

Chapter 1

INTRODUCTION AND SETTING

BACKGROUND

Like the 2001 Bicycle and Pedestrian Master Plan (BPMP), the primary purpose of the BPMP is to continue working toward identifying and implementing a comprehensive pedestrian and bicycle network over a set period. This plan assumes a twenty-five year planning horizon to the year 2035 consistent with the City's General Plan. The BPMP also continues to make the City eligible for grant funding for pedestrian and bicycle facilities. When combined, these two efforts (a comprehensive network and eligibility for funding) provide the public with attractive transportation choices as alternatives to the automobile.

Unlike the 2001 BPMP, this plan includes more of a pedestrian component and an update of the bicycle component. This BPMP update addresses the following: analysis of the existing pedestrian and bicycle facilities, recommendations for new pedestrian and bicycle facilities, pedestrian and bicycle collision analysis, education and safety programs, implementation, and bicycle parking. This BPMP update includes policies and reflects coordination with other city planning documents and coordination efforts with other city departments, neighboring municipalities, the county and the state. This plan conforms to the requirements set forth in the Streets and Highways Code 891.2, which are the primary requirements for funding through California Bicycle Transportation Account (BTA) administered by the California Department of Transportation (Caltrans) and the basis of eligibility for various other grant funding programs.

Since 2001, the City has added twenty-one miles of bicycle lanes, mainly by installing bike lanes on streets that were Class III Bike Routes. Recently completed projects include: 1) Class II Bike Lanes on Mendocino Avenue, Montgomery Drive, Dutton Avenue, Coffey Lane, and Stony Point Road; 2) Projects under construction and expected to be completed by the end of 2010 include College Avenue between Dutton Avenue to the railroad tracks, Summerfield Road between Carissa Avenue to Santa Rosita Court; and 3) secured funding for Sonoma Avenue bike lanes, route signs for various Class III bicycle routes, and pilot electronic bike lockers.

SETTING

The City of Santa Rosa is located approximately 50 miles north of San Francisco in Sonoma County. The City lies in a flat valley surrounded by low mountains to the west and east. Santa Rosa is a growing residential, governmental, medical, and commercial center. Santa Rosa is the fifth largest city in the nine Bay Area counties behind Fremont, Oakland, San Francisco and San Jose¹.

What makes Santa Rosa unique? First, Santa Rosa has taken care to preserve its past and is careful to guide its future. Santa Rosa's downtown is an active place full of vibrant restaurants and businesses. City, county, state, federal, and medical center functions throughout the city add a stable (and growing) employment base for the area. The City's residents also enjoy the favorable topography, scale, and climate for walking and bicycling throughout the City. As a gateway to the Redwood Empire, Santa Rosa attracts a substantial number of visitors and has a municipal airport and regional bus transit hub along with an ample supply of quality hotels. Outside of downtown, two major shopping centers and

1 Ten Largest Bay Area Cities, 1960-2000, "2000 Rank City," MTC-ABAG Library, <http://www.bayareacensus.ca.gov/historical/largacity.htm>

other smaller shopping centers provide goods and services along principal regional streets. Numerous parks and a municipal golf course offer a chance for residents to relax and exercise.

Transportation System

The city is divided into four quadrants defined by Highway 101, which bisects the City on a north-south axis, and State Route 12, which forms an east-west axis. In addition, several major regional streets provide for cross-city circulation, including West Third Street, Fulton Road, Montgomery Drive/Third Street, Dutton Avenue, Guerneville Road, Santa Rosa Avenue, College and West College Avenue, Mendocino Avenue, and Stony Point/Marlow Road. The City is also defined by Santa Rosa Creek, draining from east to west, and the Northwestern Pacific Railroad, running west of and parallel to Highway 101. With the passage of Measure Q on November 4, 2008, a sales tax revenue source was created to fund the 75 mile Sonoma Marin Area Rail Transit (SMART) passenger rail service between Marin and Sonoma counties, including approximately 54 miles of pedestrian and bicycle paths along the SMART right-of-way with on-street facilities constructed in conjunction with neighboring municipalities for the remaining 21 miles.

From a pedestrian perspective, Santa Rosa aims to facilitate commuting by walking. A majority of streets have sidewalks or equivalent pedestrian paths along with the various common cross walk treatments and facilities found in similar cities. For example, the proximity of residential housing such as West End, St. Rose, the Cherry Street neighborhoods—to name a few—and their proximity to downtown jobs, services, Transit Mall and various bus stops throughout the downtown area, make walking a viable transportation alternative to driving for surrounding residents traveling to downtown. The City's desire for more residential housing downtown in the form of mid-rise residential units and its recent completion of the Downtown Station Area Specific Plan in 2007, which focuses on increasing walking and the other alternative modes of transportation through land use intensification and new design policies, further demonstrates Santa Rosa's plan to facilitate walking as a viable transportation choice. The City also has attractive areas to walk: 4th Street with its wider sidewalks, outdoor dining, bulb outs and public art; the Court House Square area, Historic Railroad Square and the Prince Memorial Greenway.

From a bicyclist's perspective, Santa Rosa is an attractive locale to ride. First, its level terrain and quiet tree-shaded side streets offer comfort and safety. Second, the size of the city makes practically all parts accessible by all residents within a 30 minute ride. In many ways, Santa Rosa has some of the same attributes that make the cities of Davis, Boulder, Colorado and Portland such a bicyclist's haven.

Pedestrian Planning

Before the 2001 BPMP, Santa Rosa simply had a bicycle plan. There was no separate plan addressing the pedestrian mode of transportation. Although the 2001 plan references "pedestrian" in its title, the discussion of the pedestrian mode was limited to pedestrians' use of multi-use pathways with some collision data. A key objective of the BPMP update is to include more of a pedestrian component. The pedestrian component includes a list prioritizing the top 16 sidewalk in-fill projects with recommendations for future pedestrian component materials.

Bicycle Planning

Santa Rosa developed its first bikeway plan in 1972. In 1994, the City developed an updated bicycle plan that identified 154 miles of proposed bikeways. The City actively and successfully pursues grant funding,

and has also committed some City funds to bike projects. Some of these bikeways have been implemented since the 2001 plan, and the existing bikeway network is described in Chapter 2. Santa Rosa now has approximately 13 miles of bike paths (Class I), 46 miles of designated bike lanes (Class II) and 18 miles of bike routes (Class III), up from 12 miles of bike paths, 25 miles of bike lanes and 33 miles of bike routes respectively in 2001.

CONSISTENCY AND CONFORMANCE WITH OTHER PLANS

General Plan, 2035

The City's 2035 General Plan (GP) addresses issues related to land use and growth. It provides the framework and general policies for decisions on how to grow, provide public services and facilities, and protect and enhance the environment. A city's general plan has been described as its constitution for development. Its broad policies and goals set the vision and framework for supplemental plans and programs that pursue implementation and delivery of its services. For the City's transportation services related to walking and bicycling, the BPMP provides the more specific policies and guidance for implementation of pedestrian and bicycle facilities. The GP recognizes the BPMP in GP Policy T-J-1. The BPMP is consistent with the GP and supplements its policies and goals for a pedestrian- and bicycle-friendly city.

Other Supplemental City Plans

The BPMP is consistent with other supplemental plans which have shaped and guided the design and policies of walking and bicycling in the City. The major supplemental plans previously developed are the Northern Downtown Pedestrian Linkages Study (2006), Citywide Creek Master Plan (2007) and the Downtown Station Area Specific Plan (2007). A list of all other planning documents reviewed as part of the BPMP update appears in Appendix A.

Sonoma County Transportation Authority

The Sonoma County Transportation Authority (SCTA) produced the Countywide Bicycle and Pedestrian Master Plan in May 2008. The Countywide BPMP is a collaboration of eight cities within the county. It contains ten components: the Countywide Master Plan Overview, Appendices, and an Individual Plan for each of the eight participating jurisdictions: Cloverdale, Healdsburg, Town of Windsor, Sebastopol, Sonoma, Rohnert Park, Cotati, and Sonoma County. The collaboration and timing of these smaller municipalities having their master plans all due for updating at the same time and the economy of scale that could be recognized by taking a countywide approach facilitated the collaboration with the SCTA. Both the cities of Petaluma and Santa Rosa chose to do their own plans, Petaluma because it recently completed its BPMP before the countywide effort kicked off and the City of Santa Rosa because of its size (the largest city in the County) and special need to develop a pedestrian component to its Master Plan.

