

SONOMA BICYCLE AND PEDESTRIAN MASTER PLAN







Prepared by: Sonoma County Transportation Authority

In partnership with: City of Sonoma

Adopted September 2008 Updated May 2014







GLOSSARY AND LIST OF ACRONYMS

| ADA | Americans with Disabilities Act, passed in 1990, gives civil rights protections to indi-viduals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. Title II of the ADA prohibits discrimination against qualified individuals with disabilities in all programs, activities, and services of public entities, including local governments. | | |
|-------------------------------|--|--|--|
| Bicycle Facilities | Bicycle infrastructure, including bike lanes, bike routes, and bike paths. | | |
| BAAQMD | Bay Area Air Quality Management District was created through the California Legislature in 1955 to manage air quality in the 9-county Bay Area. BAAQMD funds a variety of bicycle, pe- destrian and transit projects through various grant programs, such as TFCA. Only the southern section of Sonoma County falls within the Air District's boundaries. The jurisdictions north of Windsor (Healdsburg and Cloverdale) outside of the BAAQMD boundaries. | | |
| Bicycle Support Facilities | Bike racks, bicycle lockers, changing rooms, signal detection, and other amenities that support bicycling. | | |
| Bike Lane | A painted lane for one-way bicycle travel with a minimum 5 foot width. Defined as a Class II Bikeway by Caltrans. | | |
| Bike Route | A street that is designated for shared bicycle and motor vehicle use by placement of bike route signs along the roadway. Note that bicyclists are legally allowed to ride on all roadways in California, whether they are bike routes or not, unless expressly forbid. Defined as a Class III bikeway by Caltrans. | | |
| Caltrans | California Department of Transportation | | |
| Measure M | The voter-approved Traffic Relief Act for Sonoma County is a 1/4 cent sales tax used to maintain local streets, fix potholes, widen Highway 101, improve interchanges, restore and enhance transit, support development of passenger rail, and build and support safe bicycle and pedestrian routes and programs. | | |
| Mode Share | A measurement of the number of trips or percentage of trips that are taken by a given type of transportation. Mode shares include, but are not limited to, bicycling, walking, transit, and driving. | | |
| МТС | Metropolitan Transportation Commission is the regional transportation agency for the 9-county Bay Area. MTC manages a variety of funding programs such as TDA3. | | |
| Multi-Use Path | A paved path with an 8-foot minimum paved width, that is solely for bicycle and pedestrian travel. Defined as a Class I bikeway by Caltrans. | | |
| NSCAPCD | The Northern Sonoma County Air Pollution Control District (NSCAPCD) is one of 35 California air districts established to regulate the emissions of air pollution from "stationary sources" that could be detrimental to the health, safety, and welfare of the public. The NSCAPCD manages the northern section of Sonoma County that is outside of BAAQMD's boundary, and manages grant and incentive opportunities for clean air projects. | | |
| | grant and incentive opportunities for clean an projects. | | |
| Pedestrian Amenities | Street furniture, pedestrian-scale lighting, landscaping, and other infrastructure and design elements that support pedestrians and improve the walkability of a street. | | |

| Glossary and | List of Acronyms, | continued |
|--------------|-------------------|-----------|
|--------------|-------------------|-----------|

| ROW | Right-of-Way | |
|----------|---|--|
| Sharrows | Shared Roadway Bicycle Markings - A stencil of a bicycle and chevron placed in the middle of the right-hand vehicle lane, typically adjacent to parallel parking. The shared lane marking indicates to bicyclists where they should ride to avoid opening car doors and reminds motorists that bicycles will be riding in the middle of the lane. | |
| SCTA | Sonoma County Transportation Authority manages countywide planning and programming of funds. | |
| SRTS | Safe Routes to Schools. There is a Countywide Safe Routes to Schools Program. There are also locally managed SRTS activities in some jurisdictions. | |
| SWITRS | A database of police-reported collisions maintained by the California Highway Patrol. | |
| TDA3 | Transportation Development Act, Article 3 is a 2% set-aside from TDA funding, which is exclusively reserved for bicycle and pedestrian projects. In Sonoma County, each jurisdiction accumulates TDA3 funds each year based upon their share of the population. | |
| TFCA | Transportation Fund for Clean Air is a funding program managed by the Bay Area Air Quality Management District. The TFCA program is funded by a \$4 vehicle registration surcharge in the Bay Area. | |

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1 | INTRODUCTION



This Sonoma Bicycle & Pedestrian Master Plan was developed as a component of the Sonoma County Transportation Authority's (SCTA's) 2008 Countywide Bicycle and Pedestrian Master Plan. While part of the Master Plan, the Sonoma plan is also a standalone document to be used by the City of Sonoma to guide implementation of local projects and programs and document city policy. It is also designed to be a component of the SCTA Countywide Bicycle & Pedestrian Master Plan to improve coordination in realizing the countywide bicycle and pedestrian system.

The Sonoma plan was developed over the course of a year through the coordinated efforts of the SCTA's Bicycle and Pedestrian Advisory Committee, a focused project steering committee, Sonoma staff, and input from the public through a series of public workshops and public review periods. The Project Steering Committee was established to oversee the development of the plan and consisted of representatives from the County and each of its cities. Public workshops were held throughout the County to collect input from interested members of the public. The workshops were advertised through various local and regional print media, mailings, the posting of public fliers, and government outreach efforts.

The primary emphasis of this planning effort is to facilitate transportation improvements for bicyclists and pedestrians.

Purposes of the Plan

The purposes of the SCTA Countywide Bicycle & Pedestrian Master Plan are to:

- Assess the needs of bicyclists and pedestrians throughout Sonoma County in order to identify a set of local and countywide improvements and implementation strategies that will encourage more people to walk and bicycle;
- Identify local and countywide systems of physical and programmatic improvements to support bicycling and walking;
- Provide local agencies that adopt the Plan with eligibility for various funding programs, including the State Bicycle Transportation Account (BTA);
- Act as a resource and coordinating document for local actions and regional projects;
- Foster cooperation between entities for planning purposes and to create Geographic Information System (GIS) maps and a database of existing and proposed facilities countywide.
- * The definition of "pedestrian" includes persons who use wheelchairs (please see side box)

CALIFORNIA VEHICLE CODE – PEDESTRIAN

Section 467 of the California Vehicle Code (CVC) provides the following definition for a pedestrian:

"Pedestrian" includes a person who is operating a self-propelled wheelchair, motorized tricycle, or motorized quadricycle and, by reason of physical disability, is otherwise unable to move about as a pedestrian.

Purposes of the Plan Update:

The update to the 2008 Countywide Bicycle and Pedestrian Master Plan was driven by the need to address the current environment for pedestrian and bicycle planning in Sonoma County. Over the past five years, a variety of changes have taken place, therefore accompanying information needs to be updated. The key updates are:

- Map: countywide bicycle and pedestrian facilities map
- Data: Census data, collision data, and commuting statistics
- Project Lists: Countywide proposed bicycle and pedestrian projects

To achieve these, the Plan includes recommendations for physical improvements and programs that could be developed to enhance and expand existing facilities, connect gaps, address constraints, provide for greater local and regional connectivity,

and increase the potential for walking and bicycling as transportation modes.

Vision Statement



Through a collaborative planning process, a vision, goal and objectives were approved by all ten jurisdictions of Sonoma County: Cloverdale, Healdsburg, Windsor, Santa Rosa, Cotati, Rohnert Park, Petaluma, Sonoma, Sebastopol, and the County of Sonoma. These are designed to guide the development and maintenance of bicycle and pedestrian facilities throughout Sonoma County and express the intent of SCTA and Sonoma County jurisdictions to enhance

non-motorized mobility and to improve safety, access, traffic congestion, air quality, and the quality of life of Sonoma County residents, workers and visitors.

<u>Vision</u>

The vision for a comprehensive bicycle and pedestrian transportation system is: In Sonoma County bicycling and walking are:

- Important to residents' quality of life
- Integral parts of an interconnected transportation system
- Safe and convenient for all user groups
- Viable means of reaching desired destinations
- Routinely accommodated as part of a complete streets approach
- Encouraged by easy connections to transit
- Supported by education and enforcement
- Advanced by actions of government, schools and the private sector
- Promoted as tourism and recreation attractions
- Mode choices that contribute to personal health

• Options that reduce vehicle miles traveled and greenhouse gas emissions

Caltrans Compliance

Active Transportation Program

The Active Transportation Program was created in 2013 by Senate Bill 99 and Assembly Bill 101. There is no longer a checklist requirement as was the case per the Bicycle Transportation Account before the Active Transportation Program. Depending on the amount awarded to a project, there may be a requirement for the project/program to be included in a plan.

