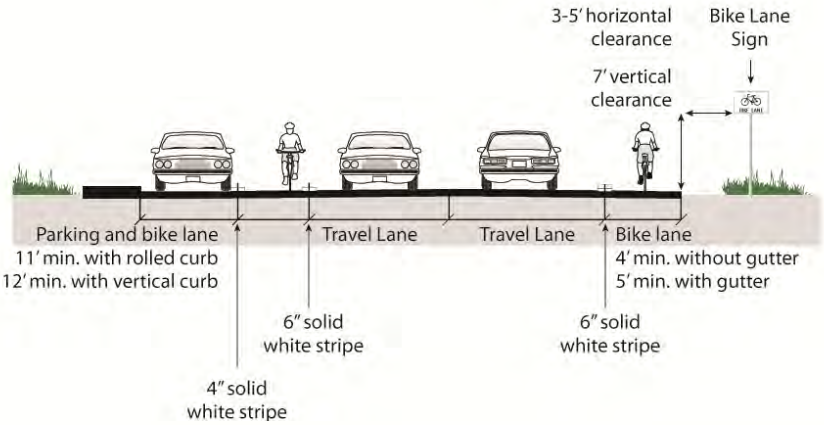
CLASS I
Multi-Use Path

Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow minimized.



CLASS II
Bike Lane

Provides a striped lane for one-way bike travel on a street or highway.



CLASS III
Bike Route
Signed Shared Roadway

Provides for shared use with motor vehicle traffic, typically on lower volume roadways.

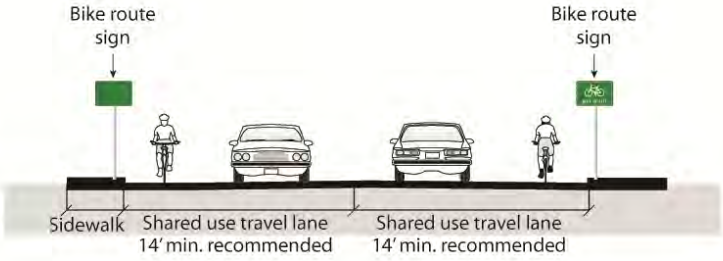


Figure 2-4: Caltrans Bikeway Classifications

2.5.1. Existing Bikeways

Table 2-2 presents the bikeway mileage by location in Monterey County. In total, Monterey County has 190.3 miles of bikeways. Class 2 bike lanes make up roughly half of the total bikeway network mileage.

Geographically, most bikeways are concentrated in developed communities. Salinas has the most bikeway miles of Monterey Communities with 74.4 miles followed by Marina with 15.9 miles and the City of Monterey with 11.7 bikeway miles. Within in Monterey County, but outside of cities, there are 39.6 bikeway miles. Region-wide, Class 3 bike routes on Caltrans Highways connect communities. These routes run along two lane and four lane separated highways typically with at least four-foot wide shoulders.

Figure 2-5 through **Figure 2-7** present the existing bikeway network, illustrating where bikeways are concentrated and gaps exist in the regional network.

Table 2-2: Existing Bikeway Mileage by Location

Jurisdiction	Class 1	Class 2	Class 3	Total
County	8.1	22.0	9.5	39.6
Carmel			1.5	1.5
Del Rey Oaks		1.9		1.9
Gonzales		1.5		1.5
Greenfield		2.2	2.3	4.6
King City	0.5			0.5
Marina	4.1	10.4	1.4	15.9
Monterey	2.2	8.8	0.7	11.7
Pacific Grove			3.6	3.6
Salinas	7.2	33.6	33.6	74.4
Sand City		0.3		0.3
Seaside	3.3	2.8		6.1
Soledad		10.4		10.4
Caltrans	18.0	0.3		18.2
Grand Total	**43.5**	**94.2**	**52.6**	**190.3**

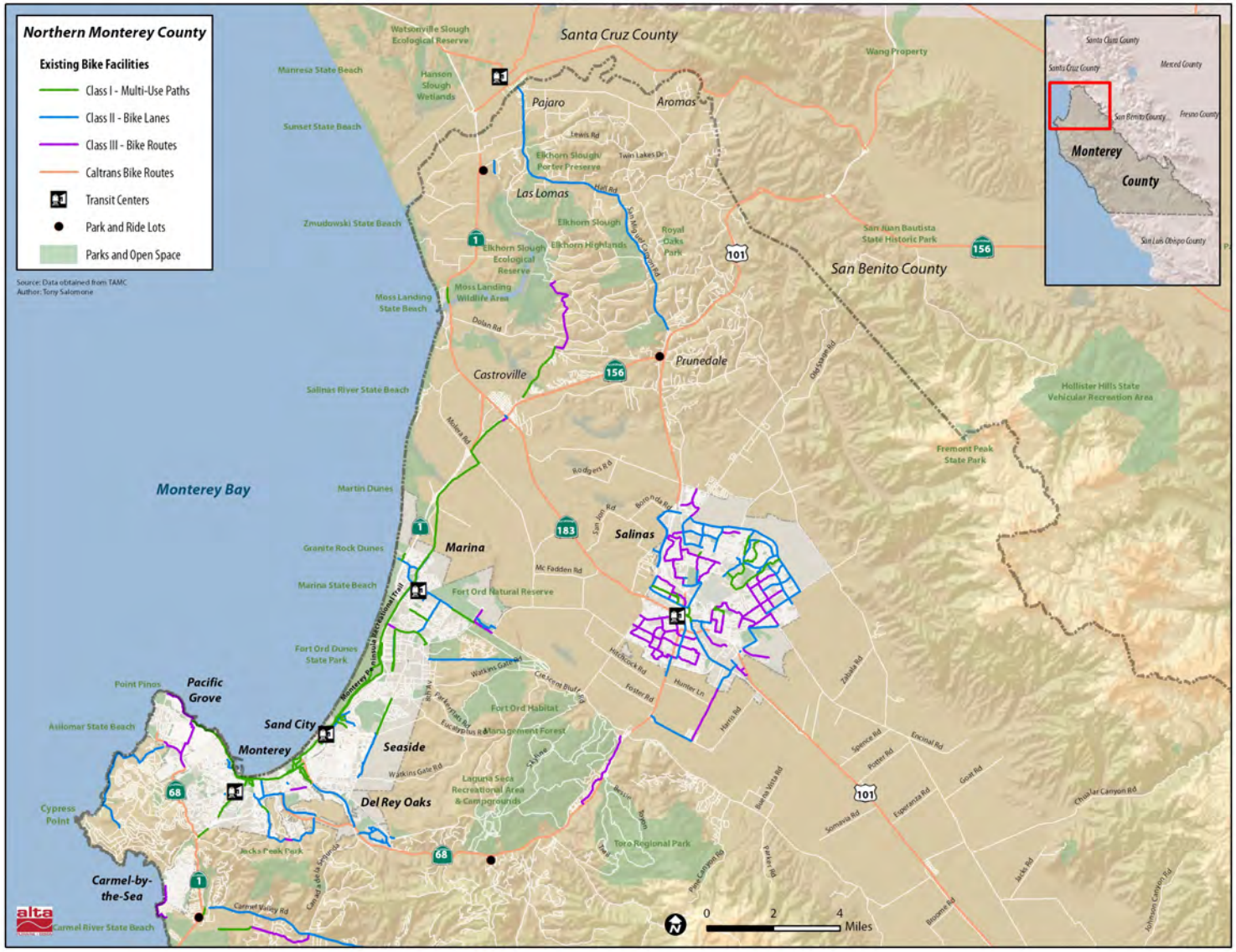


Figure 2-5: Existing Bicycle Network Northern Monterey County

Figure 2-6: Existing Bicycle Network Monterey Bay Area

Figure 2-7: Existing Bicycle Network Southern Monterey County

2.5.2. Existing Bicycle Support Facilities

Bicycle support facilities provide additional accommodations for bicyclists at the end of bicycle trips and include bicycle parking, showers and changing rooms. Bicycle support facilities are critical to make bicyclists feel that bicycling is encouraged and accepted.

Signage directs bicyclists in Salinas.

Photo: Mari Lynch

2.5.2.1.Signage

Guide signage is a required for all Caltrans standard bikeways. Class 1, 2, and 3 bikeways shall have signs at the beginning of the bikeway and at major changes in direction. The County of Monterey and jurisdictions therein have installed bikeway guide signs that meet CA MUTCD standards, such as at the intersection of South Main Street and San Joaquin Street in Salinas.

Signage is also used to warn and regulate roadway and path users, including bicyclists. Caution Watch for Bicyclists signs are used to warn motorists of potential bicyclist activity, such as where the Monterey Recreational Trail intersects Sand Dunes Road in Monterey. California Vehicle Code permits parking in bike lanes unless otherwise restricted, such as along Canyon Del Rey.

Signage restricts parking in the bike lane.

Photo: Mari Lynch

2.5.2.2.Bicycle Parking

Currently some developers will provide bicycle-parking facilities in conjunction with new residential, commercial or industrial projects. Agency staff recommends that local jurisdictions make bicycle parking facilities a formal requirement by the zoning code (parking requirements) and condition of discretionary permits by each city's Planning Department where bicycle facilities will serve either employees or customers. Bicycle parking facilities include bike racks and bike lockers.

Bike lockers are enclosed facilities that provide a high level of safety for bicycles. Their use should be encouraged throughout the cities in Monterey County, but especially in locations where bicycles could be left without the owner's attention for extended periods of time (two hours or more), or at intermodal transportation links. Such locations may include, but are not limited to: transit centers, intermodal centers, park and ride lots, and bus stations. Bike lockers require more space and cost more than other available parking facilities, but provide the benefit of a high level of protection for bicycles that may outweigh the costs.

Appendix C provides a list of bicycle parking locations, type and capacities.

2.5.2.3.Bicycle End of Trip Facilities

Bicycle end of trip facilities include showers and changing rooms. Bicyclists value these facilities because they can freshen up after a bike ride into work. The following employers provided discounted memberships to nearby gyms for employees that bicycle to work.

- Salinas Valley Memorial Hospital (1,700 employees)
- Household Credit Services (1,500 employees)
- Mann Packing (650 employees)
- City of Salinas (592 employees)
- McCormick & Company (400 employees)
- Hartnell Community College (250 employees)
- Monterey Peninsula Community College (200 employees)
- YMCA (120 employees)

2.5.2.4.Bike Rentals

Bicycle rentals in Monterey County primarily serve tourists interested in exploring the Monterey Bay area. Tourism represents a large portion of Monterey County's economy and a large number of bicyclists. Most bicycle rentals are located in the City of Monterey and surrounding areas.

2.5.3. Existing Bicycle Programs

2.5.3.1.Transportation Agency for Monterey County Bicycle Protection Program

Encouraging increased bicycle use for commuting purposes is a major goal of the Agency. The possibility of bicycle theft is a strong deterrent to bicycle use, and the Agency believes that provision of adequate numbers of secure bicycle parking facilities countywide is necessary to encourage bicycle use.

To help increase the number of secure bicycle facilities, the Agency initiated the Bicycle Protection Program, funded by AB2766 grant funds to help private businesses, local jurisdictions, school districts, and other public agencies in Monterey County acquire bicycle parking racks, and lockers with the intent of reducing air pollution associated with vehicle emissions. The program provides bicycle-parking facilities to businesses and agencies that agree to install them securely in a convenient location for use by patrons and/or employees and to monitor the usage of these facilities.

Having received grant funding during the years 2002, 2006 and 2007, the Agency provided agencies and businesses throughout Monterey County with 185 bike racks and lockers, with the total capacity to store 506 bikes. The vast majority of bicycle parking facilities provided under this program have taken the form of a variety of bike racks. These racks include wave, sidewinder and/or ribbon-type racks. Bicycle users and planners prefer these racks because they: do not cause wheel damage, require less space, are reasonably priced, come in sizes to meet each particular development's needs, offer better bicycle security, and are more aesthetic (they can be painted to match the development's color scheme). See **Appendix C** for a complete listing of bicycle parking facilities within Monterey County.

2.5.3.2.Bicycle Violator Safety Program

Monterey County Health Department provides bicycle safety classes for bicyclists cited for not wearing helmets. The classes cost 45 dollars (2011) and are held in Marina. Instructors teach the classes in English.

Individuals interested in learning about bicycle safety, but were not cited for a helmet violation, are also welcome.

2.5.3.3.Bicycle Facilities Maintenance Request Form

The Transportation Agency for Monterey County provides an online form for the public to request the maintenance of bicycle facilities and forwards the requests to the appropriate department. The Agency is not responsible for the maintenance or operation of roadways.

2.5.3.4.Bike to School Day

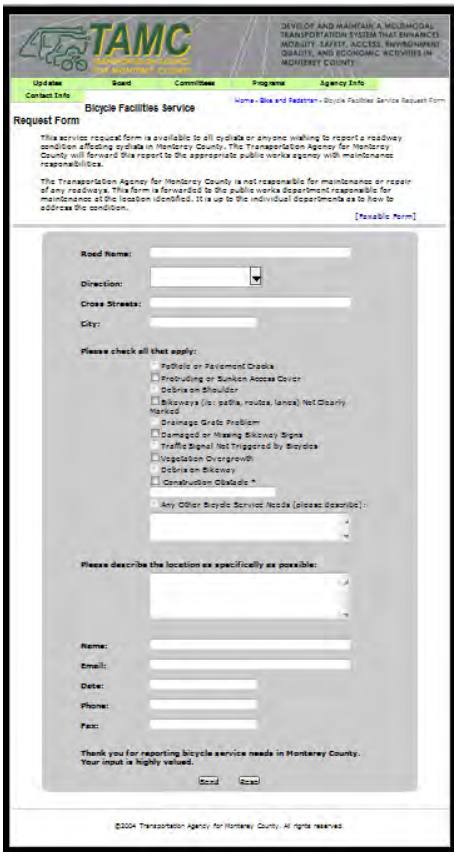
In 2010, the Transportation Agency for Monterey County promoted bicycling to school by providing school staff and parents with "Bike to School Day! A Resource Guide," which provided strategies to encourage children to bike to school. This promotional effort built on the year 2009's result of 3,300 children bicycling to school.

The Agency provides more information at:

http://www.tamcmonterey.org/bikeweek/kids.html

2.5.3.5.Bicycle Rodeos

Bicycle rodeos use police officers and instructors proficient in bicycling to teach bicycle skills and rules of the road to children. Salinas Valley Criterium and the City of Monterey have hosted bicycle rodeos in recent years.



TAMC provides an online form for the public to request maintenance of bicycle facilities.

2.6. Pedestrian Planning in Monterey County

Much like bicycle planning, the Transportation Agency for Monterey County Regional Transportation Plan and General Plans for Monterey County and the communities therein initiate the implementation of pedestrian facilities. Unlike bicycle planning, pedestrian planning is at a more local level, concentrating on improved pedestrian access to community destinations. Some of these destinations, including shopping centers and downtowns, are also accessed by those who drive, creating potential for pedestrian and motorist conflict.

This Bicycle and Pedestrian Plan supports the pedestrian-oriented goals set forth in previous regional and local transportation plans. **Chapter 3** presents a review of regional and local planning documents. The purpose of this review is to ensure that the recommendations in this Plan are consistent with regional and local agency goals and objectives regarding pedestrian travel.

The Agency and the Bicycle Pedestrian Facilities Advisory Committee will use this Plan to provide support for pedestrian issues presented to Caltrans District 5 staff for review and implementation.

2.6.1. Existing Pedestrian Facilities

Existing pedestrian infrastructure varies widely in Monterey County from urban sidewalks to unpaved roadway shoulders in rural areas. The purpose of this Plan is to provide a summary of high-level pedestrian design and safety needs for Monterey County pedestrian place types, which include:

- **AMBAG Blueprint Priority Areas** – where local agencies should focus growth to achieve a "Sustainable Growth Scenario". AMBAG defines these areas as within one half mile of a proposed Monterey Salinas Transit rapid bus line or light rail line or are zoned with at least 15 dwelling units per acre or as high density commercial and industrial.
- **Major Barrier Crossings** - where crossings inhibit pedestrian mobility and design barriers such as blocked or unprotected crossings of State routes, railroads, and large arterial roadways.
- **Safe Routes to School Areas** – where pedestrian and bicycle improvements are needed within one mile of a school.
- **Safe Routes to Transit** – should focus on the areas around the Monterey-Salinas Transit Regional Fixed Route service lines as determined in the Regional Transportation Plan, in addition to the Monterey-Salinas Bus Rapid Transit and Light Rail projects captured under 8.1.1 AMBAG Blueprint.
- **Regional Trails and Trail Access** - will consist of pathway construction, trailhead amenities, and crossing improvements along the Monterey Bay Sanctuary Trail and other trails of regional significance.

These pedestrian environments capture the majority of pedestrian trips in Monterey County. **Chapter 7** introduces typical improvement strategies to apply to these place types.

2.6.2. Existing Pedestrian Programs

2.6.2.1. Walk to School Day

International Walk to School Day is typically the first Thursday in October. In 2009, the County Sheriff's Department teamed up with Safe Kids Monterey to teach students at Castroville and McKinnon Elementary Schools safe pedestrian behaviors and hazard avoidance.

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3. Planning and Policy Review

This Plan builds on and supports a number of plans and policies of other agencies. These planning efforts were conducted by a variety of public agencies at the local, regional, state and federal level. The following chapters review these plans and policies documents relevant to this Bicycle and Pedestrian Master Plan to ensure this Plan's recommendations are consistent with adopted planning policies. Additionally, many of the reviewed documents identify bicycle and pedestrian improvements, which this Plan considers.

In addition to the documents reviewed in this section, this Plan is coordinated with many existing plans dealing with transportation:

- Monterey County General Plan and Area Plan
- Monterey County Local Coastal Development Plan
- Monterey-Salinas Transit Short Range Transit Plan
- North Monterey County Parks and Recreational Trails Plan
- Monterey Bay Unified Air Pollution Control Districts' Clean Air Plan and the Air Quality Management Plan
- Regional Transportation Plan for the Transportation Agency for Monterey County
- Local Circulation elements for each of the following member agencies:
    - Cities of Carmel, Gonzales, Greenfield, King City, Marina, Monterey, Pacific Grove, Salinas, Sand City, Seaside, Soledad and the County of Monterey
- Transportation Report for State Routes in Monterey County
- Congestion Management Program Model Trip Reduction Ordinance
- California Transportation Plan

These plans address the need to provide transportation connections between residential areas and activity centers. Goals of these plans emphasize promoting alternate modes of transportation, such as bicycling and walking, and greater interconnectedness between transportation modes: for example, providing bicycle racks on buses to allow people to use both buses and bicycles to reach their final destination. These plans emphasize funding constraints and environmental problems associated with increasing vehicle congestion. Additionally, they recognize the benefits of maximizing the efficiency of the existing transportation system by promoting alternate modes of transportation. The intention of this Plan is to highlight the importance of promoting bicycling and walking as an integrated part of the transportation system.

3.1. Regional Planning Documents

Regional bikeway planning documents address bikeways access and connections to regionally significant destinations. In the Monterey Bay Area, the Agency and County of Monterey are responsible for bikeway planning and the following Plans are relevant to bicycling and walking.

3.1.1. AMBAG's Blueprint Report (2011)

The Association of Monterey Bay Area Government's (AMBAG) Blueprint Report presents guidelines for communities in the Monterey Bay Area to grow in a sustainable fashion over the next 25 years. The Blueprint Report offers high-level guidance relative to this Countywide Bicycle and Pedestrian Plan by defining "Priority Areas" for sustainable growth. Priority areas are locations where implementing agencies should focus growth around transit and job centers. This focused growth includes improved bicycle and pedestrian access to transit, job centers and commercial areas. The Blueprint Report priority areas characteristics include:

- Coordinated regional plan for sustainable growth
- Medium to high residential and employment densities in Blueprint Priority Areas while maintaining existing average densities across the region
- New development with mix of different land uses
- More access to affordable/workforce housing in cities with large employment bases
- Multimodal focused transportation (streets for cars, buses, rail, bike and pedestrians)
- Most employment growth takes places in existing employment clusters
- Far less leapfrog development, mostly compact development
- Fiscal variances are tempered by some tax base sharing

The Blueprint priority areas informed the pedestrian recommendations in this Countywide Bicycle and Pedestrian Plan. Recommendations focus on access to schools, transit and regional destinations.

3.1.2. Transportation Agency for Monterey County's Regional Transporation Plan (2010)

The Transportation Agency for Monterey County is responsible for periodically updating the Regional Transportation Plan (RTP) for Monterey County. The RTP provides a basis for local, state and federal transportation programming and planning funds over the next 25 years. The RTP sets forth bicycle and pedestrian supporting goals that inform the recommendations of this Countywide Bicycle and Pedestrian Plan.

The RTP sets forth the following goal and objectives that support bicycling and walking.

- Expand, improve, and maintain facilities for pedestrians and bicyclists that accommodate safe, convenient, and accessible bicycle and pedestrian transportation across Monterey County.
    - **Objective 1:** Increase the number of bicycle facility miles in Monterey County by 10 percent from 246 miles to 271 miles by the year 2015.
    - **Objective 2:** Increase the number of bicycle facility miles on the Monterey Bay Sanctuary Scenic Trail from the existing 14 miles to 30 miles, completing the trail by the year 2025.
    - **Objective 3**: Increase the number of trips made by bicycle from the existing .8 percent to 3 percent by the year 2015.
    - **Objective 4:** Update and distribute a revised copy of the Monterey County Bike Map by 2010.

- **Objective 5:** Annually administer Monterey County Bike Week, and preserve or increase public and private sponsorships for Bike Week activities.

The RTP identifies the following improvement opportunities.

- Expansion and integration of bicycle and pedestrian facilities in the Fort Ord area
- Bicycle lanes on Lighthouse Avenue between David Avenue and Lighthouse Avenue
- Bicycle lanes on Carmel Valley Road between Carmel Rancho Boulevard and State Route 1

The Bicycle and Pedestrian Travel Chapter of the RTP identifies the following improvement opportunities.

- Portions of the Monterey Bay Sanctuary Scenic Trail, from Pacific Grove to the Santa Cruz County line
- Pajaro River at the Thurwachter-McGowan Bridge
- Route 68, between Monterey and Salinas
- Route 183, between Castroville and Salinas
- Route 218, between Route 68 and the Coastal Trail
- Crossing the Union Pacific Railroad tracks to connect the town of Castroville with North Monterey County High School
- Castroville Boulevard and Highway 156
- Portions of the Pacific Coast Route (generally along Highway 1)
- Blanco Road, between Salinas and Marina

3.1.3. Transportation Agency for Monterey County's 2005 General Bikeways Plan

The Agency adopted its first Bikeways Master Plan in 2005. Its purpose was to identify existing and new bike facilities within the Monterey County region and prioritize the new facilities.

This Plan updates the 2005 Bikeways Master Plan, fulfilling Caltrans' requirement to update bicycle plans every five years to maintain eligibility for Bicycle Transportation Account funding. This update also adds a Pedestrian Master Plan component.

This Plan also builds on the goals, objectives and policies set forth in the 2005 Bikeways Master Plan to ensure consistency with superseding Plans, address current goals and to include provisions for pedestrians. The goals of the 2005 Bikeway Master Plan are listed below.

1. Expand, improve, and maintain facilities for bicyclists that accommodate safe, convenient, and accessible bicycle transportation across Monterey County.
2. Increase number of commute trips by bicycle.
3. Increase number of recreation and non-commute trips by bicycle.
4. Increase number of shopping and errand trips by bicycle.

5. Increase education and awareness of the value of using bicycles for commute and non-commute trips.

The 2005 Bikeways Master Plan sets the following objectives, which are also set forth in the RTP.

- Increase the number of bikeway miles by 10 percent from 246 to 271 by 2015
- Increase the number of Sanctuary Scenic Trail miles from 14 to 30 by 2025
- Increase the number of trips made by from 0.8 percent to three percent by 2015

The proposed projects identified in the 2005 Bikeways Master Plan that have been constructed are listed below.

- 5th Avenue Class III, Alta to Winery, Gonzales
- Carmel Valley Class I Phase III, County
- Hall Road/Tarpey Road Class II, County
- San Miguel Canyon Road Class II, County
- Monterey Bay Scenic Trail, County (in environmental phase)

The 2005 Bikeways Master Plan projects not yet constructed were considered for this Plan's recommendations.

3.1.4. Monterey Bay Sanctuary Scenic Trail Master Plan (2008)

The Agency produced the Monterey Bay Sanctuary Scenic Trail Master Plan to identify a continuous trail alignment from Pacific Grove to the Pajaro River to the Santa Cruz County Boundary along the Monterey coastline. This trail alignment is a section of the California Coastal Trail, the establishment of which is set forth by California legislation.

The Monterey Bay Sanctuary Scenic Trail will consist of a variety of bikeway types dependent on existing opportunities and constraints. The planned primary route will largely consist of paved and unpaved trails separated from roadways. Spurs and connector trails will consist of on and off-street facilities.

The Monterey Bay Sanctuary Scenic Trail Master Plan identifies a host of constraints including Caltrans ROW, agricultural and private lands and lands owned by the State. Agricultural lands are not only identified as constraints but opportunities as well. The Plan identifies opportunities for users to learn about some of the most fertile land in the nation and about the risks of sharing land with farming equipment.

The 2005 Bikeways Master Plan sets forth the objective of "Monterey County and the cities therein plan to increase the number of bicycle facility miles on the Monterey Bay Sanctuary Scenic Trail from the existing 14 miles to 30 miles, completing the trail by the year 2025."

Planning and construction of the Monterey Bay Sanctuary Scenic Trail requires the coordination of the Agency, local jurisdictions and the Santa Cruz Transportation Commission.

3.1.5. Monterey County General Bikeways Plan (2008)

The Monterey County General Bikeways Plan identifies bicycle facility improvements in the unincorporated county. The General Bikeways Plan lists a number of goals to make bicycling in Monterey County safer, more convenient and pleasurable. The goals of special interest to this Plan are listed below.

- Provide opportunities and incentives to create a 10 percent mode shift from vehicles to bicycles.
- Bicycling shall be encouraged as a viable mode of transportation in all visitor-serving areas.
- Trails adjacent to agricultural areas should consider fencing and agricultural buffers and/or buffers that include plantings that prevent public access where agricultural products are grown.

In addition, inclusion of all projects identified in the 2005 General Bikeways Plan, the 2008 Monterey County General Bikeways Plan identifies the following priority bikeway projects.

- Carmel Valley Class I Project Phases I-IV
- Moss Landing Road Class II from South Highway 1 to North Highway 1

3.1.6. North County Land Use Plan and Moss Landing Community Plan

In 1972, the California State Legislature passed the Coastal Act to establish a framework for resolving competing land use along the coast. The Act prioritizes preservation and protection of natural habitat and directed local municipalities to develop coastal land use plans. The Monterey Board of Supervisors adopted the North County Land Use Plan in 1976 and last updated the plan in 1999.

The North County Land Use Plan emphasizes preservation of highway capacity for coastal access and coastal dependant-land uses. Accommodation of bicyclists is included in this effort. The plan calls for the improvement of bicycle paths by improving clarity of route markings, separating bicycle and heavy motorist traffic, and providing access to major coastal destinations. The plan sets for the following policies specific to bicycling in Monterey County. Action plans follow each policy.

- Bicycle shoulders should be provided and routes signed along Maher Road, Castroville Boulevard, and Dolan Road.
    - The County shall evaluate options for providing bicycle shoulders along Maher Road, Castroville Boulevard, and Dolan Road.
- The Bicentennial Bicycle Route should be improved by separating the bicycle path from Highway 1 traffic between the Pajaro River and Molera Road.
    - The State Department of Transportation shall initiate a study for the widening of the existing Highway 1 alignment. During evaluation of alignment adjustments for expansion, attention should be given to minimizing encroachment on agricultural uses, environmentally sensitive habitats and commercial uses. Alternative alignments for the Bicentennial Bicycle Route in this area should be considered in the study.

The North County Land Use Plan includes a community plan for Moss Landing, which plans land use for the community at full build out. Regarding bicycling, the Moss Landing Community Plan identifies the need for bicycle parking at Moss Landing State Beach.

3.2. City Plans

This Bicycle and Pedestrian Master Plan identifies bicycle and pedestrian facilities for the entire Monterey Bay County, including the cities therein. The following review of city plans relative to bicycle and pedestrian travel ensures this Plan is consistent with local policies, design guidelines, existing conditions and identified proposed facilities.

3.2.1. City of Salinas Bikeways Plan (2002)

Updated three times since 1991, the Salinas 2002 Bikeways Plan reports 64 miles of existing bikeways and 26 miles proposed bikeways. The plan identified the following priority bikeways that the City has yet to install.

- Natividad Creek/Gabilan Creek (Class I)
- Bridge Street from Rossi Street to North Main Street (Class II)
- Front Street from John Street to East Alisal Street (Class II)
- Terven Avenue from Sanborn Road to Airport Boulevard (Class II)

The goals set forth by the Salinas Bikeways Plan most relevant to this Plan are:

- Work with the Agency to develop a bikeway from southwest Salinas to the Monterey Peninsula
- Improve bikeway connections between north, south and east Salinas

3.2.2. City of Salinas Pedestrian Plan (2004)

In 2004, the City of Salinas adopted a Pedestrian Plan to satisfy its General Plan goals of becoming more pedestrian friendly and implementing New Urbanism principles.[3] The Pedestrian Plan sets forth the following goals.

- Promote the development and design of pedestrian facilities that are convenient, safe, attractive, comfortable, interesting, and interconnected to provide continuity of travel
- Reduce the number of pedestrian-related accidents in Salinas
- Condition New Development to install appropriate streets, sidewalks, pedestrian access ramps, traffic calming measures, lighting and related facilities to encourage walking
- Develop a Traffic Calming Policy to address vehicular speeds in residential and commercial areas
- Develop a Suggested Routes to School Program for all elementary schools in Salinas
- Educate the general public to increase the number of overall walking trips within Salinas
- Identify needs of walking districts or areas to increase walking trips

To further develop a strategy for traffic calming, the Salinas adopted a Neighborhood Traffic Management Program, which outlines strategies for residents and the City to slow traffic on local roadways with the intent of increasing pedestrian safety.

[3] New Urbanism is an urban design movement that promotes pedestrian movement, drawing from traditional neighborhood designs popular before the rise of the automobile.

Navajo Drive/Main Street intersection had eight pedestrian related collisions in 1999-2001, the most of any location in Salinas. East Market Street and Pajaro Street had the second most collisions with six. Neither intersection had a traffic signal at the time of the plan's development.

The 2004 Pedestrian Plan also identifies the following roadways as high-pedestrian activity areas.

- North Main Street at Harden Shopping Center, Sherwood Community Sports Complex, and Downtown
- Constitution Boulevard and Laurel Drive
- Hartnell College area
- North Sanborn Road and Garner Avenue
- Hospital area

The 2004 Pedestrian Plan provides a prioritized list of improvements, many of which are traffic signal installation, ADA ramp updates and sidewalk maintenance. These improvements are included in this Plan's pedestrian related improvements in **Section 8.2.9**.

3.2.3. City of Marina Pedestrian and Bicycle Master Plan (2010)

In 2010, the City of Marina adopted its Pedestrian and Bicycle Master Plan to achieve three purposes: provide guidelines for facilities improvements, position the City for grant and financing opportunities, and reduce the City's greenhouse gas emissions. The Plan prioritizes a range of bicycle and pedestrian facilities in an effort to meet the Complete Streets Act of 2011 and highlights policies from the City's General Plan to ensure consistency. The Plan envisions:

- A city within which the majority of the residences, businesses and community facilities are served by frequent cost effective transit.
- A city designed for attractive, comfortable, convenient, welcoming and secure walking for people of all ages and abilities, in which most housing, shops, businesses, plazas, civic buildings and other community facilities are within easy walking distance of each other.
- A balanced land use/transportation system minimizing induced traffic congestion, noise, excessive energy consumption, and air pollution.
- Physically and socially cohesive communities in which existing and future land uses, transportation facilities, and open spaces are well integrated.
- Ample opportunities for outdoor recreation for all residents, both within their immediate neighborhoods, elsewhere in the city, and in the immediate environs.

The Pedestrian and Bicycle Plan identifies the following priority projects, all of which are Class II bicycle lanes that the City has yet to install.

- Crescent Road
- Palm Avenue
- Bostick Avenue
- De Forest Road
- Carmel Avenue
- Beach Road
- Lake Drive
- Cardoza Avenue
- Seacrest Avenue

3.2.4. City of Monterey Bicycle Transportation Plan (2009)

The City of Monterey's Bicycle Transportation Plan supersedes the City's previous adoption of the 2005 Agency General Bicycle Plan. Their Plan also helps the City comply with the Urban Environment Accords and the U.S. Mayors Climate Agreement, both of which the Mayor of Monterey signed. The Urban Environment Accords holds Cities responsible to reduce the number of single-occupancy commuter trips and the U.S. Mayors Climate Agreement holds Cities responsible to reduce greenhouse gas emissions. The goal of the plan is to provide for efficient and safe bicycle travel, while increasing opportunities for bicycle ridership through bikeway interconnectedness and education for cyclists and motorists.

The plan identifies the following priority bikeways that have yet to be installed.

- North Fremont from Canyon Del Rey to Casa Verde (Class II)
- 3rd Street from Sloat to Aquajito (Class III)
- Pearl Street from Aquajito to Alvarado (Class III)
- Alvarado from Pearl Street to Monterey Peninsula Recreation Trail (Class III)
- Polk Street from Hartnell to Alvarado (Class II)
- Madison from Pacific to Harnell (Class II)
- Lighthouse Avenue from Line to Resside (SB Class II)
- Olmsted Road from Garden to Highway 68 (Class II)
- Casanova from Montecito to Euclid (Class III)
- Laine Street from David to Reeside (Class III)

The City also identifies two bicycle boulevard routes. The East Downtown Bicycle Boulevard would be installed on Jefferson Street, Pearl Street and Third Street from Van Buren Street to Camino Aguajito, at which point the bicycle boulevard would continue towards Monterey Peninsula College and under Highway 1, continuing east on Mark Thomas Drive and onto North Fremont.

The New Monterey Bicycle Boulevard would be installed on Laine Street from David Street to Reeside Street, following Reside Street to Hawthorne to the Presidio.

3.2.5. City of Seaside Bicycle Transportation Plan (2007)

In 2007, the City of Seaside adopted its Bicycle Transportation Plan with the intent to increase regional bikeway connectivity and meet the demand of growth at Fort Ord and the California State University Monterey Bay Campus. Seaside's Bicycle Transportation Plan goals with regional significance include linking bikeways to the Intermodal Transit Center at Del Monte Boulevard and Broadway Avenue and develop bikeways that link Fort Ord and the CSU campus to Seaside proper.

In addition to complying with Caltrans Highway Design Manual and the California Manual on Uniform Traffic Control Devices design guidelines, Seaside provides for modified bike facility standards, which are listed below.

- Bikeway sign intervals shall not exceed 1,500 feet

- Thermoplastic shall be used for all roadway markings at a thickness of 90 millimeters and with adequate abrasive material
- Drop lanes at intersections shall be 100 long, and 200 feet long when both roadways are arterials

Regarding new facilities, the Seaside Bicycle Transportation Plan recommends new developments install bicycle boulevards. The plan identifies the following priority bikeways that the City has yet to install.

- Canyon Del Rey from Del Monte to Fremont (Class II)
- Coe Avenue from Pacific Crest to General Jim Moore Boulevard (Class II)
- Del Monte Boulevard from Broadway to Canyon Del Rey (Class II) and from Broadway to Fremont (Class III)
- California State University links on General Jim Moore Boulevard, First, Second and Third Streets (Class II)
- Monterey Bay Trail connections on First Street, Monterey Road/Fremont Boulevard, Del Monte Boulevard/Canyon Del Rey (bikeway type not identified)
- West Broadway from Del Monte to Fremont (Class II feasibility study)

3.2.6. City of Del Rey Oaks General Plan (1997)

The City of Del Rey Oaks last updated its General Plan in 1997. The Circulation Element sets forth the following policies regarding the accommodation of bicyclists and pedestrians:

- In order to provide or promote a safe, interconnected network of bicycle and pedestrian routes linking homes with places of work, school, recreations, shopping, transit centers and other activity centers both within the City and nearby, four Class II City Bike Routes are herby designated and adopted:
    - Highway 218 within City limits; (City has installed this route)
    - North/South Road from City limit to Highway 218 (requested Fort Ord annexation area)
    - Carlton Drive from highway 218 to the City limit; (this Countywide Bicycle and Pedestrian Plan recommends Class II bicycle lanes on General Jim Moore Boulevard, which is parallel to Carlton Drive)
    - South Boundary Road (requested Fort Ord annexation area)
- Any improvement, repavement or signalization on the three designated City Bike Routes permitted by the City shall include Type II bike lanes on both sides of the affected segment of those routes.
- New non-residential land uses which generate significant adverse traffic impacts shall dedicate an easement or make a monetary contribution, if appropriate, toward the completion of adopted Bicycle Routes.
- For all proposed new land uses in the City, provision for bicycle circulation, sidewalks and pedestrian-friendly design will be required.

3.3. State Policies

State planning and policy documents set forth policies and goals for Regional Transportation Planning Agencies and Metropolitan Planning Organizations to implement. These policies begin as Senate and Assembly Bills that the governor later signs to become Acts. This section reviews three bills that have recently become law governing bicycle and pedestrian accommodations and greenhouse gas emissions.

3.3.1. State Assembly Bill 32: Global Warming Solutions Act (2006)

Signed into law in 2006, the Global Warming Solutions Act sets discrete actions for California to reduce greenhouse gas emissions. The discrete actions focus on reducing emissions by increasing motor vehicle and shipyard efficiency and other strategies involving refrigerants, landfills and consumer products. While encouraging bicycling will help California to reach 1990 greenhouse gas emission levels in 2020, AB 32 does not identify it as a strategy.

3.3.2. State Assembly Bill 1358: Complete Streets Act (2008)

AB 1358 requires the legislative body of any City or County to, upon revision of a general plan or circulation element, ensure that streets accommodate all user types, e.g. pedestrians, bicyclists, transit riders, motorists, children, persons with disabilities and elderly persons. Beginning January 1, 2011, Cities and Counties must include accommodation of all street users in Circulation Element revisions.

3.3.3. State Senate Bill 375: Sustainable Communities (2009)

Signed into law in 2008, SB 375 links land use planning with greenhouse gas emissions, first requiring the State Air Resources Board to set emission reduction goals for metropolitan planning organizations (Association of Monterey Bay Area Governments AMBAG is the metropolitan planning organization for the Monterey Bay Area) and then requiring AMBAG to develop a land use scenario to meet that goal. AMBAG must make transportation funding decisions consistent with their new plan, namely by developing a Sustainable Communities Strategy (SCS) in the Regional Transportation Plan. The SCS must also be consistent with the Regional Housing Needs Assessment (RHNA) allocation. Aspects relevant to this County Bicycle and Pedestrian Master Plan are listed below.

- Air Resources Board (ARB) creation of regional targets for greenhouse gas emissions reduction tied to land use.
- Regional planning agencies must create a plan, including a Sustainable Communities Strategy, to meet those targets.
- Regional transportation funding decisions must be consistent with this new plan.
- RHNA guiding local housing efforts that are informed by efficient use of the transportation system.

4. Needs Analysis

This chapter presents factors that influence bicycling and walking, which include:

- Bicyclist general needs and preferences
- Pedestrian general needs and preferences
- Land uses that attract bicyclists and pedestrians
- Estimated daily bicycle and pedestrian trips made in Monterey County
- Safety as measured by bicycle and pedestrian related collisions

Each of the needs listed above inform the recommendations presented in **Chapters 7** and **8**. The following analysis also satisfies Caltrans Bicycle Transportation Account (BTA) requirements ensuring the recommendations in this plan eligible for BTA funding. This needs analysis also provides supporting data for other funding applications.

4.1. Bicyclists' General Needs and Preferences

This Plan seeks to address the needs and preferences of all bicyclists and potential bicyclists and therefore it is important to understand their diverse needs in order to develop a successful plan. Bicyclists' needs and preferences vary between skill levels and their trip types. In addition, the propensity to bicycle varies from person to person, providing insight into potential increases in bicycling rates. Generally, bicycling propensity levels can be classified into four categories:[4]

- *Strong and Fearless* people will ride on almost any roadway despite the traffic volume, speed and lack of bikeway designation and are estimated to be less than one percent of the population.
- *Enthused and Confident* people will ride on most roadways if traffic volumes and speeds are not high. They are confident in positioning themselves to share the roadway with motorists and are estimated to be seven percent of the population.
- *Interested but Concerned* people will ride if bicycle paths or lanes are provided on roadways with low traffic volumes and speeds. They are typically not confident cycling with motorists. Interested but Concerned people are estimated to be 60 percent of the population and the primary target group that will bicycle more if encouraged to do so.
- *No Way No How* are people that do not consider cycling part of their transportation or recreation options and are estimated to be 33 percent of the population.