The eight individual plans have been adopted by the respective municipalities, the SCTA will post the plans on its web site and include them in the county-wide planning document: the Comprehensive Transportation Plan (CTP). Although Petaluma and Santa Rosa did not participate in countywide effort, both coordinate with the SCTA on pedestrian and bicycle issues in the county and are members of the SCTA Countywide Bicycle and Pedestrian Advisory Committee (CBPAC), which meets bi-monthly. Santa Rosa shares the same mapping as all other municipalities in the county and SCTA. Petaluma and Santa Rosa will subsequently be amended into the CTP.

Santa Rosa coordinates with its bordering jurisdictions and the County of Sonoma (unincorporated areas)

to ensure all major bicycle routes identified in the County plan (existing or proposed) connect directly to routes in Santa Rosa to reduce the possibility of gaps in bicycle facilities from one jurisdiction to the next (aka Gap Closures). These routes are depicted in Figure 1 and a list of the routes and facility type appear in Table 1-1.

This coordination includes the Sonoma Marin Area Rail Transit District (SMART) which includes a 54 mile pedestrian and bicycle pathway along portions of its 70 mile rail corridor that bisects the County and its various municipalities. The City’s coordination includes the California Department of Transportation (Caltrans) which has jurisdiction over State Highway Route 12 (SR 12). This includes Farmers Lane between Highway 12 and Fourth Street and Sonoma Highway (SR 12), from Fourth Street and Farmers Lane to the southeastern City Limits.

Table 1-1 Conformance of Existing and Planned Bicycle Facilities between Santa Rosa and Other Jurisdictions

<i>City Path/Route</i>	<i>Other Jurisdiction</i>
Northside	
Santa Rosa Creek Trail	Petersen Creek Trail
Fulton Road North	Fulton Road Bikeway to Old Redwood Hwy.
Northwestern Pacific Railroad North	County bike route
Piner Creek North	County bike route
Old Redwood Highway North	County bike route
Brush Creek Road North	County bike route on Wallace
Calistoga Road North	No designated connection
Westside	
Piner Road West	County bike route
Guerneville Road West	County bike route
Santa Rosa Creek Trail West	County bike route
West Third Street	County bike route along Hall Road
Occidental Road West	County bike route
Sebastopol Road West	Joe Rodota Pathway to Sebastopol
Ludwig Avenue West	Planned connection to Llano Road
Southside	
Stony Point Road South	County bike route
Colgan Creek West	Colgan Creek Trail
Northwestern Pacific Railroad South	County bike route
Santa Rosa Avenue South	County bike lane
Petaluma Hill Road South	County bike route
Bennett Valley Road South	County bike route
Roseland Creek South	County bike route
Hunter Creek View Creek Trail	County bike route
Eastside	
SR 12 East	County bike route
Montgomery/Santa Rosa Creek Trail East	Connection to Spring Lake, Annadel routes

Transportation 2035 Plan, 2009

The Transportation Plan 2035 (also known as the Regional Transportation Plan-RTP), updated by the Metropolitan Transportation Commission (MTC) in 2009, describes current bicycling conditions in the Bay Area, identifies deficiencies, and recommends actions such as increasing local bicycle routes, and increasing multi-modal connections and the bicycle carrying capacity of transit, among other items. The document does not provide a regional bicycle system map or route descriptions. This plan provides a framework for identifying regional priorities for routes and facilities and recommends a series of activities and policies to encourage bicycling at the regional level. This plan is regional in focus and is, therefore,

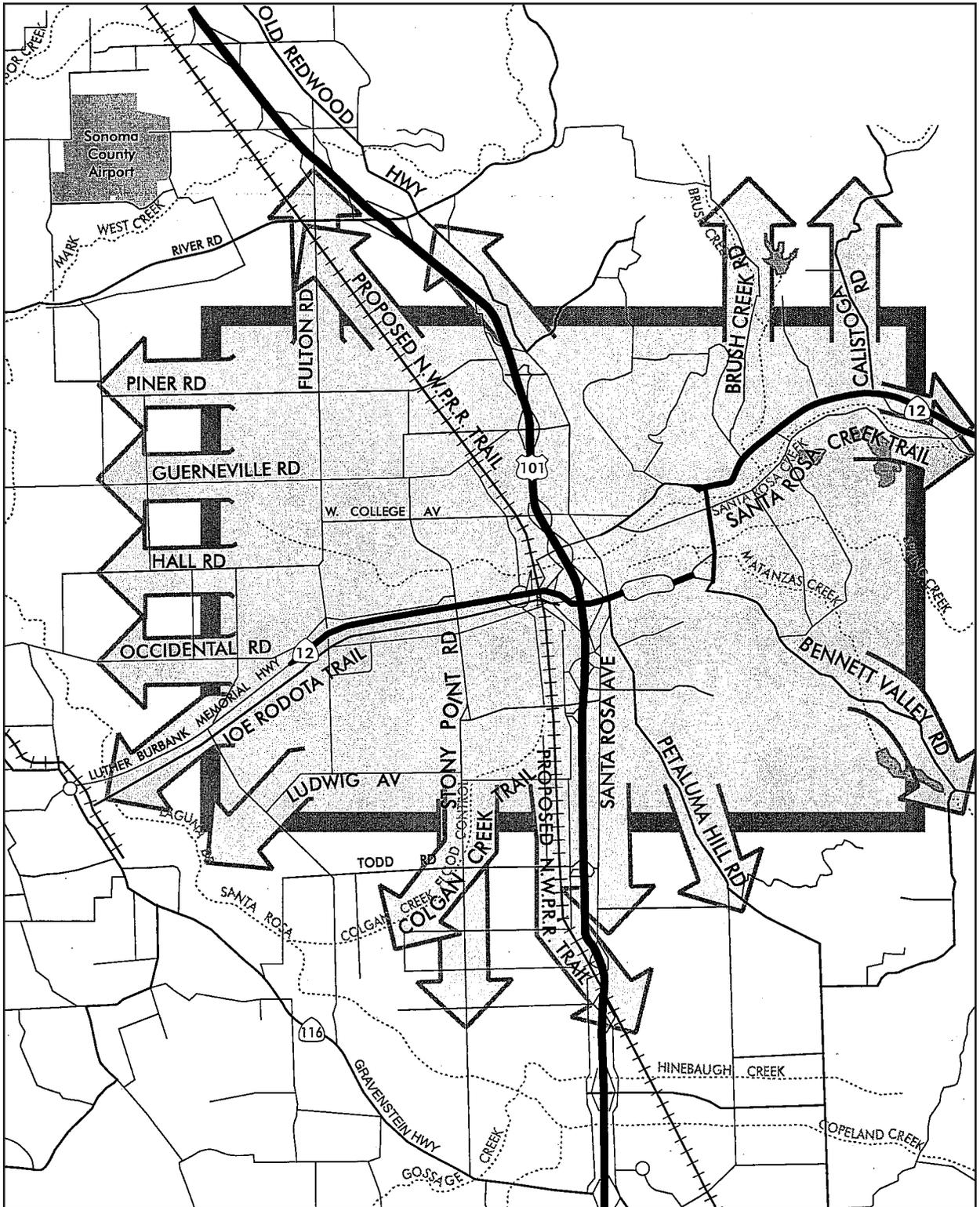


Figure 1-1 Connections to Sonoma Countywide Bicycle Routes

oriented around policies and programs and defers to local decision making about specific routes and facilities. MTC updated this plan in 2009.

Sonoma County Unincorporated Bicycle and Pedestrian Master Plan 2010

The County of Sonoma updated its Bicycle and Pedestrian Master Plan for the unincorporated portions of the county in 2010. The County's unincorporated BPMP is oriented primarily toward identifying the needs of commuting cyclists. Most County bikeways remain as Class III type facilities on existing roadways, though some Class I and II facilities do exist on major routes and near urban areas. The County's BPMP contains goals, objectives, design guidelines, and a list of bicycle facility improvement projects needed throughout the unincorporated portions of the County.