As detailed on page 10, the "Public Participation and Planning" bullet point under "Scoring Criteria" in the draft guidelines:

Identification of the community-based public participation process that culminated in the project proposal, which may include noticed meetings and consultation with local stakeholders. Project applicants must clearly articulate how the local participation process resulted in the identification and prioritization of the proposed project.

For projects costing \$1 million or more, an emphasis will be placed on projects that are prioritized in an adopted city or county bicycle transportation plan, pursuant to Section 891.2, pedestrian plan, safe routes to school plan, active transportation plan, trail plan, or circulation element of a general plan that incorporated elements of an active transportation plan. In future funding cycles, the Commission expects to make consistency with an approved active transportation plan a requirement for large projects.

At the time of this writing, the guidelines and application process were being written and approved by the California Transportation Commission. For more information, please visit the Active Transportation Program website: http://www.catc.ca.gov/programs/ATP.htm or http://www.dot.ca.gov/hq/LocalPrograms/atp/.

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2 | CONTEXT AND SETTING

Land Use and Transportation

Indigenous peoples lived in the Sonoma Valley for at least 12,000 years before the Spanish missionaries arrived in the early 19th century. In 1823, Mission San Francisco Solano de Sonoma was established, the farthest north of all 21 California missions and connected by a "Royal Road" named El Camino Real. In 1835, Sonoma was acknowledged by Mexico as a city. General Vallejo led the transformation of Sonoma into a Mexican town, constructing the eight-acre central Plaza, street grid, and wide Broadway---all of which remain central characteristics of today's Sonoma. In 1850, California became a state. The temperate climate and fertile soils of the Sonoma Valley favored agriculture, especially viticulture. The extension of the railroad to Sonoma in the 1880's brought new residents, visitors and increased commerce.



The next major influence on transportation, and likewise land use, was the affordability of the automobile for many families and businesses. Trails evolved into paved roads to serve the new vehicular mode and land use and development quickly adapted with more dispersed patterns. As development became more sprawled and the number of car owners grew, non-motorized means of travel declined. Worth noting is that most of Sonoma County's cities retain a central historic core that preceded the advent of the automobile. Sonoma's downtown retains much of its walkability from that earlier era.

Jurisdiction Overview Setting and Land Use

Sonoma has a population of 10,731(according to the 2013 California Department of Finance Population Estimates), and serves as the economic hub for approximately 39,000 residents who populate the rural Sonoma Valley. With its relatively flat terrain, vibrant commercial districts, and growing network of multi-use trails, Sonoma provides an ideal environment for walking and bicycling. From a pedestrian's perspective, Sonoma can be viewed as being divided into thirds by State Highway 12, the City's most significant barrier to walking. The three neighborhoods meet at the Plaza, Sonoma's historic town square, which houses City Hall and a central city park, which is surrounded by a thriving commercial district and features the historic Mission San Francisco Solano de Sonoma. "Walking the plaza" is one of the main draws of the City's tourist-based economy.

Town Center and Northern Hills – the historic plaza is central feature in Sonoma. The Plaza is bounded by residential uses and two blocks north of the Plaza, there is a collection of park and public facilities, including Depot Park, Arnold Field, the Veterans' Memorial Building, the Police Station, seven acres of playing fields, and Mountain Cemetery as well as the Montini Open Space Preserve.

Broadway – the Broadway corridor extends south from the Plaza. According to the 2020 General Plan, the corridor is designated for mixed use development between Maple Street and Four Corners., and streetscape improvements in the right-of-way are planned to continue south to Four Corners. Street trees, lighting, benches, planters, and other features will enhance the travel experience by car, bike, and foot, and will extend the historic feel of the Plaza all the way south to the edge of town.

East and Southeast Sonoma - represents the city's largest and oldest single-family area with a mix of housing types. The

area includes a number of public facilities, commercial activities, agricultural parcels, parks, creeks, multi-use trails, and low volume residential streets.

Southwest Sonoma—a predominantly residential area—is defined by Broadway, also known as SR12 or Highway 12—a commercial corridor—to its east and West Napa to the north. This area contains Sonoma's lowest income neighborhoods (east of Sonoma Creek), a number of neighborhood parks, two schools and the Sonoma Valley Hospital. Southeast Sonoma is bordered by Broadway to the west and East Napa Street to the north. With the exception of shops and Sonoma High and Junior High schools, which are



within a block of Broadway, the area is predominantly residential. The southern border of northern Sonoma is Highway 12/West Napa Street and East Napa Street. The Plaza and nearby Sonoma State Historic Park are at the center of this largely commercial area, although there are residential neighborhoods between the park and the Sonoma Highway

West Sonoma – is largely developed with single-and multi-family neighborhoods. The area includes the Sonoma Valley Hospital which has a significant influence on land-use and circulation patterns. While the hospital predates the surrounding residential development, it is now hemmed in by houses and the growth of the hospital over the years has led to higher traffic and friction with neighboring residents. West Napa Street from Fifth Street West to Sonoma Highway is designated for commercial use. A Branch of the Sonoma County Library is a popular destination within the corridor. Pockets of adjacent mixed use and multi-family development are located adjacent to the corridor.

Northwest Sonoma – the area north of West Napa Street and west of Fifth Street West contains the second largest reservoir of single family housing in Sonoma. It also contains Vallejo Home State Park, the largest tract of permanent open space in the city. Sonoma Highway is designated as a mixed use and commercial corridor, including at the city's northern gateway at Verano Avenue.

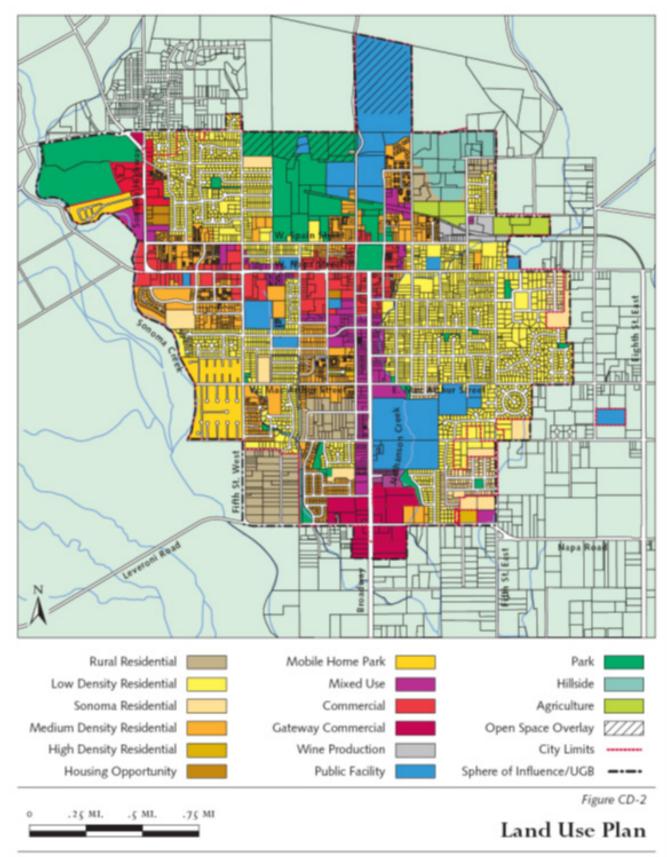
Four Corners – the intersection of Broadway with Napa and Leveroni Roads, known as Four Corners, serves as the primary southern gateway to Sonoma. According to the 2020 General Plan, the area is planned to develop and densify with housing and resident- and visitor-serving uses that feature high quality, pedestrian- scale architecture, open space, and generous landscaping. Mixed-use development and adjacent multi-family development are encouraged as means of reducing traffic and encouraging a residential presence.

Land use development and settlement patterns are indicated in Figure 1, the Sonoma Land-Use Map.