Figure 4-1 presents a bicyclist typology scale.

[4] Source: Roger Geller, Bicycle Coordinator, City of Portland, Oregon

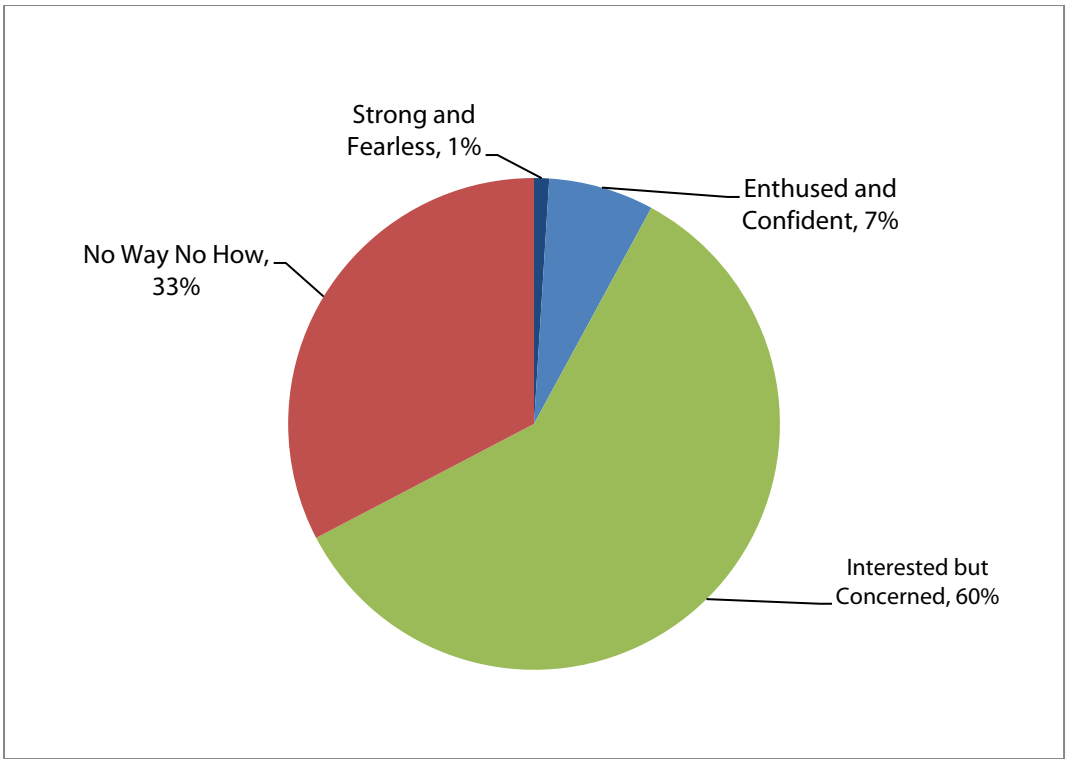

Figure 4-1: Bicyclist Typology Scale

4.2. Pedestrians' General Needs and Preferences

This Plan seeks to address the needs and preferences of all current and potential pedestrians. Pedestrian needs are more local than bicyclist needs because walking trips tend to be shorter.

Pedestrian needs include considerations for block length and roadway crossing distance as well as the presence of well designed facilities including sidewalks, curb ramps, crosswalks and support facilities. Support facilities include countdown signals, warning signage, street furniture, lighting and wayfinding signage.

Generally, pedestrian preferences include:

- Short block lengths
- Direct connections to destinations
- Wide sidewalks
- Pedestrian scaled lighting
- Street furniture
- Curb ramps
- Crosswalks
- Pedestrian countdown signals

4.3. Land Use and Demand for Bicycling and Walking

Land use types influence demand for bicycling and walking. Schools and major employers (commercial areas) are land uses that typically attract the majority of bicyclists and pedestrians. Major transit stations and parks also attract bicyclists and pedestrians. This section presents an overview of these land uses that provides support improving bicycle and pedestrian access to them. **Figure 4-2** and **Figure 4-3** present maps of school and employer locations as well as major transit stations and parks.

4.3.1. Schools

There are nearly 71,000 students enrolled in schools in Monterey and schools can be major bicyclist and pedestrian attractors. The majority of schools in Monterey County are in urbanized areas and can improve rates of walking and biking. Each school has unique opportunities and challenges that can either prevent or encourage students from walking or biking. Safely walking and bicycling to school requires a multi-disciplined approach including engineering improvements and education and encouragement programs. The first step to accommodate bicycling and walking to school is to identify how many students are in Monterey County and where they are enrolled. **Table 4-1** presents the number of students enrolled in Monterey schools by grade. **Figure 4-2** and **Figure 4-3** present school locations. While is it unknown how many students walk and bike to school, improved safety and accessibility to schools can increase the number of students who walk or bike to school and encourage fewer automobile trips,

Table 4-1: School Enrollment by Grade Level

Grade Level	Estimate
Nursery school, preschool	6,981
Kindergarten	6,119
Grade 1 to grade 4	22,680
Grade 5 to grade 8	22,196
Grade 9 to grade 12	25,426
College, undergraduate years	24,276
Graduate or professional school	4,727
Not enrolled in school	271,063

Source: American Community Survey, 2005-09

4.3.2. Major Employers

This Plan works to improve bicycle and pedestrian commuting to work. **Table 4-2** presents the major employers in Monterey County that have more than 500 employees. While some employer industries and locations may not be suitable for bicycle or pedestrian commuting due to distance and topography, other employer industries, such as hospitals and schools, are typically located in communities that have existing or potential bicycle and pedestrian facilities. Outreach to these employers to promote bicycling and walking to work could induce substantial mode shifts away from automobile commuting, which could potentially reduce traffic and automobile emissions.

Table 4-2: Major Employers in Monterey County

Employer Name	Location	Industry
Azcona Harvesting	44 El Camino, Greenfield	Harvesting-Contract
Bud Of California, Dole Fresh Vegetables	32655 Camphora Road, Soledad	Fruits & Vegetables-Growers & Shippers
California State Monterey Bay*	100 Campus Drive, Seaside	Schools
Community Hospital	23625 Holman Highway, Monterey	Mental Health Services
D'Arrigo Brothers Co	383 West Market Street, Salinas	Fruits & Vegetables-Growers & Shippers
Fresh Express	900 East Blanco Road, Salinas	Salads (Whls)
Hilltown Packing Co	375 West Market Street, Salinas	Harvesting-Contract
Hsbc Card Svc Inc	1441 Schilling Place, Salinas	Credit & Debt Counseling Services
Mann Packing Co	1250 Hanson Road, Salinas	Fruits & Vegetables-Growers & Shippers
Mc Graw-Hill Co	20 Ryan Ranch Road, Monterey	Publishers-Book (Mfrs)
Misionero Vegetables	33155 Gloria Road, Gonzales	Fruits & Vegetables-Growers & Shippers
Monterey Cnty Social Svc	713 La Guardia Street, Salinas	County Government-Social/Human Resources
Natividad Medical Ctr	1441 Constitution Boulevard, Salinas	Hospitals
Naval Postgraduate School	1 University Avenue, Monterey	Schools-Universities & Colleges Academic
Pebble Beach Resorts	2700 17 Mile Drive, Pebble Beach	Resorts
Salinas Valley Memorial	450 East Romie Lane, Salinas	Hospitals
Special Education School	901 Blanco Circle, Salinas	Schools
Taylor Farms California Inc	1207 Abbott Street, Salinas	Fruits & Vegetables-Growers & Shippers
US Defense Dept	400 Gigling Road, Seaside	Federal Government-National Security

Source: California Department of Finance, 2010

http://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000053

** California State University Monterey Bay was not included in the California Department of Finance 2010 report of major employers. However, it is a major employer with approximately 700 total faculty and staff (http://www.calstate.edu/as/stat_abstract/stat0809/pdf/z7a09.pdf)*

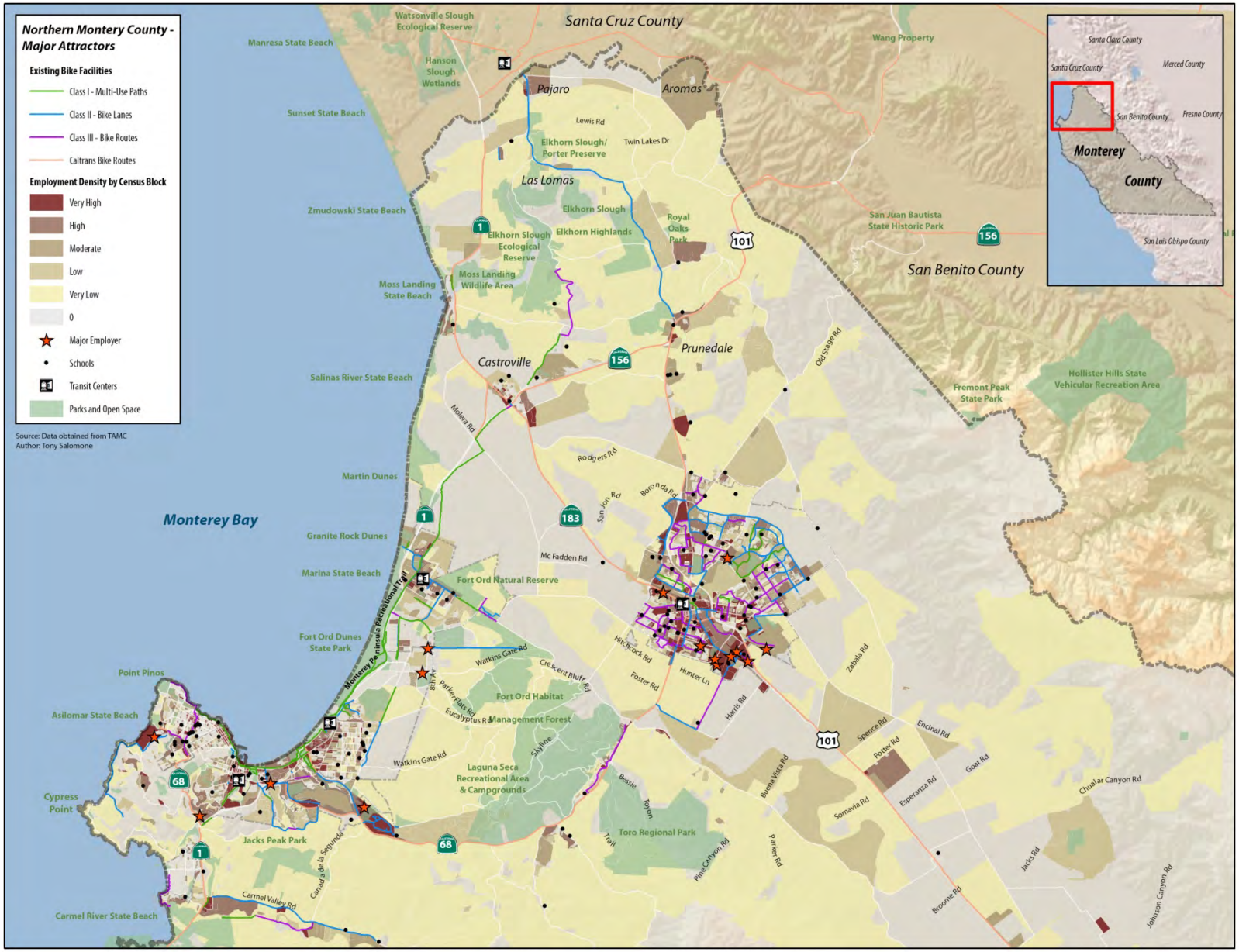

Figure 4-2: Bicycle and Pedestrian Attractors (North County)

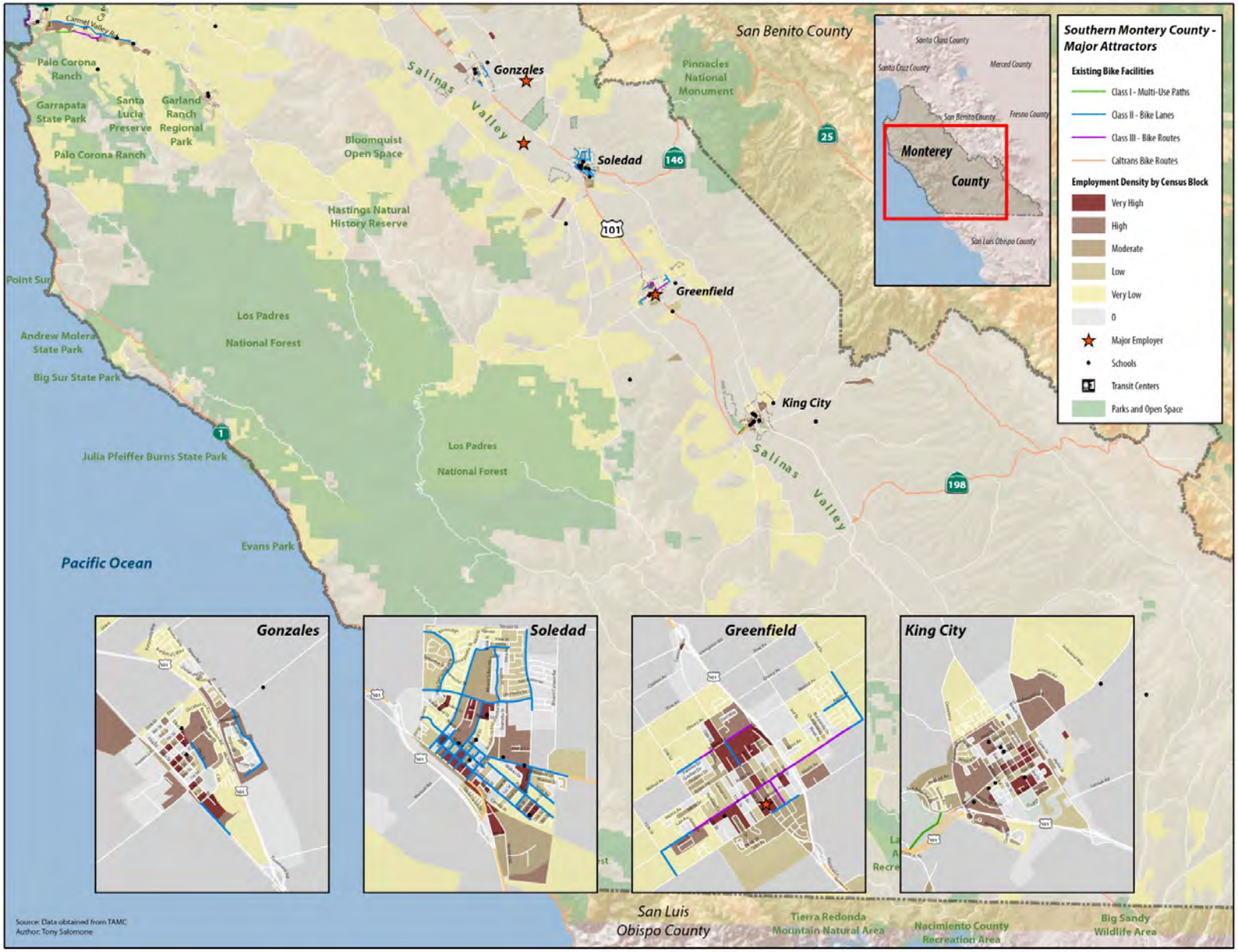

Figure 4-3: Bicycle and Pedestrian Attractors (South County)

4.4. Existing Bicycle and Pedestrian Activity

Bicycle and pedestrian daily trip estimates provide support for facility construction and program implementation. Policy makers can use the estimates provided in this Plan to inform their decisions to increase the integration of non-motorized modes into the transportation system. Agencies and departments that initiate project implementation can use the estimates to provide support for facility construction.

Bicycle and pedestrian data comes from a variety of sources. The US Census collects "Journey to Work" data, which is useful for comparing locations but is only one component in an estimate that considers other trip purposes. This section concludes with an estimated daily bicycle and pedestrian trips made in Monterey using additional data sources.

4.4.1. Journey to Work

The US Census data includes information for comparing bicycling rates in different locations. The Census only collects the primary mode residents use when commuting to work and not for other purposes, like school trips and shopping, thus many existing bicycle trips are not captured or represented. **Table 4-3** presents journey to work data for the communities in Monterey County and, for comparison, data for California and the United States.

According to the US Census American Community Survey 2005-09, approximately 1,518 Monterey residents bicycle to work and 7,378 walked. Compared to California and the United States, the percentage of residents in the County of Monterey and communities therein that bicycle and walk are about the same.

The City of Monterey and Carmel-by-the-Sea residents walk to work more than other cities in the County. Potential reasons for high walk to work rates are that these cities have compact downtown shopping districts surrounded by walkable neighborhoods.

Table 4-3: Journey to Work Mode Share by Community

Place	Drove alone	Carpooled	Transit	Bicycle	Walked	Other means	Worked at home
Carmel-by-the-Sea	54%	12%	2%	1%	17%	0%	14%
Del Rey Oaks	82%	10%	2%	0%	1%	1%	2%
Gonzales	74%	19%	2%	0%	2%	2%	1%
Greenfield	72%	19%	1%	0%	3%	4%	1%
King City	50%	40%	0%	1%	7%	2%	1%
Marina	76%	14%	3%	0%	3%	1%	2%
Monterey	57%	9%	4%	3%	18%	2%	8%
Pacific Grove	75%	9%	1%	2%	5%	0%	6%
Salinas	70%	18%	3%	0%	2%	4%	3%
Sand City	55%	14%	0%	4%	5%	0%	21%
Seaside	67%	14%	7%	2%	5%	1%	3%
Soledad	71%	22%	2%	0%	2%	1%	2%
Unincorpo-rated	75%	14%	1%	0%	2%	1%	7%
California	76%	11%	5%	0%	3%	1%	4%
United States	73%	12%	5%	1%	3%	1%	5%

Source: American Community Survey, 2005-09

US Census data reports commute time, which can be used as to identify locations where bicycle and walk to work rates have the potential to increase. US Census does not provide the data necessary to determine the commute times of residents that do not already bike or walk to work. However, most 10 minute or less commutes by motor vehicle can be assumed to be within biking distance. **Table 4-4** presents the percent of residents with drive alone and carpool commute times of 10 minutes or less by community. The communities with the highest percent of residents with 10 minute or less commutes also have gridded street networks that directly connect residents to employment centers.

This analysis does not consider distances traveled to work and where residents work but community jobs/housing ratios suggests that residents in low population communities with low jobs/housing ratios have longer commutes and are therefore less inclined to bike or walk to work. The Agency RTP notes the following factors influencing resident commute behavior: in 2002, half of all new homes in Salinas were purchased by residents commuting to the Silicon Valley; vacation homes are prevalent on the Monterey peninsula and not available for workers (which artificially lowers the jobs/housing ratio).[5]

[5] The Transportation Agency, Regional Transportation Plan, 2010

Table 4-4: Ten Minute or Less Commute Time by Community

Community	Commute less than 10 minutes	Jobs/Housing Ratio*
Carmel-by-the-Sea	31%	1.01
Pacific Grove	23%	0.86
King City	22%	0.99
Del Rey Oaks	20%	0.49
Monterey	18%	2.39
Soledad	16%	1.6
Gonzales	15%	0.53
Monterey County	13%	2.02
Greenfield	13%	0.33
Salinas	12%	1.18
Seaside	10%	0.61
Marina	10%	0.38
Sand City	8%	21.13

*Sources: US Census ACS, 2005-09, * AMBAG Population, Housing Unit and Employment Data, 2005 presented in the Agency RTP.*

4.4.2. Estimated Daily Bicycle and Pedestrian Trips

This Plan uses additional data sources presented in **Table 4-5** and **Table 4-6** to generate a more complete estimate of existing bicycle and pedestrian trips in Monterey County.

A key goal of this Plan is to maximize the number of bicyclists and pedestrians in order to realize multiple benefits, such as improved health and less traffic congestion, and maintenance of ambient air quality levels. In order to achieve this, a better understanding of the number of bicyclists and pedestrians is needed. The US Census collects only the primary mode of travel to work and it does not consider bicycle use when bicyclists ride to transit or school.

Alta Planning + Design has developed a bicycle model that estimates usage based on available empirical data. This model uses Monterey specific data from the US Census, American Community Survey; National Safe Routes to School survey information; and Federal Highway Administration college commute survey information. The steps used to calculate estimated bicycle and walk trips are outlined below.

1. Bicycle/ Walk to work mode share:
    a. Add number of bicycle commuters, derived from the US Census American Community Survey 2005-09 five year estimate.
2. Work at home bicycle mode share:

   a. Add the number of those who work from home and likely bicycle, derived from assumption that 10 percent of those who work at home make at least one bicycle trip daily.

3. Bicycle to school mode share:

   a. Add the number of number of students biking to school, derived from multiplying the K-12 student population by three percent.

   b. Add the number of students biking to college, assuming 10 percent of residents enrolled in college bike to school.

The pedestrian trip model uses the same steps as the bicycle trip model, but with slightly different assumptions and includes pedestrian trips to transit.

An estimated 7,625 people bicycle daily in Monterey County, making 15,250 daily bicycle trips. This may be an underestimate of bicyclists and bicycle trips because recreational bicycle trips are not accounted for because they are difficult to track without supporting surveys or counts.

An estimated 19,680 people walk daily in Monterey County, making 39,360 daily walking trips. It should be noted that almost every person walks somewhere on any given day. This estimate focuses on commuting trips. **Table 4-5** and **Table 4-6** present detailed calculations and data sources used to estimate bicyclist and pedestrian daily trips and resulting air quality benefits.

Table 4-5: Estimated Daily Bicycle Trips

Variable	Figure	Source
Existing study area population	401,762	American Community Survey 2005-09
Existing employed population	176,773	American Community Survey 2005-09
Existing bike-to-work mode share	0.9%	American Community Survey 2005-09
Existing number of bike-to-work commuters	1,518	Employed persons multiplied by bike-to-work mode share
Existing work-at-home mode share	4.4%	American Community Survey 2005-09
Existing number of work-at-home bike commuters	779	Assumes 10% of population working at home makes at least one daily bicycle trip
Existing transit-to-work mode share	2.5%	American Community Survey 2005-09
Existing transit-to-work commuters	135	Estimate of 3% transit to work commuters bike to transit based on survey results from the "Marina Service Area Study" (2009) and "South County Service Analysis" (2010)
Existing school children, (grades K-12)	76,421	American Community Survey 2005-09
Existing school children bicycling mode share	3.0%	Estimate based on National Safe Routes to School Partnership estimated 13% of children that walk or bike to school in the U.S. This analysis assumes 5% of those children bicycle and due to the rural setting of the County of Monterey, a slightly less percent of children (3%) are estimated to bicycle to school.
Existing school children bike commuters	2,293	School children population multiplied by school children bike mode share
Existing number of college students in study area	29,003	American Community Survey 2005-09
Existing estimated college bicycling mode share	10.0%	Review of bicycle commute share in seven university communities (source: National Bicycling & Walking Study, FHWA, Case Study No. 1, 1995).
Existing college bike commuters	2,900	College student population multiplied by college student bicycling mode share
Existing total number of bike commuters	7,625	Total bike-to-work, school, college and utilitarian bike trips. Does not include recreation.
Estimated Countywide Bicycle Mode Share	4%	Total daily bicycle trips / population (does not include recreational bicycle trips)
Estimated total daily bicycling trips	**15,250**	Total bicycle commuters x 2 (for round trips)

Table 4-6: Estimated Walking Trips

Variable	Figure	Source
Existing study area population	401,762	American Community Survey 2005-09
Existing employed population	176,773	American Community Survey 2005-09
Existing walk-to-work mode share	4.2%	American Community Survey 2005-09
Existing number of walk-to-work commuters	7,378	Employed persons multiplied by walk-to-work mode share
Existing work-at-home mode share	4.4%	American Community Survey 2005-09
Existing number of work-at-home walk commuters	1,948	Assumes 25% of population working at home makes at least one daily walking trip for any purpose.
Existing transit-to-work mode share	2.5%	American Community Survey 2005-09
Existing transit pedestrian commuters	3,374	Estimate of 75% transit to work commuters walk to transit based on survey results from the "Marina Service Area Study" (2009) and "South County Service Analysis" (2010)*
Existing school children, K-12	50,995	American Community Survey 2005-09
Existing school children walking mode share	8.0%	Estimate based on National Safe Routes to School Partnership estimated 13% of children that walk or bike to school in the U.S. This analysis assumes 8% of those children walk.
Existing school children walk commuters	4,080	School children population multiplied by school children walking mode share
Existing number of college students in study area	29,003	American Community Survey 2005-09
Existing estimated college walking mode share	10.0%	Estimate based on colleges in Monterey being commuter schools and have a lower than average pedestrian mode share.
Existing college walking commuters	2,900	College student population multiplied by college student walking mode share
Existing total number of walk commuters	19,680	Total walk-to-work, school, college and utilitarian walking trips. Does not include recreation.
Estimated countywide walk mode share	**5%**	Existing total number of walk commuters divided by existing study area population.
Estimated total daily walking trips	**39,360**	Total walk commuters x 2 (for round trips)

4.5. Collision Analysis

An analysis of bicycle and pedestrian related collisions informs this Plan's recommendations. The collision analyses presented below are categorized into bicycle and pedestrian collisions, both of which present collision data by year, location, violation type and parties at fault. The bicycle collision analysis also presents violation type by location. This provides further support for location specific recommendations.

4.5.1. Collision Data Source

Collision data was collected from the Statewide Integrated Traffic Records System (SWITRS), which is the statewide repository of all reported traffic collisions in California. SWITRS is regularly updated but the most recent data available is usually about one year old because the system relies on jurisdictions to report their data to Caltrans, who then processes the data. It for this reason and the Caltrans Bicycle Transportation Account requirement for bicycle plans to analyze the most recent five years of collision data that the collision analyses uses 2004 through 2009 data.

4.5.2. Bicycle Collisions by Year and Location

Table 4-7 presents bicycle related collisions by location and year. The bulleted list below highlights key findings.

- The number of bicycle collisions reached a high in 2006 with 130, but decreased in 2007 to 2009.
- Sand City reported the highest bicycle collision rate of 20 per 1,000 people (over six years), despite reporting only four total collisions in 2009.

Table 4-7: Bicycle Related Collisions by Location and Year

Year	Carmel	Gonzales	Greenfield	King City	Marina	Monterey City	Pacific Grove	Salinas	Sand City	Seaside	Soledad	Unincorporated	Total
2004	0		1	9	5	22	3	31	0	20	1	16	109
2005	1	1	5	1	7	22	4	42	0	18	1	15	117
2006	1	1	2	2	8	26	9	44	0	17	4	16	130
2007	2	2	6	3	7	21	9	48	0	16	3	8	125
2008	2		2	1	3	19	9	53	0	9	3	11	112
2009	0	2	1		4	17	7	30	4	8	3	21	97
Total	**6**	**6**	**17**	**16**	**34**	**127**	**41**	**248**	**4**	**88**	**15**	**87**	**690**
Population (1,000)	4.1	7.7	12.6	11.2	25.1	29.8	15.5	150.7	0.2	31.8	11.3	100.2	401.8
Collision Rate per 1,000	1.5	0.8	1.3	1.4	1.4	4.3	2.6	1.6	**20.0**	2.8	1.3	0.9	1.7

Source: Statewide Transportation Integrated Traffic Records System (SWITRS)

4.5.3. Bicycle Collisions by Traffic Violation and Party at Fault

Table 4-8 presents bicycle related collisions by traffic violation and party type at fault. The bulleted list below highlights key findings.

- Bicyclists were deemed responsible for 58 percent of collisions.
- Motorists were deemed responsible for 22 percent of collisions.
- Bicyclists most commonly rode on the wrong side of the road and violated automobile rights of way when committing traffic violations.
- Motorists most commonly violated other automobile rights of way when involved in bicycle related collisions.

Table 4-8: Violation and Faulty Parties in Bicycle Related Collisions

Violation	Bicycle	Vehicle	Tractor	Pedestrian	Not Stated	Total	Percent of Violations
Wrong Side of the Road	131	4	0	0	9	144	21%
Auto ROW	73	50	0	0	22	145	21%
Traffic Signals and Signs	41	11	0	0	5	57	8%
Improper Turning	40	34	0	0	13	87	13%
Brakes	37	5	0	0		42	6%
Unsafe Speed	18	10	0	0	3	31	4%
Not Stated	18	6	0	0	22	46	7%
Pedestrian Violation	12	1	0	1	0	14	2%
DUI	11	2	0	0	2	15	2%
Other Improper Driving	9	0	0	0	10	19	3%
Improper Passing	3	3	0	0	1	7	1%
Pedestrian ROW	2	10	1	0	4	16	2%
Unsafe Lane Change	2	0	0	0	0	2	0%
Unsafe Starting or Backing	1	10	0	0	3	14	2%
Unknown	1	2	0	0	28	31	4%
Lights	1	0	0	0	0	1	0%
Following too Closely	0	1	0	0	0	1	0%
Impeding Traffic	0	0	0	1	0	1	0%
Hazardous Parking	0	0	0	0	1	1	0%
Other than Drive	0	0	0	0	16	16	2%
Total	**400**	**149**	**1**	**2**	**139**	**690**	**100%**
Percentage at Fault	**58%**	**22%**	**0%**	**0%**	**20%**	**100%**	

Source: SWITRS

4.5.4. Bicycle Related Collisions by Traffic Violation and Location

Table 4-9 presents the percent of top five occurring bicycle related collisions by location. Only locations with significant percentages of bicycle related collisions are presented.

The bulleted list below highlights key findings.

- Differences between violation type reported by jurisdiction is presumably due to different jurisdictional reporting methods, e.g. SWITRS data reported 54.8 percent of all "other hazardous violations" occurred in Monterey City, while none occurred in Pacific Grove.
- Most wrong way riding, violation of automobile rights of way and traffic signals/signs occurred in Salinas.
- Most improper turning violations occurred in unincorporated Monterey County.

Table 4-9: Bicycle Related Traffic Violations by Location

Violation	Marina	Monterey City	Pacific Grove	Salinas	Seaside	Unincorporated County
Auto ROW	6.9%	22.8%	5.5%	41.4%	8.3%	7.6%
Wrong Side of the Road	4.2%	11.1%	0.7%	60.4%	11.8%	6.9%
Improper Turning	4.6%	9.2%	14.9%	18.4%	11.5%	34.5%
Traffic Signals and Signs	3.5%	12.3%	3.5%	35.1%	21.1%	12.3%
Other Hazardous Violation	7.1%	54.8%	0.0%	23.8%	7.1%	7.1%

Source: SWITRS

4.5.5. Pedestrian Collisions by Year and Location

Table 4-10 presents the number of pedestrian collisions and collision rates by City and year. The bulleted notes below highlight other notable findings.

- The number of pedestrian related collisions peaked in 2007 and 2008 at 150 and 151, respectively.
- Sand City reported the highest pedestrian collision rate of 19.6 collisions per 1,000 people. In comparison, most communities have a collision rate around 2.0.
    - Potential factors for pedestrian/vehicle conflicts in Sand City include a high number of potential conflict areas including high traffic volumes near the City's commercial outlets, large multi-lane intersections, and frequent driveways.
- Unincorporated county reported the lowest pedestrian collision rate of 1.0, presumably due to low population, walking rates and development densities.

Table 4-10: Pedestrian Related Collisions by Location and Year

Year	Carmel	Gonzales	Greenfield	King City	Marina	Monterey City	Pacific Grove	Salinas	Sand City	Seaside	Soledad	Unincorporated	Total
2004	2	1	2	1	6	31	3	48	1	12	0	21	128
2005	3	2	4	4	5	30	5	45	0	13	4	18	133
2006	4		1	4	5	25	4	47	0	4	3	14	111
2007	4	4	11	6	4	21	4	65	2	14	1	14	150
2008	4		6		7	14	7	77	1	12	4	19	151
2009	2	2	2	4	4	14	4	62	0	3	5	19	121
Total	**19**	**9**	**26**	**19**	**31**	**135**	**27**	**344**	**4**	**58**	**17**	**105**	**794**
Population (1,000)	4.1	7.7	12.6	11.2	25.1	29.8	15.5	150.7	0.2	31.8	11.3	100.2	401.8
Collision Rate per 1,000	4.7	1.2	2.1	1.7	1.2	4.5	1.7	2.3	**19.6**	1.8	1.5	1.0	2.0

Source: SWITRS

4.5.6. Pedestrian Collisions by Traffic Violation and Party Type at Fault

Table 4-11 presents the violations committed at pedestrian related collisions and the faulty party type of the violations. The bulleted notes below highlight key finds regarding violations and parties at fault.

- Motorists were deemed responsible for 41 percent of pedestrian collisions
- Pedestrians were deemed responsible for 32 percent of collisions.
- Motorists most commonly violated pedestrian right of way when at fault.
- Pedestrians most commonly violated a traffic law specific to pedestrian movement, such as crossing where prohibited. This is likely due to long block lengths.

Table 4-11: Parties at Fault for Pedestrian Collisions

Violation	Pedestrian	Vehicle	Tractor	Bicycle	Not Stated	Total	Percent of Violations
Pedestrian ROW	4	181	3	2	89	279	35%
Pedestrian Violation	232	2	0	0	16	250	31%
Not Stated	14	14	0	1	22	51	6%
Unsafe Speed	0	33	0	0	9	43	5%
Unsafe Starting or Backing	0	28	1	0	8	37	5%
Improper Turning	0	25	2	0	10	37	5%
DUI	0	16	0	0	3	19	2%
Unknown	0		0	0	18	18	2%
Traffic Signals/Signs	0	5	0	0	8	13	2%
Improper Passing	0	4	0	0	5	9	1%
Auto ROW	0	3	0	0	5	8	1%
Other Improper Driving	0	4	0	0	3	7	1%
Wrong Side of the Road	0	2	0	2	3	7	1%
Other than Driver	0		0	0	7	7	1%
Other Hazardous Violation	1	4	0	0	1	6	1%
Impeding Traffic	1		0	0	0	1	0%
Fell Asleep	0	1	0	0	0	1	0%
Unsafe Lane Change	0	0	0	0	1	1	0%
Hazardous Parking	0	0	1	0	0	1	0%
Total Violations	**252**	**322**	**7**	**5**	**208**	**795**	**100%**
Percent of At-Fault Parties	**32%**	**41%**	**1%**	**1%**	**26%**	**100%**	