All major bicycle routes identified in the County unincorporated plan connect directly to routes in Santa Rosa. These include the following existing or proposed facilities: the proposed Colgan Creek path, the Roseland Creek path, the Hunter View Creek path, the Joe Rodota pathway to Sebastopol, the Santa Rosa Creek pathway, Fulton Bikeway, and the Central Sonoma Valley Trail. Nearly all of the remaining Class II and III existing and proposed bikeways in the County's unincorporated BPMP also connect to existing and proposed routes shown on the Santa Rosa BPMP. Again, these routes are summarized in Table 1-1 and are illustrated in Figure 1.1.

Bay Area Ridge Trail

This trail system is planned to encircle the Bay Area, primarily using ridge tops. Approximately 316 of the total 550 miles are currently dedicated (existing). Of that 550 mile network, approximately 57.5 miles of the system is existing or proposed in Sonoma County (27 existing, 30.5 proposed), but only one mile is within the City's jurisdiction. This one mile trail connector runs through the City's Howarth Park beginning at the Lake Ralphine parking lot (0.1 mile) to the dirt trail along the edge of Lake Ralphine (0.3 mile), crossing the multi-use pathway (Route 63—Class I) to Bob Whiting Trail and ending at the West Saddle Dam of Howarth Park/Spring Lake boundary (0.6 miles). The remaining segment of the Bay Area Ridge Trail for the Santa Rosa vicinity runs south along Spring Lake and in a south-east direction along the west side of Annadel State Park where it branches east to Hood Mountain Regional Park and south toward Lawndale Road south of the City Limits and into the unincorporated area of Sonoma County (See Figure 1.2, Bay Area Ridge Trail-Santa Rosa Vicinity). The Bay Area Ridge Trail project is managed by a non-profit organization based in San Francisco that coordinates with local governments, land trusts and other land management agencies to implement the system.

Area Plans

Area Plans were adopted for southeast and southwest Santa Rosa by the City Council in 1994. Both of these plans identify pedestrian needs and bicycle facilities. Because of the projected increase in the transportation infrastructure in both of these areas, all of the proposed bike routes were reviewed in these two plans for inclusion in the 2001 Bicycle and Pedestrian Master Plan and form the foundation of pedestrian and bicycle network in these two areas, unless amended by subsequent planning documents or planning action.

The existing and proposed bicycle network in the Southwest Area is connected to the City's bikeway system. The Area Plans emphasized the development of a pedestrian and bicycle network. Related policies included encouraging school districts to locate new elementary schools so students do not have to cross major streets, developing bikeways in accordance with the 2001 Bicycle and Pedestrian Master Plan, and requiring that pedestrian/bicycle lanes/paths or shoulders be provided by developers to improve pedestrian and bicycle safety on rural roads.

The Southeast Area plan specified the provision of bicycle paths and lanes to link activity centers; bicycle parking areas in commercial and multi-family residential projects, including ensuring conveniently located bicycle racks at the Town Center, the Community Center, and parks.

Because both areas have developed since these two area plans were adopted, and the policies incorporated into subsequent regulation (e.g. Bicycle Parking requirements into the Zoning Code) or planning documents, both plans are superseded by the 2035 General Plan revision.

Santa Rosa Citywide Creek Master Plan

The Citywide Creek Master Plan (CCMP) presents a set of creek-related policies and recommendations for site-specific improvements to the nearly ninety miles of creeks that flow through Santa Rosa. Portions of the creek system are used as alternative transportation routes for pedestrians and bicyclists. The purpose of the CCMP is to implement the General Plan and to provide guidelines, policies, and criteria for the protection, care, management, restoration, and enhancement of waterways in Santa Rosa. The CCMP embraces the concept that waterways are important for multiple uses: drainage and flood control, fish and wildlife habitat, recreational and educational opportunities, open space and alternate transportation routes. The CCMP also acknowledges that although the property owner is the Sonoma County Water Agency, many waterways are also located on private property, and that private landowner rights must be respected. The City strives to acquire private property adjacent to waterways (e.g. parcels on Santa Rosa Creek east of Brush Creek) for open space and alternate transportation routes when and where possible.

The CCMP identifies existing and proposed roads, trails, connections and the various existing bicycle facilities. Where the CCMP designates proposed paved “trails,” the BPMP shows proposed Class I Bike Paths. The 2001 BPMP showed proposed Class I Bike Paths that were inconsistent with the CCMP. Trails (unpaved) are shown in the BPMP where the 2001 BPMP previously showed a proposed Class I, and the CCMP shows an unpaved trail. This update to the BPMP makes the BPMP consistent with the CCMP, and defers to the CCMP as the subject matter planning document on the policies and uses of creeks within the City Limits. There are approximately 13 miles of existing and 20 miles of proposed Class I’s along creeks within Santa Rosa.

Core Area Development Plan

The Core Area Development Plan (CADP) was adopted in 1991. The principle purpose of the CADP was to promote the Core Area as the center of business, social and civic life in Santa Rosa. The CADP focused on a 10-year planning horizon. Some of those planning recommendations from the CADP have been achieved while others are still actively being pursued and addressed in subsequent planning documents. The CADP included pedestrian and bicycle facilities. For the pedestrian mode, the plan recommends establishing obstacle-clear zones at sidewalk corners, a pedestrian corridor through Santa Rosa Plaza Shopping Mall, bulb outs, and defined signal cycle lengths to minimize delays to pedestrian movements in the Core Area. The CADP recommended that bicycle support facilities be included in new development, that Santa Rosa Creek be used to connect downtown with old Santa Rosa, and that Humboldt and D Streets be used as a primary north-south bicycle route through the Core Area.

CityVision Plan

CityVision was a non-profit public citizen’s planning group formed to facilitate the implementation of recommendations from the 1998 Rural Urban Design Assistance Team (R/UDAT) report. The recommendations of the R/UDAT stemmed from the recommendations in CADP. CityVision was also