Attractors and Generators

Attractors and generators in Sonoma were identified by reviewing information from standard sources such as maps, plans, and the City's website as well as consultation with staff. The locations of the attractors and generators were considered in determining the alignments of both the local and countywide networks. They include downtown, City Hall and other government buildings, transit access, regional and local parks, schools, Sonoma Valley Hospital and medical services, commercial districts, shopping centers, and other public attractions.

Figure 2.1: City of Sonoma Land Use Map



Source: City of Sonoma, October 2006.

Schools and Safe Routes

The Sonoma Unified School District serves the community with five schools. In addition, there are several private schools and preschools in Sonoma. The City's five public schools include Sonoma Valley High School Creekside Continuation High School, Adele Harrison Middle School, Prestwood Elementary, and Sassarini Elementary. Private schools include St. Francis Solano School, Sonoma Valley Academy, and Sonoma Valley Christian School. The schools, the grades they serve, and their addresses are listed in Table 2.2 below.



| | Table 2.2 Sonoma Schools | |
|------------------------------------|-----------------------------|-----------------------|
| Sonoma Valley High School | 9 – 12 | 20000 Broadway |
| Creekside Continuation High School | 9 – 12 | 1100 Broadway |
| Adele Harrison Middle School | 6-8 | 1150 Broadway |
| Prestwood Elementary School | К — 5 | 343 Mac Arthur Street |
| Sassarini Elementary School | К — 5 | 652 Fifth Street West |
| St. Francis Solano School | K – 8 | 342 West Napa Street |
| Sonoma Valley Academy | 6 – 12 | 276 East Napa St |
| Sonoma Valley Christian School | K – 8 | 542 First Street E |

In addition to being the name of state and federal funding programs, safe routes to schools programs are an essential component of successful efforts to make walking and bicycling to school safer, increase the number of children walking and bicycling to school, improve children's health and fitness, and educate students and parents about the health, transportation and environmental benefits of walking and bicycling.

Safe Routes to Schools programs typically use the "five Es" to accomplish these goals: Encouragement (e.g., prizes, special events like Walk to School Day), Education (e.g., fliers on the benefits of walking, maps of safe routes, classroom curriculum), Engineering (e.g., improvements to infrastructure such as roadways, intersections, sidewalks and bicycle facilities), Enforcement (making sure motorists, pedestrians and bicyclists understand and obey the rules of the road), and Evaluation (such as before/after surveys to see the effect of programs and physical improvements on mode choice for student commuters).

In 2004/05, the City partnered with the Sonoma Valley Unified School District to apply for Caltrans SR2S funds to improve pedestrian commute routes to Sassarini Elementary School, Adele Harrison Middle School, and Sonoma Valley High School. Project improvements include constructing sidewalks and curb extensions and installing radar speed feedback signs to help calm traffic on Broadway at Newcomb Street and on 5th Street West at Bettencourt Street.

Parks and Community Facilities

A variety of parks and community facilities exist in Sonoma. They include neighborhood parks, community parks, open space areas, regional parks, state parks, civic buildings, schools, and other quasi-public facilities. These facilities are distributed throughout the community and are accessible by those on foot and/or bicycle. Following is a list of the parks:

- Casa Grande/Mission State Park with museum and historic structure
- Vallejo Home State Park with museum and historic structures
- Arnold Field / Teeter Field County park
- Maxwell Farms regional park
- Plaza Park city plaza
- Depot Park community park
- Olsen Park community park
- Pinelli Park neighborhood park
- Eraldi Park community park
- El Prado Green pocket park
- Nathanson Creek Park neighborhood park
- Hertenstein Park neighborhood park
- Carter Park neighborhood park
- Grinstead Park open space park
- Bond Property community garden
- Madera Park neighborhood park
- Armstrong Park pocket park
- Field of Dreams community park
- MacArthur Park neighborhood park
- Sonoma Valley Oaks community park
- Overlook Trail community park
- Nathanson Creek Preserve open space

Sonoma Demographics and Commute Patterns

Local Bicycle and Pedestrian Travel Characteristics

Travel information in Sonoma was analyzed to identify mode split and to evaluate travel time to work. The term 'mode split' refers to the form of transportation a person chooses: walking, bicycling, taking a bus, driving, etc. The commute analysis establishes base data on the existing number of bicycle and pedestrian commuters, as well as an indication of the number of potential bicycle and pedestrian commuters in the plan area. This information can then be used by staff and local officials to develop improvement plans and set priorities, with the objective of increasing the percentage of people who choose to walk or bicycle rather than drive a car or be driven.

A review of available demographic and commute statistics was performed in order to better understand the level of walking and bicycling in Sonoma and Sonoma County as a whole. Several data sources were reviewed, including California Department of Finance Population Estimates, the Bay Area Travel Survey, and Journey-to-Work (JTW) Data from the US Census Bureau.

Every ten years, the US Census Bureau attempts to count every person throughout the nation. In the 2000 Census, "journey to work" data set was included in the long-form of the census questionnaire; however, this data set is no longer included in the decennial census, but rather is included in the American Community Survey (ACS). Each year, the question "How did you usually get to work last week?" is asked of participants in the ACS. Respondents who typically use more than one method of transportation are instructed to mark the mode used for "most of the distance". The collective responses to this question form a set of data known as Journey-to-Work (JTW). Even though the Journey-to-Work data from the ACS is available at the county level each year, only the 5-year data set has the ability to show this data for all jurisdictions.





Therefore, all Journey-to-Work data in this Plan is from the most recent 5-year American Community Survey (2007-2011).

Because of its large sample size, JTW data is considered the most reliable source of transportation mode choice information available. However, while the JTW data provides a glimpse of how Sonoma residents travel to and from work, the data source only provides a partial understanding of travel characteristics. This is particularly true in assessing walking and bicycling trips since it does not reflect multi-modal trips or non-work trips. Thus the JTW data misses school, shopping, and recreational trips, which may constitute much of the bicycle and pedestrian travel by Sonoma's senior, student and



other populations. Furthermore, the instructions effectively eliminate any record of the pedestrian portion of walk-totransit and walk-to-carpool trips. The wording leaves the response for commuters who do not use the same mode every day, up to the respondent.

| Table 2.3 Sonoma Travel Time to Work for Workers 16 Years and Older | | | | | | | |
|--|----------------------------------|---------------------|--|--|--|--|--|
| | # | % | | | | | |
| Total Employed Persons (16+) | 4,658 | 100% | | | | | |
| Worked at Home | 396 | 9% | | | | | |
| Did Not Work at Home | 4,262 | 92% | | | | | |
| Travel Time | # | % | | | | | |
| Less than 15 minutes | 1,777 | 42% | | | | | |
| 15-29 minutes | 844 | 20% | | | | | |
| 30-44 minutes | 627 | 15% | | | | | |
| 45-59 minutes | 375 | 9% | | | | | |
| 60 minute or more | 644 | 15% | | | | | |
| Mean travel time to work | 27.1 n | ninutes | | | | | |
| Source: US Census, Ame | rican Community Survey, 5-Year E | stimates, 2007-2011 | | | | | |

The 2010 US Census indicates a population of 10,648 in Sonoma; it is expected to grow to 14,590 by 2020 (Sonoma County General Plan 2020, Overview Draft). According to the 2007-2011 American Community Survey, there are 4,658 workers in Sonoma 16 years or older. Of these, 4,262 (or 92%) work outside the home. The percentage of workers who are working from home has increased 39% since the 2000 Census; all jurisdictions in Sonoma County are experiencing this trend. Forty-two percent, or 1,777 workers, travel less than 15 minutes to work. This percentage has remained fairly steady since the 2000 Census data. Sonoma has a significantly higher than average rate of workers with a commute time of less than 15 minutes, 42 percent, when compared to the state which is at 27 percent. This data indicates a high percentage of workers who are employed within the community and close to home, which represents an opportunity to shift travel modes, at least part of the time. Travel time to work in Sonoma is shown above in Table 2.