Source: SWITRS

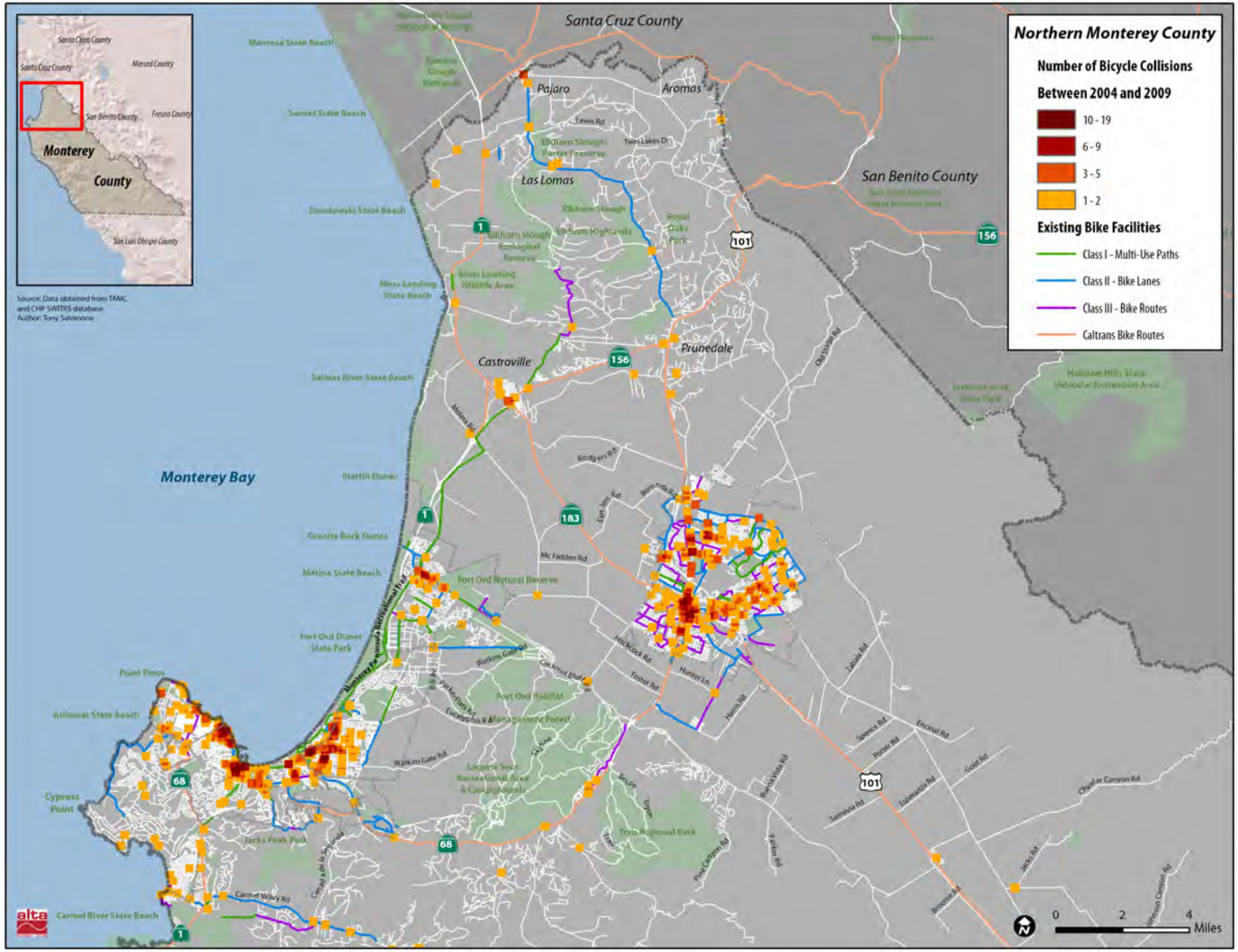

Figure 4-4: Bicycle Related Collisions Northern Monterey County

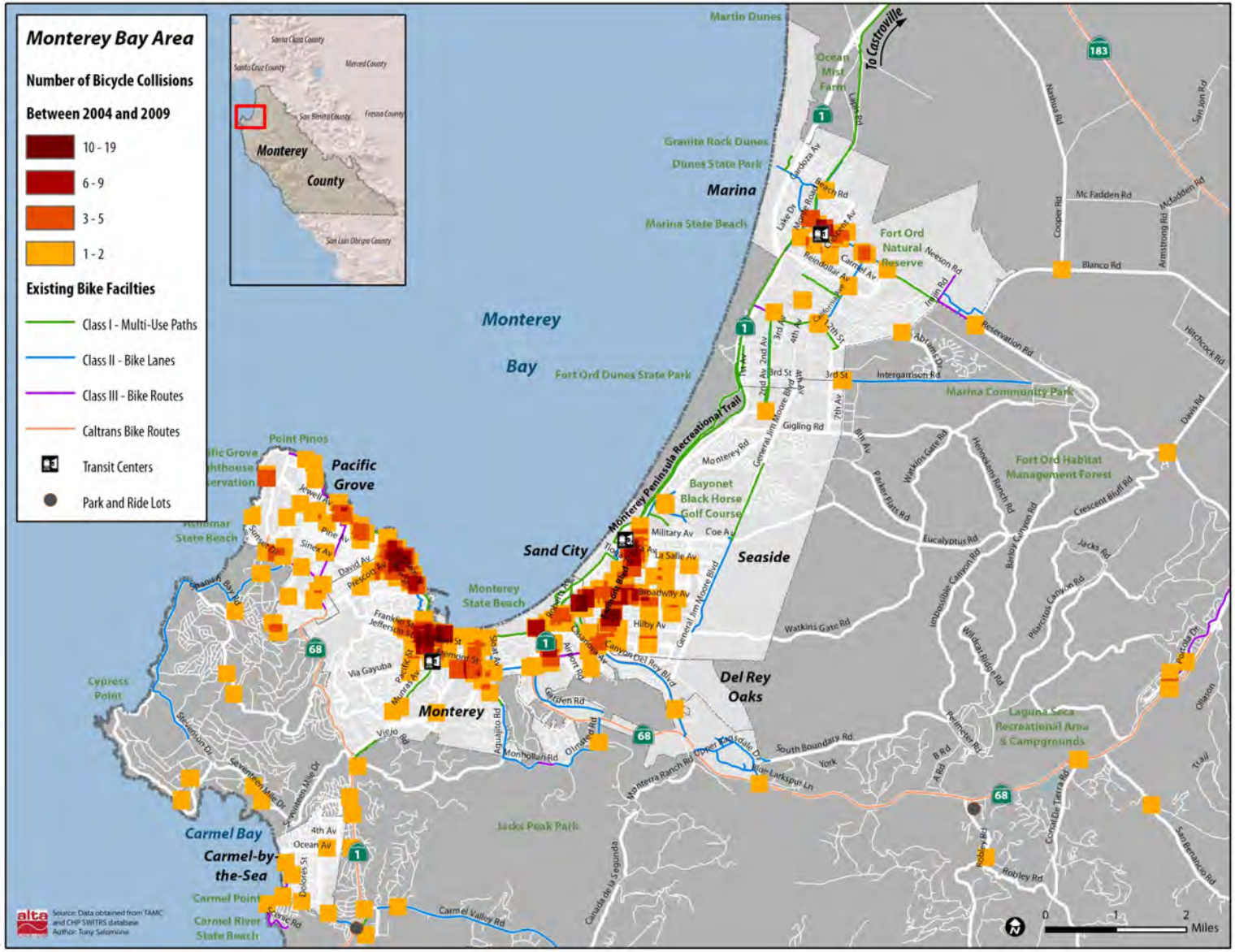

Figure 4-5: Bicycle Related Collisions Peninsula

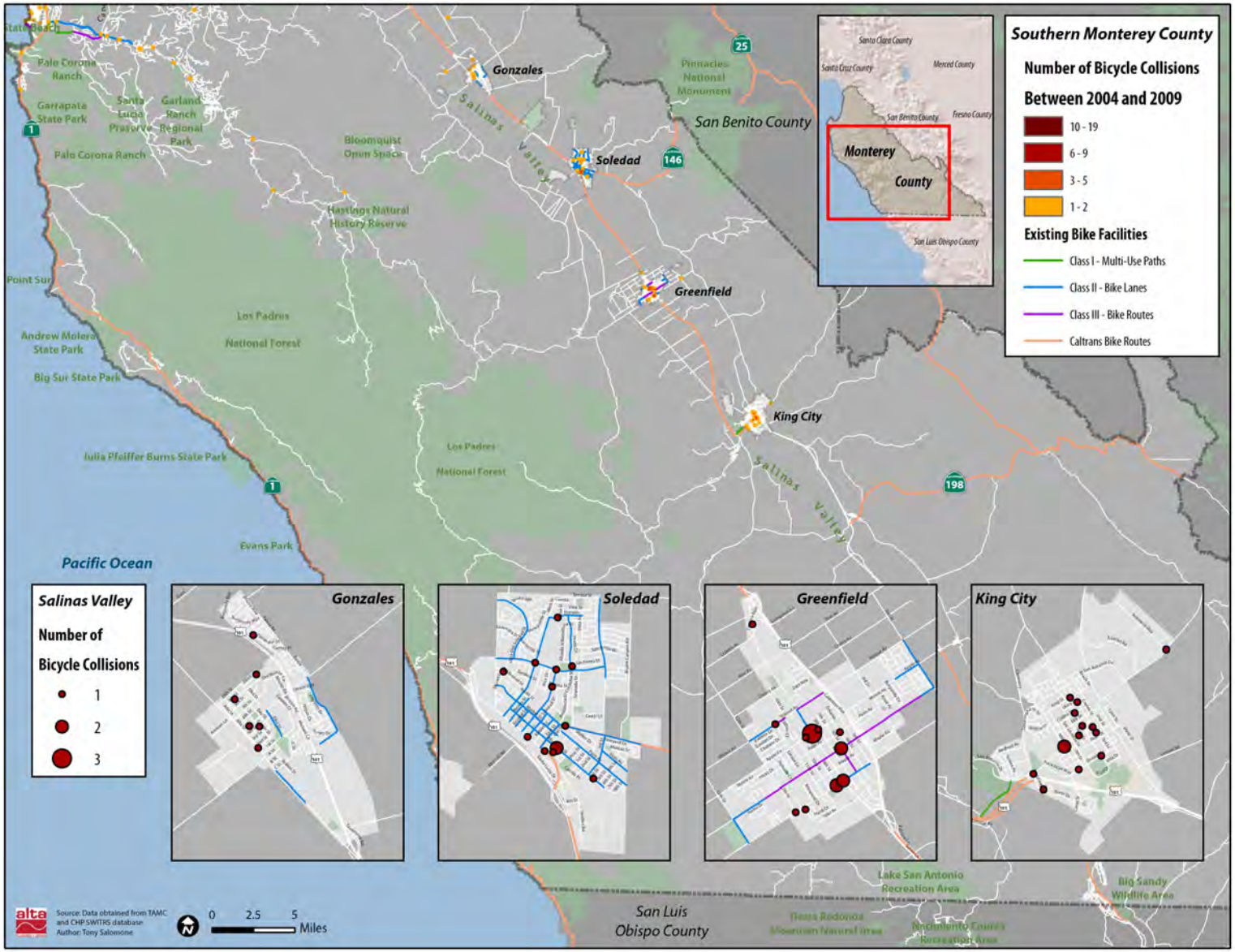

Figure 4-6: Bicycle Related Collisions Southern Monterey County

5. Benefits of Bicycling and Walking

Bicycling and walking provide a variety of benefits to the individual and to the public at large. This chapter introduces the benefits of bicycling and walking with respect to:

- Air quality
- Water quality
- Non-renewable resources
- Personal health
- Cost savings

This chapter concludes with an estimation of future bicycle and pedestrian trips made in Monterey County as a result of forecasted population growth and the implementation of the recommendations presented in this plan.

5.1. Air Quality

Each time someone in Monterey County walks or bicycles, a trip is completed that does not create air pollution. As Monterey County and its communities become more inviting to pedestrians and bicyclists, non-motorized trips to work, school, shopping outlets and recreational destinations will increase. Cumulatively, this pattern may reduce traffic in some areas and improve air quality.

Table 5-1 and **Table 5-2 shows** us the current estimated biking and walking trips presented in Chapter 4 to estimate current air quality benefits in Monterey County.

It is estimated that current biking trips in Monterey County result in a savings of approximately seven million pounds of greenhouse gas emissions a year. Current walking trips save approximately 3.3 million pounds of greenhouse gas emissions a year.

5.2. Water Quality

Bicycling and walking do not pollute water as driving an automobile otherwise would. Oil, petroleum products and other toxins from automobiles kill fish, plants and aquatic life. One quart of oil contaminates thousands of gallons of water and remains in the water because it is insoluble. These toxins, trace metals and degreasing agents used on automobiles contaminate drinking water and can cause major illness. Some of these toxins and metals are absorbed in various sea life and cause medical problems to people when eaten. Phosphorus and nitrogen cause explosive growth of algae, which depletes water of oxygen, killing fish and aquatic life.[6] As a result of bicycling, people reduce the amount of vehicle miles traveled, which reduces the amount of oil released into the environment.

[6] City and County of Honolulu Department of Environmental Services

Table 5-1: Estimated Vehicle Miles Replaced by Bicycling and Resulting Air Quality Benefits

Variable	Figure	Calculations and Sources
Vehicle Miles Reduced		
Reduced Vehicle Trips per Weekday	15,126	Assumes all bicycle trips replace vehicle trips as calculated in Table 4-5.
Reduced Vehicle Trips per Year	3,947,902	Reduced number of weekday vehicle trips multiplied by 261 (weekdays in a year)
Reduced Vehicle Miles per Weekday	31,568	Assumes average round trip travel length of 8 miles for adults/college students and 1 mile for schoolchildren
Reduced Vehicle Miles per Year	8,239,224	Reduced number of weekday vehicle miles multiplied by 261 (weekdays in a year)
Air Quality Benefits*		
Reduced Hydrocarbons (pounds/year)	24,704	Yearly mileage reduction multiplied by 1.36 grams per reduced mile
Reduced PM10 (pounds/year)	94	Yearly mileage reduction multiplied by 0.0052 grams per reduced mile
Reduced PM2.5 (pounds/year)	89	Yearly mileage reduction multiplied by 0.0049 grams per reduced mile
Reduced NOX (pounds/year)	17,256	Yearly mileage reduction multiplied by 0.95 grams per reduced mile
Reduced CO (pounds/year)	225,238	Yearly mileage reduction multiplied by 12.4 grams per reduced mile
Reduced C02 (pounds/year)	6,702,656	Yearly mileage reduction multiplied by 369 grams per reduced mile
Reduced Greenhouse Gas Emissions (pounds/year)	6,970,038	

** Emissions rates from EPA report 420-F-05-022 "Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks." 2005.*

Table 5-2: Estimated Vehicle Miles Replaced by Walking and Resulting Air Quality Benefits

Variable	Figure	Calculations and Sources
Vehicle Miles Reduced		
Reduced Vehicle Trips per Weekday	43,428	Assumes all walking trips replace vehicle trips.
Reduced Vehicle Trips per Year	11,334,698	Reduced number of weekday vehicle trips multiplied by 261 (weekdays in a year)
Reduced Vehicle Miles per Weekday	15,286	Assumes average round trip travel length of 1.2 miles for adults/college students and 0.5 mile for schoolchildren
Reduced Vehicle Miles per Year	3,989,643	Reduced number of weekday vehicle miles multiplied by 261 (weekdays in a year)
Air Quality Benefits*		
Reduced Hydrocarbons (pounds/year)	11,962	Yearly mileage reduction multiplied by 1.36 grams per reduced mile
Reduced PM10 (pounds/year)	46	Yearly mileage reduction multiplied by 0.0052 grams per reduced mile
Reduced PM2.5 (pounds/year)	43	Yearly mileage reduction multiplied by 0.0049 grams per reduced mile
Reduced NOX (pounds/year)	8,356	Yearly mileage reduction multiplied by 0.95 grams per reduced mile
Reduced CO (pounds/year)	109,066	Yearly mileage reduction multiplied by 12.4 grams per reduced mile
Reduced C02 (pounds/year)	3,245,597	Yearly mileage reduction multiplied by 369 grams per reduced mile
Reduced Greenhouse Gas Emissions (pounds/year)	3,363,108	

** Emissions rates from EPA report 420-F-05-022 "Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks." 2005.*

5.3. Reduced Dependence on Non-Renewable Resources

Motor vehicle transportation consumes three-fourths of all oil and one-half of all energy used in California. This consumption will increase as congestion levels rise and commuter distances increase. An average Monterey County commuter uses 182 gallons of fuel each year. According to the U.S. Department of Transportation, the increase in the use of bicycles during the 1980s reduced the country's dependence on oil between 16 and 24 million barrels a year. Statewide statistics show that each motorist wastes about 43 gallons of motor fuel every year due to traffic congestion. This amounts to more than 817 million gallons wasted statewide. Wasted motor fuel is estimated to cost $17 billion or approximately $900 per motorist a year. Congestion costs California $20.7 billion a year in lost time, fuel and productivity, according to the Texas Transportation Institute. As a result of bicycling, people reduce the amount of vehicle miles traveled, which reduces the amount of fuel consumed in transportation activities.

5.4. Health Benefits

Bicycling and walking create many health benefits, including:

- Enhancing cardiovascular fitness
- Reducing body fat
- Reducing stress levels
- Reduce cases of obesity

According to the Monterey County Health Department, 60 percent of all Monterey adults ages 18 through 64 and 42 percent of youth ages 12 to 17 were overweight in 2007. At the state level, the obesity rate among adults has increased 10% since 1991.[7] Without regard to age, sex, or ethnic background, people over the age of 20 are 24 pounds heavier, children 6 to 11 years of age are almost nine pounds heavier, and teen boys are more than 15 pounds heavier than in the early 1960's.[8]

Increasing obesity rates is in part due to automobile trips replacing walking and bicycling trips for all but the shortest trips.[9] The decline in walking and bicycling to school is one such example. In 1969, 48 percent of children ages five to 14 walked or biked to school; compared to 14 percent in 2009. Conversely, 12 percent of school children arrived at school by automobile in 1969 and 44 percent in 2009.[10]

Walking and biking can reduce the incidence of obesity. For children, the Center for Disease Control and Prevention recommends 60 minutes of daily aerobic exercise. The CDC recommends 75 to 150 minutes of vigorous exercise, in combination with muscle strengthening exercises, for adults on a weekly basis. For many adults and children, walking or biking to work or school is a viable option for achieving these recommended exercise regimens. For those living outside of walking or biking distances to school or work, the Monterey Bay Sanctuary Scenic Trail is great for recreational walking or biking.

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[7] Center for Disease Control and Prevention, http://www.cdc.gov/obesity/data/trends.html, accessed April 20, 2011.

[8] October 27, 2004 issue of WebMD Medical News

[9] October 27, 1999 issue of the JAMA

[10] United States Department of Transportation, National Household Travel Survey

5.5. Cost Savings and Economic Benefits

Bicycling and walking save the residents of Monterey County money on a personal and community level. At the personal level, both modes require little money to own, operate and maintain compared to automobiles. Both modes are free to operate and bicycling requires minimal maintenance cost and most people can easily acquire the skills necessary to maintain a bicycle. In addition, the healthcare savings from obesity prevention, including walking and bicycling, amounts to approximately $1,429 annually per capita.[11]

At community and regional levels, bicycle and pedestrian infrastructure costs a fraction of total roadway costs. The estimated cost to implement this Bicycle and Pedestrian Master Plan is approximately $10 million, equal a half mile of a four-lane freeway. The cost to maintain bicycle and pedestrian infrastructure is also a fraction of roadway maintenance due to the low impact bicycling and walking has on pavement and striping.

Constructing bicycle and pedestrian facilities not only provides residents with a means to travel without paying for gas or insurance but positively affects local economies. **Table 5-3** shows pedestrian projects and bicycle projects generate more jobs per $1 million spent than strictly road repairs and resurfacing. Direct jobs generated are those related to designing, engineering and constructing a project. Indirect jobs are those related to manufacturing construction items such as signs, striping and concrete. Induced jobs are those that support people working direct and indirect jobs, such as retail, food service and healthcare.

Table 5-3: Employment per $1 Million Expenditures

Project Type	Direct jobs	Indirect jobs	Induced jobs	Total jobs	Employment multiplier*
Pedestrian projects	6	2.2	3.1	11.3	1.9
Bike lanes (on-street)	7.9	2.5	4	14.4	1.8
Bike boulevard (planned)	6.1	2.4	3.2	11.7	1.9
Road repairs and upgrades	3.8	1.5	2	7.4	1.9
Road resurfacing	3.4	1.5	1.9	6.8	2

Source: Political Economy Research Institute, Estimating the Employment Impacts of Pedestrian, Bicycle and Road Infrastructure, 2010.

** The number of indirect jobs created from every direct job.*

5.6. Quality of Life

Quality of life is hard to measure. Quality of life is largely based on local attributes that make people happy about where they live, which includes attributes that bicycling addresses.

One reason why bicycling improves quality of life is that it is a flexible and inexpensive transportation choice. As noted in Section 5.5, bicycling is a very cost effective transportation mode both at a personal and community level. A bicyclist saves money from not having to pay for gas or parking. While a local economy benefits from the minimal costs, in comparison other transportation modes, of bicycle infrastructure and maintenance. These monetary savings directly and positively influence quality of life perception.

Additionally, community character can be influenced by bicycle facilities in a positive manner. Generally, people enjoy using streets that are multi-modal and that accommodate bicyclists with on-street facilities and

[11] Center for Disease Control and Prevention, 2009

bicycle parking. Such streets encourage happenstance run-ins with friends and acquaintances, building a sense of community and belonging.

Community character can be also defined by events and entertainment, both of which are used by communities to rally support for bicycling. Bike-in movies, bike clubs, organized family bike rides or "kidical mass", and providing valet bicycle parking at street festivals and fairs are ways to use bicycling to a build community and improve quality of life.

5.7. Future Usage

Alta has developed a Caltrans approved bicycle and pedestrian model that estimates future activity and benefits associated with increased biking and walking. **Table 5-4** and **Table 5-5** each quantify the estimated reduction in vehicle trips and miles as well as future air quality benefits for biking and walking for the year 2035, respectively.

The future activity estimates assume the County achieves the bicycle and walking rates set forth as objectives in this Plan. If target biking and walking mode share rates are reached, it may result in over 100,000 reduced annual vehicle trips in Monterey County as well as notable reductions in greenhouse gas emissions.

Table 5-4: Estimated Bicycle Activity and Resulting Air Quality Benefits in 2035

Variable	Figure	Source
Future Commute Statistics		
Future study area population	530,362	AMBAG estimate 2035
Future employed population	233,356	Assumes employed population will increase at the same rate as the overall population
Future bike-to-work mode share	3.0%	Assumes Plan objective of 3% bike mode share by 2015 will be achieved and remain at that level in 2035
Future number of bike-to-work commuters	7,001	Employed persons multiplied by bike-to-work mode share
Future work-at-home mode share	4.4%	Assumes percentage of work-at-home population will not change from ACS 2005-09 estimate
Future number of work-at-home bike commuters	5,142	Assumes 50% of population working at home makes at least one daily bicycle trip
Future transit-to-work mode share	2.5%	Assumes percentage of transit to work commuters will not change from ACS 2005-09 estimate
Future transit bicycle commuters	178	Assumes current bike to transit levels (3%) will remain the same
Future school children, ages 6-14 (grades K-8)	100,883	Assumes student population will increase at the same rate as the overall population
Future school children bicycling mode share	7.0%	Assumes mode share increases from current 5% to 7% with additional school focused improvements
Future school children bike commuters	7,062	School children population multiplied by school children bike mode share
Future number of college students in study area	38,287	Assumes the number of college students will increase at the same proportion as the total population
Future estimated college bicycling mode share	12.0%	Assumes college bike mode share will increase 2% over current bike to college mode share estimation
Future college bike commuters	4,594	College student population multiplied by college student bike mode share
Future total number of bicycle commuters	23,977	Total bike-to-work, school, college and utilitarian biking trips. Does not include recreation.
Future total daily biking trips	**47,955**	Total bicycle commuters x 2 (for round trips)
Future Vehicle Trips and Miles Reduction		
Reduced Vehicle Trips per Weekday	15,961	Assumes 73% of biking trips replace vehicle trips for adults/college students and 53% for school children
Reduced Vehicle Trips per Year	4,165,850	Reduced number of weekday vehicle trips multiplied by 261 (weekdays in a year)
Reduced Vehicle Miles per Weekday	101,490	Assumes average round trip travel length of 8 miles for adults/college students and 1 mile for schoolchildren
Reduced Vehicle Miles per Year	26,488,804	Reduced number of weekday vehicle miles multiplied by 261 (weekdays in a year)
Future Air Quality Benefits*		
Reduced Hydrocarbons (pounds/year)	79,421	Yearly mileage reduction multiplied by 1.36 grams per reduced mile
Reduced PM10 (pounds/year)	304	Yearly mileage reduction multiplied by 0.0052 grams per reduced mile
Reduced PM2.5 (pounds/year)	286	Yearly mileage reduction multiplied by 0.0049 grams per reduced mile
Reduced NOX (pounds/year)	55,478	Yearly mileage reduction multiplied by 0.95 grams per reduced mile
Reduced CO (pounds/year)	724,133	Yearly mileage reduction multiplied by 12.4 grams per reduced mile
Reduced C02 (pounds/year)	21,548,794	Yearly mileage reduction multiplied by 369 grams per reduced mile

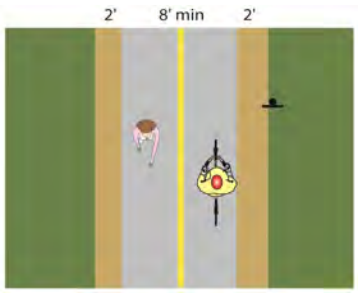
**Emissions rates from EPA report 420-F-05-022 "Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks." 2005.*

Table 5-5: Estimated Pedestrian Activity and Resulting Air Quality Benefits in 2035

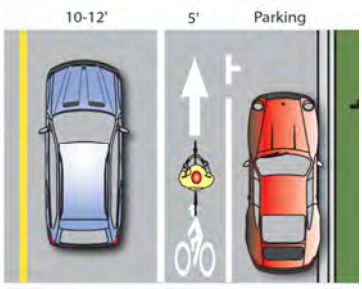
Variable	Figure	Source
Future Commute Statistics		
Future study area population	530,362	AMBAG estimate 2035
Future employed population	233,356	Assumes employed population will increase at the same rate as the overall population
Future walk-to-work mode share	5.0%	Assumes Plan objective of 5% walk mode share by 2015 will be achieved and remain at that level in 2035
Future number of walk-to-work commuters	11,668	Employed persons multiplied by walk-to-work mode share
Future work-at-home mode share	4.4%	Assumes percentage of work-at-home population will not change from ACS 2005-09 estimate
Future number of work-at-home walk commuters	5,142	Assumes 50% of population working at home makes at least one daily walking trip
Future transit-to-work mode share	2.5%	Assumes percentage of transit to work commuters will not change from ACS 2005-09 estimate
Future walk to transit commuters	4,454	Employed persons multiplied by transit mode share. Assumes existing percent of transit to work commutes (75%) will not change
Future school children, ages 6-14 (grades K-8)	100,883	Assumes student population will increase at the same rate as the overall population
Future school children walking mode share	10.0%	Assumes mode share increases from current 8% to 10% with additional school focused improvements
Future school children walk commuters	10,088	School children population multiplied by school children walking mode share
Future number of college students in study area	38,287	Assumes the number of college students will increase at the same proportion as the total population
Future estimated college walking mode share	12.0%	Assumes college walking mode share will increase at the same rate as the walk to work mode share
Future college walking commuters	4,594	College student population multiplied by college student walking mode share
Future total number of walk commuters	35,947	Total walk-to-work, school, college and utilitarian walking trips. Does not include recreation.
Future total daily walking trips	**71,894**	Total walk commuters x 2 (for round trips)
Future Vehicle Trips and Miles Reduction		
Reduced Vehicle Trips per Weekday	24,224	Assumes 73% of walking trips replace vehicle trips for adults/college students and 53% for school children
Reduced Vehicle Trips per Year	6,322,410	Reduced number of weekday vehicle trips multiplied by 261 (weekdays in a year)
Reduced Vehicle Miles per Weekday	25,326	Assumes average round trip travel length of 1.2 miles for adults/college students and 0.5 mile for schoolchildren
Reduced Vehicle Miles per Year	6,610,036	Reduced number of weekday vehicle miles multiplied by 261 (weekdays in a year)
Future Air Quality Benefits*		
Reduced Hydrocarbons (pounds/year)	19,819	Yearly mileage reduction multiplied by 1.36 grams per reduced mile
Reduced PM10 (pounds/year)	76	Yearly mileage reduction multiplied by 0.0052 grams per reduced mile
Reduced PM2.5 (pounds/year)	71	Yearly mileage reduction multiplied by 0.0049 grams per reduced mile
Reduced NOX (pounds/year)	13,844	Yearly mileage reduction multiplied by 0.95 grams per reduced mile
Reduced CO (pounds/year)	180,701	Yearly mileage reduction multiplied by 12.4 grams per reduced mile
Reduced C02 (pounds/year)	5,377,302	Yearly mileage reduction multiplied by 369 grams per reduced mile

**Emissions rates from EPA report 420-F-05-022 "Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks." 2005.*

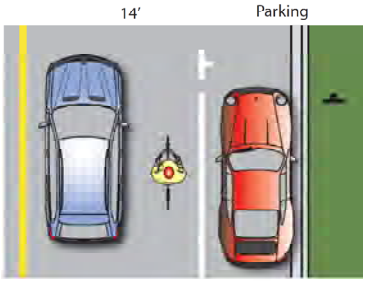
6. Bicycle Network and Projects



Class I bikeways are separated from the roadway.



Class II bike lanes provide a striped travel lane on roadways for bicyclists.



Class III bicycle routes are signed roadways indicating a preferred bicycle route.

This chapter presents the bikeway network and projects as identified by:

- Bikeways proposed in adopted County and city bicycle plans
- Bikeways submitted by local jurisdictions as part of this Plan's survey to the cities and County
- Bikeways recommended by the Bicycle and Pedestrian Facilities Advisory Committee
- Improving connections within and between communities

The bikeway projects are intended to make bicycling more comfortable and accessible for bicyclists of all skill levels and trip purposes. The type of user, e.g. novice or experienced, was considered when identifying the appropriate bikeway type. This Bicycle and Pedestrian Master Plan recommends three bikeway types as classified by Caltrans, as described below and presented to the right.

Class I multi-use paths provide for bicycle and pedestrian travel on a paved right-or-way completely separated from roadways. These facilities are typically used by recreational and casual bicyclists. Commuting bicyclists will also use Class I facilities that provide access to work or school.

Class II bicycle lanes provide a signed, striped and stenciled lane for one-way travel on both sides of a roadway. These facilities are typically used by commuting bicyclists and bicycle enthusiasts. Casual bicyclists will also use Class II facilities if traffic speeds and volumes are relatively low. Class II bicycle lanes are often recommended on roadways with moderate traffic volumes and speeds where separation from motorists can increase the comfort of bicyclists.

Class III bicycle routes provide for shared roadway use and are generally identified only by signs. These facilities may have a wide travel lane or shoulder that allow for parallel travel with motorists.

Table 6-1 presents a summary of the bikeway projects identified in this chapter. The projects include over 500 miles of bikeways, connecting residents to community destinations as well as providing recreational opportunities. The estimated cost to implement the entire network is approximately $109 million. Complete build out of the network is not possible in the short term and a detailed tiering and phasing plan is presented in **Chapter 8.**

Table 6-1: Summary of Bikeway Projects Countywide

Class	Sum of Miles	Sum of Cost Estimate
1	50.47	$75,076,000
2	276.31	$17,392,400
3	221.57	$16,464,000
Total	**548.36**	**$108,932,400**

The recommendations are organized by jurisdiction to facilitate ease of implementation by responsible agencies. Each section summarizes the existing planning and policy documents and land use characteristics that affect bicycle planning, followed by recommended bikeway projects. The projects are presented in maps and tables. The tables describe the project and also indicate the project ranking.

In order to assist the Agency identify regionally significant bicycle projects that will help guide the allocation of administered funds, each project was scored based on how it satisfies a number of criteria. The criteria include:

- Gap closure in network
- Collision/safety
- Local connections
- Project cost
- Connections to activity centers

The criteria were reviewed by the Committee, Agency staff and representatives of the local jurisdictions. A detailed explanation of the project scoring methodology is described in detail in **Chapter 8** but for jurisdictional summary purposes the project ranking is included in this chapter.

Chapter Organization

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6.1. Bicycle Parking and End-of-Trip Facilities

Bicycle parking is an important and necessary complement to any bicycle network. Without adequate bicycle parking, people may not feel encouraged to bicycle to a destination. In addition, installing the appropriate type of bicycle parking facility is also important. In general, bicycle racks are appropriate for parking durations less than two hours and bicycle lockers are appropriate for longer durations.

End-of-trip facilities also complement the bicycle network and encourage people to bicycle. Showers and changing facilities accommodate bicyclists who need to freshen up after their trip. The Association of Pedestrian and Bicycle Professional's Bicycle Parking Guide is a great resource to help determine the appropriate type of bicycle parking facility, number of parking spaces and how and where to install parking facilities.

Selecting the appropriate type of bicycle parking and indentifying end-of-trip facility locations are best completed at the local level. This Plan recommends local jurisdictions and transit agencies identify locations where bicycle parking and end-of-trip facilities are needed, especially at civic buildings, parks, schools and retail outlets.

6.2. County of Monterey

6.2.1. Planning and Policy Context

6.2.1.1. Association of Monterey Bay Area Governments Blueprint Report (2011)

The Association of Monterey Bay Area Governments (AMBAG) developed a "blueprint" to plan land use and transportation in a regional context, providing long-term guidance for local jurisdictions to remain consistent with regional goals that respond to projected future population growth. The Blueprint presents a Sustainable Growth Scenario that focuses development around job and transit rich areas. This scenario includes "priority areas" where all transportation modes should be accommodated, including bicyclists and pedestrians. Chapter 3 provides a more detailed review of the Blueprint.

6.2.1.2. Monterey County General Bikeways Master Plan (2008)

The Monterey County General Bikeways Master Plan includes of all recommended projects identified in the 2005 General Bikeways Plan that are in the incorporated county in addition to the priority bikeway projects listed below.

- Carmel Valley Class I Project Phases I-IV
- Spreckels Boulevard
- Moss Landing Road Class II from South Highway 1 to North Highway 1

Chapter 3 provides a more detailed review of the County Bikeways Master Plan.

6.2.2. Existing Conditions

The existing land use in the unincorporated county is largely rural, undeveloped or parkland. The population of the unincorporated area totals 100,200. The 2000 US census reports that no resident bicycles to work. However, many people to bicycle in the area for other purposes. Bicycling for recreation and exercise, typically for long distances, is popular in the unincorporated County. Existing bikeway mileage in this area totals 22.6 miles with 3.6 miles of Class I, 11.6 Class II and 7.3 Class III bikeways. The existing bikeways are shown on Figures 6-1 through 6-3.

For the years 2004 through 2009, 87 bicycle related collisions occurred in the unincorporated county, accounting for 13 percent of all bicycle related collisions in Monterey County. Locations with a concentrated number of collisions are Pajaro and Castroville. **Figures 4-6** through **4-8** show collision locations throughout Monterey County.

6.2.3. Bikeway Projects

Figure 6-1, **Figure 6-2** and **Figure 6-3** present the bikeway projects in the unincorporated Monterey County.

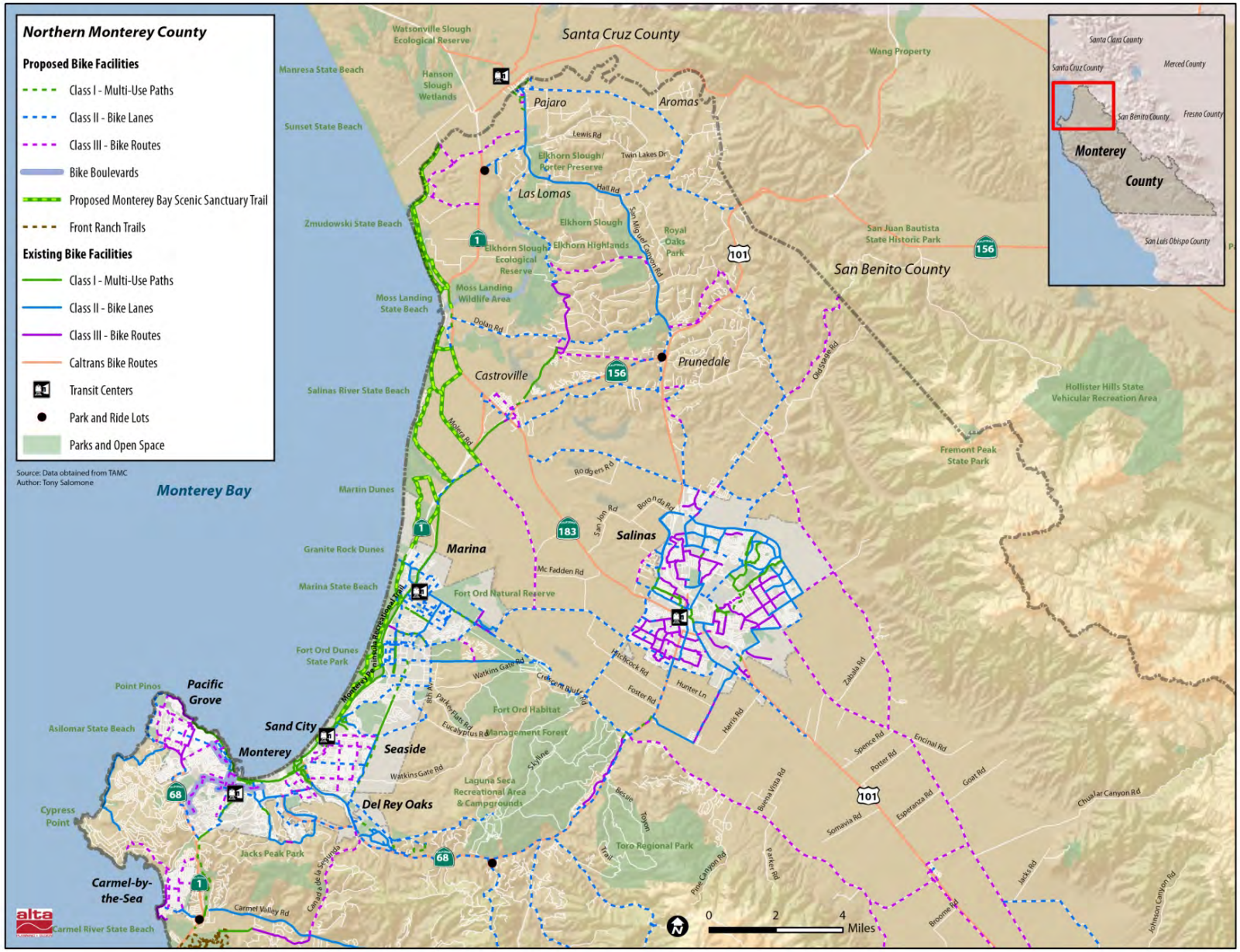

Figure 6-1: Monterey County Bikeway Projects (North)

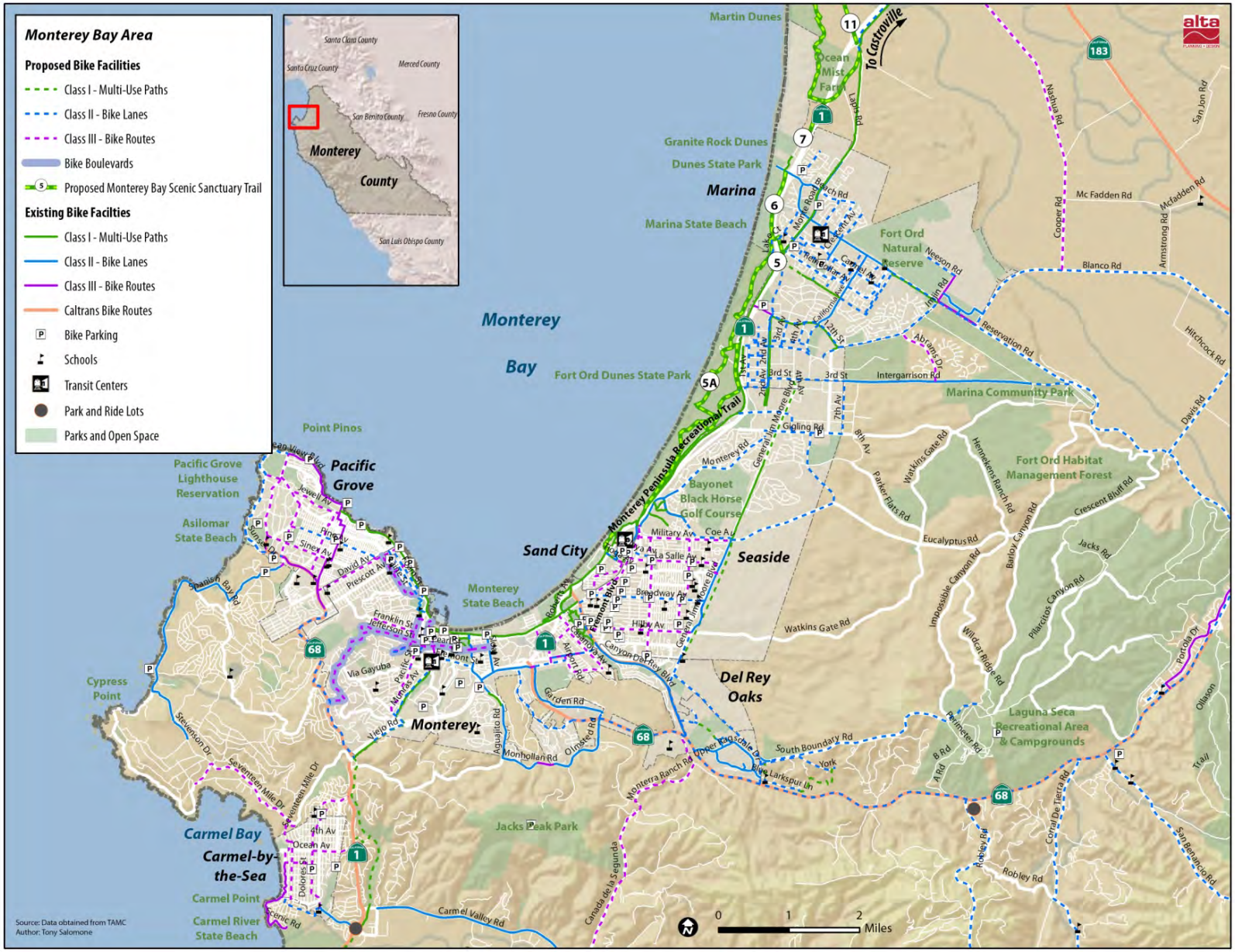

Figure 6-2: Monterey County Bikeway Projects (Peninsula)

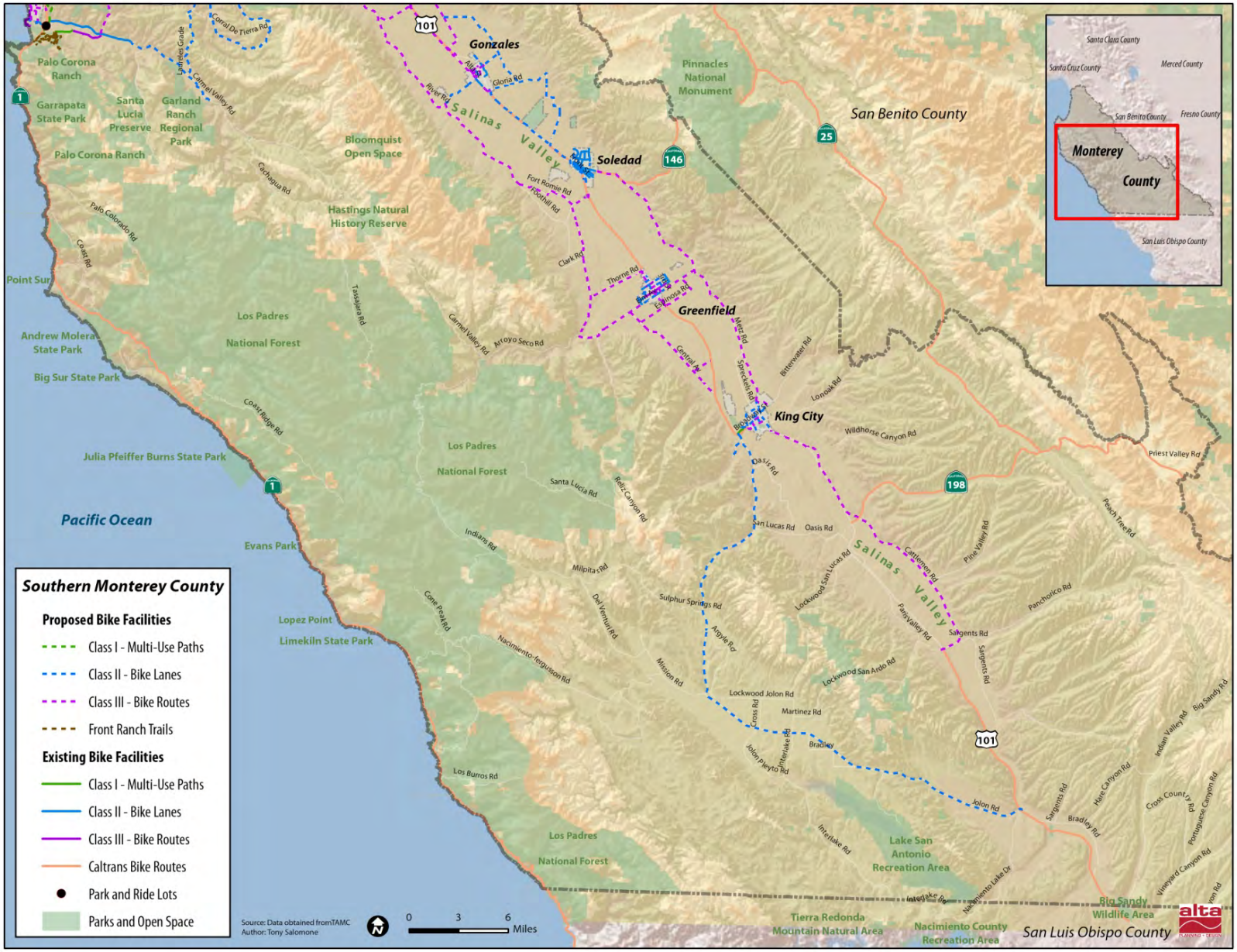

Figure 6-3: Monterey County Bikeway Projects (South)

Table 6-2 presents descriptions of each bikeway project including bikeway type, length, estimated cost, and project rank. Those identified in italics and with an asterisk are the top ranking three projects in the unincorporated County.