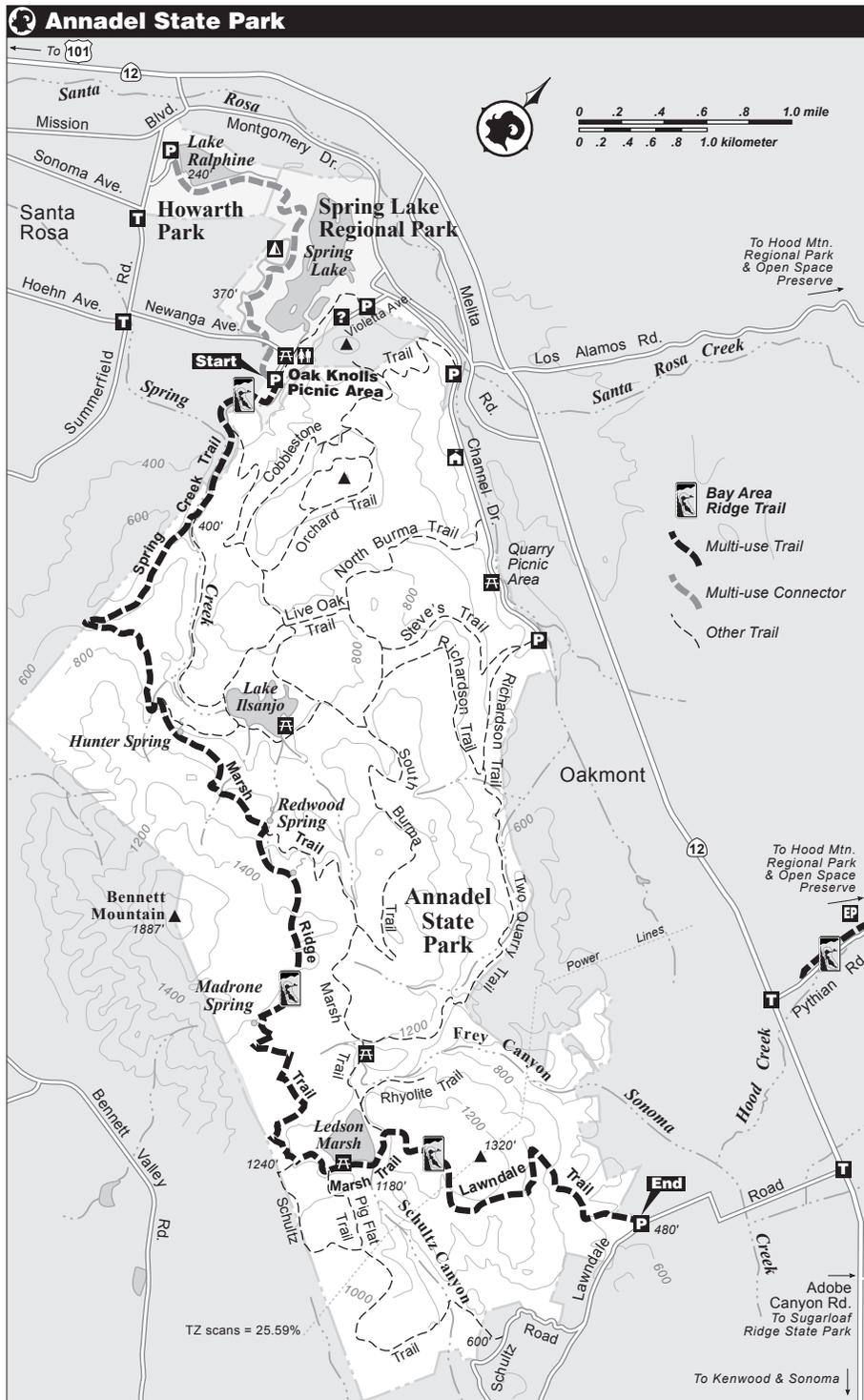


Figure 1-2 Bay Area Ridge Trail - Santa Rosa Vicinity

formed to educate and assist the public in proactive community planning in the downtown core of Santa Rosa. CityVision completed a summary report in 2000 for the City of Santa Rosa.

As part of the summary report, CityVision proposed several roadway modification projects in the downtown core with the purpose of creating walkable streetscapes. For example, it was proposed that Mendocino Avenue, from College Avenue to Fourth Street, be modified by removing a travel lane and replacing the additional space with parking or widened sidewalks. Most of these proposed projects in the downtown core were created with the idea of making the downtown a destination rather than a through route for vehicular traffic and bicyclists.

In conjunction with these street modification projects, CityVision proposed a downtown bicycle beltway system of bicycle paths around the downtown core. The beltway was identified as being located on College Avenue (from NWP railroad right-of-way to E Street), E Street (from College Avenue to Sonoma Avenue), Sonoma Avenue (from E Street to Santa Rosa Avenue), Prince Memorial Greenway (from Santa Rosa Avenue to the NWP railroad right-of-way), and the NWP railroad right-of-way (from Prince Memorial Greenway to College Avenue).

Some of the efforts from the R/UDAT exercise have been incorporated into the General Plan (e.g. downtown core boundary) while other recommendations continue to be discussed today (e.g. reunification of Court House Square, an east-west pedestrian connection through Downtown Santa Rosa Plaza to Railroad Square). The corridors identified in the bicycle beltway system have been incorporated as part of the 2001 BPMP and remain in the 2010 update. The Prince Memorial Greenway is now an existing facility.

Northern Downtown Pedestrian Linkages Study

The Northern Downtown Pedestrian Linkages Study (NDPLS) was initiated in 2004 to study the 6th and 7th Streets corridor through downtown to develop conceptual and design improvement plans that would strengthen linkages between the northern and central areas of downtown. The City Council accepted the NDPLS in November 2006 pursuing implementation of Class II bicycle lanes as the ultimate improvement along the 6th Street corridor between A Street and Pierson Street with an interim Class III bicycle facilities along 6th Street between Wilson and Davis Streets and West 6th Street west of the SMART property.

Downtown Station Area Specific Plan

The Downtown Station Area Specific Plan (DSASP) was adopted in 2007. The primary goal of the DSASP was to create a transit-supportive environment through land use intensification, improved modal connectivity and circulation, and creation of more walkable environments within the ½ mile radius of the Plan Area. The DSASP recognized that some of the currently planned Class II bicycle facilities in the 2001 BPMP would be difficult to implement due to a combination of right-of-way and site constraints, neighborhood parking issues, and the presence of historic structures. The DSASP also suggested alternative approaches for accommodating bicycle travel where right-of-way constraints exist. The DSASP was adopted by the City Council without making changes to the Class II Bike Lane facilities proposed in the 2001 BPMP in favor of having the matter studied further as a part of the 2010 BPMP update process. This update makes revisions to the 2001 BPMP as outlined in Chapter 3 of this BPMP update, and discusses the conclusions in Chapter 5 from this further study.

VISION STATEMENT

Promote walking and bicycling as viable, attractive, non-polluting forms of transportation and assure safe and convenient pedestrian and bicycle access to all areas of the city.

GOALS AND POLICIES

GOAL 1 - PLANNING

Integrate the consideration of bicycle and pedestrian travel into City planning activities and capital improvement projects, and coordinate with other agencies to improve pedestrian and bicycle facilities and access within and connecting to Santa Rosa.

POLICIES:

- 1.1 Planning for non-automobile modes (pedestrian, bicycle, transit) to receive equal emphasis as planning for motor vehicle transportation.
 - 1.1.1 **Action Step:** Conduct regular counts of pedestrian and bicycle traffic.
 - 1.1.2 **Action Step:** Review existing city ordinances for appropriateness and for consistency with the California Vehicle Code.
- 1.2 Integrate pedestrian and bicycle network and facility needs as appropriate into all planning, and regulatory documents, street capital improvement projects, including traffic impact studies and analyses of proposed street changes.
 - 1.2.1 **Action Step:** Ensure consideration of pedestrian and bicycle network and facility needs into all planning policy documents, studies and in the development review process by considering:
 - Impact on the existing pedestrian and bikeway network;
 - Consistency with General Plan, Bicycle and Pedestrian Master Plan (BPMP) policies and City Design Guidelines;
 - Degree to which pedestrian and bicycle travel patterns are altered or restricted due to the project; and
 - Safety of future pedestrian and bicycle operations .
 - 1.2.2 **Action Step:** Require new development, or reconstruction if applicable, to address the pedestrian and bicycle circulation element based on the above considerations.
 - 1.2.3 **Action Step:** Utilize the Regional Complete Streets (Routine Accommodation) Checklist to assure consideration of pedestrian and bicycle facility needs in City transportation projects and roadway improvements.
- 1.3 Establish clear roles and responsibilities for all affected City departments in the implementation of the Bicycle and Pedestrian Master Plan, including the funding, planning, construction, operation, and maintenance of pedestrian and bicycle facilities.
 - 1.3.1 **Action Step:** Establish a full-time pedestrian and bicycle coordinator position.
- 1.4 Coordinate the pedestrian and bicycle network plan with state and other adjacent governmental entities, public service companies, potential partner organizations, regulatory and coordinating agencies and transit agencies.

- 1.5 Require development projects to include features that promote the use of, and eliminate barriers to the use of, bicycle, pedestrian and transit systems. These features could include bus turnouts, inter-connected bicycle and pedestrian paths and sidewalks, and pedestrian-accessible features such as convenient local-serving retail and service uses.
- 1.6 Improve regulatory requirements related to building and driveway setbacks, curb cuts, maximum block lengths and cul de sacs to reduce impacts to the pedestrian and bicycle system.

GOAL 2 - PEDESTRIAN AND BICYCLE NETWORK DESIGN AND MAINTENANCE

Develop a safe, convenient, and continuous network of pedestrian and bicycle facilities that serves the community and links neighborhoods with schools, parks, shopping, and employment centers.