| Table 2.4 Demographic and Journey to Work Data | | | | | | | | | |
|--|----------------|-----------|-----------|-------|------------|-------|--|--|--|
| | Sonor | na | County | wide | California | | | | |
| Population | 10,43 | 0 | 478,5 | 51 | 36,969,2 | 200 | | | |
| Employed Persons 16 years of age + | 4,65 | 8 | 226,2 | 80 | 16,251,0 |)32 | | | |
| Mode Share | # % # % | | | | # | % | | | |
| Drove Alone | 3,354 | 72.0% | 169,257 | 74.8% | 13,764,624 | 84.7% | | | |
| Carpool | 424 | 9.1% | 24,438 | 10.8% | 1,901,371 | 11.7% | | | |
| Public Transit | 47 | 1.0% | 4,299 | 1.9% | 828,803 | 5.1% | | | |
| Walk | 289 | 6.2% | 7,015 | 3.1% | 455,029 | 2.8% | | | |
| Bike | 107 | 2.3% | 2,715 | 1.2% | 162,510 | 1.0% | | | |
| Motorcycle, cab, other 42 0.9% 2,263 1.0% 211,263 1. | | | | | | | | | |
| Worked at Home 396 8.5% 15,840 7.0% 828,803 5.1 | | | | | | | | | |
| Source: US Census - American Community S | Survey, 5-Year | Estimates | 2007-2011 | | <u>~</u> | | | | |

As shown in Table 2.4 above, JTW data indicates that approximately 72 percent of workers in Sonoma, or 3,354 persons, drive to work alone. This demonstrates a decrease from the 2000 Census, which was 77.4 percent of workers that were driving alone. Approximately 2.3 percent, or 107 workers commute by bicycle, a rate that is higher than that of the County and statewide average bicycle mode share of 1.2 percent 1.0 percent respectively. Approximately 6.2 percent of workers walk to work, over twice the countywide average of 3.1 percent. While approximately 9.1 percent of workers in Sonoma (424 persons) carpool, the majority of workers in Sonoma drive to work alone. Given Sonoma's climate, topography, and percentage of commuters with a travel time to work of 15 minutes or less, the opportunity exists to achieve a higher nonmotorized mode share, especially for the bicycle share. Every motor vehicle trip or vehicle mile driven eliminated results in less air pollution, reduced green house gas emissions, and lessened traffic congestion. Furthermore, overall workers who live in Sonoma are driving alone to work less, and are carpooling and walking to work more. These are positive developments, which demonstrates Sonoma's continual move toward a sustainable transportation future.

Local Opportunities and Constraints

This section provides a discussion of opportunities and constraints for the City's bicycle and pedestrian networks. A variety of conditions were considered including roadway geometries, traffic volumes, crossing locations, distance between destinations, topography, system users, and other issues.

Opportunities:

- Pedestrian crossing enhancements
- Potential to improve connections between pathways
- Potential bicycle and pedestrian design enhancements on the State Highway
- Continued Safe Routes to Schools improvements both physical and programmatic
- System enhancements through a comprehensive way-finding, directional, and warning signing campaign for pedestrians and bicyclists
- Potential mode share growth and safety improvements through education and awareness efforts

- Improved inter-county and inter-city connection opportunities
- Potential to provide alternative routes to SR 12 for bicyclists

Constraints:

- Signalized intersections need bicycle sensitive detection
- Several high volume roadways need pedestrian crossing enhancements
- Traffic volumes and speeds on the State Highway impact non-motorized use
- Limited control over state highway rights-of-way
- Access barriers/obstacles for wheelchair users and the disabled
- On-going maintenance needs of surfaces, markings, and vegetation

The following issues were identified by the public through a series of public forums on bicycle issues conducted by the City in the fall and winter of 2007.

Park Point

- Crosswalk wanted across Highway 12 at bike path.
- Sidewalk obstructions exist in front of Taco Bell.
- The Sonoma City Trail is hard to locate from southbound Highway 12 without a defined trail crossing.
- A crosswalk would be helpful at the north side of the intersection at Maxwell Farms Shopping Center.

Highway 12 and West Napa

- Difficult to cross Highway 12 at Sonoma Village West.
- Island at Highway 12 and West Napa Street—no man's land.
- People staying at B&Bs cannot get across Highway 12 to walk to do tourist things.
- Two left hand turn lanes not necessary going south from Highway 12 to West Napa Street.
- Bridge has no bike lane; bikers must go against traffic on sidewalk.
- Sign needed to direct bikers as to what to do on bridge.

Library

- Share the road sign is needed on West Napa Street and Highway 12.
- A raised bike path would be great.
- Seventh Street West and West Napa—City working on installing crosswalk.
- Crossing Highway 12 on West Napa is not safe. It feels like you are playing chicken with the cars. A sign would be good directing bicycles as to what to do.
- Education!
- Wanted safe transit from the Springs area to the library.
- Improve bike markings in front of Maxwell Village Shopping Center. It is difficult to know how to cross intersection on Highway 12 (north-south) on a bike.
- Bikes can move faster through Sonoma on a bike than in a car.
- Is it possible to put a bike lane on West Napa Street?

Fifth Street West and Safeway

- Lock on gate to private living facility is currently broken.
- Four-way ownership of property (Safeway, school district, City of Sonoma and Sonoma Ventures Ltd.)
- Near potential new site for hospital.

Fourth Street West Connection, east of Sassarini School

- Safe routes to school funds would help.
- Would bike path though a parking lot be a liability issue?



Fourth Street West and Arroyo Way

- Bike marking needed indicating where bike trail dumps out—striping for "way finding" with sharrows.
- Awkward gate where bike path dumps out on Arroyo Way (bollard would be better than a gate).

Bike Path and West MacArthur

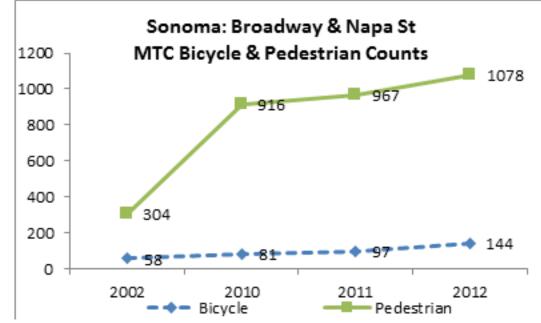
- Bike crossing needs help. The path should be set at an angle to get to crosswalk.
- The bulb out here forces bikers on West MacArthur to get in the vehicle's way of traffic.
- Tree roots on bike path need to be ground down.
- Sign needed to direct bikers as to what to do.

Data Collection

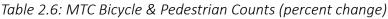
Bicycle and Pedestrian Counts

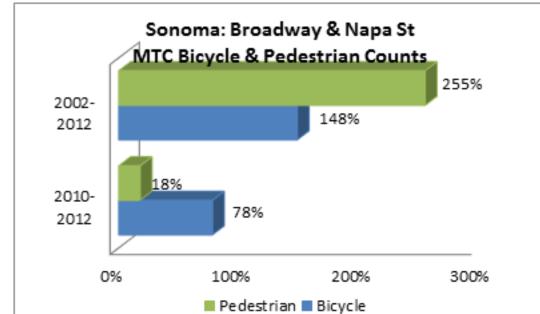
Since the adoption of the 2008 Countywide Bicycle and Pedestrian Master Plan, significant work has been accomplished with regard to bicycle and pedestrian counts by the Sonoma County Transportation Authority (SCTA). SCTA began the bicycle and pedestrian count program in 2009. The completion of the 2008 Countywide Bicycle and Pedestrian Master Plan assisted in informing SCTA staff of key locations within each jurisdiction to be included in a countywide bicycle and pedestrian count program. Moreover, the Metropolitan Transportation Commission (MTC) has collected bicycle and pedestrian count data at eight locations in Sonoma County since 2002. The MTC count locations have remained consistent over the entire 10 year period. The graph below demonstrates the total bicycle and pedestrian counts for the Broadway and Napa Street location in the City of Sonoma. According to the data in the MTC counts, there has been a steady increase in both bicycle and pedestrian activity in Sonoma County at the eight locations where MTC conducts their counts. Likewise, this location in Sonoma has experienced increases in both bicycle and pedestrian activity, as the graph below demonstrates.