Table 6-2: Monterey County Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Carmel River Bridge	1	Carmel River (N)	Carmel River (S)	0.08	$540,000	377
*Castroville Bike Path and Railroad Crossing**	*1*	*Axtell St*	*Castroville Blvd*	*0.31*	*$5,995,000*	*3*
Gen Jim Moore Path	1	Eucalyptus Rd	City Limits	1.85	$1,205,500	67
Hatton Canyon MUP	1	Carmel Valley Rd	Hwy 1	2.60	$1,689,600	14
Hatton Canyon MUP	1	Rio Rd	Carmel River Bridge	0.24	$156,200	365
Hwy 1 Sidepath - MBSST	1	Moss Landing Rd	Elkhorn Bridge (S)	0.57	$373,400	354
Jonathan St	1	Salinas Rd	Florence St	0.14	$90,600	296
Meridian Rd Path	1	375' S of Meridian Rd	390' N of Meridian Rd	0.15	$95,300	388
Pajaro Rail Line	1	Salinas Rd	Pajaro River Levee	0.69	$447,600	355
Pajaro River Levee	1	Pajaro Rail Line	Drainage Pond	0.69	$448,100	356
Reservation Rd Path	1	Reservation Rd	Creekside Terrace	0.22	$140,300	56
Sanctuary Scenic Trail 15A	1	Elkhorn Bridge (S)	Elkhorn Bridge (N)	0.17	$5,082,00	8
Sanctuary Scenic Trail Segment 10	1	Neponset Rd	Lapis Rd	2.42	$2,057,100	359
Sanctuary Scenic Trail Segment 11	1	Neponset Rd	Monte Rd	0.79	$634,400	357
Sanctuary Scenic Trail Segment 12	1	Salinas River and Hwy 1	Salinas River State Beach	1.82	$5,552,000	389
Sanctuary Scenic Trail Segment 13	1	Salinas River State Beach	Sandholdt Rd	3.85	$7,403,800	392
Sanctuary Scenic Trail Segment 14	1	Nashua Rd	Potrero Rd	3.40	$2,799,000	215
Sanctuary Scenic Trail Segment 14	1	Molera Rd	Monterey Dunes Way	0.40	$257,600	353
Sanctuary Scenic Trail Segment 14A	1	Salinas River State Beach	Potrero Rd	1.29	$835,400	358
Sanctuary Scenic Trail Segment 17A	1	Pajaro River	Trafton Rd	0.11	$699,200	390
Sanctuary Scenic Trail Segment 17B	1	Trafton Rd	McGown Rd	1.44	$1,659,200	391
Sanctuary Scenic Trail Segment 7	1	Lapis Rd	Dunes Dr	0.69	$3,411,000	361
Sanctuary Scenic Trail Segment 9	1	Lapis Rd	Monte Rd	0.89	$36,800	344
York - Blue Larkspur Path	1	York Rd	Blue Larkspur Ln	0.87	$564,000	192

Project	Class	Start	End	Miles	Cost Estimate	Rank
York School Path	1	Blue Larkspur Ln	York School	0.24	$152,800	312
15th Ave	2	Bay View Ave	Rio Rd	0.80	$34,300	23
Abbott St	2	Harkins Rd	Firestone Business Park	2.93	$126,200	360
Artichoke Ave	2	Merritt St/Poole St	Hwy1/Watsonville Rd	0.98	$42,100	146
Blackie Rd	2	Hwy 101	Hwy 183	4.81	$207,000	44
*Blanco Rd**	*2*	*Luther Way*	*Abbott St*	*2.50*	*$107,300*	*4*
Blanco Rd	2	Research Dr	Luther Way	5.36	$200,000	6
Blue Larkspur Ln	2	York Rd	end of Blue Larkspur	0.64	$27,300	34
Camphora Gloria Rd	2	Gloria Rd	Hwy 101	5.27	$226,800	76
Carmel Valley Rd	2	Loma del Rey	Via Contenta	6.47	$278,200	54
Castroville Blvd - Dolan Rd	2	San Miguel Canyon Rd	Hwy 1	6.64	$285,300	58
Cherry Ave	2	10th St	end of 10th St	0.36	$15,400	314
Crazy Horse Canyon Rd	2	Hwy 101	San Juan Grade Rd	3.78	$162,600	75
Cross Rd	2	Reese Rd	Pesante Rd	0.71	$30,700	325
*Davis Rd**	*2*	*Blanco Rd*	*Rossi St*	*1.75*	*$3,411,000*	*5*
Davis Rd	2	Reservation Rd	Central Ave	2.91	$125,300	216
Drainage Pond/Miller Property	2	Florence Extension	Levee	0.37	$16,100	336
Elkhorn Rd	2	Paradise Valley Rd	Hall Rd	4.52	$194,200	208
Espinosa Rd	2	Hwy 101	Hwy 183	4.93	$211,900	31
Florence Ave	2	Pajaro River Levee	End of Florence Ave	0.29	$12,500	294
Front Rd Extension	2	Camphora Gloria Rd	Encinal St	2.20	$94,700	42
Gloria Rd	2	Hwy 101	Camphora Gloria	3.77	$162,000	74
Gonzales River Rd	2	River Rd	Alta St	2.52	$108,300	195
Harkins Road	2	Nutting Street	5th Street	1.55	$66,700	70
Harrison Rd	2	Damian Wy	Russell Rd (Salinas)	1.90	$81,700	33
Hwy 156	2	Prunedale Rd	Castroville Blvd	4.27	$183,800	43
Hwy 68	2	San Benancio Rd	Salinas Creek Bridge (S)	4.40	$189,300	12
Hwy 68	2	Viejo Rd	Presidio Blvd	2.32	$99,600	32
Hwy 68	2	Salinas Creek Bridge (N)	Salinas City Limit	1.45	$62,300	134
Intergarrison Rd	2	Reservation Rd	Old County Rd	0.61	$26,200	166
Iverson Rd	2	5th St (Gonzales City Limits)	Old Stage Rd	4.66	$200,400	221

Project	Class	Start	End	Miles	Cost Estimate	Rank
Iverson Rd	2	Johnson Canyon Rd	Gloria Rd	2.17	$93,500	222
Johnson Canyon Rd	2	650' NE of Herold Pkwy	Iverson Rd	1.09	$47,000	185
Jolon Rd	2	Hwy 101	Nacimiento Lake Dr	39.29	$1,689,300	69
Lanini Rd	2	Tavernetti Rd	Tavernetti Rd Hwy 101 On Ramp	0.67	$28,900	72
Las Lomas Dr	2	Hall Rd	Clausen Rd	0.75	$32,300	337
Laureles Grade Rd	2	Hwy 68	Carmel Valley Rd	5.86	$251,800	209
Main St	2	Grant St	Lincoln St	0.14	$6,200	352
McCoy Road	2	Soledad Prison Rd	Camphora Gloria Rd	2.01	$86,600	65
Meade St (Extension)	2	Tembladera St	Artichoke Ave (Extension)	0.04	$1,800	255
Monte Rd - MBSST	2	Nashua Rd	Lapis Rd	1.88	$80,800	63
Moss Landing Rd - MBSST	2	Potrero Rd	end of Moss Landing Rd	0.74	$31,800	240
Natividad Rd	2	Boronda Rd	Old Stage Rd	2.14	$92,000	189
Old Stage - San Juan Grade	2	Herbert Rd	Crazy Horse Canyon Rd	1.18	$50,700	55
Park Rd	2	Ryan Ranch Rd	end of Park Rd	0.07	$3,000	136
Pine Canyon Rd	2	Jolon Rd	Pine Meadow Dr	1.35	$58,200	226
Portola Dr	2	Torero Dr	Muleta Dr	0.38	$16,400	299
Prunedale North Rd	2	San Miguel Canyon Rd	300' S of Hwy 156 overpass	1.06	$45,700	24
Reservation Rd	2	Blanco Rd	Hwy 68	5.51	$236,800	201
Rio Rd	2	Atherton Dr	Hwy 1	0.68	$29,200	303
Rogge Rd	2	San Juan Grade Rd	Natividad Rd	1.29	$55,600	193
S Prunedale Rd	2	300' S of Hwy 156 overpass	Blackie Rd	0.95	$40,700	198
Salinas Rd	2	Hwy 1	Salinas Rd/ County Rd 12	1.62	$69,500	164
Salinas Rd	2	Salinas Rd	Werner Rd	0.02	$1,100	380
Salinas Rd - Hall Rd - Tarpey Rd	2	Porter Dr	San Juan Rd	1.73	$74,400	202
Salinas St	2	Haight St	Merritt St	0.34	$14,500	123
San Benancio - Corral de Tierra Rd Loop	2	Hwy 68	Hwy 68	12.34	$530,400	212
San Juan Rd	2	Porter Dr	Florence Ave	0.11	$4,900	274
San Juan Grade Rd	2	Herbert Rd	Rogge Rd	2.05	$88,300	9
San Juan Rd	2	Porter Dr	Hwy 101	8.87	$381,200	60
South Boundary Rd	2	City Limit	Barley Canyon Rd	3.32	$142,800	39
Tavernetti Rd	2	Lanini Rd	Soledad Prison Rd	2.20	$94,400	64

Project	Class	Start	End	Miles	Cost Estimate	Rank
Werner Rd	2	Salinas Rd	Elkhorn Rd	0.22	$9,300	335
York Rd	2	Trail Rd/York Rd	end of York	1.14	$49,200	176
5th St	3	Herold Pkwy	650' N of Herold Pkwy	0.13	$400	324
Abrams Dr	3	Imjin Rd	Intergarrison Rd	0.91	$2,700	162
Alisal - Old Stage Rd - San Juan Grade Rd	3	San Juan Grade Rd	Old Stage Rd Hwy 101 On Ramp	23.00	$69,000	177
Alta St/Old US Hwy 101	3	Foletta Rd	10th St	1.23	$3,700	45
Arroyo Seco	3	Fort Romie	Hwy 101	1.69	$5,100	199
Arroyo Seco Rd	3	Fort Romie Rd	Elm Ave	8.04	$24,100	224
Bishop St	3	Salinas Rd	Florence Ave	0.12	$400	256
Blackie Rd	3	Castro St	Merritt St	0.07	$200	145
Bluff Rd	3	Hwy 1	Pajaro River	1.70	$5,100	383
Brooklyn St	3	San Juan Rd	Bishop St	0.19	$600	273
Canada de la Segunda	3	Hwy 68	Carmel Valley Rd	4.14	$12,400	29
Castro St	3	Blackie Rd	Wood St	0.28	$800	143
Castroville Blvd	3	Del Monte Farms Rd	Dolan Rd	0.32	$1,000	227
Cattleman Rd	3	Wildhorse Canyon Rd	Paris Valley Rd	16.83	$50,500	62
Central Ave	3	Elm Ave	Hwy 101	7.21	$21,600	230
Chualar River Rd	3	River Rd	Grant St	2.56	$7,700	49
Copper - Nashua Rd	3	Blanco Rd	Monte Rd	4.89	$14,700	73
El Camino Real	3	City Limits	Susan Ln	0.19	$600	373
Elm Ave	3	Arroyo Seco Rd	13th St	4.74	$14,200	59
Elm Ave	3	Metz Rd	3rd St (Greenfield)	2.15	$6,500	179
Espinosa Rd	3	Patricia Ln	Elm Ave	2.73	$8,200	188
Espinosa Rd	3	Central Ave	Susan Ln (// to Hwy 101)	1.82	$5,500	218
Foletta Rd	3	Chualar River Rd	Alta St/Old US Hwy 101	4.14	$12,400	57
Fort Romie Rd	3	River Rd	Arroyo Seco Rd	3.87	$11,600	225
Fremont St	3	Salinas Rd	End of Fremont St	0.13	$400	293
Geil St	3	Wood St	Hwy 156 Bike/Ped Overcrossing	0.19	$600	105
Grant St	3	Hwy 101	Payson St	0.60	$1,800	167
Hwy 1	3	Ocean Ave	Carmel High School	0.23	$700	275
McGowan Rd - MBSST	3	Trafton Rd	Santa Cruz Co Line	0.70	$2,100	381
Mead St	3	Tembladera St	Gambetta Middle School	0.34	$1,000	161
Meridian Rd	3	Castroville Blvd	Hwy 156	2.74	$8,200	51

Project	Class	Start	End	Miles	Cost Estimate	Rank
Mesa Verde	3	Wildhorse Canyon Rd/ Hwy 101	1st St	2.56	$7,700	50
Metz Rd	3	Soledad City Limits	King City Limits	18.47	$55,400	217
Moro Rd	3	San Miguel Canyon Rd	Hwy 101	1.93	$5,800	47
Old Stage - San Juan Grade	3	Crazy Horse Canyon Rd	County Limit	4.25	$12,800	229
Old Stage Rd	3	Associated Ln/101	Alta St	0.36	$1,100	206
Omart Rd	3	Del Monte Farms Rd	Meridian Rd	0.15	$500	384
Pajaro - Axtell - Benson Rte	3	Merritt St	Benson Rd	0.51	$1,500	123
Payson St - Chualar Rd	3	Grant St	Old Stage Rd	1.41	$4,200	207
Pesante Rd	3	Hwy 101	Cross Rd	0.68	$2,000	342
Reese Cir - Country Meadows Rd	3	Blackie Rd	Damian Wy	1.09	$3,300	46
River Rd	3	Hwy 68	Fort Romie Rd	23.39	$70,200	180
San Juan Grade Rd	3	Russell Rd	Rogge Rd	0.40	$1,200	9
Seymour St	3	Salinas St	Washington St	0.76	$2,300	315
Strawberry Rd	3	San Miguel Canyon Rd	Elkhorn Rd	3.32	$10,000	194
Susan Ln	3	El Camino Real	Espinosa Rd	0.32	$1,000	376
Tafton Rd	3	Salinas Rd	McGowan Rd	2.58	$7,700	328
Tafton Rd	3	Bluff Rd	2nd Bend in Trafton Rd	0.58	$1,800	388
Tafton Rd - MBSST	3	Salinas Rd	Pajaro River Trails	1.00	$3,000	382
Tavernetti Rd	3	Hwy 101 Overpass	Gloria Rd	0.18	$500	223
Teague Ave	3	Central Ave	Hwy 101	1.22	$3,700	231
Thorne Rd	3	Arroyo Seco Rd	El Camino Real	3.50	$10,500	219

The bikeway projects for unincorporated Monterey County includes 385 bikeway miles and will cost approximately $54 million dollars (**Table 6-3**).

Table 6-3: Monterey County Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	25.90	$42,325,900
2	188.89	$11,427,500
3	170.20	$511,000
Total	**385.00**	**$54,264,400**

6.3. Carmel-by-the-Sea

6.3.1. Planning and Policy Context

6.3.1.1. General Plan

The City of Carmel-by-the-Sea adopted its most recent general plan in 2010. The Circulation Element of the General Plan notes that all bikeways in Carmel are Class III bicycle routes, the designation of which requires only signs. The Circulation Element notes a focus on safety and maintenance of bicycle routes rather than the construction of new bikeways due to the build-out of the City. Policy O2-6 directs the City to promote and participate in alternative transportation (including bicycles) encouragement programs.

6.3.2. Existing Conditions

The City of Carmel-by-the-Sea is the second least populous city in Monterey County with approximately 4,100 residents. The City has one and half miles of bikeway, a Class III bicycle route along Scenic Road and is shown on **Figure 6-4**.

The 2000 US Census reports no Carmel resident bicycles to work. However, this does not mean people to do not bicycle in Carmel. During the years 2004 to 2009, 19 bicycle related collisions occurred in Carmel, resulting in the City having second highest collision rate of all cities in Monterey County. **Figure 4-7** in Chapter 4 presents the bicycle related collision locations in Carmel-by-the-Sea.

6.3.3. Bikeway Projects

Figure 6-4 presents the bikeway projects in Carmel-by-the-Sea.

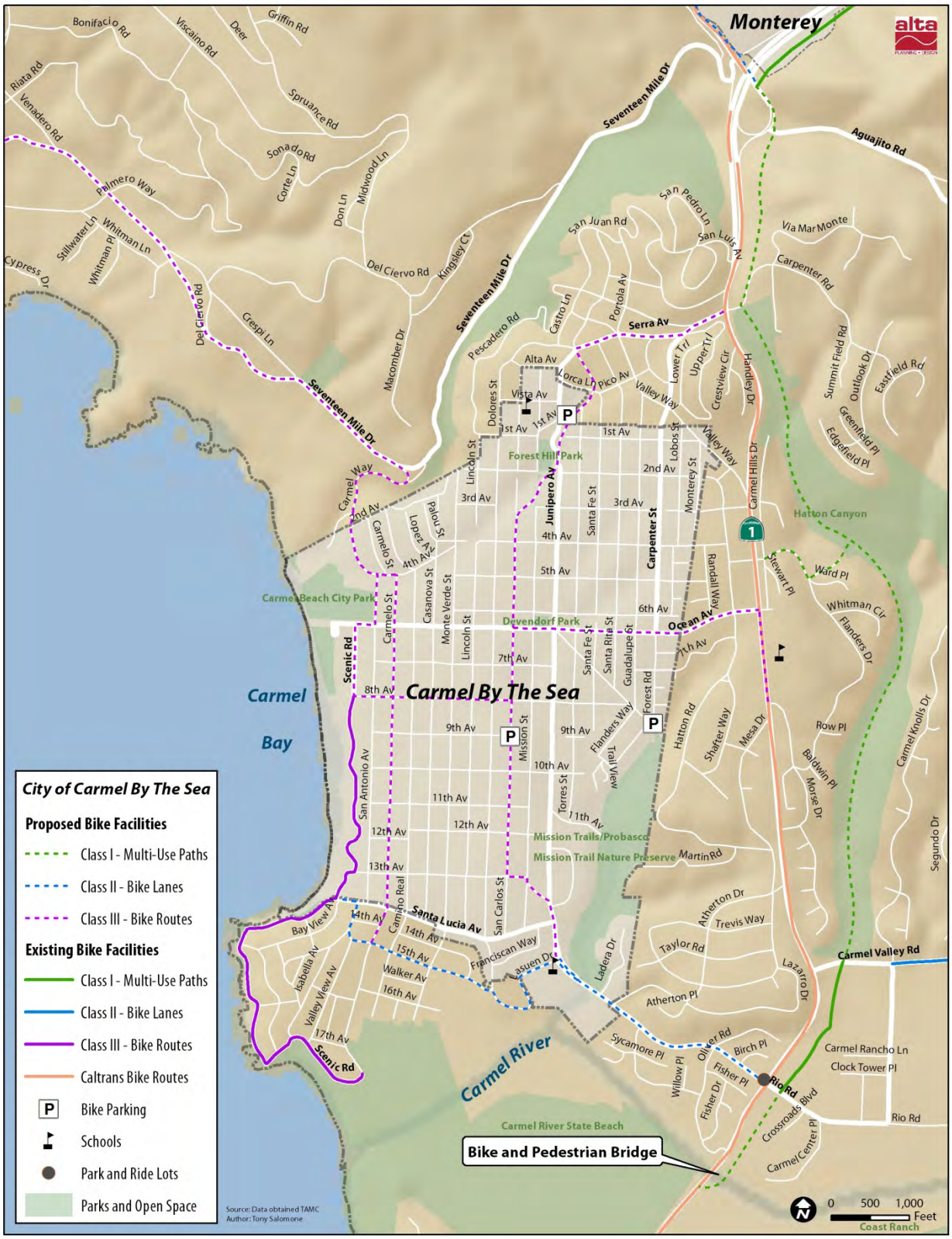

Figure 6-4: Carmel-by-the-Sea Bikeway Projects

Table 6-4 presents descriptions of each bikeway project and includes bikeway type, length, estimated cost, and project rank. All projects in Carmel-by-the-Sea are Class 3 Bicycle Routes connecting residents across the City. Those identified in italics and with an asterisk are the top ranking three projects.

Table 6-4: Carmel Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Rio Rd	2	Lausen Dr	Atherton Dr	0.68	$29,200	304
*17 Mile Dr/Carmel Way**	*3*	*17 Mile Dr*	*San Antonio Ave*	*2.22*	*$6,700*	*203*
4th Ave	3	San Antonio Ave	Carmelo St	0.05	$100	343
8th Ave	3	Scenic Rd	San Carlos St	0.38	$1,100	332
Camino del Monte Ave	3	San Carlos St	Serra Ave	0.49	$1,500	341
Carmelo St	3	4th Ave	15th Ave	0.90	$2,700	329
Ocean Ave	3	San Antonio Ave	Scenic Rd	0.05	$100	298
Ocean Ave	3	San Carlos St	Hwy 1	0.61	$1,800	326
San Antonio Ave	3	Carmel Way	Ocean Ave	0.30	$900	345
San Carlos St - Rio Rd Rte	3	Lasuen Dr	Camino del Monte Ave	1.15	$3,400	301
*Scenic Rd**	*3*	*8th Ave*	*Ocean Ave*	*0.17*	*$500*	*297*
*Serra Ave**	*3*	*Camino del Monte Ave*	*Hwy 1*	*0.39*	*$1,200*	*295*

The bikeway projects for Carmel includes over seven bikeways miles and will cost approximately $50,000 to construct (**Table 6-5**).

Table 6-5: Carmel Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
2	6.69	$20,000
3	0.68	$29,200
Total	**7.37**	**$49,200**

6.4. Del Rey Oaks

6.4.1. Planning and Policy Context

6.4.1.1. General Plan

The Del Rey Oaks City Council amended the City's most current General Plan in 1997. The Circulation Element sets forth the following policies most related to bicycling.

- Provide safe, convenient, energy-conserving, comfortable and healthful transportation for all people and goods by the most efficient and appropriate transportation modes that meet current and future travel needs of the City's residents.
- Provide or promote travel by mean other that single-occupant automobile.
- Improve and maintain a transportation network of streets, transit, pedestrian paths and bikeways.

Bicycle and pedestrian circulation and facilities policies designate the following roadways as Class II bicycle routes.

- Highway 218 within City limit (City has since installed)
- North/South Road from Highway 218 to City limit (requested Fort Ord annexation area)
- Carlton Drive from Highway 218 to City limit (this Countywide Bicycle and Pedestrian Plan recommends Class II bicycle lanes on General Jim Moore Boulevard, which is parallel to Carlton Drive)
- South Boundary Road (requested Fort Ord annexation area)

6.4.2. Existing Conditions

Del Rey Oaks has a population of 1,650 residents primarily living along Canyon Del Rey Boulevard. Del Rey Oaks has 1.9 miles of Class II bikeways making up the Ragsdale Drive loop, which accesses light industrial land uses. **Figure 6-5** presents the existing bikeways.

The US Census reports one percent of residents bicycle to work. During the years 2004 through 2009, one bicycle collision occurred on the intersection of Route 218 and Del Rey Gardens (**Figure 4-7**, **Chapter 4**).

6.4.3. Bikeway Projects

Figure 6-5 presents the Del Rey Oaks bikeway projects.

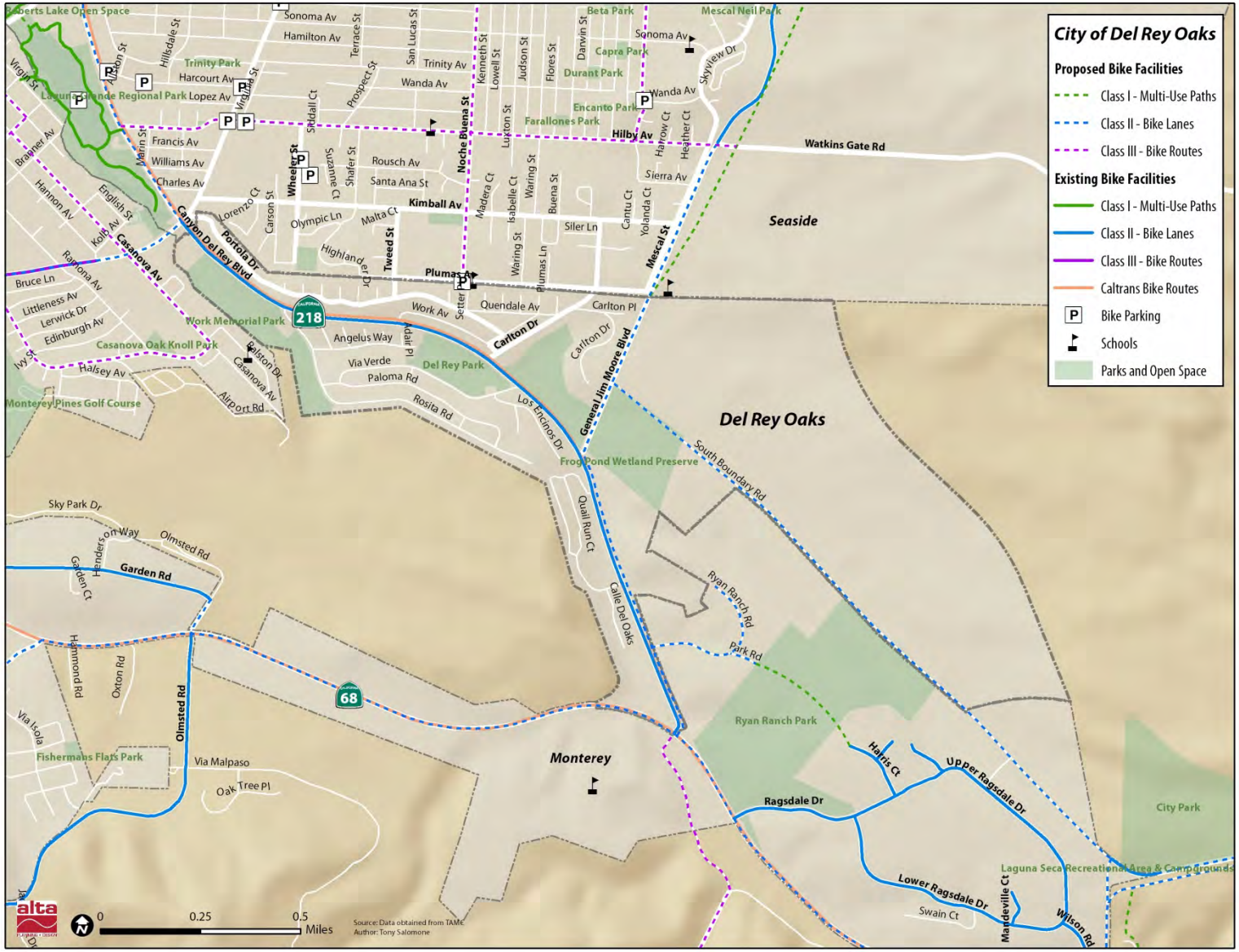

Figure 6-5: Del Rey Oaks Bikeway Projects

Table 6-6 presents the bikeway projects in Del Rey Oaks. All the facilities are Class 2 Bike Lanes providing important connections across the City. Those identified in italics and with an asterisk are the top ranking three projects in Del Rey Oaks.

Table 6-6: Del Rey Oaks Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
*Canyon del Rey Blvd**	*2*	*General Jim Moore Blvd*	*Hwy 68*	*0.76*	*$32,500*	*2*
*General Jim Moore**	*2*	*Canyon del Rey Blvd*	*City Limits*	*0.43*	*$18,300*	*18*
Ryan Ranch Rd	2	Canyon del Rey Blvd	end of Ryan Ranch	0.42	$18,000	135
*South Boundary Rd**	*2*	*Gen Jim Moore Blvd*	*York Rd*	*1.73*	*$74,200*	*30*

The bikeway projects for Del Rey Oaks include three bikeways miles and will cost approximately $143,000 to construct. **Table 6-7** presents the summary miles and costs for Del Rey Oaks.

Table 6-7: Del Rey Oaks Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
2	3.33	$143,000
Grand Total	**3.33**	**$143,000**

6.5. Gonzales

6.5.1. Planning and Policy Context

6.5.1.1. General Plan

The City of Gonzales adopted its most current General Plan in 2010. The Circulation Element requires that all arterial and collector roadways provide Class I or II "bicycle/pedestrian" paths and presents the following implementing actions.

CIR 1.1.4 Design all new collector streets with one travel lane in each direction and sufficient room for parking, sidewalks, and bicycle lanes.

CIR 1.1.5 Design local streets in a manner that is consistent with the street system in place in the older portions of Gonzales and in a manner that encourages pedestrian and bicycle traffic.

CIR 5.1.10 Design Streets for Pedestrians and Bicyclists. Ensure that street designs provide adequate safety provisions for bicycles and pedestrians.

Policy CIR 8.1. sets forth for the City to increase bicycle and pedestrian opportunities including the following projects.

- Construct a linear park along Johnson Canyon Creek
- Ensure any redesign of the Fifth Street/Highway 101 interchange places high priority on providing safe movement of bicyclists and pedestrians

6.5.2. Existing Conditions

The City of Gonzales has 7,700 residents in approximately one square mile of area. Highway 101 bisects the city, creating a barrier for bicyclists commuting between residential areas on the east side of the highway and commercial and retail opportunities on the west side of the highway. The city has two Class II bicycle lanes, one on Herold Parkway, which is the eastern edge of current development and one on Alta Street. The bikeways are shown on **Figure 6-6**.

The 2000 US Census reports one percent of residents bicycle to work. During the years 2004 to 2009, nine bicycle related collisions occurred in Gonzales, resulting in a low collision rate (1.2%) in comparison to other cities in Monterey County. **Figure 4-8** in Chapter 4 shows the bicycle related collisions in Gonzales.

6.5.3. Bikeway Projects

Figure 6-6 presents the recommended bikeway projects in Gonzales.

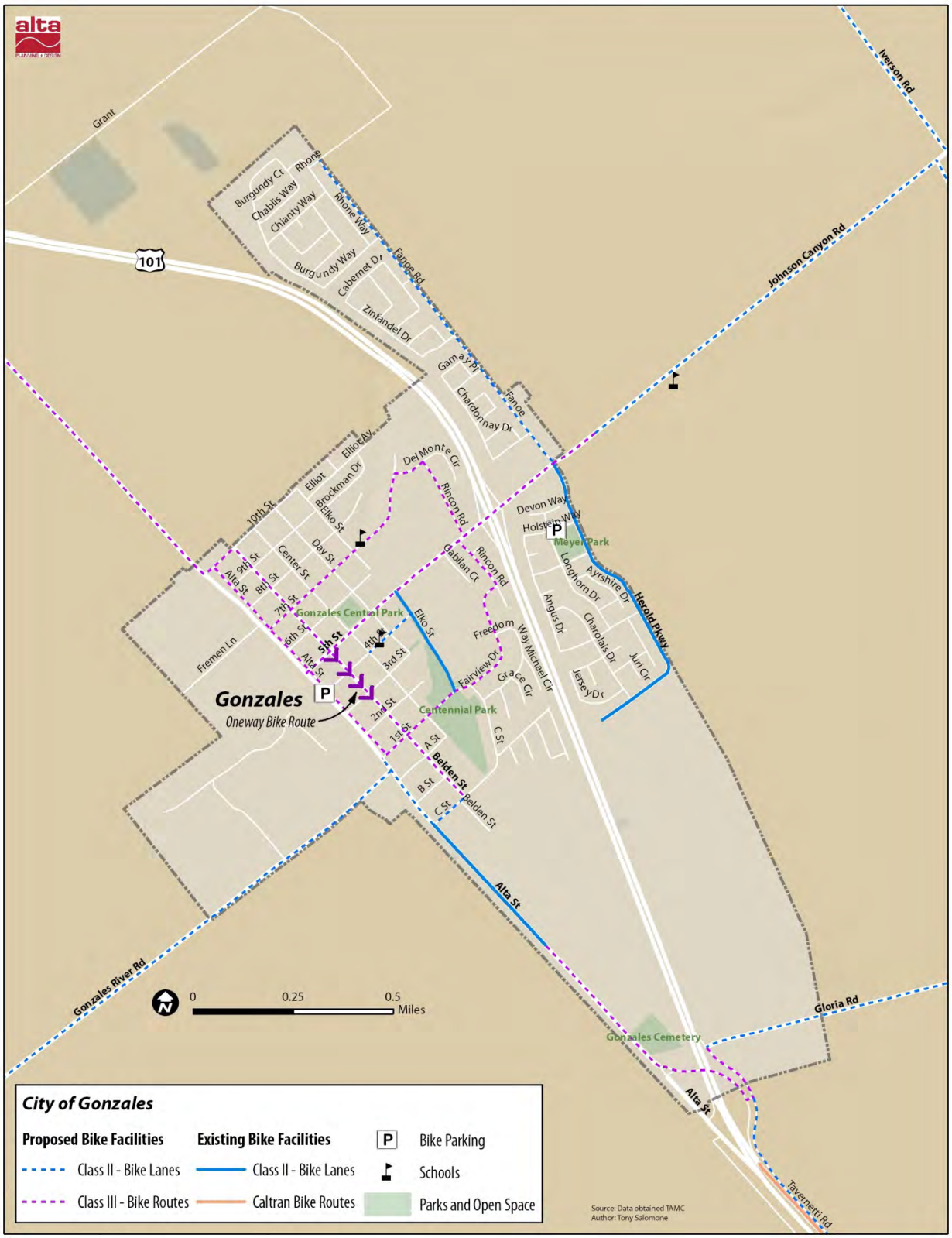

Figure 6-6: Gonzales Bikeway Projects

Table 6-8 represents the bikeway projects in Gonzales. The projects include a number of Class 2 Bike Lanes while the majority of projects are Class 3 Bike Routes connecting residents to retail destinations. Those identified in italics and with an asterisk are the top ranking three projects in Gonzales.

Table 6-8: Gonzales Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
4th St	2	Center St	Gonzales High School	0.14	$6,100	291
Alta St	2	1st St	C St	0.21	$9,000	158
C St	2	Belden St	Alta St	0.10	$4,500	156
Fanoe Rd	2	Rhone Rd	5th St	0.96	$41,100	327
10th St	3	Alta St/Old US Hwy 101	Belden St	0.10	$300	174
*1st St**	*3*	*Alta St*	*Elko St*	*0.25*	*$700*	*128*
*5th St**	*3*	*Alta St*	*Herold Pkwy*	*0.81*	*$2,400*	*154*
7th St	3	Alta St	Del Monte Cir	0.52	$1,600	289
*Alta St**	*3*	*Existing BL on Alta St*	*Hwy 101 Overpass*	*0.42*	*$1,200*	*47*
Alta St	3	10th St	1st St	0.64	$1,900	320
Belden St	3	5th St	3rd St	0.14	$400	287
Belden St	3	10th St	5th St	0.35	$1,100	288
Belden St	3	3rd St	C St	0.35	$1,100	290
Del Monte Cir	3	7th St	Rincon Rd	0.08	$200	364
Fairview Dr	3	Elko St	5th St	0.50	$1,500	155
Rincon Rd	3	Del Monte Rd	5th St	0.21	$600	323

Table 6-9 presents a summary of bikeway project miles and costs. Implementation of the projects would add nearly six miles of bikeways and with an estimated cost of $73,700.

Table 6-9: Gonzales Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
2	1.41	$60,700
3	4.37	$13,000
Total	**5.78**	**$73,700**

6.6. Greenfield

6.6.1. Planning and Policy Context

6.6.1.1. General Plan

The City of Greenfield adopted its most current general plan in 2005. Among the key issues identified in the Circulation Element are identifying measures to increase bicyclist safety and encouraging bicycle usage. Bicycle supportive policies include:

Policy 3.3.1. Provide maximum opportunities for bicycle and pedestrian circulation on existing and new roadway facilities.

Policy 3.3.2 Incorporate convenient bicycle and pedestrian access and facilities in new public and private development projects where appropriate.

Policy 3.3.3 Create a bicycle and pedestrian system that provides connections throughout Greenfield and within the region designed to serve both recreational and commuter users.

Policy 3.3.4 Design new roadway facilities to accommodate bicycle and pedestrian traffic.

6.6.2. Existing Conditions

Greenfield has 12,600 residents in approximately one and half square miles of area. Land use is primarily residential with retail along El Camino Real. Elementary and high schools are located on El Camino Real at the northern extent of the city, while the middle school is located in the southwest of the city on Elm Street. The 2000 US Census reports no one bicycled to work. The existing bikeway network, shown in **Figure 6-7**, includes a Class III Bike Route on Oak Avenue and a number of short Class II Bike Lanes.

During the years 2004 to 2009, 26 bicycle related collisions occurred in Greenfield, the majority were along El Camino Real. **Figure 4-8** in Chapter 4 presents the bicycle-related collisions.

6.6.3. Bikeway Projects

Figure 6-7 presents the Greenfield bikeway projects.

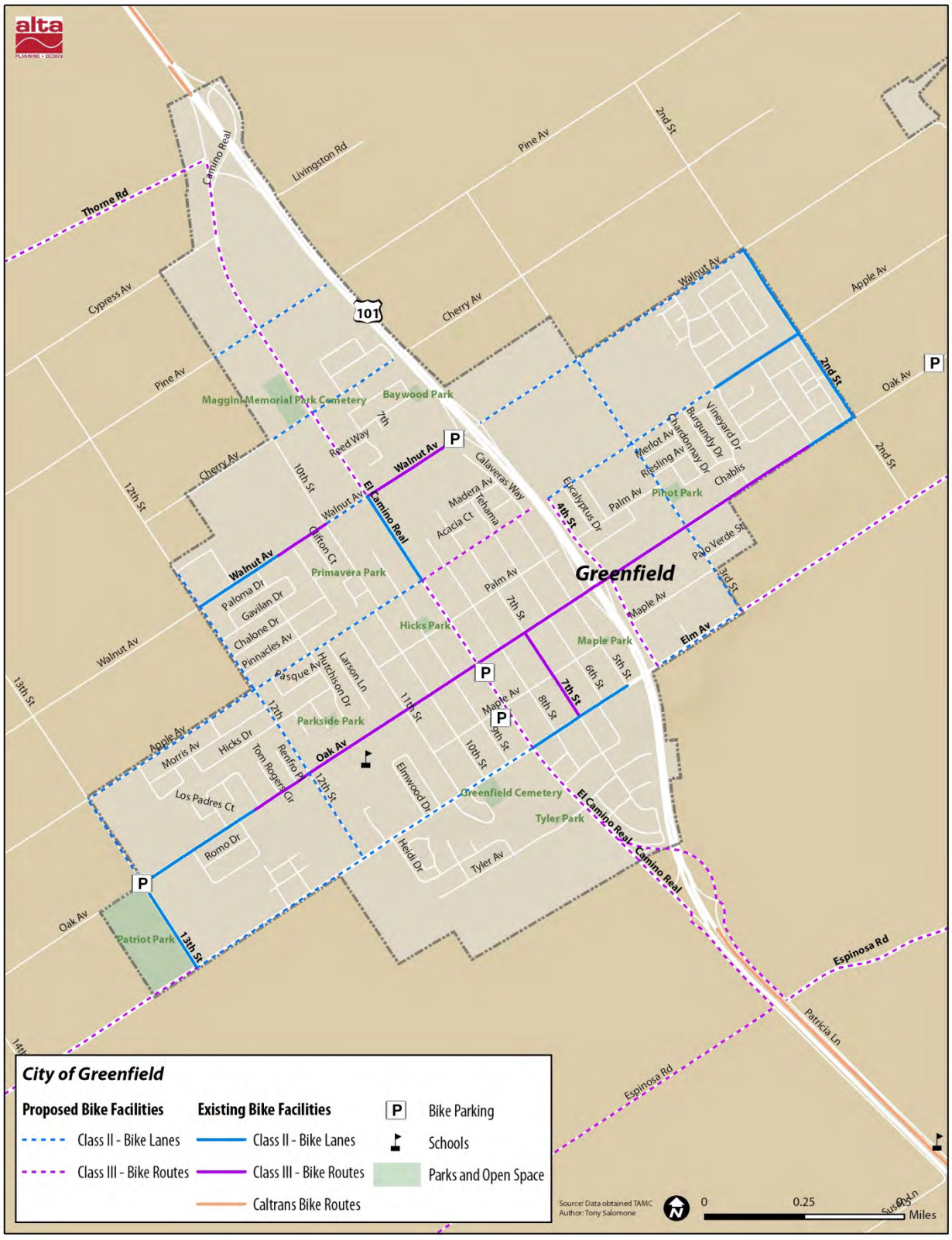

Figure 6-7: Greenfield Bikeway Projects

Table 6-10 presents the bikeway projects in Greenfield. The projects include a number of Class 2 Bike Lanes where right-of-way allows. Class 3 Bike Routes complete the connections across the City. Those identified in italics and with an asterisk are the top ranking three projects in Greenfield.