POLICIES:

- 2.1 Develop a citywide system of designated bikeways that serve bicyclists of all skill levels and which maximizes bicycle use for commuting, local transportation, and recreation.
- 2.2 Provide bike lanes along all regional streets and high volume transitional streets (i.e. 4,000 vehicles per day) and remove barriers to bicycle use on selected low volume residential streets. Provide sidewalks on all future development and existing streets as needed.
 - 2.2.1 **Action Step:** Include Class II bike lanes in all new construction or reconstruction projects. Maintain a Sidewalk-Infill Program to address sidewalk gaps. Plan and develop well-connected streets and sidewalk and pathways that provide the most direct paths of travel for pedestrians. Provide connections between or through cul de sacs and remove barriers to walking.
 - 2.2.2 **Action Step:** Evaluate all streets during pavement resurfacing to determine if pedestrian or bicycle facilities can be provided (e.g. bike lanes, wider curb lanes or sidewalks) when the striping is reapplied.
 - 2.2.3 **Action Step:** On transitional streets with speeds of 35 mph or more, and local streets with speeds over 25 mph, implement traffic calming measures to improve safety for all users - motorists, cyclists and pedestrians.
 - 2.2.4 **Action Step:** Provide Class II bike lanes through the downtown core to include at least one east-west and one north-south route.
- 2.3 Provide sidewalks or pathways and bikeways on major access routes to all schools and parks.
- 2.4 Ensure that projects affecting roadway and pedestrian corridor designs avoid any actions that would compromise pedestrian or bicycle safety or circulation, such as removing or narrowing an existing sidewalk, the narrowing of a curb lane on any road to a width less than acceptable, or restriping or widening to provide a double right-turn lane, particularly where the second lane is a shared through-right lane.
- 2.5 Integrate Class I multi-use paths along creeks, railroad rights-of-way, and park designs by

coordinating with the Citywide Creek Master Plan, operators and appropriate jurisdictions. Ensure all multi-use paths are accessible per the federal Americans with Disabilities Act (ADA).

2.5.1 Action Step: Since off-road paths are not surveyed by the pavement management program or reached by street sweepers, a special schedule for inspection and maintenance should be established.

2.5.2 Action Step: Utilize the design criteria published in Chapter 1000 of the California Highway Design Manual (Caltrans), existing standards for design of Class I multi-use paths, Class II Bike Lanes, and Class III Bike Routes (See 2010 BPMP Appendix B). If it is a pedestrian facility, utilize design criteria published in Chapter 105 of the California Highway Design Manual (See 2010 BPMP Appendix C), the City’s Design Guidelines, and Street Design and Construction Standards.

2.5.3 Action Step: Evaluate at-grade and grade-separated crossing installations where multi-use paths cross streets. Utilize the “Surface Street Crossings” design standards for at-grade crossings in the Citywide Creek Master Plan Chapter 3.3.4 (See 2010 BPMP Appendix D).

2.5.4 Action Step: Design Class I facilities to allow for adequate access by public safety and Water Agency vehicles.

2.5.5 Action Step: Work with Water Agency to design and construct ADA-compatible gates on multi-use paths along creeks.

2.5.6 Action Step: Continue the directional and informational signing system initiated for the Santa Rosa Greenway Signage and expand to all other Class I multi-use paths within the City limits and coordinate the signage system with partner jurisdictions.

2.5.7 Action Step: Continue developing standards for accessible gates at Class 1 bike path entrances that are acceptable to all users (“Trail Entries” are discussed in Chapter 3 and Appendix E of the Citywide Creek Master Plan).

2.6 Ensure that pedestrian and bicycle circulation is an integral part of street design so that lanes and pathways form an integrated network and address the “Complete Streets” concept in transportation planning.

2.6.1 Action Step: Identify weak links and discontinuities in the existing network, and develop criteria for prioritizing and finding solutions to the problems.

2.7 Consider pedestrian and bicycle operating characteristics in the design, and/or retrofitting of turning movements, intersections and traffic control systems, including analysis of pedestrian and bicycle counts and collisions.

2.7.1 Action Step: Continue to install bicycle-sensitive loop detectors (or video detectors) with accurately-placed pavement markings placed such that the Bicycle Detection Symbol (BDS) is off-center of the travel lane and not on the right edge of the travel lane.

- 2.7.2 Action Step:** Continue to install lead pedestrian interval (LPI) phases in traffic signal timing in the urban core, and outside the urban core, as warranted, to encourage walking and facilitate crossing busy regional or high volume transitional streets.
- 2.7.3 Action Step:** Adjust pedestrian clearance time where older or disabled pedestrians routinely use the crosswalk.
- 2.7.4 Action Step:** Refine and calibrate sensitivity of bicycle loop detectors where bicycles are not recognized.
- 2.7.5 Action Step:** Develop standards for signal timing to facilitate movement of bicycles at intersections.
- 2.7.6 Action Step:** Conduct regular pedestrian and bicycle counts pursuant to regional methodology as part of before and after project implementation, as necessary.
- 2.8** Coordinate and cooperate with surrounding jurisdictions, such as Sonoma County, to create a seamless pedestrian and bikeway network.
- 2.9** Maintain all roadways, pedestrian and bicycle-related facilities so they provide safe and comfortable conditions for pedestrians and bicyclists. The level of service for maintenance efforts on pedestrian and bicycle facilities should be equal to roads used by motor vehicles.
- 2.9.1 Action Step:** Sweep streets regularly, with priority given to those with higher pedestrian and bicycle traffic.
- 2.9.2 Action Step:** Prepare an annual Work Plan including the status of pedestrian and bicycle projects in the BPMP completed, in progress and proposed for the budget year showing Scope, Schedule, and Budget by fund source.
- 2.9.3 Action Step:** Incorporate routine accommodation for pedestrian and bicycle facilities when developing priority lists for overlay and construction projects, maintenance, and in the City's guidelines.
- 2.9.4 Action Step:** Adopt street surface repair standards for roadway maintenance that meet bicyclists' needs for smooth, deterrent-free roads. (Appendix E.)
- 2.9.5 Action Step:** Design facilities to minimize maintenance costs by specifying quality materials and standard products.
- 2.9.6 Action Step:** Require glass and debris removal from bike lanes after motor vehicle collisions.
- 2.9.7 Action Step:** Trim overhanging and encroaching vegetation to maintain a clear path of travel along pedestrian facilities and bicycle facilities.
- 2.9.8 Action Step:** Repair surface defects such as potholes and ruts, giving priority to the right-hand portion of the outside lane.
- 2.9.9 Action Step:** Ensure proper funding levels for routine bicycle-related maintenance activities.

- 2.9.10 Action Step:** Review conditions of all road shoulders and bike lanes at railroad crossings. Plan for an upgrade of conditions to assure safe crossings by bicyclists.
 - 2.9.11 Action Step:** Establish a routine inspection procedure for pedestrian and bicycle facilities.
 - 2.9.12 Action Step:** Repair faded and worn bike lane markings and improve pavement quality where needed, including replacement of drainage grates on City bikeways with grate designs that do not pose a safety hazard for bicycles.
- 2.10** Provide specific requirements and design guidelines for bikeways, particularly shared use roads and traffic calming strategies where appropriate. (See Chapter 6)
- 2.10.1 Action Step:** Develop policy for increasing Class II-Bike Lane width greater than the Caltrans minimum 5-foot width based on speed limit and traffic volumes.
 - 2.10.2 Action Step:** Develop policy for deploying Shared Roadway Bicycle Markings in the City based on the Caltrans standard but adapted to the City's local operations and characteristics of speed limit, traffic volumes and street geometry.
 - 2.10.3 Action Step:** Develop policy for designating Class III Bike Routes with added street treatments where the travel lane width is less than 12 feet and the street meets some of the Caltrans Highway Design Manual "On-street Bike Route Criteria."
 - 2.10.4 Action Step:** Develop a city traffic calming program defining the process and criteria used for deploying street calming treatments.

GOAL 3 – PEDESTRIAN NETWORK

Develop a safe, convenient and continuous pedestrian network of sidewalks and paths that link neighborhoods with schools, parks, shopping and employment centers.

POLICIES

- 3.1** Provide attractive and safe streets for pedestrians.
 - 3.1.1 Action Step:** Include sidewalks on all new or retrofitted roadways.
 - 3.1.2 Action Step:** Provide pedestrian connections to schools and shopping centers from new housing developments.
 - 3.1.3 Action Step:** Design connections that provide a clear and direct path of travel for the advantage and convenience of the pedestrian (See Chapter 6)
 - 3.1.4 Action Step:** Develop a protocol to evaluate locations for enhancing crosswalks.