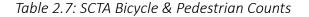
The below graph demonstrates the percent change in both bicycle and pedestrian counts at the Broadway and Napa Street location. The top bars are comparing the percent change between the years 2002 and 2012, and the bottom bars are comparing the percent change between the years 2010 and 2012. The Broadway and Napa Street location experienced a 148 percent increase in bicycle activity between 2002 and 2012, and there was a 78 percent increase in bicycle activity between 2002 and 2012, and there was a 78 percent increase in pedestrian activity between 2010 and 2012. The Broadway and Napa Street location experienced a 255 percent increase in pedestrian activity between 2002 and 2012, and there was an 18 percent increase in pedestrian activity between 2010 and 2012.

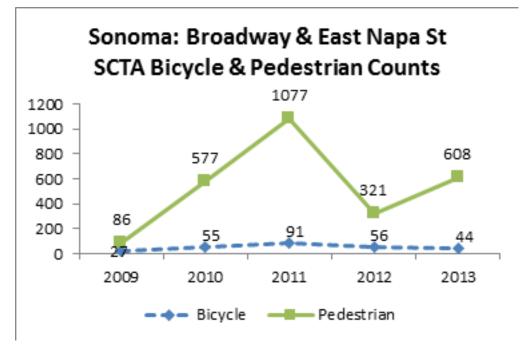




SCTA began their bicycle and pedestrian count program in 2009 with 15 count locations throughout almost all jurisdictions in Sonoma County. By 2011, all jurisdictions were included in the SCTA bicycle and pedestrian count program. The SCTA counts demonstrate a yearly variability, as the graph below demonstrates. Overall, both bicycle and pedestrian have increased at this location in Sonoma. Since 2009, bicycle activity has increased 63 percent, and pedestrian activity has

increased 607 percent.





Even though significant work has been accomplished in recent years on collecting bicycle and pedestrian count data, SCTA can only count approximately 20 locations per year. Moreover, only four hours per location are collected in manual bicycle and pedestrian counts. Therefore, the lack of documentation on usage and demand for pedestrian and bicycle facilities remains a challenge facing staff and local decision makers in bicycle and pedestrian planning. Moreover, we have no data on non-peak travel hours, or on weekend non-motorized travel throughout Sonoma County. Without accurate and consistent data, it is difficult to measure the benefits of bicycle and pedestrian investments, especially when compared to the other types of transportation such as the automobile. In order to supplement JTW data, to attain a better understanding of existing usage and travel patterns, and to be able to project demand, specialized bicycle and pedestrian counts are recommended. Therefore, SCTA is exploring various options to purchase automated counters to assist in counting bicyclists and pedestrians for longer periods of time at locations throughout Sonoma County. This will be a collaborative effort, which will include participation from each jurisdiction.

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3 | VISION, GOAL, OBJECTIVES AND POLICIES

Vision, Goal, Objectives, and Policies

This section defines the vision for bicycle and pedestrian transportation throughout Sonoma County, and outlines the vision, principal goal, and objectives that will serve as guidelines in the continuing development of the countywide bicycle and pedestrian transportation system . Through a collaborative planning process, the vision, goal and objectives were approved by all ten jurisdictions of Sonoma County: Sonoma, Healdsburg, Windsor, Santa Rosa, Sonoma, Rohnert Park, Petaluma, Sonoma, and the County of Sonoma. These are designed to guide the development and maintenance of bicycle and pedestrian facilities throughout Sonoma County and express the intent of SCTA and its member agencies to enhance non-motorized mobility to improve safety, access, traffic congestion, air quality, and the quality of life of Sonoma County residents, workers and visitors.

The vision, goal and top-tier objectives are meant to function as the mutually agreed upon common framework applicable to both the primary countywide system and local bicycle and pedestrian networks. Policies, and possibly additional objectives, that address jurisdiction-specific issues are included in the individual County and city/town plans.

The role of the SCTA is in advocating, planning, coordinating, and funding, whereas local agencies, such as cities, towns, and the County, transit agencies, Caltrans, and the non-profit and private sectors, will be chiefly responsible for implementation of objectives and policies.

The vision for a comprehensive bicycle and pedestrian transportation system is:

In Sonoma County bicycling and walking are:

- Important to residents' quality of life
- Integral parts of an interconnected transportation system
- Safe and convenient for all user groups
- Viable means of reaching desired destinations
- Routinely accommodated as part of a complete streets approach
- Encouraged by easy connections to transit
- Supported by education and enforcement
- Advanced by actions of government, schools and the private sector
- Promoted as tourism and recreation attractions
- Mode choices that contribute to personal health
- Options that reduce vehicle miles traveled and greenhouse gas emissions

Principal Goal:

To develop and maintain a comprehensive countywide bicycle and pedestrian transportation system, which includes projects, programs, and policies that work together to provide safe and efficient transportation opportunities for bicyclists and pedestrians.

Objectives and Policies

Objective 1.0: The Countywide Bicycle and Pedestrian Network

Establish a comprehensive countywide bicycle and pedestrian transportation system.

Policies

- 1.1 Develop a local and countywide bicycle and pedestrian transportation network that provides access to and among major activity centers, commercial districts, schools, transportation centers, public transportation recreation, and other destinations, according to the recommendations in this plan.
- 1.2 Work cooperatively with responsible agencies including Sonoma County's Transportation and Public Works, Regional Parks, and Water Agency; SCTA, Sonoma Marin Area Rail Transit (SMART), and others, to close existing facility gaps and ensure the system is implemented, constructed, and maintained.
- 1.3 Establish a bicycle and pedestrian advisory committee to advise staff on bicycle and pedestrian issues.
- 1.4 Assign a bicycle and pedestrian coordinator to oversee implementation of the Bicycle and Pedestrian Plan and coordinate activities between City departments and other jurisdictions.
- 1.5 Double the "Journey to Work" mode split percentages for walking and bicycling, by the year 2020, using 2006 data as the baseline.

Bicycle-specific policies

1.6 Consider the needs of bicyclists of all types (commuters, recreational riders, children, and families) in planning, developing, and maintaining a bikeway network that is safe and convenient.

Pedestrian-specific policies

- 1.7 Require new development to provide safe, continuous and convenient pedestrian access to jobs, shopping and other local services and destinations.
- 1.8 Create spaces and activities that invite pedestrian use and optimize the experience of walking with amenities such as landscaping, public art, seating, and drinking fountains.
- 1.9 Focus on improving safety of pedestrian crossings of roadways and highways, especially in pedestrian districts.

Objective 2.0: Design

Utilize accepted design standards and complete streets principles for the development of bicycle and pedestrian facilities.

Policies

- 2.1 Utilize Chapter 1000 "Bikeways Planning and Design," from the California Highway Design Manual, the California Manual of Uniform Traffic Control Devices, the American Association of State Highway Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities and Guide for the Planning, Design, and Operation of Pedestrian Facilities for the development of bicycle and pedestrian facilities.
- 2.2 Require that all signalized intersections include bicycle detection and are properly marked and operational for use by bicyclists.
- 2.3 Where minimum bike lane standards are infeasible, use striped edge lines, signs, shared lane markings, or other route enhancements to improve conditions for bicyclists.
- 2.4 Projects that will result in the loss of existing bicycle and pedestrian facilities or jeopardize future facilities as shown on the Bikeways Map must be mitigated.
- 2.5 Install way finding signage, markers, and stencils on off-street paths, on-street bikeways, local roads, and State Routes to improve way finding for bicyclists, assist emergency personnel, and heighten motorist's awareness.
- 2.6 Provide consistent enhanced features at uncontrolled pedestrian crossings, especially within pedestrian districts and at intersections of arterials with Class I trails.

Objective 3.0: Multimodal Integration

Develop and enhance opportunities for bicyclists and pedestrians to easily access other modes of transportation

Policies

- 3.1 Implement a safe routes to transit program that prioritizes pedestrian and bicycle access to transit stops and stations.
- 3.2 Require/encourage transit providers to provide and maintain convenient and secure bike parking facilities, allweather shelters, and other amenities at major transit stops and transportation centers at a minimum.
- 3.3 Require/encourage local and regional transit agencies to accommodate bicycles on transit and plan for the need for additional bicycle storage capacity on transit to ensure capacity keeps up with demand.

Objective 4.0: Comprehensive Support Facilities

Encourage the development of comprehensive support facilities for walking and bicycling.