Table 6-10: Greenfield Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
12th St	2	Elm Ave	550' N of Walnut Ave	0.86	$36,800	182
13th St	2	Oak Ave	Apple Ave	0.25	$10,800	161
3rd St	2	Walnut Ave	Elm Ave	0.75	$32,300	313
*Apple Ave**	*2*	*Thorp Ave*	*4th St*	*0.51*	*$21,700*	*142*
Apple Ave	2	13th St	El Camino Real	1.00	$43,000	183
*Elm Ave**	*2*	*13th St*	*El Camino Real*	*1.00*	*$43,200*	*144*
Elm Ave	2	4th St	3rd St	0.25	$10,700	372
Pine Ave	2	690' W of El Camino Real	end of Pine Ave	0.34	$14,500	378
Walnut Ave	2	10th St	El Camino Real	0.13	$5,400	168
Walnut Ave	2	Hwy 101	2nd St	0.79	$33,800	181
4th St	3	Elm Ave	Apple Ave	0.50	$1,500	371
Apple Ave	3	El Camino Real	end of Apple	0.33	$1,000	171
*El Camino Real**	*3*	*Apple Ave*	*Hwy 101 Ramp*	*0.89*	*$2,700*	*121*
El Camino Real	3	Thorne Rd	Walnut Ave	0.93	$2,800	313

Table 6-11 presents a summary of bikeway project miles and costs. Implementation of all projects would add nearly nine miles of bikeways and would cost an estimated $260,200.

Table 6-11: Greenfield Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
2	5.86	$252,200
3	2.66	$8,000
Grand Total	**8.52**	**$260,200**

6.7. King City

6.7.1. Planning and Policy Context

6.7.1.1. General Plan

The King City Council adopted the most current General Plan in November 1998. At the time of adoption, King City did have any designated bikeways. The Circulation Element states that the City will promote the use of non-motorized transportation modes where appropriate.

6.7.2. Existing Conditions

King City has 11,200 residents, one percent of which bicycle to work. The city is bound by Highway 101 to south and Metz Road to the east, providing a fairly continuous grid network for bicyclists to travel. Commercial retail lines Broadway Street, which bisects the city. One, half mile, Class I multi-use pathway is located in at the southwest end of the city, connecting San Antonio Drive and County Road G14. **Figure 6-8** presents this path's location.

During the years 2004 to 2009, 16 bicycle related collisions occurred in King City. The majority of the collisions were on 3rd Street and Broadway. **Figure 4-8** in Chapter 4 presents the bicycle related collisions.

6.7.3. Bikway Projects

Figure 6-8 presents the bikeway projects in King City.

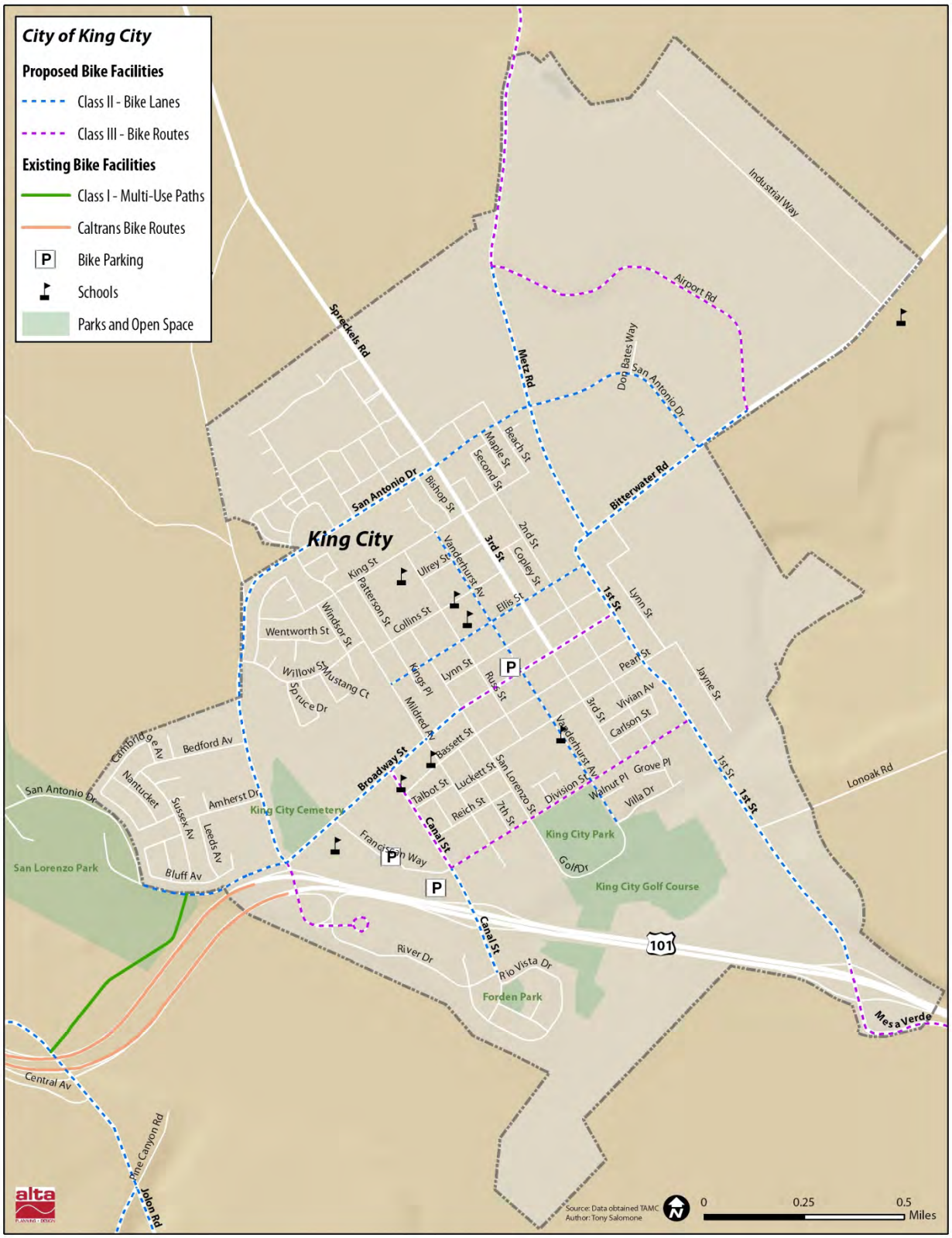

Figure 6-8: King City Bikeway Projects

Table 6-12 presents descriptions of each bikeway project by bikeway type and includes estimated cost and project rank. The projects connect residents across the city and provide routes on roadways parallel to busier streets such as Broadway. Those identified in italics and with an asterisk are the top ranking three projects in King City.

Table 6-12: King City Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
1st St	2	Metz Rd	Hwy 101	1.30	$55,800	311
Bitterwater Rd	2	Airport Dr	1st St	0.51	$21,700	366
*Broadway**	*2*	*Mildred Ave*	*San Lorenzo St*	*0.12*	*$5,100*	*261*
Broadway	2	San Lorenzo Park	Mildred Ave	0.85	$36,500	307
Canal St	2	Division St	River Dr	0.29	$12,300	308
Ellis St	2	1st St	Mildred Ave	0.57	$24,400	281
Metz Rd	2	Airport Rd	1st St	0.72	$30,800	367
San Antonio Dr	2	Metz Rd	Broadway	1.55	$66,500	310
San Antonio Dr	2	Metz Rd	Bitterwater Rd	0.52	$22,500	370
Vanderhurst Ave	2	King St	Villa Dr	0.86	$36,900	282
Airport Rd	3	Metz Rd	Bitterwater Rd	0.91	$2,700	369
*Broadway**	*3*	*San Lorenzo St*	*1st St*	*0.45*	*$1,400*	*279*
Broadway Cir	3	San Antonio Dr	River Dr	0.39	$1,200	309
*Canal St**	*3*	*Broadway*	*Division St*	*0.29*	*$900*	*280*
Division St	3	Canal St	1st St	0.70	$2,100	306

Table 6-13 presents a summary of bikeway project miles and project costs. The projects would add ten miles to the existing bikeway network and would cost approximately $320,800.

Table 6-13: King City Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
2	7.27	$312,500
3	2.74	$8,300
Total	**10.00**	**$320,800**

6.8. Marina

6.8.1. Planning and Policy Context

6.8.1.1. General Plan

The City of Marina last amended its general plan in 2006. Policy 3.15 sets forth that all collector streets, existing and future shall provide bicycle lanes within or adjacent to the roadway. Policy 3.18 further strengthens policy 3.15 by restricting additional roadway width to selected roadway extensions to accommodate only transit, bicycles or pedestrians.

The General Plan identifies the following opportunities for bicycle facilities.

- Marina Heights
- Southern extension of DeForest Road
- Extension of Crescent Avenue

6.8.1.2. Bicycle and Pedestrian Plan

The City of Marina adopted its first Bicycle and Pedestrian Plan in 2010, which identifies deficiencies in and improvements to the non-motorized transportation network. The plan presents a prioritized listing of recommended bikeways, which includes bicycle lanes on DeForest Road and Crescent Avenue.

6.8.2. Existing Conditions

The City of Marina has 25,100 residents, one percent of whom bicycle to work, according to the 2000 US Census. Marina's roadway network includes a number of cul-de-sacs, which directs bicyclists to use collector and arterial roadways. There are 16.7 miles of bikeways, the majority being Class II bicycle lanes. The Monterey Peninsula Recreation Trail runs on the west side of Del Monte Road, providing a critical north-south connection through the western part of the city. **Figure 6-9** presents the existing bikeways in Marina.

During the years 2004 through 2009, 34 bicycle related collisions occurred in Marina. The collision rate for this time period is 1.4 per 1,000 residents, 0.3 points below the average rate for the entire county. Collisions were concentrated along Carmel Ave and Reservation Road. **Figure 4-7** in Chapter 4 presents the bicycle related collision locations.

6.8.3. Bikeway Projects

Figure 6-9 presents the bikeway projects in Marina.

Figure 6-9: Marina Bikeway Projects

Table 6-14 presents descriptions of each bikeway project by bikeway type and includes estimated cost and project rank. The bikeway projects provide bike lane connections from the residential communities to community destinations including transit and the Monterey Peninsula Recreational Trail. Those identified in italics and with an asterisk are the top ranking three projects in Marina.

Table 6-14: Marina Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Patton Pkwy Path	1	Reindollar Ave	Patton Pkwy	0.50	$322,400	199
1st Ave	2	1st St	8th St	0.58	$25,000	351
*2nd Ave**	*2*	*3rd St*	*1st St*	*0.26*	*$11,400*	*21*
2nd Ave N Extension	2	Imjin Rd	Cypress Knolls	1.31	$56,500	153
3rd Ave	2	8th St	Imjin Rd/12th St	0.37	$15,800	339
3rd St	2	2nd Ave	8th St	1.06	$45,600	165
3rd St	2	1st Ave	2nd Ave	0.29	$12,300	387
4th Ave	2	9th St	12th St	0.29	$12,300	330
5th Ave	2	8th St	12th St	0.52	$22,200	321
7th St	2	1st Ave	2nd Ave	0.28	$12,200	386
8th St	2	2nd Ave	5th Ave	0.62	$26,600	334
8th St	2	Proposed St - The Dunes	2nd Ave	0.15	$6,400	347
8th St	2	Hwy 1	1st Ave	0.10	$4,400	385
9th St	2	1st Ave	3rd Ave	0.47	$20,100	348
9th St	2	1st Ave	Proposed St - The Dunes	0.16	$7,000	350
9th St Extension	2	3rd Ave	5th Ave	0.35	$15,300	333
Bayer Dr	2	Bostick Ave	end of Bayer Dr	0.42	$18,000	375
Bayer Dr - California Ave MUP	2	Carmel Ave/Salinas Ave	California Ave	0.86	$37,100	186
Bayer St - Bostick Ave	2	Reindollar Ave	Reservation Rd	0.59	$25,300	159
Beach Rd	2	Monte Rd	Costa del Mar Rd	0.65	$28,000	147
Berney Dr	2	Reindollar Ave	Hillcrest Ave	0.10	$4,200	363
California Ave	2	Carmel Ave	Reservation Rd	0.29	$12,500	127
Cardoza Ave	2	Beach Rd	end of Cardoza Ave	0.49	$21,200	160
Carmel Ave	2	Sunset Ave	Salinas Ave	1.27	$54,800	149
Carmel Ave	2	Sunset Ave	Monte Rd	0.16	$7,000	172
Crescent Ave	2	Reservation Rd	end of Reservation Rd	0.49	$21,200	284
Crescent Ave + Extension	2	Hillcrest Ave	Carmel Ave	0.14	$6,200	148
Crescent St	2	Reindollar Ave	end of Crescent St	0.13	$5,700	319
Crestview Ct	2	Reservation Rd	end of Crestview Ct	0.12	$5,100	267
de Forest Rd	2	Costa del Mar Rd	Reservation Rd	0.40	$17,400	173
Ellen Ct	2	Reindollar Ave	end of Ellen Ct	0.15	$6,500	374
Hillcrest Ave	2	Redwood Dr	end of Hillcrest Ave	0.84	$36,100	318
Imjin Rd	2	8th St	12th St	0.33	$14,000	379

Project	Class	Start	End	Miles	Cost Estimate	Rank
*Imjin Rd/12th St**	*2*	*Imjin Rd*	*Reservation Rd*	*2.72*	*$2,200,000*	*1*
Lake Dr	2	Robin Dr	174' E of Hwy 1	0.51	$22,000	285
Lake Dr	2	174' E of Hwy 1	end of Lake Dr	0.29	$12,600	317
Lynscott Dr	2	Carmel Ave	Reservation Rd	0.31	$13,200	322
Melania Rd	2	Peninsula Dr	Beach Rd	0.33	$14,400	169
Neeson Rd	2	Imjin Rd	end of Neeson Rd	0.53	$22,700	331
Palm Ave	2	Lake Dr	Clarke Pl	0.03	$1,200	266
Palm Ave	2	Lake Dr	Sunset Ave	0.35	$15,200	283
*Peninsula Dr**	*2*	*Viking Ln*	*Melanie Rd*	*0.03*	*$1,300*	*68*
Proposed St – The Dunes	2	3rd St	300' N of 10th St	0.76	$32,900	349
Redwood Dr	2	Reindollar Ave	end of Redwood Dr	0.35	$15,200	286
Reindollar Ave	2	Bostick Ave	Monte Rd	1.27	$54,800	150
Reservation Rd	2	Salinas Ave	Blanco Rd	1.39	$59,900	152
Robin Dr	2	Lake Dr	Reservation Rd	0.02	$1,000	233
Salinas Ave	2	Carmel Ave	Reservation Rd	0.27	$11,800	157
Seacrest Ave	2	Carmel Ave	Reservation Rd	0.29	$12,300	252
Sunset Ave	2	Reindollar Ave	Carmel Ave	0.28	$12,200	362
Vaughn Ave	2	Reindollar Ave	Carmel Ave	0.28	$12,200	316
Viking Ln	2	Reservation Rd	Peninsula Dr	0.11	$4,900	124

Table 6-15 presents the bikeway project summary of bikeway miles and costs. Implementation of the projects would add nearly 25 miles of bikeways and would cost an estimated $3.5 million.

Table 6-15: Marina Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	0.49	$322,400
2	24.42	$3,133,200
Total	**24.91**	**$3,455,600**

6.9. City of Monterey

6.9.1. Planning and Policy Context

6.9.1.1. General Plan

The City of Monterey last amended its general plan in 2009. The circulation element sets forth an extensive set of policies and programs that support bicycling. The policies and programs listed below hold most relevance to this Plan.

Policy b.4. Reinforce the visual, pedestrian, and bicycle connection between City neighborhoods and the Bay so that residents have exceptional non-automobile access to the Bay.

Program c.11. To better link the Downtown with the waterfront, construct an attractive pedestrian bridge between Spanish Plaza and the Wharf parking lot to provide a direct bicycle connection from Downtown to the Recreation Trail.

Program d.1.3. Plan and support a continuous east west Class I/Class II bikeway that connects the Monterey Peninsula with Salinas.

6.9.1.2. Bicycle Plan

The City of Monterey adopted its Bicycle Plan in 2009, in response to implementing the Mayor's signing of the Urban Climate Accords and the US Mayors Climate Agreement. The Bicycle Plan presents the following proposed bikeways that will improve regional connectivity. Chapter 3 presents the City of Monterey Bicycle Plan in more detail.

- Munras Avenue between El Dorado Road and Fremont Street
- Abrego Street between Fremont Street and Del Monte Avenue
- Washington Street between Pearl Street and the Recreation Trail

6.9.2. Existing Conditions

The City of Monterey has 29,800 residents, two percent of whom bicycle to work. Many employment opportunities are located along Washington Street and Fremont Street. Located at the south end of Monterey Bay, the City of Monterey is also a scenic destination for recreational bicyclists, ranging from beginners to the experienced. The City's bicycle network totals 11.7 miles and is comprised of two miles of Class I, nine miles of Class II and one mile of Class III bikeways. **Figure 6-10** presents the existing bikeways in the City of Monterey.

During the years 2004 to 2009, 123 bicycle related collisions occurred in the City of Monterey; this is noticeably more collisions than other communities in the County. The majority of the bicycle related collisions occurred in downtown Monterey. **Figure 4-7** in Chapter 4 presents the bicycle related collisions in the City of Monterey.

6.9.3. Bikeway Projects

Figure 6-10 presents the bikeway projects in the City of Monterey.

Figure 6-10: City of Monterey Bikeway Projects

Table 6-16 presents the bikeway projects in the City of Monterey. The projects include a number of Class 2 Bike Lanes where right-of-way allows. Class 3 Bike Routes complete the connections across the City. The City of Monterey has also identified a Bike Boulevard network along Laine Street, Van Buren Street, Pearl Street and Aguajito Road. Those identified in italics and with an asterisk are the top ranking three projects in the City of Monterey.

Table 6-16: City of Monterey Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Ryan Ranch Park MUP	1	Park Rd	Harris Ct	0.32	$207,900	138
Soledad - Viejo	1	Munras Ave	Existing MUP	0.70	$456,800	139
Van Buren St Path	1	Seeno St	near Artillery St	0.05	$29,700	239
Camino Aguajito	2	Monterey Peninsula Recr-eational Trail	Fremont St	0.47	$20,400	89
Fairground Rd	2	Airport Rd	Garden Rd	0.45	$19,300	110
Foam St	2	David Ave	Lighthouse Ave	0.79	$33,800	242
Fremont Blvd	2	Canyon del Rey Blvd	Casa Verde	0.70	$30,100	96
Fremont St	2	Abrego St	Camino Aguajito	0.55	$23,700	81
Herman - Madison Uphill Bike Boulevard Route	2	Via del Rey	Pacific St	0.35	$15,000	247
Joselyn Canyon Rd	2	Hwy 68	Mark Thomas Rd	1.47	$63,400	132
Lighthouse Ave	2	David Ave	Private Bolio Rd	0.74	$31,900	243
Munras Ave	2	Soledad Dr	El Dorado St	0.80	$34,400	100
Olmsted Rd	2	Hwy 68	Garden Rd	0.10	$4,200	178
Polk St Bike Boulevard Route	2	Pacific St	Pearl St	0.05	$2,100	113
Polk St Bike Boulevard Route	2	Alvarado St	Hartnell St	0.10	$4,300	214
Soledad - Viejo	2	Munras Ave	Existing MUP	0.69	$29,700	133
Soledad Dr	2	Pacific St	Munras Ave	0.08	$3,400	257
Van Buren St	2	Scott St	Seeno St	0.05	$2,200	232
York Rd	2	Hwy 68	South Boundary Rd	0.37	$15,700	137
3rd St Bike Boulevard Route	3	Sloat Ave	Camino Aguajito	0.24	$700	246
*Abrego St**	*3*	*El Dorado St*	*Webster St*	*0.29*	*$900*	*78*
*Abrego St**	*3*	*Webster St*	*Del Monte Ave*	*0.29*	*$900*	*80*
Airport Rd - Euclid Ave	3	Casanova Ave	Fremont St	0.69	$2,100	271
Alvarado St Bike Boulevard Route	3	Pearl St	Monterey Peninsula Recreational Trail	0.37	$1,100	234
Casa Verde Way	3	Hwy 1	Del Monte Ave	0.22	$700	86
Casa Verde Way	3	Fairground Rd	Hwy 1	0.28	$800	98
Casanova Ave	3	Montecito Ave	Euclid Ave	0.73	$2,200	265
David Ave	3	Cannery Row	Hwy 68	1.32	$4,000	108
English Ave	3	Del Monte Ave	Montecito Ave	0.22	$700	254
Fairground Rd	3	Garden Rd	Montsalas Dr	0.07	$200	90

Project	Class	Start	End	Miles	Cost Estimate	Rank
Franklin St	3	Van Buren St	Bowen St	0.65	$2,000	245
Herman - Madison Downhill Bike Boulevard Route	3	Via del Rey	Pacific St	0.37	$1,100	241
Hoffman Ave	3	Laine St	Monterey Peninsula Recreational Trail	0.28	$800	236
Jefferson-Skyline Route Bike Boulevard Routes	3	Alvarado St	Hwy 68	2.57	$7,700	95
Laine St Bike Boulevard Route	3	David Ave	Lighthouse Ave	0.82	$2,400	250
Montecito Ave	3	Casa Verde Way	English Ave	0.43	$1,300	253
Oliver St	3	Van Buren St	Monterey Peninsula Recreational Path	0.18	$500	235
Pacific St	3	Pacific St Bike Lane at Martin St	Madison St	0.23	$700	237
Pacific St	3	Soledad Dr	Pacific St Bike Lane	0.70	$2,100	277
Pearl-Jefferson-Johnson-Skyline Bike Boulevard Route	3	Camino Aguajito	Alvardo St	0.69	$2,100	85
Van Buren St Bike Boulevard Route	3	Madison St	Scott St	0.45	$1,300	238
*Hwy 1 Ramp and Aguajito Rd Signage**	*Signs*	*Aguajito Rd*	*Aguajito Rd*			*15*

Table 6-17 presents the bikeway project summary of bikeway miles and costs. Implementation of the projects would add over 20 miles of bikeways and would cost an estimated $1 million.

Table 6-17: City of Monterey Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	1.07	$694,400
2	7.76	$333,600
3	12.09	$36,300
Total	**20.92**	**$1,064,300**

6.10. Pacific Grove

6.10.1. Planning and Policy Context

6.10.1.1. General Plan

The City of Pacific Grove adopted its most recent general plan in 1994. Many of the policies and programs related to bicycling in Pacific Grove support the improvement of the Monterey Peninsula Recreational Trail. Other policies most relevant to this Countywide BPP are listed below.

Program GG	Coordinate bicycle and pedestrian route planning with the City of Monterey, the Pacific Grove Unified School District, Monterey County, the State Department of Parks and Recreation, the U.S. Coast Guard, and the Monterey Peninsula Regional Park District.
Policy 27	Pursue the acquisition and development of the remainder of the Southern Pacific right-of-way within Pacific Grove for recreational, trail, and open space use.

6.10.1.2. Coastal Trails Master Plan

The City of Pacific Grove adopted a Coastal Parks Plan in 1998. Goal 6 of the plan sets forth a provision for the City to establish a safe and continuous coastal bikeway by implementing phase III of the city's bikeways plan. As of the development of this Plan, the City has a continuous coastal bikeway comprised of Class I, II and III bikeway designations.

6.10.2. Existing Conditions

The City of Pacific Grove has 15,000 residents, two percent of whom bicycle to work. Employment opportunities are located along Lighthouse Avenue, in downtown. Recreational bicyclists from beginner to experienced also bicycle in Pacific Grove, many of whom use the Monterey Recreational Trail along the Bay. Pacific Grove's bicycle network totals 5.9 miles, comprised of 2.3 Class II and 3.6 Class III. The Monterey Bay Scenic Trail also runs through Pacific Grove and is in Caltrans jurisdiction. **Figure 6-11** presents the existing bikeways in Pacific Grove.

During the years 2004 through 2009, 41 bicycle related collisions occurred in Pacific Grove, which was slightly above the county average. The collisions occurred throughout the City but were more prevalent on Ocean View Road and Sunset Drive. **Figure 4-7** in Chapter 4 presents the bicycle related collisions in Pacific Grove.

6.10.3. Bikeway Projects

Figure 6-11 presents the bikeway projects in Pacific Grove.

Figure 6-11: Pacific Grove Bikeway Projects

Table 6-18 presents the Pacific Grove bikeway projects. The projects include connections across the City connecting residents to downtown and to the Bay. Those identified in italics and with an asterisk are the top ranking three projects in the Pacific Grove.

Table 6-18: Pacific Grove Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
*Ocean View Ave**	*2*	*Asilomar Blvd*	*17 Mile Dr*	*2.31*	*$99,100*	*17*
Pine Ave	2	Alder St	Eardley Ave	1.12	$48,100	268
17 Mile Dr	3	Sunset Dr	Jewell Ave	0.81	$2,400	116
*17 Mile Dr**	*3*	*Hwy 68*	*840' S of Hwy 68*	*0.16*	*$500*	*101*
19th St - Park St	3	Jewell Ave	Hwy 68	0.99	$3,000	270
Asilomar Blvd	3	Sunset Dr	Sinex Ave	0.23	$700	118
Asilomar Blvd	3	Sinex Ave	Lighthouse Ave	0.87	$2,600	119
Asilomar Blvd	3	Lighthouse Ave	Ocean View Blvd	0.37	$1,100	122
Jewell Ave	3	Lighthouse Ave	17th St	0.78	$2,300	272
Lighthouse Ave	3	Ocean View Blvd	Asilmoar Blvd	0.22	$600	263
Lighthouse Ave	3	17 Mile Dr	Asilomar Blvd	0.47	$1,400	276
Pine Ave	3	Eardley Ave	David Ave	0.05	$100	237
Pine Ave	3	Alder St	17 Mile Dr	0.16	$500	302
*Sinex Ave**	*3*	*Asilomar Blvd*	*19th St*	*0.90*	*$2,700*	*111*

Table 6-19 presents the bikeway project summary miles and costs. Implementation of the bikeway projects would add nearly 10 miles to the bicycle network and would cost an estimated $165,000.

Table 6-19: Pacific Grove Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
2	3.42	$147,200
3	6.02	$17,900
Total	**9.44**	**$165,100**

6.11. Salinas

- The Salinas Bicycle and Pedestrian Advisory Committee reviews bicycle-related issues and provides input on bicycle programs/projects within Salinas. Salinas Bicycle and Pedestrian Advisory Committee also promotes bicycling through special events held within the City and/or County, and supports educational and enforcement activities to enhance bicycle safety throughout the community.

6.11.1. Planning and Policy Context

6.11.1.1. General Plan

The City of Salinas adopted its most current General Plan in 2002. The following policy and program item directly address bicycle planning in Salinas.

Policy COS 7.11 Supports the development of trails along easements, utility corridors, drainage corridors and other natural features.

Implementation Program item C-12 identifies the Public Works Department to continue to implement the Bikeways Plan.

The City's website, below, provides the entire General Plan.

http://www.ci.salinas.ca.us/services/commdev/generalplan.cfm

6.11.1.2. Bikeways Plan

The Salinas 2002 Bikeways Plan reports 64 miles of existing bikeways and 26 miles of proposed bikeways. The City's website, below, provides an updated map with the remaining unconstructed bikeways.

http://www.ci.salinas.ca.us/leadership/boards/bicycle/BicycleCommittee.cfm

The goals set forth by the Salinas Bikeways Plan most relevant to this Plan are:

- Work with the Agency to develop a bikeway from southwest Salinas to the Monterey Peninsula
- Improve bikeway connections between north, south and east Salinas

6.11.2. Existing Conditions

Salinas is the most populous city in Monterey County, with over 150,000 residents. Commercial land use, where many bicyclist destinations are located, is mostly in the areas adjacent to Main Street and Alisal Street. These areas represent regional attractions for motorists, pedestrians and bicyclists. **Figure 6-12** presents the existing bikeways in Salinas.

The 2000 US Census reports one percent of Salinas residents bike to work, which is the typical percent reported by other cities in the County. While 35 percent of bicycle related collisions in Monterey County occurred in Salinas, the City has relatively average collision rate (collisions per residents) compared to the County as a whole. **Figure 4-6** in Chapter 4 presents the bicycle-related collision locations in Salinas for the years 2004-2009.

6.11.3. Bikeway Projects

Figure 6-12 presents the Salinas bikeway projects.

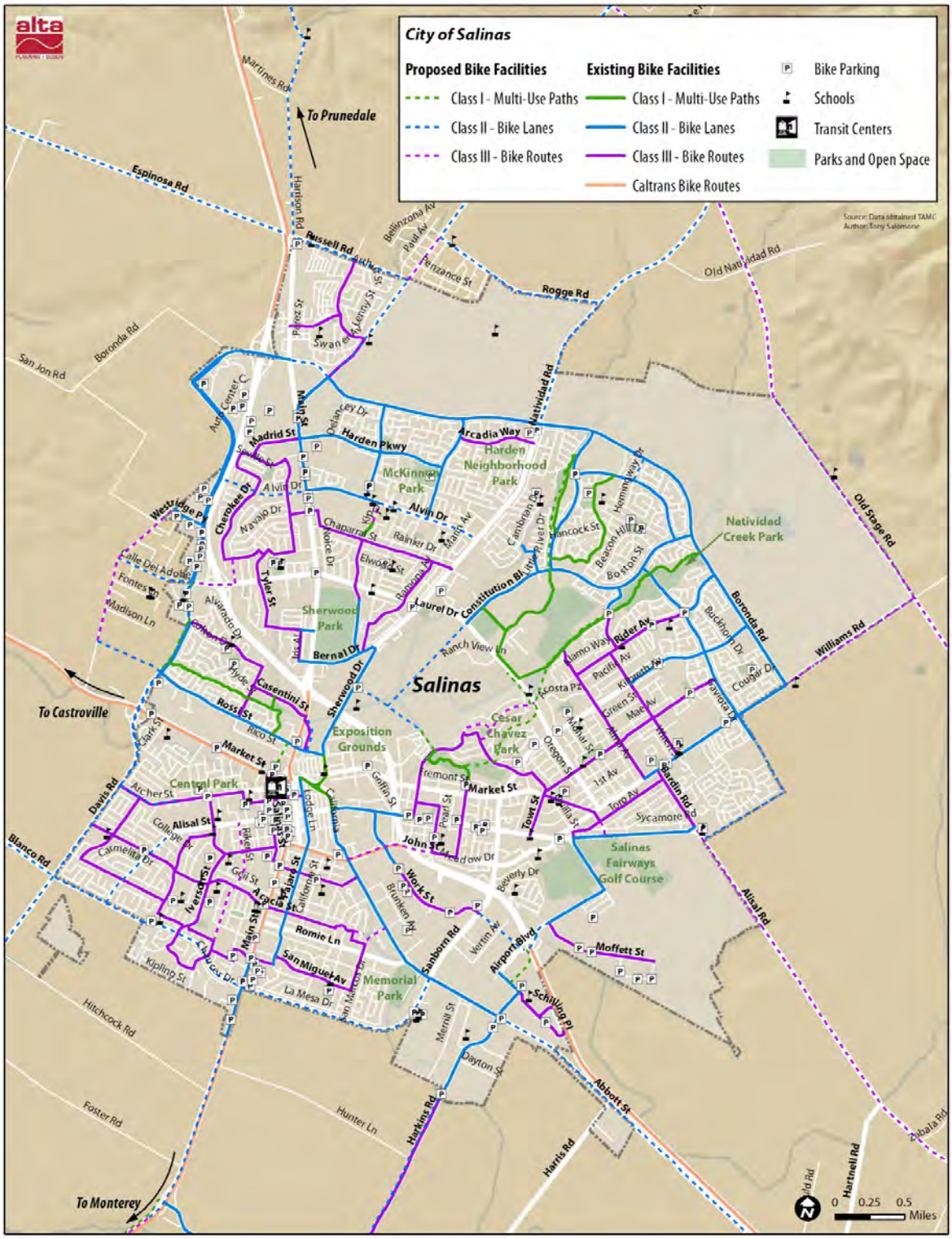

Figure 6-12: Salinas Bikeway Projects

Table 6-20 presents the Salinas bikeway projects. The projects include filling in a number of bikeway network gaps and improving connections across the City. Those identified in italics and with an asterisk are the top ranking three projects in the Salinas.

Table 6-20: Salinas Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Airport Blvd Path	1	Airport Blvd	Hansen St	0.30	$196,700	264
Cesar Chavez Park – Natividad Creek Path	1	Cesar Chavez Park	Natividad Creek	1.08	$702,800	112
Davis Rd Median Path	1	Larkin St	Calle del Adobe	0.30	$195,500	251
Davis Rd Path	1	Larkin St	Rossi St	0.41	$266,500	26
E Laurel Path	1	Sanborn Rd	650 ft south of Ranch View Ln	0.29	$188,500	300
*Gabilan Creek**	*1*	*Danbury St*	*Constitution Blvd*	*0.88*	*$569,300*	*10*
Madeira Ave Path	1	Madeira Ave	Yorkshire Way	0.18	$117,700	126
Martella St Path	1	Rossi St	Station Pl cul-de-sac	0.21	$134,300	77
Natividad Creek	1	Boronda Rd	Las Casitas Dr	0.59	$385,000	163
Airport Blvd	2	Terven Ave	de la Torre	0.12	$5,300	103
Airport Blvd	2	Moffett St	existing bike lane on Airport Blvd	0.13	$5,700	104
Alisal St	2	Blanco Rd	College Dr	0.65	$27,900	25
Alvin Dr	2	Main St	Hwy 101	0.61	$26,300	109
Alvin Dr	2	Kip Dr	Natividad Rd	0.75	$32,400	114
Boronda Rd	2	San Juan Grade Rd	Main St	0.32	$13,700	117
Calle del Adobe	2	Davis Rd	Boronda Rd	0.57	$24,600	27
Casentini Bridge	2	Main St	Rossi St	0.24	$10,100	97
*Central Ave**	*2*	*David Rd*	*Hartnell College*	*0.45*	*$19,200*	*11*
Constitution Blvd Extension	2	Laurel Dr	Proposed Sherwood Pl Extension	0.83	$35,600	131
Davis Rd	2	Laurel Dr	Larkin St	0.60	$25,700	99
Freedom Pkwy + Extension	2	Tuscany Blvd	Alisal Rd	1.15	$49,200	37
Hemingway Dr	2	Nantucket Blvd	Boronda Rd	0.17	$7,500	175
Rossi St Extension	2	Davis Rd	Boronda Rd	0.51	$22,000	170
Russell Rd	2	Main St	San Juan Grade Rd	0.89	$38,100	40
*San Juan Grade Rd**	*2*	*Russell Rd*	*Boronda Rd*	*0.91*	*$39,200*	*9*
Sherwood Pl Extension	2	Sherwood Dr	Yorkshire Way	0.57	$24,500	125
Terven Ave	2	Sanborn Pl	Airport Blvd	0.42	$18,200	258
Adams St	3	Tulane St	Laurel Dr	0.18	$500	269
Alisal Rd	3	Bardin Rd	City Limits	0.86	$2,600	38
Boronda Rd	3	Proposed Rossi St Extension	Davis Rd	1.15	$3,500	115
Calle del Adobe	3	Adams St	Davis Rd	0.31	$900	92
John St	3	Abbott St	Wood St	0.63	$1,900	87
Kip Dr	3	Block Ave	Alvin Dr	0.14	$400	85

Project	Class	Start	End	Miles	Cost Estimate	Rank
Los Palos Dr	3	Manor Dr	Abbott St	0.20	$600	93
Madeira Ave	3	Circle Dr	St Edwards Ave	0.25	$700	130
Maplewood Dr	3	Grove St	Sierra Dr	0.07	$200	248
Market St	3	Cross Ave	Alisal St	0.11	$300	107
Riker St	3	Woodside Dr	Alisal St	0.90	$2,700	244
St Edwards Ave	3	Circle Dr	Laurel Dr	0.51	$1,500	129

Table 6-21 presents the bikeway project summary miles and costs. Implementation of the bikeway projects would add over 21 miles to the bicycle network and would cost an estimated $3.2 million.

Table 6-21: Salinas Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	4.24	$2,756,300
2	9.89	$425,200
3	5.31	$15,800
Total	**21.19**	**$3,197,300**

6.12. Sand City

6.12.1. Planning and Policy Context

6.12.1.1. General Plan

Sand City adopted its most recent General Plan in 2002. The General Plan's Circulation element identifies a proposed Class I path between La Playa Avenue and Tioga Avenue. The Circulation Element sets forth the following policies most directly related to this Countywide Bicycle and Pedestrian Plan.

- Facilitate the coast-side completion of the remaining segment of the coastal bicycle trail connecting Marina to the Monterey Peninsula in conjunction with project approvals in the North of Tioga Coastal district.
- Include bicycle and pedestrian facilities within any new connection between the southeast portion of the city and the South of Tioga Coastal district or improvement projects involving the Tioga Avenue overpass and Playa Avenue undercrossing.
- A complete, integrated program for future rail, bike lanes, sidewalks and boardwalks, parking and shuttle service should be pursued by the City to connect all districts with the coastal area and to transport visitors to the beach.

6.12.2. Existing Conditions

Sand City is the smallest city in Monterey County, with 200 residents, 21 percent of whom bicycle to work. Regional commercial land use makes up most of Sand City, representing many employment opportunities. Sand City's bikeway mileage totals 0.3 miles, all of which are designated Class II bike lanes. The Monterey Bay Scenic Trail also runs along Highway 1 and is in Caltrans jurisdiction. **Figure 6-13** presents the existing bikeways in Sand City.

During the years 2004 through 2009, four bicycle related collisions occurred in Sand City, all of which occurred in 2009, resulting the highest collision rate in the county. The majority of collisions occurred on Del Monte Boulevard, Fremont Boulevard and Broadway Avenue. **Figure 4-7** in Chapter 4 presents the bicycle related collisions.

6.12.3. Bikeway Projects

Figure 6-13 presents the bikeway projects in Sand City.

Figure 6-13: Sand City Bikeway Projects

Table 6-22 presents the Sand City bikeway projects. The replacement of lighting along the Sanctuary Scenic Trail is included in the Sand City pedestrian projects (Section The projects include connections across the city as well as recreational facilities including a segment of the Sanctuary Scenic Trail. Those identified in italics and with an asterisk are the top ranking three projects in Sand City.

Table 6-22: Sand City Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Peninsula Path	1	Vista del Mar St	Peninsula Trail near La Playa Ave	0.19	$121,400	120
*Sanctuary Scenic Trail Segment 4B**	*1*	*Tioga Ave*	*Monterey Peninsula Recreational Trail*	*0.42*	*$292,600*	*22*
*UPRR RWT**	*1*	*Tioga Ave*	*La Playa Ave*	*0.22*	*$140,300*	*79*
La Playa Ave	2	Metz Rd	Noche Buena St	0.49	$20,900	83
Tioga Ave	2	Sand Dunes Dr	Metz Rd	0.18	$7,800	91
California Ave	3	Contra Costa St	Tioga Ave	0.47	$1,400	259
Contra Costa St	3	California Ave	Del Monte Blvd	0.23	$700	249
*Tioga Ave**	*3*	*Metz Rd*	*Del Monte Blvd*	*0.15*	*$400*	*82*

Table 6-22 presents the bikeway project summary miles and costs. Implementation of the bikeway projects would add 2.34 miles to the bicycle network at an estimated cost of $585,500.