- 3.1.5 Action Step:** Use state-of-the-art technologies such as pedestrian countdown signals and infrared pedestrian detectors or pressure plates.
- 3.1.6 Action Step:** Identify and construct new sidewalks in areas where they are incomplete.
- 3.1.7 Action Step:** Develop and enforce a sidewalk maintenance program to ensure that adjacent property owners maintain the sidewalk properly.

GOAL 4 - PEDESTRIAN AND BICYCLE SUPPORT FACILITIES AND INTERMODAL CONNECTIONS

Provide related facilities necessary for walking and bicycling to assume a significant role in the transportation system.

POLICIES:

- 4.1** Ensure adequate supply and type of bike parking.
 - 4.1.1 Action Step:** Review and update the Zoning Code, as necessary, for bicycle parking requirements related to new development. Projects of commercial or industrial nature should include bicycle storage facilities for employees and customers and shower/locker areas for employees who commute using bicycles. (Appendix F)
 - 4.1.2 Action Step:** Review and update standards for bike rack parking/storage design and placement.
 - 4.1.3 Action Step:** Monitor bicycle parking supply within the City right-of-way and installed by private developers under city ordinance to ensure that adequate bike parking is available, and installed properly.
 - 4.1.4 Action Step:** Explore innovations for bicycle parking facilities, such as electronic lockers and high-security racks.
 - 4.1.5 Action Step:** Continue working with the downtown employers to meet bicycle parking needs in the downtown area and other areas as necessary.
 - 4.1.6 Action Step:** Develop a procedure for routine inspection and maintenance of bicycle parking facilities.
 - 4.1.7 Action Step:** Encourage event organizers to provide and publicize valet bike parking.
- 4.2** Promote and facilitate the use of bicycles in conjunction with other transportation modes.
 - 4.2.1 Action Step:** Explore the feasibility of providing secure bike parking at key transit transfer centers and bike stations at the Transit Mall and SMART Stations.
- 4.3** Provide consistent signage for all bikeways.
 - 4.3.1 Action Step:** Develop a policy standard for bike signage at set intervals including directional arrows and/or destination signs. (See Chapter 6)

GOAL 5 - EDUCATION/SAFETY/ENFORCEMENT

Improve safety for pedestrians and bicyclists through education and enforcement.

POLICIES:

- 5.1 Support and expand safety education programs such as “Share the Road” for adult bicyclists, child bicyclists, and motorists which increase knowledge of safe bicycling practices and encourage positive individual behavior change.
 - 5.1.1 **Action Step:** Work with the Pedestrian and Bicycle Safety Program offered by the Police Department.
 - 5.1.2 **Action Step:** Support and enhance existing programs that promote safe walking and bicycling techniques, and make the information available through schools, work sites and general publicity efforts.
 - 5.1.3 **Action Step:** Promote the League of American Bicyclist’s Certified Instructor bicycle Street Skills course offered by the Sonoma County Bicycle Coalition and encourage it to be taught through the adult education program or Recreation, Parks and Community Services.
 - 5.1.4 **Action Step:** Use pavement markings on the road surface or signage along the road to specify the correct travel direction of bicycles when in bike lanes.
 - 5.1.5 **Action Step:** Use “Share the Road” warning signs or other appropriate regulatory signs on roads too narrow for bike lanes to encourage mutual consideration and respect for users of the road.
 - 5.1.6 **Action Step:** Develop and implement a media campaign to promote bicycle safety by increasing motorist awareness of safe driving techniques around bicyclists.
- 5.2 Work with the school districts in Santa Rosa to institute safety education programs for students, such as the countywide Safe Routes to School Program sponsored by SCTA.
- 5.3 Enforce motorist, pedestrian and bicyclist violations that are most likely to cause injury, such as running red lights, speeding, wrong-way riding, jay-walking, riding on sidewalks where illegal, and children under the age of eighteen not wearing helmets.
 - 5.3.1 **Action Step:** Expand and support a city-wide school safety helmet program.
 - 5.3.2 **Action Step:** Increase enforcement of motor vehicle speeds.
 - 5.3.3 **Action Step:** Adopt a reduced fine schedule for bicycle infractions so that fines are commensurate with the offense.
 - 5.3.4 **Action Step:** Study pedestrian/auto and bicycle/auto accident records and develop a focused enforcement effort, combined with education and awareness campaign targeting motorists, pedestrians and bicyclists with a goal of reducing collisions by 10% between 2010 and 2014.
 - 5.3.5 **Action Step:** Collect comprehensive information about police and hospital-reported pedestrian and bicycle collisions to identify causes and remedies.

- 5.4 Provide literature and up-to-date bicycle route maps for public use.
- 5.4.1 Action Step:** Continue to provide a link to the current version of the countywide unincorporated bicycle map on the City pedestrian and bicycle program web site.
- 5.4.2 Action Step:** Continue to provide the City bicycle guide map for public use. The map shall be distributed to employers, bike shops, public buildings and schools as part of the Transportation Demand Management program. The map should be updated approximately once every three years as needed.
- 5.5 Promote programs that reduce incidents of theft and continue efforts to recover stolen bicycles.
- 5.5.1 Action Step:** Develop informative material for use with neighborhood groups on incidents of bike theft from private property.
- 5.5.2 Action Step:** Establish and promote a voluntary bicycle licensing system.

GOAL 6 - PROMOTION

Increase pedestrian and bicycle mode share by increasing public awareness of the benefits of walking and bicycling and of the available facilities and programs through the Transportation Demand Management Program.

POLICIES:

- 6.1 Provide current and easily accessible information about the pedestrian and bicycle network, pedestrian and bicycle programs and bicycle parking.
- 6.1.1 Action Step:** See 5.4.1 and 5.4.2.
- 6.1.2 Action Step:** Provide website links on the City's pedestrian and bicycle program web site to pedestrian related programs (e.g. YMCA's walking program, Police Department's Pedestrian Safety Program).
- 6.2 Encourage bicycling and walking through the Transportation Demand Management's (TDM) incentive/awareness programs.
- 6.2.1 Action Step:** Continue to sponsor the annual Bicycle and Walk to Work Week in May to receive input on the pedestrian and bicycle program, as well as to educate the public as to the benefits of walking and bicycling and the TDM program.
- 6.2.2 Action Step:** Continue to offer and expand, if possible, the City's Free Ride Program.
- 6.2.3 Action Step:** Incorporate pedestrian and bicycling promotional activities into City-sponsored events.
- 6.2.4 Action Step:** Continue the City's current program of repairing bikes and donating them to individuals.

6.2.5 Action Step: Publish an annual report summarizing pedestrian and bicycle program activities.

6.2.6 Action Step: Encourage local businesses to welcome and support bicyclists and pedestrians and to participate in the TDM program.

6.2.7 Action Step: Encourage the City of Santa Rosa to become a “Model Employer” for commute alternatives by practicing TDM principles and offering tax-free reimbursement for the cost of transit passes and commuting by bicycle for its employees.³

6.3 Increase local coverage of pedestrian and bicycle issues in the media.

6.3.1 Action Step: Include articles on pedestrian and bicycle issues in the City’s newsletter and distribute to local newspapers and provide the information on the City’s pedestrian and bicycle program web site.

GOAL 7 - IMPLEMENTATION/PROGRAMMING

Maximize the use of public and private financial resources to fund ongoing pedestrian and bicycle improvements and programs.

POLICIES:

7.1 Develop a phased and prioritized implementation plan that takes into consideration the available funding opportunities and availability of staff.

7.1.1 Action Step: Reevaluate the project priorities on an annual basis in order to take into consideration changing conditions and opportunities.

7.1.2 Action Step: Actively seek funding from public and private sources including grant funding.

7.2 Promote public/private partnerships in development, implementation, operation, and maintenance of pedestrian and bicycle facilities.