Policies

- 4.1 Require adequate short-term bicycle parking for retail, office, commercial and industrial uses.
- 4.2 Require adequate short-term bicycle parking and long-term bicycle storage for transportation centers.
- 4.3 Require employers to provide secure indoor and/or covered bicycle parking for their employees.
- 4.4 Require employers to provide adequate shower and locker facilities for workers.
- 4.5 Install high-visibility crossing treatments, pedestrian scale lighting, street furniture, drinking fountains, and other pedestrian amenities in pedestrian districts and on Class I trails.

Objective 5.0: Education and Promotion

Develop programs and public outreach materials to promote bicycle and pedestrian safety and the benefits of bicycling and walking.

Policies

- 5.1 Participate in the development and maintenance of a bicycle and pedestrian safety campaign as a countywide tool to deliver comprehensive safety awareness, driver, cyclist and pedestrian education information, and to increase the awareness of the benefits of walking and bicycling as transportation modes.
- 5.2 Support "grassroots" efforts that help to resolve bicycle and pedestrian transportation issues.
- 5.3 Distribute bicycle and pedestrian safety, educational, and promotional materials through law enforcement activities, at scholastic orientations, through drivers training and citation diversion programs, and to new political representatives.
- 5.4 Encourage events that introduce residents to walking and bicycling, such as bike-to-work, walk/bike-to-school days, senior walks and historic walks.
- 5.5 Require major employment centers and employers to encourage commuting by bicycle, including the use of flextime work schedules to support non-rush hour bicycle commuting.
- 5.6 Educate the general public and the officials of state, county, and local law enforcement agencies on common Vehicle Code infractions involving bicyclists and other users of roadways or off-road pathways.

Objective 6.0: Safety and Security

Create countywide pedestrian and bicycle networks that are, and are perceived to be, safe and secure.

Policies

- 6.1 Reduce automobile collisions with pedestrians and bicyclists by 50 percent by the year 2020, using 2006 collision data as the baseline for analysis.
- 6.2 Coordinate the delivery of bicycle safety education programs to schools, utilizing assistance from law enforcement agencies, local bicycle shops, and other appropriate groups and organizations.
- 6.3 Focus on improving safety of intersection crossings using routine pedestrian signal cycles, pedestrian buttons,

high-visibility crosswalk markings and education.

- 6.4 Prioritize safety improvements in the vicinity of schools, public transit and other high-priority pedestrian destinations.
- 6.5 Improve collection and analysis of collision data. The Public Works Department shall review this data at least annually to identify problem areas which require immediate attention.
- 6.6 Improve pedestrian safety and security and the 'sense of isolation' with pedestrian-level lighting, where appropriate, and development of activities and facilities that encourage walking.

Objective 7.0: Land Use

Encourage smart growth land use strategies by planning, designing and constructing bicycle and pedestrian facilities in new development.

Policies

- 7.1 Encourage school districts to participate in providing safe and continuous bicycle and pedestrian connections from surrounding neighborhoods when constructing new or improving existing school facilities.
- 7.2 Consider allowing tandem parking for residential development in areas where on-street parking may conflict with development of Class II bikeways.
- 7.3 Encourage compact, high density pedestrian oriented development in pedestrian districts.
- 7.4 In pedestrian districts allow shared parking for commercial uses rather than requiring each business to provide separate parking areas.
- 7.5 Condition discretionary projects in pedestrian districts to provide pedestrian facilities such as sidewalks, and trails that link pedestrian routes or provide access to destinations.
- 7.6 Where a nexus is identified, condition discretionary projects to provide an irrevocable offer of Class I easement or land dedication and construction of Class I multi-use pathways as designated in an adopted plan provided it can be shown that such a Class I pathway will serve as loops and/or links to designated or existing Class I multi-use pathways, trails, communities, existing or proposed schools, public parks and open space areas, and existing or proposed public transit nodes (e.g., transportation centers, park and ride lots, bus stops).

Objective 8.0: Planning

Plan for the ongoing expansion and improvement of the countywide bicycle and pedestrian system

Policies

- 8.1 The Bicycle and Pedestrian Advisory Committee (BPAC) shall be responsible for advising staff on the ongoing planning and coordination of the bicycle and pedestrian transportation system.
- 8.2 Update the Bicycle and Pedestrian Plan in accordance with the California Bicycle Transportation Act, and to coordinate with Regional Transportation Plan updates.
- 8.3 Incorporate policies in this Bicycle and Pedestrian Plan into all specific, master and General Plan documents and redevelopment policies.
- 8.4 The BPAC shall review the design of all new road widening projects in order to minimize hazards and barriers to bicycle travel on all local roads.
- 8.5 Refer projects that meet any of the following conditions to the BPAC for review to determine consistency with this plan:
 - A. Resurfacing, restoration, and rehabilitation (3R) projects, or other improvements of roads designated as Class II bikeways.
 - B. Resurfacing, restoration, and rehabilitation (3R) projects or other improvements of roads designated as Class III bike routes.
 - C. Resurfacing, restoration, and rehabilitation (3R) projects that include the installation of rumble strips, AC berms or similar barriers, and/or roadway dots in the shoulder area.
 - D. Traffic calming improvements.

- E. Road capacity improvement projects.
- F. Discretionary projects adjacent to or traversed by existing or designated Class I, II or III bikeways.
- G. Discretionary projects conditioned with roadway improvements along a designated or existing Class I, II or III bikeway.
- 8.6 Proactively seek opportunities for acquisition of abandoned rights-of-way, natural waterways, flood control rightsof-way, utility rights-of-way, and lands for the development of new Class I multi-use pathways.
- 8.7 Where different classes of bikeways share the same route, Class I or II bikeways should not be constructed in a manner that reduces or eliminates other designated bikeways without consultation with the Bicycle and Pedestrian Advisory Committee.

Objective 9.0: Maintenance

Maintain and/or improve the quality, operation, and condition of bicycle and pedestrian infrastructure.

Policies

- 9.1 Maintain geometry, pavement surface condition, debris removal, markings, and signage on Class II and Class III bikeways to the same standards and condition as the adjacent motor vehicle lanes.
- 9.2 Develop a maintenance reporting system with a central point of contact that can be used to report, track, and respond to routine bicycle and pedestrian maintenance issues in a timely manner.
- 9.3 Require that road construction projects minimize their impacts on bicyclists and pedestrians through the proper placement of construction signs and equipment, and by providing adequate detours.
- 9.4 Require that routine maintenance of local roads consider bicycle and pedestrian safety and at a minimum includes the following activities:
 - Trim vegetation to provide a minimum horizontal clearance of 4 feet from the edge of pavement and a minimum vertical clearance of 8 feet.
 - Clear debris from road shoulder areas to provide space for walking.
- 9.5 Perform periodic sidewalk inspections to ensure adequate pedestrian clearance and to address maintenance issues that could present a tripping hazard.

Objective 10.0: Funding

Maximize the amount of funding for bicycle and pedestrian projects and programs throughout Sonoma County, with an emphasis on implementation of this plan.

Policies

- 10.1 Work with federal, state, regional, and local agencies and any other available public or private funding sources to secure funding for the bicycle and pedestrian system.
- 10.2 Encourage multi-jurisdictional funding applications to implement the regional bicycle and pedestrian system.
- 10.3 Promote the availability of adequate regional, state and federal funding sources for bicycle and pedestrian transportation projects.

Relationship to Other Plans and Policies

Implementation of the Sonoma Bicycle & Pedestrian Master Plan will require coordination, consistency, and cooperation among numerous jurisdictions and agencies with varied interests that share policy decisions within and immediately adjacent to Sonoma and Sonoma County. There are myriad relevant federal, state, regional, county, and local agencies that have developed plans, programs, directives, policies, and regulations related to funding, planning, designing, operating, maintaining, and using bicycle and pedestrian facilities. These agencies and their plans, policies, etc., have been evaluated for coordination, consistency, and conformance with this Plan. Brief summaries of local plans and policies are provided below. Summaries of regional, state, and federal plans, policies, and other relevant resources are provided in the Overview

section.

Sonoma General Plan

The Sonoma General Plan is a long-range comprehensive planning document required by state law and adopted by the City in 2006 to set policy and guide future growth, development and conservation of resources. The following General Plan goals are relevant to bicycle and pedestrian improvements in Sonoma.

Chapter 1: Community Development Element Goals, Policies, and Implementation

Goal CD-4: Encourage quality, variety, and innovation in new development.