Table 6-23: Sand City Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	0.82	$554,300
2	0.67	$28,700
3	0.85	$2,500
Total	**2.34**	**$585,500**

6.13. Seaside

6.13.1. Planning and Policy Context

6.13.1.1. General Plan

The City of Seaside adopted its most recent general plan in 2004. The general plan sets forth the following policies and programs that support bicycling. Implementation Plan C-3.4.2 requires new development and redevelopments to accommodate bicyclists and identifies bicycle improvement opportunities on Del Monte, Fremont and Broadway.

6.13.1.2. Bicycle Plan

The City of Seaside adopted its current Bicycle Transportation Plan in 2007. The recommendations in the plan include provisions for new developments to install bicycle boulevards and for Class II bike lanes on Eucalyptus Drive, Broadway Avenue and Monterey Road as well as Class III bike routes on La Salle, Military and Hilby Avenues.

6.13.2. Existing Conditions

The City of Seaside has 31,800 residents, one percent of whom bicycle to work. Regional and heavy commercial land use is mostly located between Del Rey Avenue and Fremont Boulevard. Seaside's bicycle network totals 5.7 miles, with 3.4 miles of Class I and 2.3 miles of Class II bikeways. **Figure 6-14** presents the existing bikeways in Seaside.

During the years 2004 through 2009, 88 bicycle related collisions occurred in Seaside, resulting a high collision rate per number of residents relative to the entire county. **Figure 4-7** in Chapter 4 presents the bicycle related collisions in Seaside.

6.13.3. Bikeway Projects

Figure 6-14 presents the bikeway projects in Seaside.

Figure 6-14: Seaside Bikeway Projects

Table 6-24 presents the Seaside bikeway projects. The projects include bikeways that cross the City connecting residents to schools, retail and recreation. Those identified in italics and with an asterisk are the top ranking three projects in Seaside.

Table 6-24: Seaside Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Gen Jim Moore Path	1	Normandy Rd	3rd St	1.30	$845,000	213
Peninsula Path Connection	1	Laguna Grande Regional Park	Laguna del Rey	0.06	$39,900	71
1st St	2	Beach Range	2nd Ave	0.43	$18,500	351
6th Division Circle	2	Gigling Rd	Monterey Rd	0.10	$4,200	228
7th Ave	2	3rd St	Gigling Rd	0.75	$32,200	200
*Broadway**	*2*	*Del Monte Blvd*	*Mescal St*	*1.58*	*$67,900*	*6*
Canyon del Rey Blvd	2	Fremont Blvd	Del Monte Blvd	0.67	$28,800	94
Coe Ave	2	Hibiscus Heights	General Jim Moore Blvd	0.72	$31,000	151
*Del Monte Blvd**	*2*	*Canyon del Rey Blvd*	*Broadway*	*0.20*	*$8,700*	*20*
Eucalyptus Rd	2	Parker Flats	General Jim Moore Blvd	1.55	$66,600	220
General Jim Moore	2	Watkins Gate Rd	Broadway	0.42	$18,000	36
General Jim Moore	2	City Limits	Coe Ave	0.02	$900	196
Gigling Rd	2	7th Ave	6th Division Cir	1.11	$47,800	204
Light Fighter Dr	2	Gen Jim Moore Blvd	Hwy 1	0.66	$28,200	340
Melmedy Rd	2	Gigling Ave	General Jim Moore Blvd	0.34	$14,600	338
Monterey Rd	2	6th Division Cir	Buna Rd	1.59	$68,400	53
Parker Flats	2	Gigling Rd	Eucalyptus Rd	1.16	$49,700	205
*Del Monte Blvd**	*3*	*Broadway*	*Fremont Blvd*	*1.17*	*$3,500*	*19*
Fremont Blvd	3	Military Ave	Hwy 1 Ramp	0.16	$500	88
Hilby Ave	3	Canyon del Rey Blvd	Watkins Gate Rd	1.55	$4,600	260
Hwy 1 Crossing	3	Fremont Blvd	Monterey Rd	0.03	$100	84
La Salle Ave	3	Del Monte Blvd	Nadina St	1.23	$3,700	275
Military Ave	3	Fremont Blvd	Paralta Ave	1.25	$3,700	278
Nadina St + Extension	3	La Salle Ave	Proposed Gen Jim Moore MUP	0.23	$700	191
Noche Buena St	3	Plumas Ave	Military Ave	1.69	$5,100	262
Yosemite St	3	Hilby Ave	Military Ave	1.34	$4,000	292

Table 6-25 presents the Seaside project summary miles and costs. Implementation of the projects would add nearly 22 miles to the bikeway network and would cost an estimated $1,396,300.

Table 6-25: Seaside Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	1.36	$884,900
2	11.29	$485,500
3	8.66	$25,900
Total	**21.31**	**$1,396,300**

6.14. Soledad

6.14.1. Planning and Policy Context

6.14.1.1. General Plan

The City of Soledad adopted its most recent general plan in 2005. The Circulation Element sets forth a set of bicycle supporting policies mostly addressing design issues. Policy L-31 is most relevant to this Countywide BPP, stating that the downtown area along First Street shall be developed as a physical and social center. Pedestrian and bicycle access shall to downtown be improved. The general plan also identifies the closure of Bryant Canyon Road to automobiles for non-motorized purposes.

6.14.2. Existing Conditions

The City of Soledad has 11,300 residents, one percent of whom bicycle to work. Employers in Soledad are located in downtown along Front Street. The existing bicycle network in Soledad totals 8.7 miles, all of which are Class II bicycle lanes connecting to Front Street in downtown and on most major roadways except Front Street. During the years 2004 through 2009, 15 bicycle related collisions occurred in Soledad, resulting in a lower than average collision rate relative to the entire county. **Figure 4-8** in Chapter 4 presents the bicycle related collision locations in Soledad.

6.14.3. Bikeway Projects

Figure 6-15 presents the bikeway projects in Soledad.

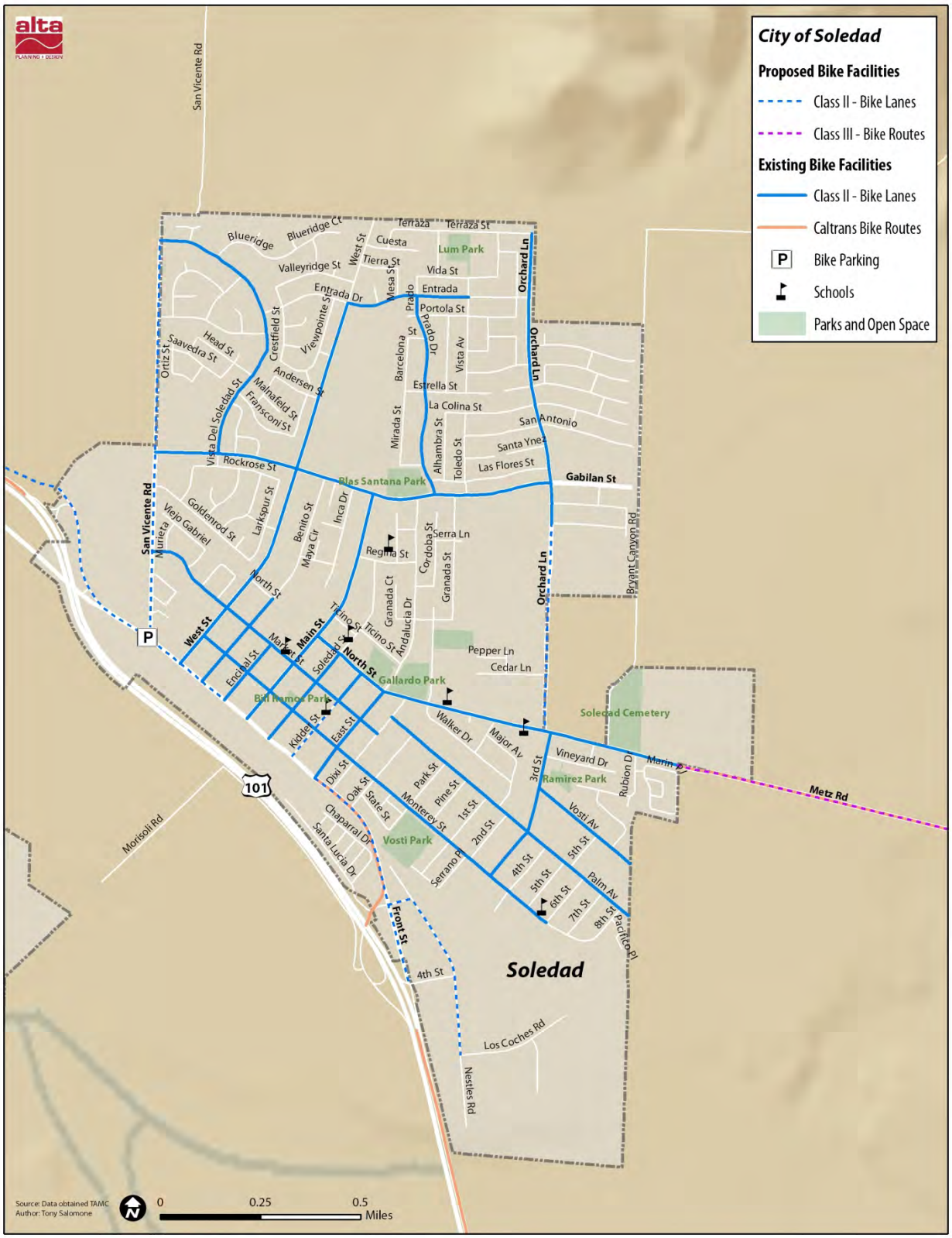

Figure 6-15: Soledad Bikeway Projects

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Table 6-26 presents the Soledad bikeway projects. The projects include completing a number of connections across the City. Those identified in italics and with an asterisk are the top ranking three projects in Soledad.

Table 6-26: Soledad Bikeway Recommendations

Project	Class	Start	End	Miles	Cost Estimate	Rank
*Front St**	*2*	*East St*	*4th St*	*0.59*	*$25,200*	*28*
*Kidder St**	*2*	*Front St*	*Market St*	*0.18*	*$7,800*	*102*
Nestles Rd	2	Los Coches Rd	Front St	0.48	$20,700	368
*Orchard Lane**	*2*	*Metz Rd*	*Asilomar Rd*	*0.52*	*$22,300*	*140*
San Vincente Rd	2	Vista del Sol Rd	Hwy 101	1.00	$42,800	141

Table 6-27 presents the Soledad project summary miles and costs. Implementation of the projects would add over two miles to the bikeway network and would cost an estimated $118,800.

Table 6-27:Soledad Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
2	2.76	$118,800
Total	**2.76**	**$118,800**

6.15. Caltrans

A number of bikeways in this countywide plan are in the jurisdiction of the California Department of Transportation (Caltrans). These bikeway projects will be a critical part of the countywide network. Caltrans has jurisdiction over the State Routes in Monterey County. Local jurisdictions and the County should coordinate with Caltrans to develop the bikeways listed in **Table 6-28**.

Table 6-28: Caltrans Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
Hilltop MUP (West of State Highway 68)	1	Spreckels Blvd	Reservation Rd	0.89	$576,300	211
*Hwy 68**	*2*	*Joselyn Canyon Rd*	*San Benancio Rd*	*8.17*	*$351,300*	*7*
*Hwy 68**	*2*	*Prescott Ln*	*Presidio Blvd*	*0.48*	*$20,800*	*35*
Crazy Horse Canyon Rd - Echo Valley Rd	3	Hwy 101	Encho Valley Rd/Tustin Rd	0.87	$2,600	197
El Camino Real - 101 - Patricia Ln	3	El Camino Real	Espinosa Rd	0.64	$1,900	184
Hwy 101 Overpass	3	Alta St	Tavernetti Rd	0.27	$800	52
*Hwy 68 at Salinas River Bridge widening**	*3*	*South of Salinas Creek*	*North of Salinas Creek*	*0.20*	*$15,800,000*	*16*

Table 6-29 presents the Caltrans project summary miles and costs. Implementation of the projects would add over 11 miles to the bikeway network and would cost an estimated $16.8 million.

Table 6-29: Caltrans Bikeway Project Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	1.09	$576,300
2	8.65	$372,100
3	1.78	$15,805,300
Total	**11.52**	**$16,753,700**

6.16. California State Parks

Segments of the Sanctuary Scenic Trail are in the jurisdiction of California State Parks. It is recommended local jurisdictions and the County coordinates with California State Parks on the development of the bikeways listed in **Table 6-30**.

Table 6-30: California State Parks Bikeway Projects

Project	Class	Start	End	Miles	Cost Estimate	Rank
*Sanctuary Scenic Trail Segment 5**	*1*	*Ford Ord State Park*	*Hwy 1 and Marina Dr*	*4.85*	*$982,800*	*66*
*Sanctuary Scenic Trail Segment 5A**	*1*	*Ford Ord State Park*	*Hwy 1 and Marina Dr*	*1.74*	*$152,000*	*210*
*Sanctuary Scenic Trail Segment 6**	*1*	*Marina Dr and Hwy 1*	*Dunes Dr and Reservation Rd*	*1.67*	*$90,200*	*187*
Sanctuary Scenic Trail Segment 16A	1	Jetty Rd	Trafton Rd	3.61	$9,940,000	393
Sanctuary Scenic Trail Segment 16B	1	Jetty Rd	Trafton Rd	3.83	$15,796,500	394

Table 6-31 presents the State Park project summary miles and costs. Implementation of the projects would add over 15 miles to the bikeway network and would cost an estimated $27 million.

Table 6-31: California State Parks Bikeway Projects Summary Miles and Costs

Class	Sum of Miles	Sum of Cost Estimate
1	15.70	$26,961,500
Total	**15.70**	**$26,961,500**

7. Pedestrian Improvements

While walking is the least expensive and for some, the only transportation mode, implementing, building, and maintaining a high quality pedestrian system requires comprehensive planning and long term funding. Everyone who lives in and visits Monterey County is a pedestrian; whether they walk to work, walk to school, walk to transit, or walk from their car to a shopping destination. Walking trips form the foundation of our transportation system and provide connectivity to automobile and transit modes. For these reasons, this 2011 Transportation Agency for Monterey County (Agency) Bicycle and Pedestrian Plan includes the following recommendations to focus investment in capital projects to improve walking:

- Definitions for countywide pedestrian priority areas
- Locally-identified pedestrian projects for potential implementation in the short-term
- Evaluation criteria for use in future Agency calls-for-projects

The recommended countywide pedestrian priority area definitions provide the Agency with a starting point for focusing scarce financial resources in the areas where people walk most often and where people need to walk but encounter significant barriers. First and foremost, these pedestrian priority areas emphasize investment in areas where people walk frequently including downtowns, school zones, transit stops, and regional trails. In addition to these areas with concentrated walking trips, investment should also be focused in areas where people frequently need to walk but encounter significant gaps in the pedestrian network due to lack of facilities and high-speed, high volume traffic. These areas include crossings of major arterials, at-grade highways, and interchanges in areas where there are pedestrian attractors and generators.

This plan includes locally-identified pedestrian projects that reflect local priorities at the time that this Plan was prepared. These projects should be considered for short-term implementation provided that they fall within the recommended countywide pedestrian priority areas and that they rank favorably according to the additional criteria recommended below. These projects are not guaranteed funding by virtue of listing in this Plan, but are considered likely candidate projects.

Finally, this plan recommends preliminary evaluation criteria that can be refined and adopted by the Agency for use in future evaluation of pedestrian projects submitted by local jurisdictions in response to call-for-projects under various funding programs including TDA Article 3 and any future sales tax measures.

7.1. Countywide Pedestrian Priority Areas

Pedestrian trips are and will continue to be concentrated in key geographic areas in Monterey County, as introduced above, thus it is important to focus investment of scarce resources in these geographic areas. AMBAG's *Envisioning the Monterey Bay Area: A Blueprint for Sustainable Growth and Smart Infrastructure Blueprint* (AMBAG Blueprint) provides a regional, consensus-based starting point for focusing pedestrian investment for Monterey County in the short-term. The AMBAG Blueprint Priority Areas capture existing concentrations of residential land use, commercial and employment centers, and industrial that offer potential for future infill development. These AMBAG Blueprint Priority Areas are outlined in greater detail below, under 8.1.1. The AMBAG Blueprint Priority Areas do not however capture other areas that are important for

Monterey County pedestrian infrastructure investment. This Plan adds the following additional geographic priorities to the AMBAG Blueprint Priority Areas: major barriers to walking, safe routes to school areas, and safe routes to transit connections.

7.1.1. AMBAG Blueprint Priority Areas

The AMBAG Blueprint describes how communities in Monterey County can grow in a sustainable fashion. The Blueprint's Sustainable Growth Scenario identifies priority areas for compact development centered around transit and job centers. **Figure 7-1** and **Figure 7-2** present the locations of these Priority Areas. The AMBAG Blueprint Priority Areas capture existing concentrations of residential land use, commercial and employment centers, and industrial that offer potential for future infill development.

AMBAG's specific methodology defines the priority areas by the following characteristics:

- Areas within one half mile of proposed transit stops for Monterey-Salinas Bus Rapid Transit line and TAMC's Light Rail Line
- Areas identified in City and County General Plans as:
    - Density of 15 dwelling units per acre or higher
    - Higher density commercial and industrial areas
- Areas were excluded if they:
    - Fell within an open space, agricultural or conservation easement area
    - Did not fall within at least one of the following: transit corridor, city boundary, sphere of influence or in an annexation area

Future pedestrian infrastructure investments in the Blueprint Priority Areas should at minimum include creation of a continuous pedestrian network through construction of new sidewalks and intersection improvements and crossing improvements. Sidewalks in these more dense areas with higher walking rates should ideally include a planted/furniture zone, a wide pedestrian through zone, and a frontage zone.

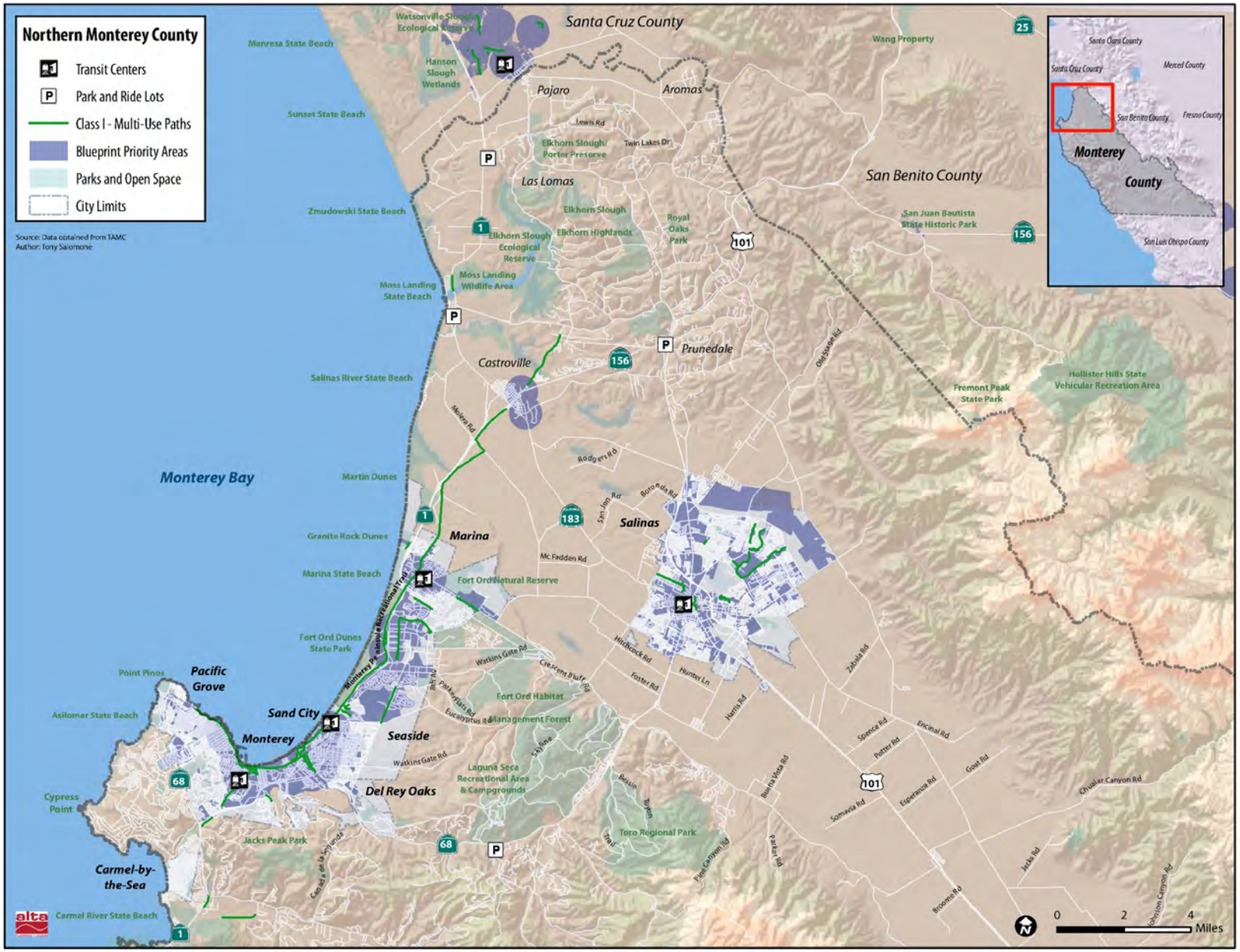

Figure 7-1: Northern County AMBAG Blueprint Priority Areas

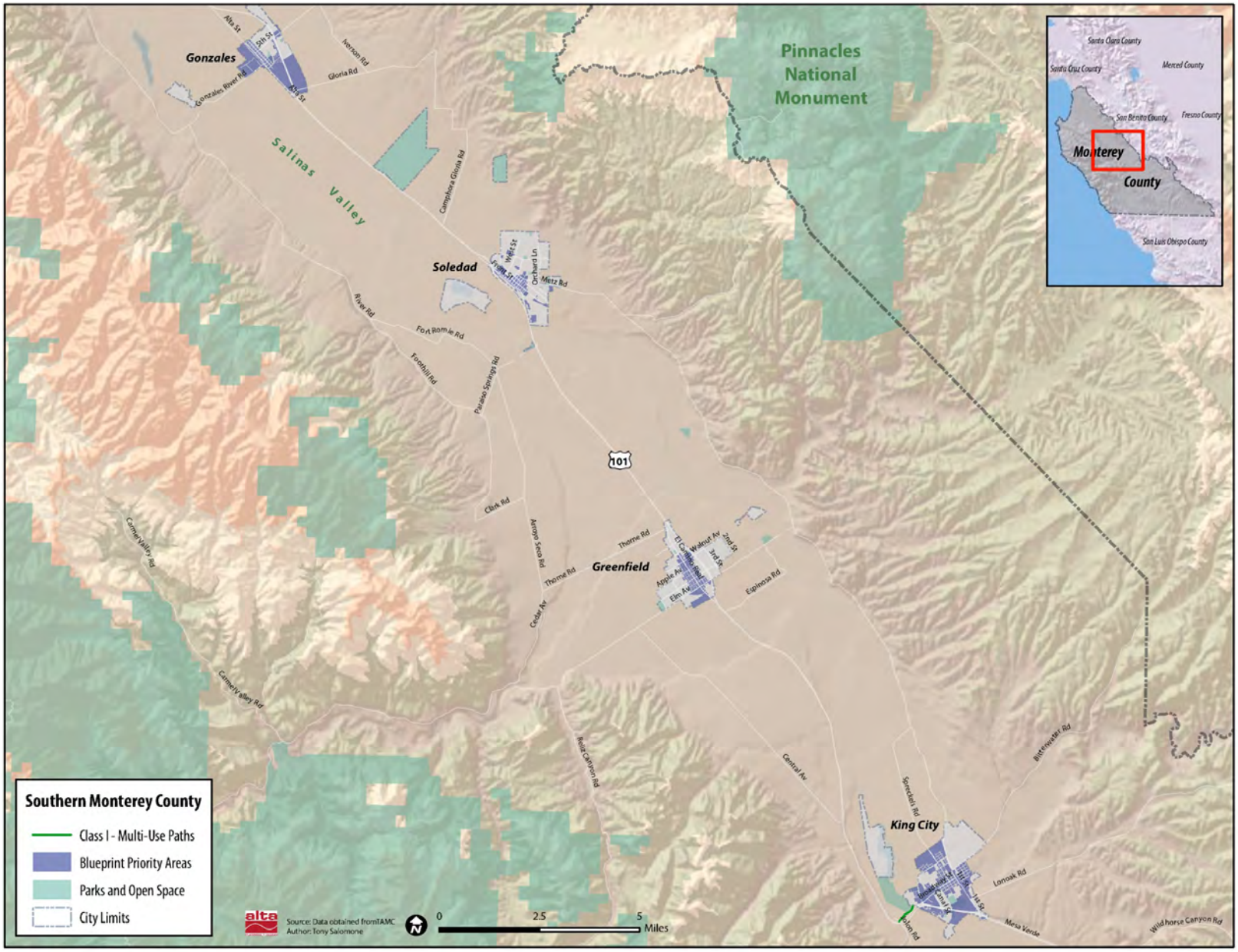

Figure 7-2: Southern County AMBAG Blueprint Priority Areas

7.1.2. Major Barrier Crossing Areas

Major barriers to walking that influence countywide pedestrian mobility and safety include both physical barriers, long and design barriers such as blocked or long unprotected crossings of State routes, railroads, and large arterial roadways.. Major barrier crossing improvements benefit both bicyclists and pedestrians. New or improved crossings for pedestrians are especially beneficial where they would connect pedestrian attractors and generators that are currently separated such as a crossing improvement or sidewalk gap closure project on a major arterial that connects a school site to an isolated neighborhood. Additionally, new or reconstructed freeway interchanges can benefit from additional design improvements to encourage safe convenient pedestrian and bicycle access or dedicated bicycle and pedestrian overcrossings.

Projects in these focus areas will generally consist of crossing and sidewalk improvements on major arterials designated in the Monterey County Regional Road System (Monterey County Regional Transportation Plan, 2010) pedestrian over and undercrossings at freeway interchange and ramp areas, improvements to at-grade arterial intersections, and pedestrian-related improvements to interchanges.

7.1.3. Safe Routes to School Areas

Safe Route to School improvements facilitate walking and bicycling to schools in Monterey County. A two-mile radius around a school is considered the highest priority for Safe Routes to School infrastructure improvements. Pedestrian improvements in Safe Routes to School areas will improve safety and help encourage children to walk to school.

Projects in these priority areas may include sidewalk installation along school access routes, development of improved pedestrian crossings, and traffic calming measures to help reduce motor vehicle speeds.

7.1.4. Safe Routes to Transit Areas

Access to transit can be a challenge for pedestrians and is a priority improvement for the Transportation Agency for Monterey County. In some cases, there are few or no safe and convenient walkways between residential areas and transit stops and stations. Intersections and crossings near station areas can be challenging and unpleasant to navigate because of large intersections and vehicular volume and speeds. Pedestrian improvements in transit areas will improve safety while making transit accessible to more people.

Priority Safe Routes to Transit should focus on the Monterey-Salinas Transit Regional Fixed Route service lines as determined in the Regional Transportation Plan, in addition to the Monterey-Salinas Bus Rapid Transit and Light Rail projects captured under AMBAG Blueprint. Projects within these priority areas will generally consist of sidewalks, wayfinding signage, intersection improvements within a half-mile radius of Amtrak and future light rail and a quarter-mile of major bus lines, and bus stop and transit station amenities that improve the pedestrian experience.

7.1.5. Regional Trails and Trail Access

Regional trail facilities meet important recreation and transportation needs for Monterey County residents. Trails are typically a significant investment for implementing agencies, and to protect this investment, trail use should be maximized by providing convenient pedestrian access and safe crossings of roadways.

Projects in these priority areas will consist of pathway construction, trailhead amenities, and crossing improvements along the Monterey Bay Sanctuary Trail and other trails of regional significance.

7.2. Project Lists and Categories

As part of this Plan's development, a request for priority pedestrian projects was sent to all communities within Monterey County. The following communities and agencies submitted projects.

- County of Monterey
- Carmel by the Sea
- Gonzales
- King City
- Marina
- Pacific Grove
- Salinas
- Seaside
- Soledad
- California State University Monterey Bay

Communities described submitted projects at varying levels of detail and costs and some communities did not provide project costs. In order to develop cost estimates for all of the submitted projects, **Table 7-1** lists the methodologies used to develop cost estimates where submitted project descriptions were incomplete or inconsistent.

Table 7-1: Project Cost Estimation by Submitted Project Description Level of Detail

Project Description Level of Detail	Project Cost Estimation Methodology
No cost estimate provided	Estimates developed using Table 7-2 planning level cost assumptions
Project cost included bicycle facilities	Cost of bicycle facilities estimated using Section 8.2.1 planning level cost assumptions and subtracted from total cost
No cost estimate provided and insufficient project detail	No cost estimate developed and noted with "NA"
Project described as "various locations" communitywide	Planning level cost estimate per mile provided
Sidewalks and paths	Cost estimates developed assuming project is needed on one street side, unless otherwise noted or if the community provided a cost estimate

In order to provide a summary of proposed pedestrian improvements on a countywide level, as presented in **Table 8-9 and Table 8-10**, each submitted project was categorized into a:

- **Sidewalk** – four feet wide and includes curb gutter.
- **Path**– soft-surface path and intended for multiple user types
- **Intersection Improvement** – includes engineering intensive improvements such as intersection reconfiguration and traffic signal installation.
- **Crossing Improvement** – includes striping and signage installation to improve pedestrian crossings.
- **Maintenance Project** – includes restriping and repairing multi-use paths.
- **Amenities Project** –includes lighting enhancements, benches and trash receptacles.

The City of Salinas also submitted non-infrastructure projects that were categorized into "planning" or "programs". The City of Pacific Grove submitted one project on school property, which was categorized as "school".

Table 7-2 presents pedestrian facility construction item costs used to calculate the cost of sidewalks and soft-surface walkways per mile. Lump sums are provided for pedestrian facilities that are primarily comprised of a few construction items.

Table 7-2: Pedestrian Facilities Cost Assumptions

Item	Quantity	Units	Unit Cost		Total
Sidewalk					
Concrete	21,120	SF	$15	$	316,800
Curb Gutter	5,280	LF	$35	$	184,800
Clearing Grubbing	21,120	SF	$1.50	$	31,680
Curb Ramp	8	EA	$4,000	$	32,000
Sidewalk per mile				**$**	**570,000**
Soft Surface Walkway					
Erosion Control	1	LS	$12,000	$	12,000
Clearing Grubbing	1	LS	$12,000	$	12,000
Earthwork	1	LS	$20,000	$	20,000
Aggregate Base	1,030	TON	$50	$	51,500
Decomposed Granite	700	TON	$95	$	66,500
Header Board	14,600	LF	$8	$	116,800
Driveway Modification	1,080	SF	$85	$	91,800
Tree/Stump Removal	40	EA	$600	$	24,000
Tree Replacement	1	LS	$65,000	$	65,000
Soft Surface Walkway per mile				**$**	**460,000**
Crosswalk	**1**	**EA**	**$1,000**	**$**	**1,000**
Raised Textured Crosswalk	**480**	**SF**	**$15**	**$**	**7,200**
Traffic Signal Reconfiguration	**1**	**EA**	**$250,000**	**$**	**250,000**
Pre Fabricated Bridge	**2,400**	**SF**	**$150**	**$**	**360,000**
Renovate Bridge	2,400	**SF**	$75	$	180,000
Maintenance (resurfacing)	**1**	**MI**	**$200,000**	**$**	**200,000**
Pedestrian Amenities					
Lighting	10	EA	5,000	$	50,000
Bench	2	EA	1,000	$	2,000
Trash Receptacle	2	EA	800	$	1,600
Pedestrian Amenities per mile				**$**	**53,600**

7.2.1. County of Monterey

Table 7-3 presents specific priority pedestrian improvement projects in unincorporated Monterey County. Project costs were provided by the County. **Figure 7-3**, **Figure 7-4** and **Figure 7-5** present maps of Moss Landing, Las Lomas and Carmel Valley, respectively. **Figure 7-3** shows the location of the proposed Monterey Bay Sanctuary Trail, which is discussed in **Chapter 6.**

Table 7-3: Monterey County Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Berry Rd	End	End	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.44	$2,110,000
Boling Rd	Las Lomas Dr	End	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.29	$1,650,000
Boronda Rd and Country Club Dr at Carmel Valley Rd	Intersection		Intersection Improvement Widen and reconfigure the intersections	NA	$1,017,000
Rancho Rd at Carmel Valley Rd	Intersection		Intersection Improvement Widen and reconfigure the intersection	NA	$815,000
Clausen Rd	Las Lomas Dr	End	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.29	$1,650,000
Gregory Rd	Overpass Rd	End	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.16	$890,000
Hall Rd	1668 Feet West of Las Lomas Dr	655 Feet East of Las Lomas	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.44	$2,440,000
Las Lomas Dr	Thomas Rd	End	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.23	$7,490,000

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Las Lomas Dr	Sill Rd	Overpass Rd	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.57	$1,945,000
Moss Landing Rd	South end of Hwy 1	North end of Hwy 1	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.71	$2,856,000
Oak Rd	Berry Rd	End	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.12	$610,000
Sandholt Rd	North of MBARI		Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.33	$896,100
Sill Rd	Kinghall Rd	End	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.40	$2,500,000
Willow Rd	Hall Rd	Berry Rd	Sidewalk Improvement New sidewalks, curb, gutter, drainage and roadway improvements	0.17	$950,000
Total				**4.15**	**$27,819,100**

Figure 7-3: County of Monterey (Moss Landing) Pedestrian Projects

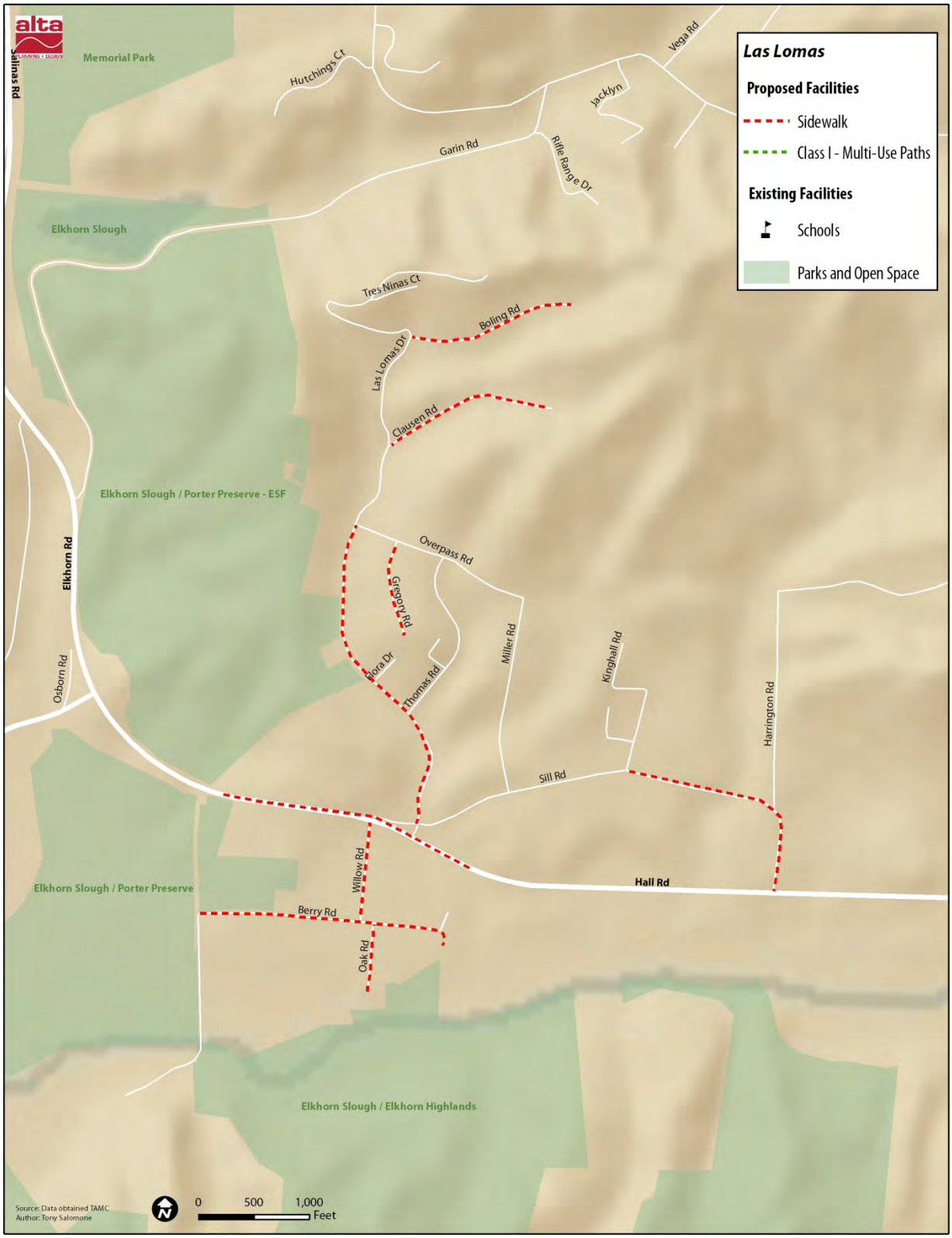

Figure 7-4: County of Monterey (Las Lomas) Pedestrian Projects

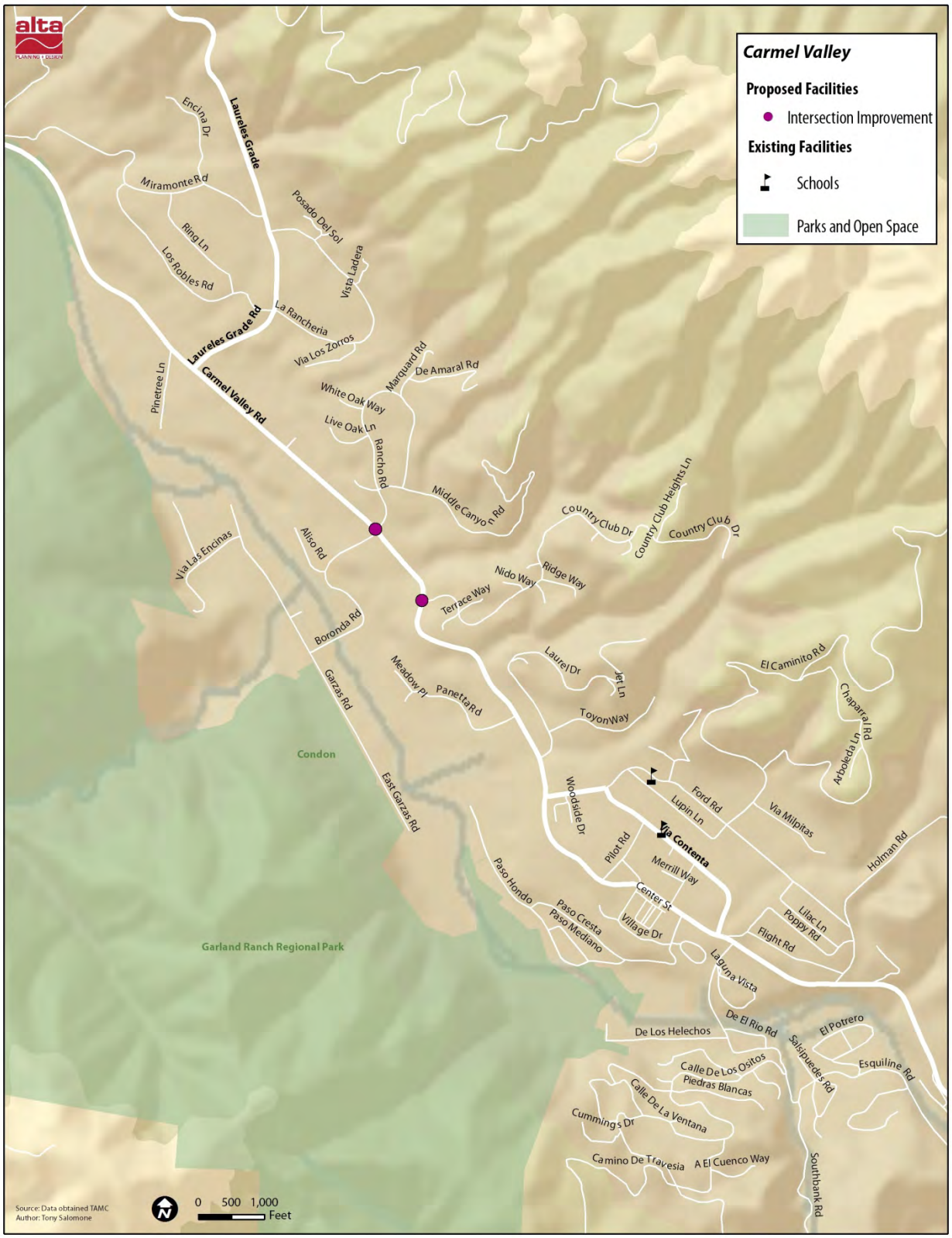

Figure 7-5: County of Monterey (Carmel Valley) Pedestrian Projects

7.2.2. Carmel by the Sea

Specific pedestrian priority projects for Carmel by the Sea are presented in **Table 7-4**. Carmel by the Sea submitted projects that included bicycle facilities but did not provide cost estimates. Project cost estimates were developed using the cost assumptions provided in **Table 7-2** and only estimate costs for pedestrian facilities. **Figure 7-6** presents a map of the projects, including the Hatton Canyon Class 1 path presented in **Chapter 6**.