7.3 Utilize Complete Street practices to incorporate pedestrian and bicycle facilities into all roadway improvement projects, -such as widening, overlays, and restripings—to the extent feasible and not limited to those pedestrian and bikeway improvements recommended in this plan. (See Chapter 3 for an extended discussion of “Complete Streets.”)

7.4 Continue the use of the citywide Bicycle and Pedestrian Advisory Board to assist staff and advise City Council in the planning, design, and implementation of projects that directly or indirectly impact pedestrian and bicycle travel and safety.

7.5 Pedestrian and bicycle facilities should be included in the City’s regular planning (Capital Improvement Plan) and budgeting processes, and shall be subject to public review by community and planning bodies (i.e., advisory groups, Boards and Planning Commission

3 On January 1, 2009, the qualified bicycle commuting reimbursement was added to the list of qualified transportation fringe benefits covered in section 132 (f) of the Internal Revenue Service Code.

as appropriate).

- 7.6 Review and update project lists and maps in this plan annually as needed with an overall review and comprehensive update every five years when funding is made available for this purpose as outlined in the Metropolitan Transportation Commission Resolution No. 875 (Appendix G) and for presentation to the City Council for adoption.

LOCAL GOVERNMENT AND CITIZEN INVOLVEMENT

Bicycle and Pedestrian Advisory Board (BPAB)

On April 4, 2006, the City Council adopted a Resolution No. 26536 (See Appendix H for City Resolution and staff report) to restructure the former Bicycle and Pedestrian Advisory Committee (BPAC) to a nine-member appointed-Board. Seven of the members are individually appointed by City Council members. The other two positions are appointed at-large by the Council and represent the disabled community and senior community. The former BPAC was constituted in 1993 as required by Metropolitan Transportation Commission Resolution 875 as a condition of eligibility for Transportation Development Act funds. The Bicycle and Pedestrian Advisory Board (BPAB) provides City staff with input on the type of pedestrian and bicycle transportation projects that should be considered for transportation and what priority those projects should have. These efforts culminate in the preparation of the City's Bicycle and Pedestrian Master Plan. The BPAB typically met once a month and in addition convened special meetings during the preparation of this plan.

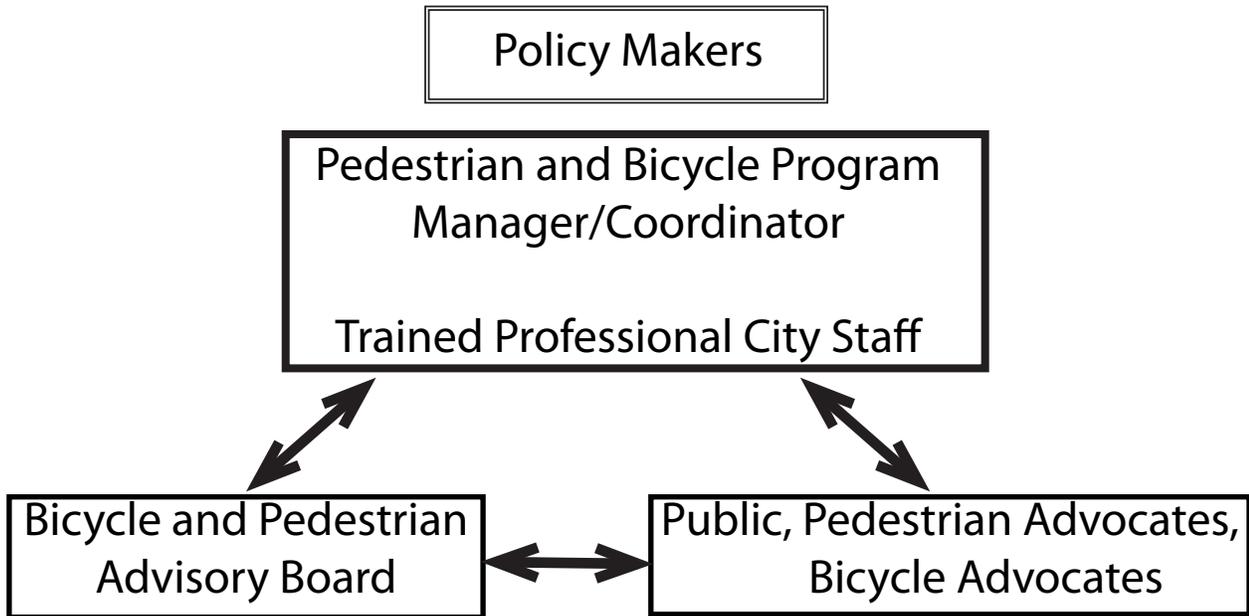
Public Workshops

Public workshops were held in October 2007, March 2008, February (Focus Group) and April 2009 and September 2010. In addition, public hearings were held as part of the Planning Commission (October 2010), and City Council (February 2011) process. Several of the BPAB's regularly scheduled and special meetings were held to discuss the development of the BPMP and included public comment periods as well. A questionnaire (described below) was also done on-line to get the public's help in determining walking and bicycling characteristics, location-specific needs in order to develop an idea of the future types of routes and facilities needed in the community. Public comments were considered or included in the early drafts of the BPMP update and refined in later versions, which shaped the draft final presented by staff to the Planning Commission and City Council. Finally, the staff presentation of the BPMP update to the Planning Commission and the City Council included public hearings as part of the recommendation and adoption process.

The development of the BPMP update also included a Technical Advisory Committee (TAC) made up primarily of planners and engineers from not only the various City departments but also partners at the county, regional and state level. The TAC membership also included two BPAB representatives. Figure 1-3 depicts a flow chart of the public involvement process.

Figure 1-3

BPMP Development and Public Involvement Process



Questionnaire, Pedestrian and Bicycle Counts

This update included a questionnaire and pedestrian and bicycle counts. Although the questionnaire is not a statistically significant survey it did fulfill two purposes: as a public participation tool that allowed members of the community to participate in the planning process and to use the results from the questionnaire to reinforce findings from public involvement activities and planning analyses. Two hundred-ninety three individuals took the on-line survey in the spring of 2008. Although this is less than 1 percent of the total population in Santa Rosa, it does represent those individuals of the public who participated in the planning process and who were most interested in the pedestrian and bicycle modes of transportation. This sort of data, although unscientific, can help staff have at least some rough idea of travel patterns from those most interested in walking and bicycling in Santa Rosa and provides consideration for future planning or survey efforts as needed.

This small sample of participants revealed that personal vehicles are the primary modes of transportation. Half of the participants said they use their vehicles for transportation while bicycling is the second most popular and walking third among the participants who took the questionnaire. Again, although the questionnaire is not statistically significant and represents less than 1 percent of the total population in Santa Rosa, it does mirror what the Press Democrat reported in November 2005: that “Sonoma County has more vehicles per capita than any of the nine Bay Area counties -- nearly one for every man, woman and child living here.”⁴

4 COUNTY LEADS IN CARS PER CAPITA, Kerry Benefield, Santa Rosa Press Democrat, November 7, 2005, p.A1

Other findings from the Questionnaire: *(Details of the questionnaire are available in Appendix I.)*

- Many respondents are avid cyclists, riding 10 miles or more on an average trip.
- Safety and lack of paths and connections are the biggest reasons respondents choose not to bicycle. Safety issues (hazardous pathway conditions and personal security) comprised over 54 percent of the responses for top reasons NOT to bike, followed closely by the lack of paths/connections and time/distance to destinations. Other reasons for not biking for transportation included lack of secure bike racks and other end-of-trip facilities.
- The time and distance to get the destination is the biggest reason residents choose not to walk. Other reasons include hazardous conditions, lack of paths and connections, and user conflicts.
- Separated bicycle paths are the preferred type of bikeway. Of the three types of bikeways, 56 percent of respondents prefer to use a Type I facility followed by a Class II facility (32 percent), unpaved trails (7 percent) and the least popular: a Class III facility (5 percent).
- Among respondents who are walkers, paved multi-use paths and unpaved paths are equally preferred over sidewalks.
- Very few questionnaire respondents have a disability that prevents them from biking and/or walking. The results show that 92 percent of respondents are able to bike or walk.