Policy

4.4. Require pedestrian and bicycle access and amenities in all development.

Implementation Measures

- 4.4.4 Upgrade connections between streets and bike paths to make them safer, more visible, and more attractive.
- **Goal CD-5**: Reinforce the historic, small-town characteristics that give Sonoma its unique sense of place.

Policy

5.6 Pursue design consistency, improved pedestrian and bicycle access, and right-of-way beautification along the Highway 12 corridor.

Implementation Measures

5.6.1 Install consistent signage to identify City facilities, directional routes, city limits, and bike path/ street connections.

Chapter 3: Environmental Resources Element

• Open space areas should be accessible, linked with trails and bike paths, and provided in new development.

The Circulation Element

Through its policies aimed at promoting transit use and walking and biking, the Circulation Element provides the basis for both transportation and recreation systems that help sustain the environment and community health. The network of bicycle and pedestrian facilities that link Sonoma's parks, cultural facilities, schools, civic places, and commercial centers also provide access to important natural features.

Goals, Policies, and Implementation

Goal ER-4: Respond to the recreational needs of the community.

Policy

4.3 Link neighborhoods and recreational, cultural, educational, civic, and commercial destinations with bicycle and pedestrian facilities.

Implemented through the Bicycle Plan.

4.3.1 Publish a recreation guide that includes local trails and bike routes.

Chapter 4: Circulation Element

Goal CE-1: Provide a safe walking environment throughout Sonoma.

Policy

1.1 Preserve and establish short-cuts that take pedestrians away from major streets.

Implementation Measure

1.1.1 Require the preservation or replacement of cutthrough paths in conjunction with proposed development projects.

Policy

1.2 Eliminate gaps and obstructions in the sidewalk system.

Implementation Measure

1.2.1 Create and fund a pedestrian improvement category in the five-year Capital Improvement Program as a mechanism for identifying, budgeting, and implementing specific pedestrian improvements, including constructing pathways and repairing and completing sidewalks.

Policy

1.3 Improve pedestrian circulation and safety at major intersections.

Implementation Measures

- 1.3.1 Install crosswalk actuators and improve bicycle safety signs at all signalized intersections and bikeway crossings.
- 1.3.2 Monitor and prioritize the need for pedestrian improvements through the Traffic Safety Committee.

Policy

1.4 Establish a system of hiking trails through major public open space. See measure 2.2.2.

Goal CE-2: Establish Sonoma as a place where bicycling is safe and convenient.

Policy

2.1 Promote bicycling as an efficient alternative to driving.

Implementation Measures

- 2.1.1 Work with Caltrans, the County Bicycle Authority, and the SCTA to coordinate bicycle improvements within Sonoma Valley, to provide connections to regional routes, and to incorporate bicycle facilities, and services, such as carriers and racks, on transit buses and at bus stops.
- 2.1.2 Work with schools and other interested organizations to establish safe bike routes and to promote bicycle use, registration, safety, and etiquette in accordance with the Police Department bicycle education program.

Policy

2.2 Extend the bike path system, with a focus on establishing safe routes to popular destinations.

Implementation Measures

- 2.2.1 Earmark Circulation Improvement Fee funds for bikeway system and facility improvements.
- 2.2.2 Prioritize and implement bicycle and trail improvements through the five-year Capital Improvement

Program and the Bicycle and Trail Implementation Plan.

2.2.3 Require development projects to provide all rights-of- way and improvements necessary to comply with the Bicycle Plan and Development Code requirements pertaining to bicycle and pedestrian amenities.

Policy

2.3 Expand the availability of sheltered bicycle parking and other bicycle facilities.

Implementation Measures

2.3.1 Implement Development Code requirements for bicycle access and amenities in commercial and multi-unit residential developments and update the provisions as necessary

Policy

2.4 Resolve potential conflicts between bicycles and vehicles and pedestrians. See measures 1.3.1 and 2.1.1.

Policy

2.5 Incorporate bicycle facilities and amenities in new development. See measures 2.2.3 and 2.3.1.

4 | LOCAL BICYCLE AND PEDESTRIAN NETWORK

Existing Conditions

Bicyclists and Bicycle Conditions

The existing bicycle network in Sonoma consists of Class I pathways and Class II bike lanes, and Class III bike routes. The City's longest Class I pathway is the Sonoma City Trail, which generally runs east-west and extends for approximately 1.5 miles across northern Sonoma. The Nathanson Creek Trail extends north-south along Nathanson Creek in the City's southeast quadrant connecting local neighborhoods and Sonoma Valley High School and Adele Harrison Middle School. The Madera Park Trail extends north-south along Fryer Creek from Leveroni Road at the southwestern city limit and connects to 3rd Street West. It includes several short spur connections including the KT Carter Trail and the Hertenstein Park Trail. The Sonoma Creek Trail, located on the western edge of the City south of Napa Road is located on the eastern bank of Sonoma Creek, and provides connections to Oregon Street, Studley Street, and West Napa Street and includes a bridge over Napa Creek to Riverside Drive. Class II bike lanes are provided on Studley Street, Oregon Street and Dewell Drive along with a few other short segments. Class III bike routes are provided on Second Street East, Third Street West, Oregon Street, and Curtin Lane. A segment by segment breakdown of existing bikeways is listed in Table 4.

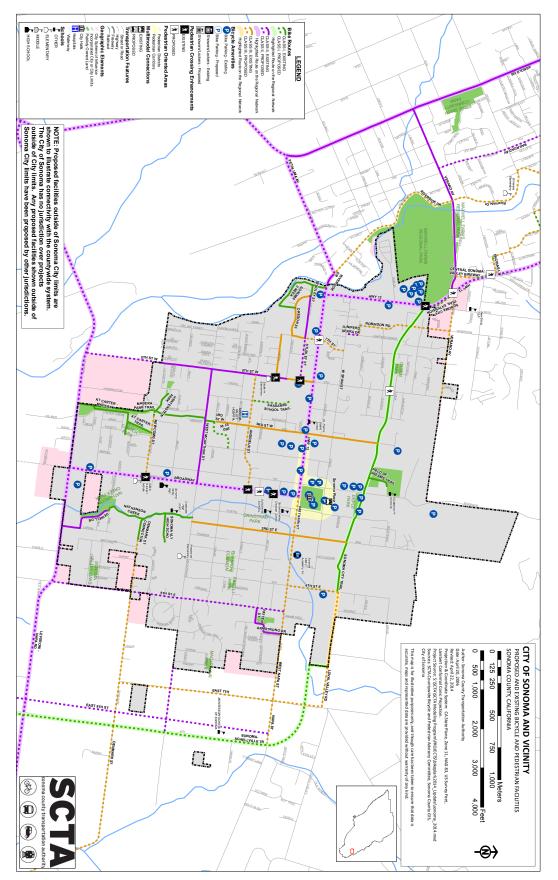
Pedestrians, Pedestrian Districts, and Pedestrian Conditions

The City covers approximately three square miles, which puts most destinations throughout Sonoma within walking distance of each other. In addition, Sonoma has more than 30 existing marked crosswalks throughout the city. Most neighborhoods are within one mile of the Plaza, and many are much closer. Particularly in the southeast neighborhoods and in and around the Plaza, mature street trees provide shade during the hot summer months. The City's grid street system is conducive to walking because it provides frequent direct routes.

Although people walk throughout the City of Sonoma, pedestrian activity is largely focused in three "pedestrian districts," places where walking is prioritized as a mode of travel. Sonoma's primary pedestrian district is the Plaza – bounded by Spain Street, First Streets East and West, and Napa Street – extending west on West Napa Street to Second Street West. Much of this area has wide sidewalks and is well-shaded by mature trees and by storefront awnings surrounding the Plaza. However, roadway crossings are difficult due to high traffic volumes on the Plaza's southern border along West Napa Street and Broadway. Other barriers to walking include motorists and pedestrians who are unfamiliar with the area, and diagonal parking near crosswalks. City staff is looking for ways to increase motorist awareness of pedestrians around the Plaza, such as way-finding signage that has been installed designed to guide tourists and raise awareness of pedestrians.