Table 7-4: Carmel by the Sea Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
15th Ave	Carmelo St	Monte Verde St	Path Improvement Separated soft-scape walkway	0.15	$69,000
Canyon and Flanders and Carmel Hills Dr	Hatton Canyon	Ocean Ave	Sidewalk Improvement Separated walkway (sidewalk) joining Hatton Canyon path & Carmel High School	1.17	$666,900
Carmel River	Rio Park	Ribera Rd Bluffs	Bridge Improvement Renovate existing pedestrian bridge & add second bridge for access across River & Lagoon via sewer treatment & other properties.	NA	$540,000
Carmelo St	River Beach	Santa Lucia Ave	Path Improvement Separated soft-scape walkway	0.42	$193,200
Carpenter St	Ocean Ave	Hwy 1	Path Improvement Separated soft-scape walkway	0.85	$391,000
Dolores St and Lasuen Dr	Corner 15th and 14th Aves	Rio Rd	Sidewalk Improvement Separated walkway	0.29	$165,300
Hwy 1	Ocean Ave	68W over-pass	Sidewalk Improvement Separated walkway	1.31	$746,700
Hwy 1	Monastery Beach	Point Lobos	Sidewalk Improvement Separated walkway	1.57	$894,900
Hwy 1 and Carpenter St	Crossing Improvement		Crossing Improvement Raised & bricked crosswalk at northern entrance to Carmel	NA	$7,200
Hwy 1 and Ocean Ave	Crossing Improvement		Crossing Improvement Raised & bricked crosswalk at high school & main entrance to Carmel	NA	$7,200
Hwy 1 and Oliver Rd	Oliver Rd	Crossroads Mall	Crossing Improvement Separated crossing over Hwy 1 at terminus of new Hatton Bike path	NA	NA

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Hwy 1 and Rio Rd	Intersection		Crossing Improvement Raised & bricked crosswalk at southern entrance to Carmel	NA	$7,200
Junipero St	Rio Rd	Ocean Ave	Path Improvement Separated soft-scape walkway	1.40	$644,000
Junipero St and Ocean Ave	Crossing Improvement		Crossing Improvement Raised & bricked crosswalks plus landscaped island(s) at 5-way Intersection	NA	$56,000
Rio Rd	Mission Trail Park	Carmel Mission	Crossing Improvement Raised & bricked crosswalk with landscaping connecting the Mission and its park	NA	$7,200
Rio Rd	Hwy 1	Junipero St	Sidewalk Improvement Gap closure: walkway on both sides of road with landscaped separation	0.73	$416,100
Santa Lucia Ave	Rio Rd	Scenic Rd	Path Improvement Separated soft-scape walkway	0.55	$253,000
Scenic Rd	Martin Wy	River Beach	Path Improvement Separated soft-scape walkway	2.11	$970,600
Serra Ave and San Carlos St	Santa Lucia Ave	Hwy 1	Path Improvement Separated soft-scape walkway	1.96	$901,600
West of Scenic Rd	Ocean Ave	8th Ave	Path Improvement Separated soft-scape walkway joining Carmel Beach path with parking lot	0.17	$78,200
Total				**12.68**	**$7,015,300**

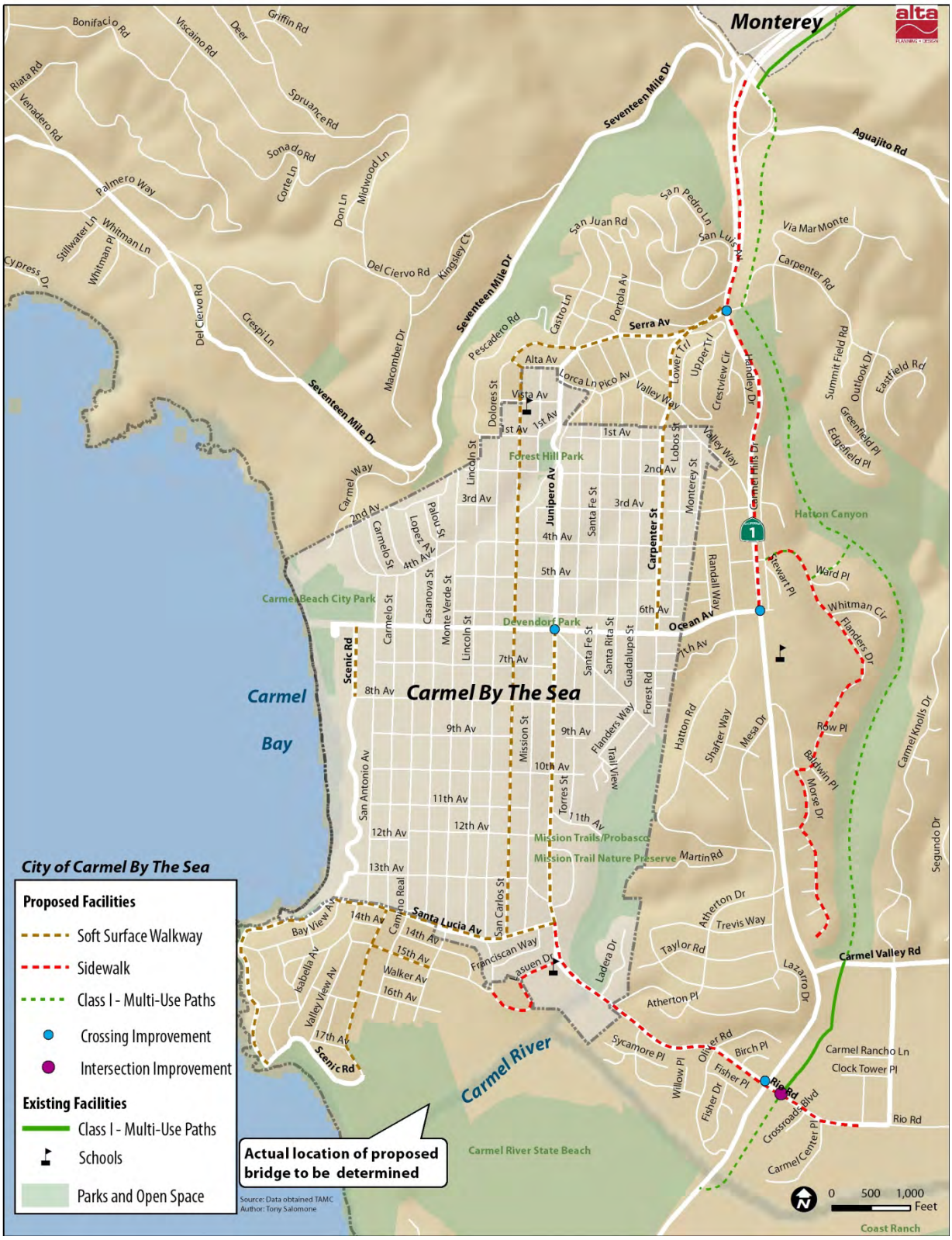

Figure 7-6: Carmel Pedestrian Projects

7.2.3. Castroville

Project list not submitted.

7.2.4. Del Rey Oaks

Project list not submitted.

7.2.5. Gonzales

Table 7-5 presents specific priority pedestrian improvement projects in the City of Gonzales. The majority of the improvements address pedestrian crossing improvements at uncontrolled intersections. Highway 101 bisects the City and presents a major pedestrian barrier. To overcome this pedestrian network challenge, the City of Gonzales seeks to provide a pedestrian overcrossing at Fifth Street and Highway 101. Project cost estimates were provided by the City. **Figure 7-7** presents a map of the projects.

Table 7-5: City of Gonzales Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Fifth St	Ricon Rd	Elko St	Path Improvement Multi-use path	0.23	$300,000
Elko St	Fourth St	Fifth St	Amenity Improvement Pedestrian amenities	0.10	$90,000
Fifth St and Elko St			Intersection Improvement Traffic signal installation	NA	$450,000
Fifth St and Harold Parkway			Intersection Improvement Lighted crosswalk installation, traffic signal installation	NA	$900,000
Fifth St and Highway 101 Overpass			Intersection Improvement Pedestrian overcrossing and traffic signal installation	NA	$650,000
Fifth St and Rail Rd Crossing			Intersection Improvement Traffic signal installation	NA	$1,600,000
Fifth St and Rincon Rd			Intersection Improvement Traffic signal installation	NA	$480,000
Harold Parkway at Gloria Rd			Intersection Improvement Traffic signal installation (2)	NA	$450,.000
Citywide			No improvement type due to non-specific location Sidewalk gap closure	NA	NA
Citywide			No improvement type due to non-specific location Sidewalk repair and maintenance	NA	$2,000,000

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Citywide			No improvement type due to non-specific location Curb ramp installation	NA	$1,500,000
Total				**0.33**	**$7,970,000**

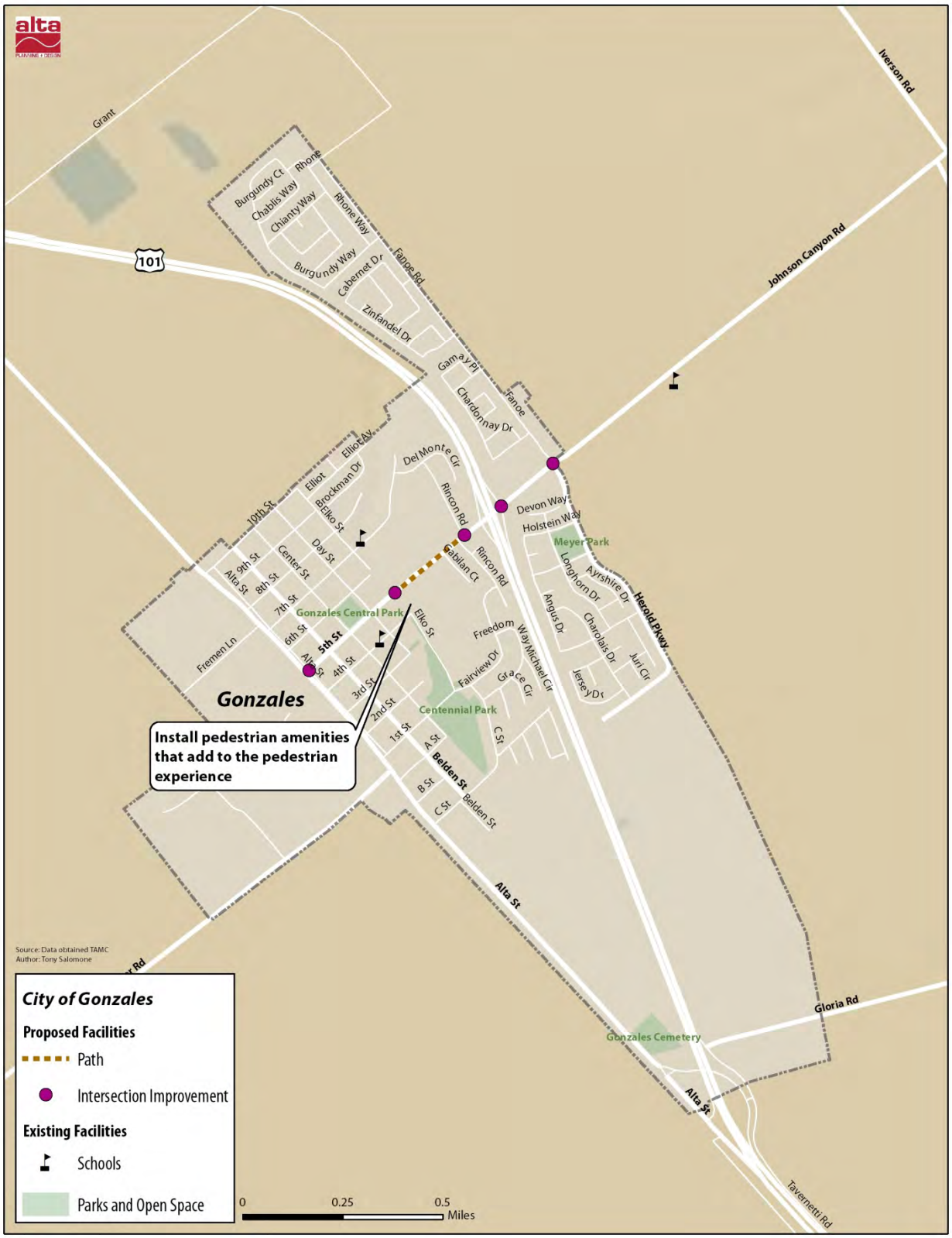

Figure 7-7: Gonzales Pedestrian Projects

7.2.6. Greenfield

Project list not submitted.

7.2.7. King City

Table 7-6 presents specific priority pedestrian improvement projects in King City. The majority of the improvements address sidewalk gaps and curb ramp installation. Project cost estimates were developed using the cost assumptions provided in Table 7-2. The cost assumptions for sidewalks include costs for eight curb ramps per mile, which was assumed given the project description provided by the City. In addition, sidewalk installation is assumed to be on one side of the street. Figure 7-8 presents a map of the projects.

Table 7-6: King City Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Airport Blvd	Bitterwater Rd	Metz Rd	Sidewalk Improvement Sidewalk and curb ramp installation	0.90	$513,000
Broadway and Mildred Ave			Intersection Improvement Intersection redesign and traffic signal installation	NA	$250,000
Canal St	River Dr	Hwy 101	Sidewalk Improvement Sidewalk and curb ramp installation	0.17	$96,900
Canal St	Reich St	Talbot St	Sidewalk Improvement Sidewalk and curb ramp installation	0.10	$57,000
Canal St at Hwy 101			Intersection Improvement Curb ramp installation on Caltrans R.O.W	NA	NA
Carlson St	Third St	Second St	Sidewalk Improvement Sidewalk and curb ramp installation	0.90	$513,000
Copley St	Ellis St	Orchard St	Sidewalk Improvement Sidewalk and curb ramp installation	0.13	$74,100
Division St	Vanderhurst Ave	First St	Sidewalk Improvement Sidewalk and curb ramp installation	0.23	$131,100
Ellis St	Third St	Second St	Sidewalk Improvement Sidewalk and curb ramp installation	0.10	$57,000
Mildred Ave	Reich St	Talbot St	Sidewalk Improvement Sidewalk and curb ramp installation	0.80	$456,000
Mildred Ave	Division St	Reich St	Sidewalk Improvement Sidewalk and curb ramp installation	0.80	$456,000
Monte Vista Pl	Reich St	Talbot St	Sidewalk Improvement Sidewalk and curb ramp installation	0.10	$57,000
Pearl St	Second St	First St	Sidewalk Improvement Sidewalk and curb ramp installation	0.90	$513,000

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Reich St	Monte Vista Pl	Seventh St	Sidewalk Improvement Sidewalk and curb ramp installation Sidewalk Improvement	0.11	$62,700
Talbot St	Canal St	Mildred Ave	Sidewalk Improvement Sidewalk and curb ramp installation	0.11	$62,700
Third St	Pearl St	Vivian St	Sidewalk Improvement Sidewalk and curb ramp installation	0.70	$399,000
Total				**6.05**	**$3,698,500**

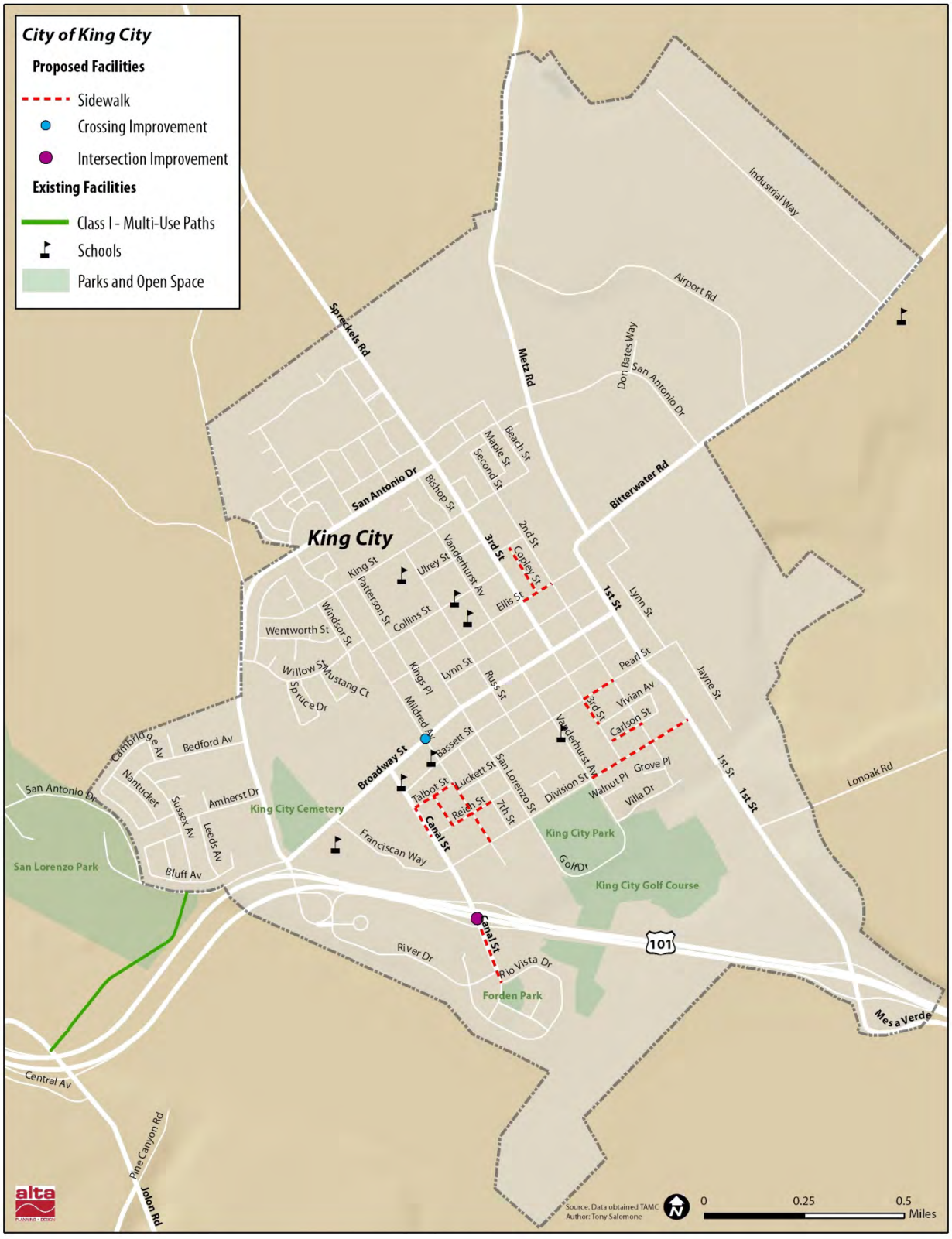

Figure 7-8: King City Pedestrian Projects

7.2.8. Marina

Table 7-7 presents specific priority pedestrian improvement projects submitted by the City of Marina and California State University Monterey Bay. The majority of the improvements address sidewalk gaps and crosswalk striping. Project cost estimates were developed using the cost assumptions provided in **Table 7-2**. Sidewalk installation is assumed to be on one side of the street. **Figure 7-9** presents a map of the projects submitted by the City of Marina and California State University Monterey Bay, including the Patton Parkway Path presented in **Chapter 6**.

Table 7-7: Marina Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
2nd Ave	Imjin Pkwy	CSUMB	Sidewalk Improvement Sidewalks	1.00	$570,000
Abdy Way	Healy Ave		Sidewalk Improvement Sidewalks	0.24	$136,800
Abdy Way	Cardoza Ave		Sidewalk Improvement Sidewalks	0.10	$57,000
Abdy Way	Healy Ave		Sidewalk Improvement Sidewalks	0.10	$57,000
Beach Rd	Michael Dr		Sidewalk Improvement Sidewalks	0.20	$114,000
Beach Rd	Del Monte Blvd		Sidewalk Improvement Sidewalks	0.45	$256,500
Beach Rd	Cardoza Ave		Sidewalk Improvement Sidewalks	0.23	$131,100
California Ave	Reservation Rd	Carmel Ave	Sidewalk Improvement Sidewalks	0.28	$159,600
California Ave	Tamara Court	End	Sidewalk Improvement Sidewalks	0.78	$444,600
Cardoza Ave	Abdy Way	Ora Court	Sidewalk Improvement Sidewalks	0.10	$57,000
Carmel Ave	Crescent Ave	Vaughan Ave	Sidewalk Improvement Sidewalks	0.07	$39,900
Carmel Ave	Del Monte Blvd	Sunset Ave	Sidewalk Improvement Sidewalks	0.16	$91,200
Carmel Ave	Seacrest Ave	Crescent Ave	Sidewalk Improvement Sidewalks	0.28	$159,600
Carmel Ave	Del Monte Blvd	Sunset Ave	Sidewalk Improvement Sidewalks	0.07	$39,900

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Carmel Ave	Bayer St	Salinas Ave	Sidewalk Improvement Sidewalks	0.06	$34,200
Crescent Ave	Carmel Ave	Reservation Rd	Sidewalk Improvement Sidewalks	0.27	$153,900
Del Monte Blvd	Reservation Rd	Beach Rd	Sidewalk Improvement Sidewalks	NA	$4,000
Del Monte Blvd	Palm Ave	Mortimer Lane	Sidewalk Improvement Sidewalks	NA	$4,000
Del Monte Blvd	Palm Ave		Crossing Improvement Restripe Crosswalks	NA	$4,000
Del Monte Blvd	Crescent Ave		Crossing Improvement Restripe Crosswalks	NA	$2,200
Del Monte Blvd	Reservation Rd		Crossing Improvement Restripe Crosswalks	0.44	$250,800
Del Monte Blvd	Reservation Rd		Crossing Improvement Restriping: Remove one of two right turn lanes	0.17	$96,900
Drew St	Abdy Way	Lakewood Dr	Sidewalk Improvement Sidewalks	0.33	$188,100
Healy Ave	Abdy Way	David Dr	Sidewalk Improvement Sidewalks	0.10	$57,000
Healy Ave	Abdy Way	Marina Dr	Sidewalk Improvement Sidewalks	0.31	$176,700
Lake Dr	Messinger Dr	Hilo Ave	Sidewalk Improvement Sidewalks	0.24	$136,800
Lake Dr	Hilo Dr	Reservation Rd	Sidewalk Improvement Sidewalks	0.45	$256,500
Marina Dr	Legion Way	Healy Ave	Sidewalk Improvement Sidewalks	0.10	$57,000
Paddon Place	Lake Dr	Marina Dr	Sidewalk Improvement Sidewalks	0.16	$91,200
Palm Ave	Lake Dr	Del Monte Blvd	Sidewalk Improvement Sidewalks	0.15	$85,500
Palm Ave	Elm Ave	Sunset Ave	Sidewalk Improvement Sidewalks	0.10	$57,000
Redwood Dr	Hillcrest Ave	Carmel Ave	Sidewalks Sidewalk Improvement	0.12	$68,400
Reindollar Ave	Vera Lane	Vaughan Ave	Sidewalk Improvement Sidewalks	0.16	$91,200

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Reindollar Ave	Del Monte Blvd	Sunset Ave	Sidewalk Improvement Sidewalks	0.18	$102,600
Reindollar Ave	California Ave	Eddy Circle	Sidewalk Improvement Sidewalks	0.10	$57,000
Reservation Rd	Cardoza Ave	Beach Rd	Sidewalk Improvement Sidewalks	0.10	$57,000
Reservation Rd	Ocean Terrace	Lynscott Dr	Sidewalk Improvement Sidewalks	0.36	$205,200
Salinas Ave	Carmel Ave	Reservation Rd	Sidewalk Improvement Sidewalks	0.27	$153,900
Seacrest Ave	Carmel Ave		Sidewalk Improvement Sidewalks	`	
Zanetta Dr	Reindollar Ave	Hillcrest Ave	Sidewalk Improvement Sidewalks	0.13	$74,100
Total				**8.36**	**$4,779,400**

Figure 7-9: Marina Pedestrian Projects

7.2.9. City of Monterey

Table 7-8 presents the pedestrian projects and costs submitted by the City of Monterey. Projects focus on filling sidewalk gaps and installing ADA curb ramps. Figure 7-10 presents a map of the projects, including the Soledad-Viejo Class 1 path listed in Table 6-16.

Table 7-8: City of Monterey Pedestrian Projects

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
English Avenue/ Del Monte	Intersection		Intersection Improvement Construct pedestrian and bike safety and ADA improvements at the signalized intersection of Del Monte / English	NA	$700,000
Hawthorne / Pvt Bolio	Intersection		Intersection Improvement Fills critical gap that connects the New Monterey Neighborhood through the Lower Presidio to Downtown without crossing Lighthouse Avenue	NA	$350,000
Mark Thomas Sidewalk	Sloat	Garden	Sidewalk Improvement Construct sidewalk on north side of Mark Thomas Drive	0.60	$850,000
MBCT Crossings	David	Casa Verde	Crossing Improvement Construct pedestrian and bike safety improvements at 11 uncontrolled trail crossings	NA	$660,000
Pacific Street	Colton	Martin	Sidewalk Improvement Construct sidewalk on west side of Pacific	0.10	$250,000
Pearl Street ADA Improvements	Calle Principal	Camino Aguajito	Crossing Improvement Construct ADA curb ramps at 10 intersections	NA	$750,000
Sloat / 5th	Intersection		Crossing Improvement Construct curb extensions, crosswalk, ADA ramps, lighting, signing and striping	NA	$400,000
Soldead / Soledad	Soledad Dr	Mar Vista	Intersection Improvement Intersection realignment and sidewalk	NA	$500,000
Soledad Drive	Via Descanso	Via Gayuba	Sidewalk Improvement Install sidewalk, curb and gutter on north side of Soledad Drive	0.60	$980,000
Van Buren / Corporal Ewing Ped & Bike Connection	Intersection		Intersection Improvement Fills critical gap that connects the New Monterey Neighborhood through the Lower Presidio to Downtown without crossing Lighthouse Avenue	NA	$1,700,000
Total					**$7,140,000**

Figure 7-10: City of Monterey Pedestrian Projects

7.2.10. Pacific Grove

Specific priority pedestrian projects for the City of Pacific Grove are presented in **Table 7-9.** The City of Pacific Grove seeks to install sidewalks where there are none, improve pedestrian access to shopping and schools and improve intersections with pedestrian elements. Project cost estimates were provided by the City. **Figure 7-11** presents a map of the projects.

Table 7-9: Pacific Grove Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Central and Grand intersection			Intersection Improvement Redesign and rebuild intersection -- curb bulb outs, pavement treatment, crosswalk updates	NA	$50,000
David Ave sidewalk	SaveMart Driveway	West end of David Ave	Sidewalk Improvement New sidewalk on south side of David Avenue	0.40	$700,000
Forest and Lighthouse intersection			Intersection Improvement Re-design and re-build intersection -- curb bulb outs, pavement treatment, crosswalk updates	NA	$300,000
Forest and Sinex intersection			Intersection Improvement Traffic signal upgrade, modify existing signals, include countdown pedestrian signals and vehicle detection	NA	$300,000
Forest Ave at Forest Hill Blvd			Crossing Improvement Lighted crosswalk, pavement markings, signs	NA	$170,000
Forest Ave crosswalk at Grove Market			Crossing Improvement Mid-block crosswalk, bulb out, pavement markings, loading zone switch	NA	$20,000
Forest Grove School	Congress Ave	Forest Grove School	Sidewalk Improvement New sidewalk on east side of Congress Avenue, along high school stadium	0.23	$100,000
Fountain and Central intersection			Intersection Improvement Re-align and narrow intersection, consider round-about	NA	$300,000
Jewell, Pacific, and Caledonia intersection			Crossing Improvement Pedestrian crossing, new stop sign, curb extension	NA	$100,000

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Lighthouse intersections			Intersection Improvement Redesign and rebuild intersection -- curb bulb outs, pavement treatment, crosswalk updates	NA	$300,000
Lighthouse and 17th intersection			Intersection Improvement Redesign and rebuild intersection -- curb bulb outs, pavement treatment, crosswalk updates	NA	$100,000
Lighthouse and Congress intersection			Intersection Improvement Redesign and rebuild intersection -- curb bulb outs, pavement treatment, crosswalk updates	NA	$300,000
Lighthouse and Granite intersec-tion			Intersection Improvement Redesign and rebuild intersection -- curb bulb outs, pavement treatment, crosswalk updates	NA	$75,000
Ocean View Ave access to Trail			Crossing Improvement Bulb outs, crosswalks		$400,000
Pacific Grove Middle School	Sinex Dr	Hillcrest Ave	Maintenance Improvement Restripe Forest Avenue	0.13	$15,000
Recreational Trail (Monterey Bay Sanctuary Trail)	David Ave	Ocean View Blvd	Maintenance Improvements Repair and maintenance for pede-strian safety		$100,000
Robert Down School	12th St	13th St	School Improvement Add passenger loading zones	0.03	$50,000
Total				**0.79**	**$3,380,000**

Figure 7-11: Pacific Grove Pedestrian Projects

7.2.11. Prunedale

Project list not submitted.

7.2.12. Salinas

Specific priority pedestrian projects for Salinas are presented in **Table 7-10**. The City of Salinas' pedestrian improvements include curb ramp upgrades, curb ramp installation and installation of lighted crosswalks. Project cost estimates were provided by the City. **Figure 7-12** presents a map of the projects, including Class 1 projects that are listed in **Chapter 6**.

Table 7-10: Salinas Pedestrian Improvements

Location	Improvement Description and Type	Cost Estimate
2003-2004 North Salinas ADA Pedestrian Ramps	Crossing Improvement Deficient Pedestrian Access Ramps West Alvin Drive, East Alvin Drive, Linwood Drive, Lassen Avenue, Modoc Avenue, Rainier Avenue, Parkside Street, Baldwin Street, Sherwood Drive and a portion of Natividad Road	$480,000
2004-2005 East Salinas Area St Lights - Phase VIII	Maintenance Improvement Street Light Upgrade Rider Avenue, Alamo Way, Gee Street, South Elm Street, Holly Street	$220,000
2004-2005 North Main St ADA Pedestrian Ramp Project	Crossing Improvement Deficient Pedestrian Access Ramps- North Main Street (Bernal Drive – Lamar Street), West Curtis Street, Tyler Street (West Curtis – Laurel Drive), East Curtis Street, Chaparral Street (North Main Street - Linwood Drive), Maryal Drive (Chaparral Street – East Laurel Drive), Lamar Street (North Main Street– Santa Rita Street), Santa Rita Street, West Bolivar, East Bolivar, Swaner Avenue, Van Buren Avenue, Mass Street, Brutus Street	$332,000
Bernal Dr Widening	Sidewalk Improvement Widen Bernal Drive, construct sidewalk & retaining wall on north side between Main St & Rosarita Dr	$1,647,000
Chaparral St and Linwood Dr	Intersection Improvement Deficient Pedestrian Access Ramps	$25,000
Citywide Sidewalk St Inventory	No Improvement Type Survey of City Pedestrian Facilities	$20,000
E. Market St and Pajaro St	Crossing Improvement Install lighted crosswalk and improve signing	$100,000
East Alisal and Towt St	Intersection Improvement Traffic Signal Installation	$275,000
John St (Across from Los Padres Elementary School)	Crossing Improvement Install lighted crosswalk	$100,000
John Steinbeck U.S Post Office Ac-	Sidewalk Improvement	$41,000

Location	Improvement Description and Type	Cost Estimate
cessibility	New curb, gutter, sidewalk, pedestrian ramps, and minor drainage improvements	
N. Main St and Navajo St	Sidewalk Improvement Lack of sidewalk; deficient pedestrian access ramp, Install Lighted crosswalk	$136,400
Natividad St and Sorentini Dr	Crossing Improvement Install lighted crosswalk	$100,000
North Main St and Chaparral St	Intersection Improvement Deficient Pedestrian Access Ramps	$25,000
North Sanborn and Kimmel St	Intersection Improvement Traffic Signal Installation	$275,000
Northridge Mall's North Main St frontage	Intersection Improvement Deficient Pedestrian Access Ramps	NA
Pedestrian Safety Education Program	Program Improvement Implement Pedestrian Safety Education for motorists and pedestrians; Streets Smarts Program	$250,000
Sidewalk Repair Program	Maintenance Improvement Capital Improvement Project for Sidewalk and Drainage Repairs	$297,000
South Main St corridor	Intersection Improvement Deficient Pedestrian Access Ramps	NA
Traffic Calming Policy	Planning Improvement Develop Policy – Being Prepared	$20,000
West Alisal St at and Cayuga St	Crossing Improvement Install lighted crosswalk with curb return improvements	$150,000
Williams and John and Alisal Intersection (MST Bus Stop Issue)	Intersection Improvement Install Pedestrian Access Ramps	NA
Total		**$4,493,400**

Figure 7-12: Salinas Pedestrian Projects

7.2.13. Seaside

Table 7-11 presents the specific priority pedestrian improvements submitted by the City of Seaside. The City seeks to improve the pedestrian environment with sidewalk widening, crossing and curb ramp improvements. Project cost estimates were developed using the cost assumptions provided in **Table 7-2**. Sidewalk installation is assumed to be on one side of the street. **Figure 7-13** presents a map of the projects submitted by the City of Seaside and California State University Monterey Bay.

Table 7-11: Seaside Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
Broadway Ave	Terrace	Terrace	Crossing Improvement Sidewalk curb, gutter, crossing improvements	NA	$63,200
Broadway Ave	San Lucas	San Lucas	Intersection Improvement Signal installation, crosswalk, sidewalk curb and gutter	NA	$54,200
West Broadway Ave	Del Monte	Fremont	Sidewalk Improvement Widen sidewalks, pedestrian and bicycle facilities	0.08	$108,300
Total				**0.08**	**$225,700**

Figure 7-13: Seaside Pedestrian Projects

7.2.14. Sand City

Table 7-12 presents the priority pedestrian project submitted by the City of Sand City. The City did not provide project detail. Project scope is assumed to replace approximately 100 lighting fixtures. **Figure 6-13** shows location of proposed lighting replacement.

Table 7-12: Sand City Pedestrian Improvements

Location	Improvement Description and Type	Cost Estimate
Sanctuary Scenic Trail	Replace lighting along the trail. Maintenance Improvement	$50,000

7.2.15. Soledad

Table 7-13 presents the priority pedestrian improvement types and general locations in the City of Soledad. Because the City did not provide specific project locations, planning level cost estimates and a map of the projects are not provided. Rather, planning level cost assumptions are provided for informational purposes. A map of pedestrian projects in Soledad is not provided due to the general project descriptions.

Table 7-13: Soledad Pedestrian Improvements

Location	Improvement Description	Cost Estimate
Various locations	Construct lighted crosswalks in front of local schools	$120,000/ea
Various locations	Replace damaged and broken cross walks with new thermoplastic striping	$6/SF
Various locations	Construct countdown ped signals at two signalized intersections	$40,000/ea
Various locations	Remove and replace non ADA ramps	$4,000/ea
Various locations	Construct missing sidewalk	$540,000/mi
Various locations	Remove raised and broken sidewalk with new sidewalk	$200,000/mi

7.2.16. California State University Monterey Bay

Specific pedestrian priority projects for California State University Monterey Bay are presented in **Table 7-14**. The projects primarily include providing pedestrian connections from the roadway network to campus buildings and athletic areas. Project cost estimates were developed using cost assumptions provided in **Table 7-2**. **Figure 7-8** and **Figure 7-12** present the location of projects in Marina and Seaside, respectively.

Table 7-14: California State University Monterey Bay (Seaside and Marina) Pedestrian Improvements

Location	Start	End	Improvement Description and Type	Miles	Cost Estimate
2nd Ave to Otter Sports Center	2nd Ave	Otter Sports Center	Sidewalk Improvement New sidewalk	1.00	$540,000
2nd Ave to Sports Fields	2nd Ave	Sports Fields	Sidewalk Improvement New sidewalk	1.30	$702,000
3rd Ave	Inter-Garrison	Child Center	Sidewalk Improvement New sidewalk	0.10	$178,200
4th St	General Jim Moore Blvd	Black Box Cabaret	Sidewalk Improvement New sidewalk	0.33	$178,200
5th Ave	8th St	Inter-Garrison	Path Improvement Two-way pedestrian and bicycling path on west side of street	0.35	$189,000
B St	6th Ave	Watershed Institute	Sidewalk Improvement New sidewalk	0.20	$108,000
Divarty St	General Jim Moore Blvd	5th Ave	Sidewalk widening Sidewalk Improvement	0.37	$199,800
Divarty St (north and south side)	General Jim Moore Blvd	2nd Ave	Sidewalk Improvement New sidewalk	0.37	$199,800
Divarty St (south side)	Tide Hall	Library	Sidewalk Improvement New sidewalk	0.27	$145,800
General Jim Moore Blvd to Stadium	General Jim Moore Blvd	Stadium	Sidewalk Improvement New sidewalk	0.29	$156,600
Inter-Garrison Rd (south side)	2nd Ave	Ocean Hall (closest building)	Sidewalk Improvement New sidewalk	0.10	$54,000
Inter-Garrison Rd (south side)	4th Ave	5th Ave	Sidewalk Improvement New sidewalk	0.42	$226,800
Inter-Garrison Rd south to Science Bldg	Inter-Garrison Rd	Science Bldg	Sidewalk Improvement New sidewalk	0.17	$91,800
Total				**5.27**	**$2,970,000**

7.3. Recommended Pedestrian Project Prioritization Criteria

This section describes criteria that can be used to prioritize pedestrian projects during the Transportation Agency for Monterey County funding process. The Agency distributes state and federal funding for local and regional transportation projects, including approximately $250,000 per year from Transportation Development Act Article 3. These criteria reflect the goals and policies of this Plan, and ask the following questions:

- Does the project fall within a pedestrian priority area?
- Does the project improve pedestrian safety?
- Does the project provide for or improve facilities for people with disabilities, children, seniors, or a vulnerable population?
- Is the project identified in the priority project list?
- Is the project consistent with relevant pedestrian design guidelines?

7.3.1. Improvement Located In a Countywide Pedestrian Priority Area

Projects located in the Countywide Pedestrian Priority Areas including AMBAG Blueprint priority areas, major barrier crossing improvements, safe routes to school priority areas, safe routes to transit priority area and regional trail access areas as described in **Section 7.1** should receive priority over projects that do not.

7.3.2. Pedestrian Safety

Pedestrian safety is a key concern within the county and should be considered when identifying potential projects. A high rate of pedestrian injuries and fatalities suggest the pedestrian realm is an unsafe place to travel and may benefit from enhanced pedestrian facilities focusing on safety. While the total number of reported pedestrian collisions in a given area is readily available, it is often difficult to establish a rate—pedestrian collisions per pedestrian exposed to motor vehicles. When available, pedestrian collision rate should be considered to identify potential projects. When not available, number of pedestrian related collisions should be used.