WALKING AND BICYCLING BENEFITS IN THE TRANSPORTATION SYSTEM

Some would suggest that walking is the ultimate or universal form of transportation in that almost everyone can participate without a large investment. However, both modes of transportation—walking and bicycling—require less public or private space to operate, cost less publicly or privately to operate, and cost less in terms of impact to the environment. Muenster, Germany demonstrated this concept of “less space” in its classic photo from 2001 that has been replicated over the years by many other supporters of walking and bicycling.

Unfortunately, most people do not immediately think of walking or bicycling as their first or preferred mode of transportation to work, to shop or to social occasions. There are a number of reasons for this: community planning and design, and the car culture of Americans that gave rise to suburban sprawl. But today the trend is moving back toward urban living, and the desire for more viable city centers with convenient access to services and public transportation.

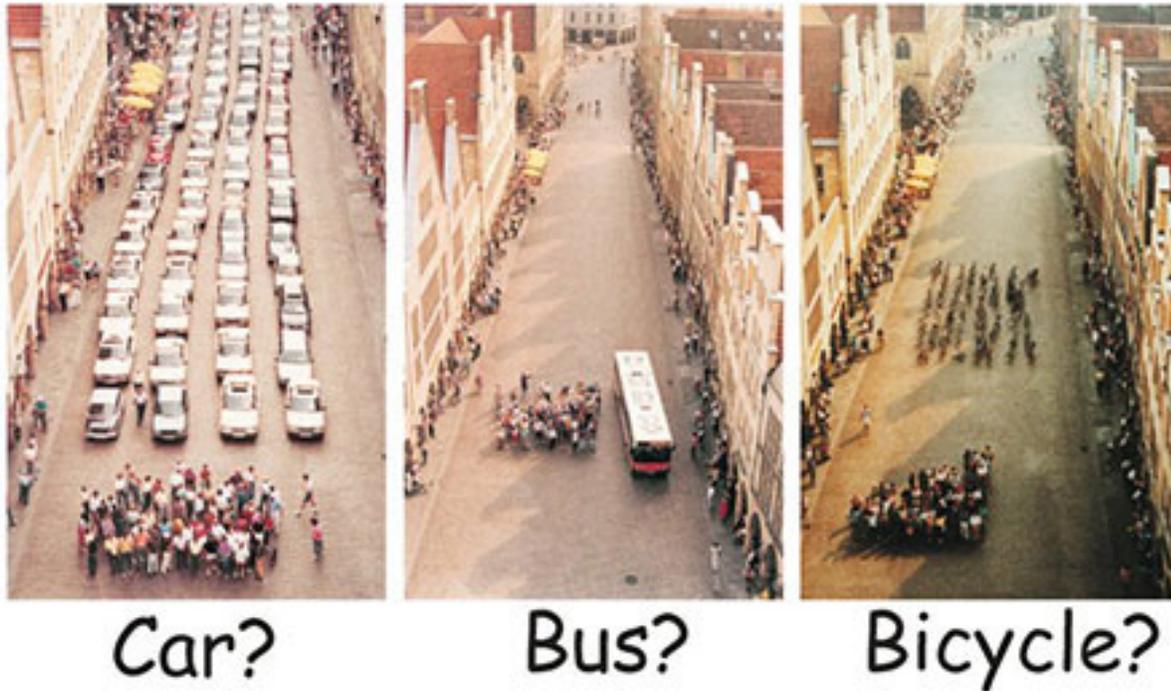
Bicycling is the most efficient form of transportation in terms of energy per mile traveled and still less to operate than a personal vehicle. However, few bicyclists consciously ride for this reason. Bicyclists ride, in fact, for many reasons and the benefits are accrued by both the individual as well as society. Some bicyclists are sometimes referred to as “transit-dependent”—meaning they have no car. But with a bicycle they are not dependent on transit; they have door-to-door mobility at the exact time they need it without being dependent on transit schedules and with the increasing popularity of “cargo bikes” and accessories such as saddle bags, bicycling is even feasible for shopping locally.

Santa Rosa, like most American cities, is car centric, more so in the Bay Area as noted previously in the Press Democrat article. Of Santa Rosa’s workers, 75 percent drive to work alone, 12 percent carpool, 3 percent take public transportation, and 5 percent use other means. The remaining 6 percent work at home.

It takes an average 21.9 minutes to get to work for Santa Rosans who commute.⁵ Like most commuters, the majority of Santa Rosans rely on personal vehicle travel. With the increasing price of gas and greater awareness of the impact of the personal vehicle, more people will look to other transportation options.

Other bicyclists, like pedestrians, have or could afford a car but for environmental reasons choose to use their bikes or feet for transportation. The environmental reasons range from the obvious one of air pollution to the more subtle but just as real problems of noise pollution, water pollution from roadway storm water run-off, reduced area for water drainage, loss of habitat due to excessive pavement for roads and parking lots, dependence on foreign oil, et cetera.

In addition to societal benefits, walking and bicycling have direct benefits for the individual. Walking is the least expensive transportation mode while bicycling is a less costly transportation mode than the automobile. When there is a fee for car parking, bicycling is even more cost-effective. At ten cents a mile,



Poster in City of Munster Planning Office, August 2001
Credit: Press Office City of Munster, Germany

a five mile bicycle trip is only 50⁶ cents compared to an auto trip at \$2.75 per trip (55 cents per mile) or a one-way bus fare of \$1.25. Thus, bicycling is chosen by people both with and without cars as the most cost effective way to travel. Bicycling is particularly convenient when it comes to parking and/or storage. Bike parking takes less space than automobile parking. Besides the individual benefits of lower costs, there are also individual health benefits from walking and bicycling: exercise. Walking and bicycling are popular among those who are concerned with health and fitness. While walking is often recommended for its health benefits, bicycling provides excellent cardio-vascular conditioning and studies have shown that employees who regularly bike to work are sick less than the average employee. Many bicycle commuters recognize that the time spent commuting to work is time that does not have to be spent at the gym or on a home treadmill.

5 US Census 2006 American Community Survey

6 “Our Methodology:” taken from article “Benefits of Biking to Work Keep Adding Up,” Louis Jones, June 2009, Kiplinger.com

From a public policy point of view, it is a worthy goal to provide safe and convenient personal mobility choices not only to those without cars but to those who have cars but want other choices in transportation other than using their car. Those without cars need access to employment, shopping, recreation and connections to transit, rail and air to reach points outside the City just as those who can afford cars and choose to drive. In sum, investing in pedestrian and bicycle facilities is a fiscally and environmentally sound expenditure of public monies and helps connect to schools and neighborhoods helping to reduce congestion. It is similar to recycling in that a



win-win situation is achieved that improves the environment while saving public dollars in the long run. Just as recycling programs have become main stream in the last twenty years, both in residential areas and at institutions, it is hoped that in the next ten years, walking and bicycling in Santa Rosa will be a daily or weekly event in the lives of most residents. This desire for walking and bicycling becoming more of main stream method of transportation in Santa Rosa is consistent with the General Plan policy



- **T-A-7: Expand non-motorized and bus infrastructure throughout the city such that greater amenities exist for cyclists, pedestrians and transit users in order to promote a healthy, sustainable city and further reduce GHG (Green House Gas) emissions.**

It is also coincident with the City's GHG Resolution No. 26341 (Appendix J) adopted August 2, 2005 that established a municipal GHG reduction target of 20 percent from 2000 levels by 2010 and facilitated a community-wide GHG emission reduction target of 25 percent from 1990 levels by 2015.

SUMMARY: HOW WALKING AND BICYCLING FITS INTO THE TRANSPORTATION SYSTEM

- Walking and bicycling are common forms of exercise
- Walking and bicycling benefits the environment
- Walking and bicycling are the least costly forms of transportation
- Pedestrians and bicyclists use less roadway space than cars
- Bike parking takes less space: up to twenty bikes can park in one car space
- Bikes provide access to outlying areas (1 to 2 miles) from transit that may not be as appealing to some if they had to walk 1 to 2 miles to use transit
- Walking and bicycling offer competitive travel time for short trips under 2 miles, particularly where motor vehicle parking is limited
- Walking and bicycling provide access to schools from within neighborhoods - removing vehicles from transitional and regional streets