7.3.3. Provides for Vulnerable Communities

There are vulnerable and underserved communities that would benefit significantly from improved pedestrian infrastructure. They include: people with disabilities, children, and seniors, and people living in lower income underserved communities. People with disabilities often face transportation challenges, and require a connected transportation network that meets or exceeds ADA guidelines. Children and seniors are more at risk of being injured or killed in a car crash than other age groups. People living in underserved communities are more likely to walk than other income groups. Projects that address the needs of people with disabilities, children, seniors and those living in underserved communities should receive priority over those projects that do not.

7.3.4. Priority Project List

Projects listed on the priority project list in **Section 7.2** were identified by local jurisdictions as high priority and of citywide importance. Projects on the priority project list should receive priority over projects that do not.

7.3.5. Consistency with Design Guidelines and Complete Streets Policies

Projects that meet or exceed the design guidelines listed in **Table 7-15**, should receive priority over those that do not. For additional reference, the Pedestrian Design Guidelines included in **Appendix B** of this document, provide a toolbox of potential strategies to improve walking conditions.

Table 7-15: Design Guidelines for Pedestrian Priority Areas

	AMBAG Blueprint Priority Areas	Major Barrier Crossings	Safe Routes to School	Safe Routes to Transit	Regional Trails and Trail Access
Streets & Sidewalks	• 6' - 16' sidewalk • Vertical curb and gutter • Obstacles removed from pedestrian way • ADA-compliant curb ramps • Pedestrian-scale lighting • 5' landscape buffer • Street trees • On-street parking or bike lane buffer	• 10' - 20' paths or min. 5' detached sidewalks; wider pathways where high pedestrian and/or bicycle demand expected • Min. 12' path if vertical enclosure • Obstacles removed from pedestrian way • ADA-compliant curb ramps • Pedestrian-scale lighting, min. at crossings	• 4′ – 12′ sidewalk or pathway • Vertical curb and gutter where sidewalks exist • Obstacles removed from pedestrian way • ADA-compliant pathways • Pedestrian-scale lighting, min. at crossings	• 6' - 16' sidewalk • Vertical curb and gutter • Obstacles removed from pedestrian way • ADA-compliant curb ramps • Pedestrian-scale lighting • Minimum 5' landscape buffer • Street trees • On-street parking or bike lane buffer	• 10' - 20' paths • Obstacles removed • ADA-compliant curb ramps • Pedestrian-scale lighting, min. at crossings • Min. 12' path if vertical enclosure

	AMBAG Blueprint Priority Areas	Major Barrier Crossings	Safe Routes to School	Safe Routes to Transit	Regional Trails and Trail Access
Crossings	• Marked crossings at signalized and stop controlled locations • Accessible pedestrian signals • High visibility, enhanced crossings at uncontrolled locations • High visibility, enhanced mid-block crossings where appropriate • Median islands • Bulb-outs • Max 300' between crossings	• Max 1 mile between crossings • Marked crossings at signalized and stop controlled locations on access routes to barrier crossing	• Marked crossings at signalized and stop controlled locations • High visibility, enhanced crossings at uncontrolled locations, including possible raised crosswalks • Median islands and bulbouts possible	• Marked crossings at signalized and stop controlled locations • Accessible pedestrian signals • High visibility, enhanced crossings at uncontrolled locations • High visibility, enhanced mid-block crossings where appropriate • Median islands • Bulb-outs • Max 300' between crossings	• Marked crossings at signalized and stop controlled locations • Accessible pedestrian signals • High visibility, enhanced crossings at uncontrolled locations • High visibility, enhanced mid-block crossings where appropriate • Median islands and bulbouts possible
Pedestrian Realm Vitality	• Medium/high density housing, employment • Regional, community shopping destinations • Public art • Street fairs • Street furniture • Wayfinding • Sidewalk seating/cafes	• Street furniture • Wayfinding • Crime prevention through environmental design measures (lighting, visibility, regular maintenance, etc.)	• Slow zones for vehicles • Walking programs (e.g. walking school bus)	• Medium/high density housing, employment • Regional, community shopping destinations • Public art • Street fairs • Street furniture • Wayfinding • Sidewalk seating/cafes	• Street furniture • Wayfinding • Crime prevention through environmental design measures (lighting, visibility, regular maintenance, etc.)

	AMBAG Blueprint Priority Areas	Major Barrier Crossings	Safe Routes to School	Safe Routes to Transit	Regional Trails and Trail Access
	• Show windows • Vendor carts • Awnings/shade structures • Paseos			• Show windows • Vendor carts • Awnings/shade structures • Paseos	

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8. Project Implementation

This chapter presents the methodology used to identify bicycle projects of regional significance as well as a strategy for project implementation. This Plan is intended to guide the Agency indentify and assist with funding projects of regional significance. The Plan includes nearly 400 bicycle projects and phased implementation of the projects will take significant amounts of time and financial resources. The following outlines the priority projects and the methodology used to identify them.

The Agency's primary role regarding bicycle and pedestrian facilities is to distribute funding to local agencies for projects. Ultimately, cities, the County and other agencies are responsible for implementing projects.

8.1. Bicycle Project Implementation

8.1.1. Bicycle Project Ranking Methodology

This section describes the methodology used to prioritize bikeway projects. Projects were scored and prioritized based on a defined set of criteria focused on safety, gap closure, local connections, feasibility and community (destination) connections. The intent of prioritizing projects is to identify projects of regional significance and to develop a phased approach to completing a countywide bicycle network, beginning with a set of short term, achievable, projects that best meet the objectives of this Plan.

The criteria outlined below were developed to score projects based on how well they achieve the objectives of this Plan. Based on Agency staff input, Collisions/Safety, Gap Closure and Local Connections hold the most importance thus were allotted the most possible points. Project Feasibility was added to serve as a measurement for the ability of a project to be implemented. Community Connections was divided into three sub-criteria that measured connections to employment centers, activity centers and transit. Projects could score a maximum five points for each sub-criterion for a total possible score of 15. The maximum potential score for each project is 100.

Table 8-1 describes the ranking criteria. The criteria include:

1. Collisions/Safety (0-25 points)
2. Gap Closure (0-25 points)
3. Local Connections (0-20 points)
4. Feasibility (0-15 points)
5. Community Connections (0-15 points, summed from the following)
    a. Employment connections (0-5 points)
    b. Activity center connections (0-5 points)
    c. Multimodal connections(0-5 points)

Based on the nature of the criterion, the project received a score, score/no score, or with a scaled range from zero to maximum score. For example, employment connections range by the number of employees per mile. The point range for employment connections reflects this with a scoring range from zero to five. By contrast, a project either meets or does not meet the local connections criterion and therefore receives zero or twenty points.

Table 8-1: Ranking Criteria

Criteria	Description	Maximum Score
Gap Closure in Network	Projects that complete a continuous connection between cities and communities close will have higher scores. Projects will be scored with either a zero or twenty-five (25).	25
Collisions/Safety	This ranking is based on available collision data identifying corridors with high incidents of bicycle related collisions (2004-2009) within a quarter mile buffer of the proposed improvement. Projects will be scored on a scaled ranking from zero to twenty-five (25) based on number of collisions per mile. Projects that address areas with the highest number of collisions are scored with a twenty-five (25).	25
Local Connections	Projects that contribute to a continuous connection between cities communities will receive higher scores. Projects will be scored by either a zero or twenty (20).	20
Project Feasibility	Project cost affects the ability to implement a facility. Projects that are lower cost will have higher scores. Projects will be scored on a scaled ranking from zero to fifteen (15) based on the Plan developed cost estimates.	15
Activity Center Connections	Employment, community and multimodal center connections	15
Employment Centers	Projects that connect to employment centers will receive higher scores. Scoring for this criterion will be based on the US Census American Community Survey employment data (2008). Projects will be scored on a scaled ranking from zero to five based on number of employees within one mile.	(5)
Community Centers	Projects that connect to activity centers such as schools, shopping centers or recreational areas will score higher. Projects will be scored with either a zero or five.	(5)
Multimodal Centers	Projects that connect to multimodal centers including park-and-ride lots, rail, bus, aviation and maritime traffic will score higher. Projects will be scored by either a zero or five.	(5)
	Maximum Score	*100*

8.1.2. Bikeway Tier Description

After projects were scored based on how they satisfy each criterion, projects were then categorized into short-term, mid-term and long-term phase tiers, as shown in . The tiers are intended to organize the projects to facilitate implementation. Tier 1 project are those that closely meet the countywide goals and have the highest potential and are intended for implementation within five years. Tier 2 projects are intended for mid-term implementation, within the next ten years. Tier 3 projects have long-term potential and are intended for implementation within the next twenty years.

Table 8-2: Project Phasing Tiers

Tier	Overall Score	Description
Tier 1	70 and higher	Tier 1 projects have the highest potential and are intended for implementation within 1-5 years. These projects are high priority and identified in **Section 8.1.6**.
Tier 2	20-69	Tier 2 projects intended for implementation within 6-10 years.
Tier 3	0-20	Tier 3 projects are projects not currently ready to be implemented but will be included as long-term potential projects over the next 11-20 years.

Appendix D lists all the bikeway projects by rank and tier.

8.1.3. Bikeway Cost Assumptions

Table 8-3 presents per mile bikeway cost estimates based on standard quantities of construction items. Because this is a planning level document, estimated costs do not consider project-specific factors such as intensive grading, landscaping, intersection modifications and right-of-way acquisition. However, a number of project specific costs were used when member agencies were able to provide the data.

Table 8-3: Bikeway Cost Assumptions Per Mile

Item	Quantity	Units	Unit Cost	Total
Class 3 Bike Route				
Bike Route Sign/Wayfinding[1]	10	EA	$ 300	$ 3,000
Total Cost Per Mile				**$ 3,000**
Class 2 Bike Lanes				
Bike Lane Sign/Wayfinding	10	EA	$ 300	$ 3,000
Striping Removal	10,560	LF	$ 1.25	$ 13,200
Striping and Stenciling	10,560	LF	$ 2.50	$ 26,400
Total Cost Per Mile				**$ 43,600**
Class 1 Shared Use Path - 10' paved, 2' shoulders				
Wayfinding	4	EA	$ 300	$ 1,200
Clear and Grub	73,920	SF	$ 1.00	$ 73,920
Asphalt Concrete Pavement	52,800	SF	$ 8.00	$ 422,400
Decomposed Granite Shoulders	21,120	SF	$ 5.00	$ 105,600
Striping[2]	15,840	LF	$ 2.50	$ 39,600
Total Cost Per Mile				**$ 642,720**

[1] Assumes five signs per mile in each direction.

[2] Includes center stripe and striping along path edges.

8.1.4. Bikeway Cost by Jurisdiction and Improvement Type

Implementation of the bikeway network identified in this plan would cost approximately $109 million dollars. **Table 8-5** presents recommended bikeway network cost by jurisdiction and bikeway classification and shows Class 1 pathways costs make up 40 percent, Class 2 bike lanes make up 12 percent, and Class 3 make up 48 percent of the total bike network cost. Class 3 projects include the Highway 68 bridge widening at the Salinas River, which is estimated to cost approximately $15.8 million and will include a Class 3 bicycle route.

8.1.5. Bikeway Cost by Tier

Using the planning level cost estimates described earlier, the recommended bikeway network will cost approximately $109 million. **Table 8-4** presents the cost estimates for each tier.

Table 8-4: Bikeway Cost by Tier

Tier	Cost Estimate
1	$43,461,600
2	$13,484,200
3	$51,863,600
Total	**$108,809,400**

Table 8-5: Bikeway Cost by Jurisdiction

Jurisdiction	Class	Mileage	Cost Estimate
Ca State Parks	1	15.70	$26,961,500
Ca State Parks Total		**15.70**	**$26,961,500**
Caltrans	1	0.89	$576,300
	2	8.65	$372,100
	3	1.97	*$15,805,300
Caltrans Total		**11.51**	***$16,750,200**
Carmel	2	0.68	$29,200
	3	6.69	$20,000
Carmel Total		**7.37**	**$49,200**
County	1	25.90	$42,325,900
	2	188.89	$11,427,500
	3	170.20	$511,000
County Total		**383.25**	**$54,264,400**
Del Rey Oaks	2	3.33	$143,000
Del Rey Oaks Total		**3.33**	**$143,000**
Gonzales	2	1.41	$60,700
	3	4.37	$13,000
Gonzales Total		**5.78**	**$73,700**
Greenfield	2	5.86	$252,200
	3	2.66	$8,000
Greenfield Total		**8.52**	**$260,200**
King City	2	7.27	$312,500
	3	2.74	$8,300
King City Total		**10.00**	**$320,800**
Marina	1	0.50	$322,400
	2	24.42	$3,133,200
Marina Total		**24.92**	**$3,455,600**
Monterey	1	1.07	$694,400
	2	7.76	$333,600
	3	12.09	$36,300
Monterey Total		**20.92**	**$1,064,300**
Pacific Grove	2	3.42	$147,200
	3	6.02	$17,900
Pacific Grove Total		**9.44**	**$165,100**
Salinas	1	4.24	$2,756,300
	2	9.89	$425,200
	3	5.31	$15,800
Salinas Total		**21.19**	**$3,197,300**
Sand City	1	0.82	$554,300
	2	0.67	$28,700
	3	0.85	$2,500
Sand City Total		**2.34**	**$585,500**
Seaside	1	1.36	$884,900
	2	11.29	$485,500
	3	8.66	$25,900
Seaside Total		**21.31**	**$1,396,300**
Soledad	2	2.76	$118,800
Soledad Total		**2.76**	**$118,800**
Grand Total		**548.36**	**$108,809,400**

** $15.8 million estimated for the Highway 68 bridge widening that will include a Class 3 bicycle route.*

Table 8-6: Costs by Class

Class	Miles	Cost Estimate
1	50.47	$75,076,000
2	276.31	$17,269,400
3	221.77	*$16,464,00
Grand Total	**548.36**	**$108,809,400**

** $15.8 million estimated for the Highway 68 bridge widening that will include a Class 3 bicycle route.*

8.1.6. Priority Bikeway Projects

All bikeway projects were scored and evaluated based on the criteria described in **Section 8.1** and evaluated by Agency Staff, member agencies and Bicycle and Pedestrian Facilities Advisory Committee members. **Table 8-7** presents the priority bikeway projects. A complete list of projects organized the rank and tier are presented in **Appendix D**.

Table 8-7: Priority Bikeway Projects

Rank	Project	Class	Start	End	Miles	Jurisdiction	Cost Estimate
1	Imjin Rd/12th St	2	Imjin Rd	Reservation Rd	2.72	County	$2,200,000
2	Canyon del Rey Blvd	2	General Jim Moore Blvd	Hwy 68	0.76	Del Rey Oaks	$32,500
3	Castroville Bicycle Path and Railroad Crossing	1	Axtell St	Castroville Blvd	0.31	County	$5,995,000
4	Blanco Rd	2	Research Rd	Luther Way	5.36	County	$200,000
5	Davis Rd	2	Blanco Rd	Rossi St	1.75	County	$3,411,000
6	Blanco Rd	2	Luther Way	Abbott St	2.50	County	$107,300
7	Broadway	2	Del Monte Blvd	Mescal St	1.58	Seaside	$67,900
8	Hwy 68	2	Joselyn Canyon Rd	San Benancio Rd	8.17	Caltrans	$351,300
9	Sanctuary Scenic Trail Segment 15A	1	Moss Landing Rd	Hwy 1 Elkhorn Slough Bridge	0.74	County	$5,082,000
10	San Juan Grade Rd	2	Russell Rd	Boronda Rd	0.91	Salinas	$1,200
10	San Juan Grade Rd	2	Herbert Rd	Rogge Rd	2.05	County	$88,300
10	San Juan Grade Rd	3	Russell Rd	Rogge Rd	0.40	County	$39,200
11	Gabilan Creek	1	Danbury St	Constitution Blvd	0.88	Salinas	$569,300
12	Central Ave	2	David Rd	Hartnell College	0.45	Salinas	$19,200
13	Hwy 68	2	San Benancio Rd	Salinas City Limit	6.05	Caltrans	$189,300
14	Hatton Canyon Path	1	Carmel Valley Rd	Hwy 68/Aguajito Rd	2.48	Caltrans	$1,689,600
15	Hwy 1 Ramp and Aguajito Rd Signage	Signs	Aguajito Rd	Aguajito Rd	3.70	Monterey	$--
16	Hwy 68 at Salinas River Bridge widening	1	Salinas River	Salinas River State Beach	0.25	Caltrans	$15,800,000
17	Ocean View Ave	2	Asilomar Blvd	17 Mile Dr	2.31	Pacific Grove	$99,100
18	General Jim Moore	2	Canyon del Rey Blvd	City Limits	0.43	Del Rey Oaks	$18,300
19	Del Monte Blvd	3	Broadway	Fremont Blvd	1.17	Seaside	$3,500
20	Del Monte Blvd	2	Canyon del Rey Blvd	Broadway	0.20	Seaside	$8,700
21	2nd Ave	2	3rd St	1st St	0.26	Marina	$11,400
22	Sanctuary Scenic Trail Segment 4B	1	Tioga Ave	Monterey Peninsula Recreational Trail	0.42	Sand City	$292,600
23	15th Ave	2	Bay View Ave	Rio Rd	0.80	County	$34,300
24	Prunedale North Rd	2	San Miguel Canyon Rd	300' S of Hwy 156 overpass	1.06	County	$45,700

8.2. Pedestrian Project Implementation

8.2.1. Pedestrian Project Prioritization

Agency staff and Bicycle and Pedestrian Committee members selected the top scoring Class 1 projects as priority pedestrian projects because they serve a wide range of users and can improve the pedestrian environment. Pedestrians are anticipated to use these paths for utilitarian and recreational purposes. Because these paths are physically separated from roadways, they are anticipated to be used by people of all ages and abilities.

8.2.2. Pedestrian Cost Assumptions

Table 8-8 presents pedestrian facility construction item costs used to calculate the cost of sidewalks and soft-surface walkways per mile. Lump sums are provided for pedestrian facilities that are primarily comprised of a few construction items.

Table 8-8: Pedestrian Facilities Cost Assumptions

Item	Quantity	Units	Unit Cost		Total
Sidewalk					
Concrete	21,120	SF	$15	$	316,800
Curb Gutter	5,280	LF	$35	$	184,800
Clearing Grubbing	21,120	SF	$1.50	$	31,680
Curb Ramp	8	EA	$4,000	$	32,000
Sidewalk per mile				**$**	**570,000**
Soft Surface Walkway					
Erosion Control	1	LS	$12,000	$	12,000
Clearing Grubbing	1	LS	$12,000	$	12,000
Earthwork	1	LS	$20,000	$	20,000
Aggregate Base	1,030	TON	$50	$	51,500
Decomposed Granite	700	TON	$95	$	66,500
Header Board	14,600	LF	$8	$	116,800
Driveway Modification	1,080	SF	$85	$	91,800
Tree/Stump Removal	40	EA	$600	$	24,000
Tree Replacement	1	LS	$65,000	$	65,000
Soft Surface Walkway per mile				**$**	**460,000**
Crosswalk	**1**	**EA**	**$1,000**	**$**	**1,000**
Raised Textured Crosswalk	**480**	**SF**	**$15**	**$**	**7,200**
Traffic Signal Reconfiguration	**1**	**EA**	**$250,000**	**$**	**250,000**
Pre Fabricated Bridge	**2,400**	**SF**	**$150**	**$**	**360,000**
Renovate Bridge	2,400	**SF**	$75	$	180,000
Maintenance (resurfacing)	**1**	**MI**	**$200,000**	**$**	**200,000**
Pedestrian Amenities					
Lighting	10	EA	5,000	$	50,000
Bench	2	EA	1,000	$	2,000
Trash Receptacle	2	EA	800	$	1,600
Pedestrian Amenities per mile				**$**	**53,600**

8.2.3. Pedestrian Project Cost by Jurisdiction and Improvement Type

Construction cost of the pedestrian facilities submitted is estimated at $62 million dollars. This amount does not include additional costs associated with construction, including administration, design, engineering, mobilization or traffic control. Table 8-9 lists improvement types and costs by jurisdiction. Sidewalk construction makes up 72 percent of pedestrian facilities cost, as shown in Table 8-10.

Table 8-9: Pedestrian Facilities Cost by Jurisdiction

Improvement	Miles	Cost Estimate
Carmel		
Bridge		$540,000
Crossing		$77,600
Intersection		$7,200
Path	7.6	$3,500,600
Sidewalk	5.1	$2,889,900
Carmel Total	**12.7**	**$7,015,300**
County		
Intersection		$1,832,000
Sidewalk	3.8	$25,987,100
County Total	**3.8**	**$27,819,100**
Gonzales		
Amenities	0.1	$90,000
Crossing		$900,000
Intersection		$4,680,000
Path	0.2	$300,000
Sidewalk		$2,000,000
Gonzales Total	**0.3**	**$7,970,000**
King City		
Intersection		$250,000
Sidewalk	6.1	$3,448,500
King City Total	**6.1**	**$3,698,500**
Marina		
Crossing		$14,200
Sidewalk	8.4	$4,765,200
Marina Total	**8.4**	**$4,779,400**
Pacific Grove		
Crossing		$690,000
Intersection		$1,725,000
Maintenance	0.1	$115,000
School		$50,000
Sidewalk	0.6	$800,000
Pacific Grove Total	**0.8**	**$3,380,000**
Salinas		
Amenities		$220,000
Crossing		$918,400
Intersection		$1,080,000
Planning		$40,000
Programs		$250,000
Sidewalk		$1,985,000
Salinas Total		**$4,493,400**
Seaside		
Intersection	0.1	$54,200
Sidewalk	0.4	$171,500
Seaside Total	**0.5**	**$225,700**
CSUMB (Marina/Seaside)*		
Path	0.4	$189,000
Sidewalk	4.8	$2,602,800
CSUMB Total	**5.2**	**$2,791,800**
Grand Total	**37.7**	**$62,173,200**

** CSUMB submitted projects separate from the cities of Marina and Seaside. CSUMB project costs are separate from these cities.*

Table 8-10: Costs By Improvement

Improvement	**Cost** Estimate
Amenities	$310,000
Bridge	$540,000
Crossing	$2,600,200
Intersection	$9,628,400
Maintenance	$115,000
Path	$3,989,600
Planning	$40,000
Programs	$250,000
School	$50,000
Sidewalk	$44,650,000
Grand Total	**$62,173,200**

8.2.4. Priority Pedestrian Projects

Table 8-11 lists the top five pedestrian priority projects, which are also the top scoring Class 1 multi-use path projects when using the bikeway scoring criteria. Agency staff and Bicycle and Pedestrian Committee members prioritized the top scoring Class 1 projects because they serve the widest range of users.

The projects are listed based on how well they fill gaps in the existing network, connect to community destinations and employment centers, and how well they address safety concerns. The top priority project, Castroville Path and Railroad Crossing fills a critical gap separating the residents of Castroville from the existing Castroville path along Castroville Boulevard, which leads to North Monterey High School. In addition, this project includes facilities to control pedestrian crossings of the railroad tracks.

Table 8-11: Pedestrian Priority Projects

Rank	Project	Class	Start	End	Miles	Jurisdiction
1	Castroville Path and Railroad Crossing	1	Axtell St	Castroville Blvd	0.31	County
2	Sanctuary Scenic Trail 15A	1	Elkhorn Bridge (S)	Elkhorn Bridge (N)	0.17	County
3	Gabilan Creek Path	1	Danbury St	Constitution Blvd	0.88	Salinas
4	Hatton Canyon Path	1	Carmel Valley Rd	Hwy 1	2.60	County
5	Sanctuary Scenic Trail Segment 4B	1	Tioga Ave	Monterey Peninsula Recreational Trail	0.42	Sand City

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9. Funding

The Agency administers two funding sources for bicycle and pedestrian projects in Monterey County: Transportation Development Act Article 3 and the Bicycle Protection Program. Transportation Development Act and Bicycle Protection Program funds are just two of many funding sources available for bicycle and pedestrian projects. To implement the projects recommended in this Plan, local cities and the County will need to draw from many different funding sources. This chapter provides implementing agencies with a list of potential sources to fund bicycle and pedestrian projects and programs.

Bicycle and pedestrian funding is administered at all levels of government. This chapter begins with explaining the current state of federally-administered funding and the anticipated new transportation bill, which influences State, regional and local funding. **Table 9-1** lists the funding sources and summarizes important funding source components, such as funding amount available, application deadlines and eligible applicants.

Given the countywide scope of this Plan, this chapter provides a menu of potential funding sources intended to provide a reference for implementing agencies but does not identify a funding strategy for each project.

9.1. Federal

SAFETEA-LU, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, is the primary federal funding source for bicycle and pedestrian projects. SAFETEA-LU is the fourth iteration of the transportation vision established by the Intermodal Surface Transportation Efficiency Act (1991). Also known as the federal transportation bill, Congress passed the $286.5 billion SAFETEA-LU bill in 2005. SAFETEA-LU expired in 2009, at which time Congress approved extending funds through 2010. When the next multi-year federal transportation bill is reauthorized, funding available for bicycle and pedestrian projects is likely to change. Historically, these modes have received larger allocations with each new multi-year transportation bill.

The Federal Highway Administration (FHWA) is charged with obligating transportation funding and provides bicycle and pedestrian funding through seven programs:

- American Recovery and Reinvestment Act
- Congestion Mitigation and Air Quality Improvement Program
- Surface Transportation Program set aside for safety
- Surface Transportation Program set aside for transportation enhancements
- Safe Routes to School and Non-motorized Transportation Pilot Program
- Regional Trails Program

Figure 9-1 presents the total amount obligated to the programs listed above since 2000. The programs listed above are not the sole sources for bicycle and pedestrian funding. Larger highway projects paid for through other funding streams can include bicycle and pedestrian facilities, which are not accounted for in **Figure 9-1**.

Table 9-1 lists the funding sources and summarizes important funding source components, such as funding amount available, application deadlines and eligible applicants.

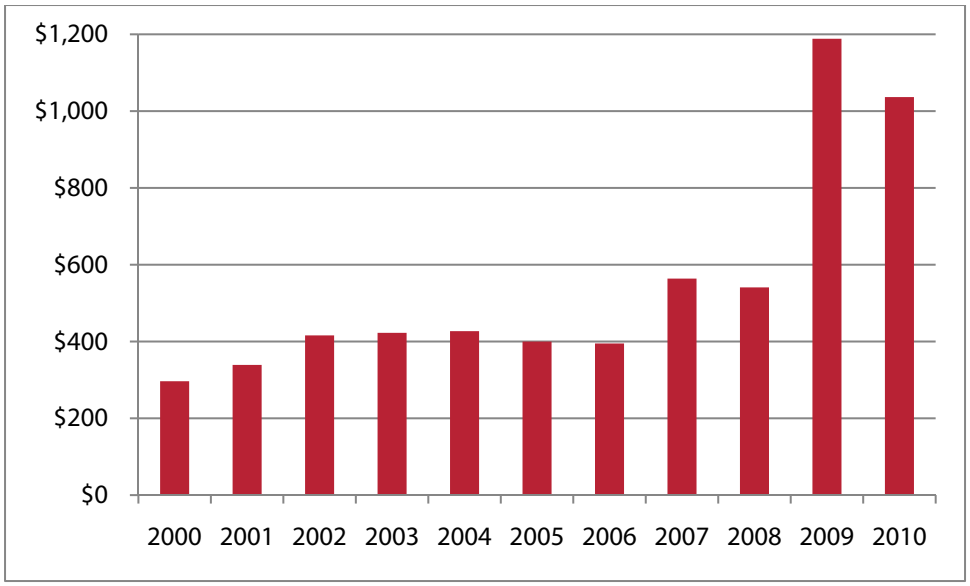

Figure 9-1: Federal Obligations for Bicycle and Pedestrian Projects in Millions (Source: FHWA)

9.2. State

After the FHWA obligates funds for bicycle and pedestrian projects, it allocates those funds to state agencies responsible for fund administration. Caltrans, the State Resources Agency, and regional planning agencies administer bicycle and pedestrian funding in California. **Figure 9-2** shows how Federal transportation funding generally flows to State and regional agencies. Most, but not all of these funding programs emphasize transportation modes and purposes that reduce auto trips and provide inter-modal connections. SAFETEA-LU programs require local matches between zero percent and 20 percent. SAFETEA-LU funds primarily capital improvements and safety and education programs that relate to the surface transportation system.

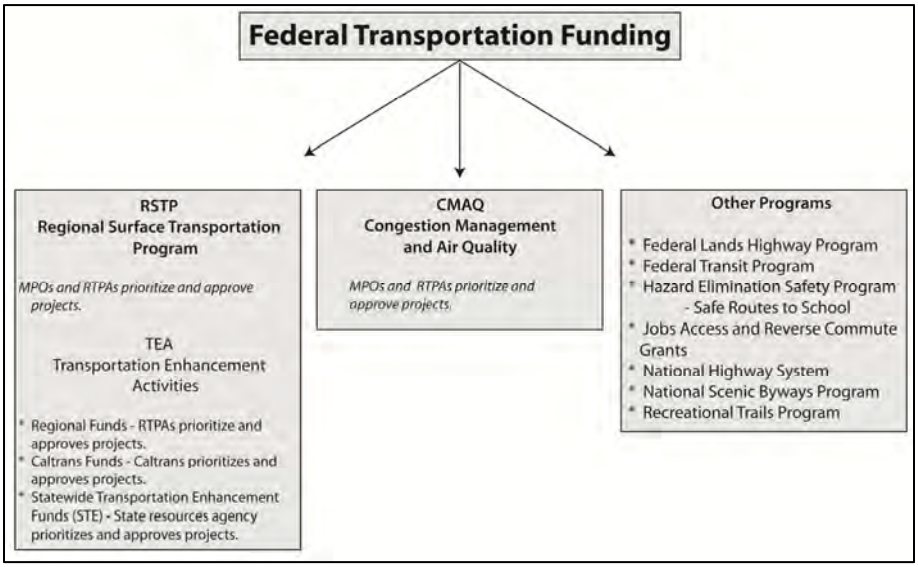

Figure 9-2: Transportation Funding Flow Chart

Figure 9-3 shows the amount of bicycle and pedestrian funds spent in California since 2000. In addition to federally obligated funds, California also provides competitive grant opportunities through the Bicycle Transportation Account, State Coastal Conservancy and a Safe Routes to School Program separate from that at the federal level.

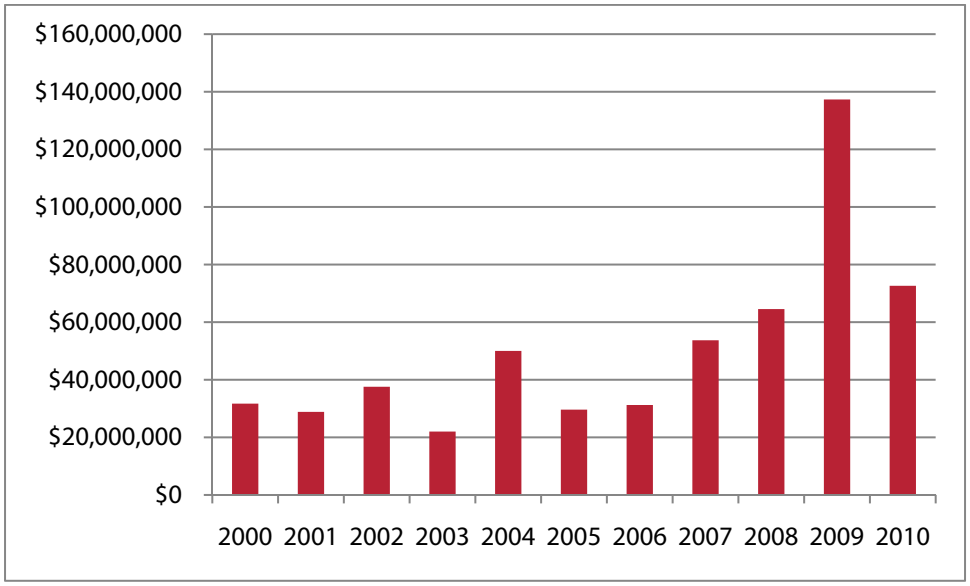

Figure 9-3: California Spending on Bicycle and Pedestrian Projects (Source: FHWA)

9.3. Regional

9.3.1. Regional Surface Transportation Program Funds

The Agency administers Regional Surface Transportation Program funds, which was established by the State of California to utilize federal Surface Transportation Program funds for a wide variety of transportation projects. The State allows the Agency to exchange these federal funds for state funds to maximize the ability of local public works departments to use the funds on a wide variety of projects including street and road maintenance. The Agency for Monterey County has the responsibility for distributing these exchanged funds to the local jurisdictions. The exchanged funds are distributed on a fair share and competitive basis. Annual apportionments of Regional Surface Transportation Program funds range from $3 to $4 million and may be used on on-street bicycle facilities.

9.3.2. Transportation Development Act

Transportation Development Act funds are derived from a ¼ cent general sales tax collected by the State and returned to Monterey County. Annual apportionments average around $12,000,000. Local Transportation Funds can be used for planning and constructing bicycle and pedestrian facilities.

9.3.3. State Transportation Improvement Program

The State Transportation Improvement Program is a statewide five-year program of state highway and local transportation projects, funded with revenues from state and federal funding sources for capital improvements. These funds can be used for a wide variety of transportation projects including local road

rehabilitation, intersection improvements, bicycle and pedestrian facilities, and other projects that enhance the region's transportation infrastructure.

9.3.4. Transportation Enhancements

Transportation Enhancement funds are for constructing transportation projects that are over and above the "normal" types of projects. The goal of program is to enhance the transportation system aesthetically and through support if non-motorized transportation. Projects may include but are not limited to streetscaping and landscaping along roadways, bicycle facilities, and decorative sidewalks. Annual apportionments of Transportation Enhancement funds average around $800,000.

Table 9-1: Funding Sources

Source	Due Date	Admin Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Construction	Other	Comments
Federally-Administered Funding									
Transportation, Community and System Preservation Program	Varies, generally January or February.	Federal Transit Administration	$204 m nationally in 2009	20%	States, MPOs, local governments and tribal agencies	X	X	X	Because TCSP program is one of many programs authorized under SAFETEA-LU, current funding has only been extended through March 4 of 2011, and program officials are not currently accepting applications for 2011. In most years, Congress has identified projects to be selected for funding through the TCSP program. the Agency will need to work with AMBAG, Caltrans and Members of Congress to gain access to this funding.
Rivers, Trails and Conservation Assistance Program	Aug 1 for the following fiscal year	National Parks Service	Program staff time is awarded.	Not applicable	Public agencies			X	RTCA staff provides technical assistance to communities so they can conserve rivers, preserve open space, and develop trails and greenways.
National Scenic Byways Program	Varies by agency	Federal Highway Administration	$3 m annually nationwide	20%	State agencies	X	X	X	NSB funds may be used to fund on-street or off-street facilities, intersection improvements, user maps and other publications. Projects must be located along a National Scenic Byway. Highway 1 south of the City of Monterey is a designated Nation Scenic Byway.
Paul S. Sarbanes Transit in Parks and Public Lands Program	Varies, Generally October.	Federal Transit Administration	$27 m in 2009	Not available	Federal, State, local and tribal agencies that manage federal lands	X	X		Funds transportation modes that reduce congestion in parks and public lands.

Source	Due Date	Admin Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Construction	Other	Comments
State-Administered Funding									
Bicycle Transportation Account	March (2011)	Caltrans	$7.2 m	min. 10% local match on construction	Public agencies	X	X	X	Eligible projects must improve safety and convenience of bicycle commuters. In addition to construction and planning, funds may be used for right of way acquisition.
Federal Safe Routes to School	Mid-July	Caltrans	$46 m	none	State, city, county, MPOs, RTPAs and other organizations that partner with one of the above.		X	X	Construction, education, encouragement and enforcement program to encourage walking and bicycling to school.
California Safe Routes to School	Varies	Caltrans	$24.5 m	10%	city, county		X	X	SR2S is primarily a construction program to enhance safety of pedestrian and bicycle facilities near schools.
Recreational Trails Program	October	CA Dept. of Parks and Recreation	$1.3 m in2010	12%	Agencies and organizations that manage public lands	X	X	X	Funds can be used for acquisition of easements for trails from willing sellers.
State Coastal Conservancy	Rolling	State Coastal Conservancy	Varies	None	Public agencies, non-profit organizations	X	X	X	Projects must be in accordance with Division 21 and meet the goals and objectives of the Conservancy's strategic plan. More information can be found at http://scc.ca.gov/applying-for-grants-and-assistance/forms.
California Conservation Corps	On-going	California Conservation Corps	CCC donates labor hours	None	Federal and state agencies, city, county, school district, NPO, private industry		X	X	CCC provides labor assistance on construction projects and annual maintenance.
Community Based Transportation Planning	March (2011)	Caltrans	$3 m	20%	MPO, RPTA, city, county		X		Eligible projects that exemplify livable community concepts including enhancing bicycle and pedestrian access.

Source	Due Date	Admin Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Construction	Other	Comments
Highway Safety Improvement Program	October	Caltrans	$1.4 m apportioned to Monterey County in 2010	Varies between 0% and 10%	City, county or federal land manager	X	X	X	Projects must address a safety issue and may include education and enforcement programs. This program includes the Railroad-Highway Crossings and High Risk Rural Roads programs.
Land and Water Conservation Fund	March	NPS, CA Dept. of Parks and Recreation	$2.3 m in CA in 2009	50% + 2-6% administration surcharge	Cities, counties and districts authorized to operate, acquire, develop and maintain park and recreation facilities	X		X	Fund provides matching grants to state and local governments for the acquisition and development of land for outdoor recreation areas. Lands acquired through program must be retained in perpetuity for public recreational use. Individual project awards are not available. The Department of Parks and Recreation levies a surcharge for administering the funds.
Environmental Enhancement and Mitigation Program	October (2010)	California Natural Resources Agency	$10 m	None	Federal, State, local agencies and NPO		X	X	EEMP funds projects in California, at an annual project average of $250,000. Funds may be used for land acquisition.
State Highway Operations and Protection Program (SHOPP)	Not Available	Caltrans	$1.69 m statewide annually through FY 2013/14	Not Available	Local and regional agencies		X	X	Capital improvements and maintenance projects that relate to maintenance, safety and rehabilitation of state highways and bridges.
Petroleum Violation Escrow Account	Not Applicable	Caltrans	Varies annually	None	Local and regional agencies		X	X	Funds programs based on public transportation, computerized bus routing and ride sharing, home weatherization, energy assistance and building energy audits, highway and bridge maintenance, and reducing airport user fees.
Office of Traffic Safety (OTS) Grants	January	Caltrans	Varies annually	None	Government agencies, state colleges, state universities, city, county, school district, fire department, public emergency service provider			X	Funds safety improvements to existing facilities, safety promotions including bicycle helmet giveaways and studies to improve traffic safety.

Source	Due Date	Admin Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Construction	Other	Comments
Community Development Block Grants	Varies between grants	U.S. Dept. of Housing and Urban Development (HUD)	$42.8 m	Varies between grants	City, county	X	X	X	Funds local community development activities such as affordable housing, anti-poverty programs, and infrastructure development. Can be used to build sidewalks, recreational facilities.
Locally-Administered Funding									
Regional Surface Transportation Program	Varies	Caltrans, the Agency	Varies annually	Not applicable	Regional, local agencies	X	X		The Agency prioritizes and approves projects receiving RSTP funds.
Transportation Development Act Article 3 (2% of total TDA)	Jan.	the Agency	varies	None	City, county, joint powers agency	X	X		Projects must be included in either a detailed circulation element or plan included in a general plan or an adopted comprehensive bikeway plan and must be ready to implement within the next fiscal year.
Mello-Roos Community Facilities Act	Not Applicable	City, county, special district, school district, joint powers authority	Varies	Not Applicable	city, county, special district, school district, joint powers of authority		X	X	Property owners within the district are responsible for paying back the bonds. May include maintenance.
Other Funding Sources									
Community Action for a Renewed Environment	March	US EPA	Varies	Not Available	applicant must fall within the statutory terms of EPA's research and demonstration grant authorities	X		X	Grant program to help community organize and take action to reduce toxic pollution in its local environment
Bikes Belong Grant	Multiple dates throughout year.	Bikes Belong	Not Available	50% minimum	organizations and agencies		X	X	Bikes Belong provides grants for up to $10,000 with a 50% match that recipients may use towards paths, bridges and parks.
Volunteer and Public-Private Partnerships	Not Applicable	City, county, joint powers authority	Varies	Not Applicable	Public agency, private industry, schools, community groups		X	X	Requires community-based initiative to implement improvements.

** Due dates are subject to change due to pending authorization of a new federal transportation bill.*