Another pedestrian district is farther west on West Napa Street, roughly between Sixth Street West and Sonoma Highway, centered on the library. In addition to local traffic, this stretch of Highway 12 carries traffic headed south and north out of town. The difficulty of crossing this heavily-traveled roadway is compounded by the limited number of crossing opportunities and the unrestricted right hand turn lane from West Napa to Sonoma Highway. The intersection of West Napa Street and Seventh Street West has a crosswalk on the east side of the intersection, but no other crossing improvements.

Figure 4.1: Sonoma Bicycle and Pedestrian Map



Broadway between East MacArthur and Newcomb Streets, adjacent to Sonoma Valley High School and Harrison Middle School, is another pedestrian district in Sonoma, in which hundreds of students walk on school days. The Sonoma Valley Unified School District recently installed a traffic signal on Broadway at Newcomb Street to improve the safety of pedestrians crossing from the residential neighborhoods west of the schools. Crossing improvements, curb ramps, and sidewalk infill are also needed at Malet Street, at the school's main entrance, and at Newcomb Street at the entrance to the school parking lot.

Parks – including Maxwell Farms Regional Park, Sonoma State Historic Park and local parks – are popular pedestrian destinations in Sonoma. Civic destinations include the library, the post office and City Hall. The City of Sonoma also has many historic landmarks to which to walk, including the Mission San Francisco Solano and numerous buildings built for General Vallejo and his family in the mid-1800s. Beyond walking in these areas and in Sonoma's residential neighborhoods, pedestrians use the City's network of Class I bicycle/pedestrian trails, such as the Sonoma City Trail, Fryer Creek Path and Madera Park Trail.

Despite these facilities, walking in Sonoma could be enhanced with citywide shade tree and sidewalk gap closure programs. Daytime temperatures are regularly in the nineties in the summer months. Gaps in the sidewalk network impede travel, particularly for some of the elderly and persons with disabilities. Broadway, West Napa Street, and the Sonoma Highway create especially strong barriers to pedestrians, in terms of their high volume of moderate-to-fast moving traffic and the long distances between established crossings and signals. The City Building Department requires sidewalk improvements when project improvements exceed \$40,000. In addition, the Public Works Department has a limited budget to make sidewalk improvements when public safety is at risk.

In 2003, the City of Sonoma prepared a Traffic Calming and Pedestrian Improvement Plan. The traffic calming portion of the Plan: details a citywide hazard reporting process; describes how to select the right traffic calming measure for various situations; provides a toolbox of traffic calming measures; and presents conceptual plans of solutions in eight of the locations most in need of calming. Most measures that calm or slow vehicular traffic also help create a more pleasant and inviting pedestrian environment. The "pedestrian" portion of the Plan, then, focuses on the provision of a basic sidewalk network. This section provides a detailed sidewalk gap inventory, which, in addition to gaps in the City's sidewalk network, details broken or cracked segments and sidewalk obstructions, and provides cost estimates and a prioritization for repairs. The Plan also lists three groupings each of traffic calming and pedestrian hot spots, locations that City staff and the public who attended a public workshop agree are particularly difficult and/or dangerous locations for pedestrians.

Disabled Access – ADA

The Americans with Disabilities Act (ADA) was enacted in 1990, providing rights and protections to individuals with disabilities. To comply in the realm of the pedestrian network, local governments must bring sidewalks, curb ramps and roadway crossings up to a set of specified standards when constructing new facilities or making modifications within existing public rights-of-way. According to ADA, additions and alterations to existing facilities shall comply with R202. Alterations include, but are not limited to, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, or changes or rearrangement of structural parts or elements of a facility. Pavement patching and liquid-applied sealing, lane restriping, and short-term maintenance activities are not alterations.

In addition to providing individuals with disabilities with accessible sidewalk, curb ramp and crossing facilities, many ADA requirements help other populations as well. For instance, in addition to serving people who use wheelchairs or other mobility aids, curb ramps facilitate travel by those pushing strollers and inexperienced bicyclists who are not yet ready to ride in the street. Wide sidewalks, and a lack of obstructions, create a nicer environment for all pedestrians. These improvements can also reduce demand for paratransit services (demand-responsive transit for people whose disabilities prevent them from using public transit) by allowing some people with disabilities to access public transit stops.

| | F | Tak kisting Bikeways a | ole 4.2 nd Pede | estrian Pi | roiects | | | |
|------------------------------------|-----------------------------|------------------------------|--------------------|-------------------|------------------------------|--------------------|-------------------------------------|---------------|
| Project Corridor/ Street | Begin Point | End Point | Class | Length (miles) | Local (L) Regional (R) | Primary Network | SF Bay Area Regional Route | Use |
| Denmark St Connector | Nathanson Creek Trail | Denmark St | 1 | 0.11 | R | No | No | Trans/ Rec |
| Field of Dreams Trail | Field of Dreams Park | Sonoma City Trail | 1 | 0.10 | L | No | No | Rec |
| Hertenstein Park | Hertenstein Park | Madera Park Trail | 1 | 0.11 | L | No | No | Trans/ Rec |
| KT Carter - Madera Trail | Madera Trail | Cox St | 1 | 0.28 | L | No | No | Trans/ Rec |
| KT Carter Trail | Newcomb St | Madera Park Trail | 1 | 0.13 | L | No | No | Trans/ Rec |
| Madera Park Trail | Nicoli Lane | Leveroni Rd | 1 | 0.68 | L | No | No | Trans/ Rec |
| Nathanson Creek Trail | Macarthur St | Fine Ave | 1 | 0.45 | L | No | No | Trans/ Rec |
| Sonoma City Trail | Sonoma Hwy | 4th St | 1 | 1.48 | R | Yes | No | Trans |
| Sonoma Creek Trail | Riverside Dr | Oregon St | 1 | 0.37 | L | No | No | Trans/ Rec |
| Sonoma Valley High School Trail | Nathanson Creek Trail | Sonoma Valley High School | 1 | 0.14 | L | No | No | Trans/ Rec |
| Studley St | Sonoma Creek Trail | Gregory Circle | 1 | 0.06 | L | No | No | Trans |
| Armstrong Dr | Napa St | Charles Van Damme Wy | | 0.09 | L | No | No | Trans |
| Charles Van Damme Wy | Patten St | Armstrong Dr | | 0.07 | L | No | | |
| Dewell Dr | Fine Avenue | Napa Rd | 11 | 0.28 | L | No | No | Trans/ Rec |
| Oregon St | Studley St | 7th St | | 0.24 | L | No | No | Trans |
| Patten St | 5th St | Charles Van Damme Wy | 11 | 0.08 | L | No | No | Trans |
| Studley St | Oregon St | 7th St | | 0.21 | L | No | No | Trans |
| Fifth Street West | West MacArthur Street | Smith Street | 11 | 0.25 | R | No | No | Trans |

| | F | Tab xisting Bikeways a | le 4.2 | octrian Pr | rojects | | | |
|--|------------------------|---------------------------|--------|-------------------|------------------------------|--------------------|-------------------------------------|-------|
| Project Corridor/ Street | Begin Point | End Point | Class | Length (miles) | Local (L) Regional (R) | Primary Network | SF Bay Area Regional Route | Use |
| West MacArthur Street | Broadway | Fifth Street West | 11 | 0.77 | L | No | No | Trans |
| Fifth Street West | Spain Street | Oregon Street | | 0.27 | L | No | No | Trans |
| Second Street East | Sonoma CityTrail | MacArthur Street | | 0.76 | L | No | No | Trans |
| Third Street West | Sonoma City Trail | Nicoli Lane | | 0.80 | L | No | No | Trans |
| Fifth Street West | West Napa Street | West MacArthur Street | 11 | 0.50 | R | No | No | Trans |
| Seventh Street West | Oregon Street | West Napa Street | 111 | 0.13 | L | No | No | Trans |
| Oregon Street | Studley Street | Seventh Street West | 111 | 0.24 | L | No | No | Trans |
| Curtin Lane | Seventh Street West | Fifth Street West | | 0.21 | L | No | No | Trans |
| Signing Program (Warning & Destination Signing) | Citywide | | | | L | | No | Trans |
| Comprehensive Sign Program (including sharrows, where necessary) | Citywide | | | | L | | No | Trans |
| Plaza Bicycle Parking Plan | | | | | L | | No | Trans |
| Sonoma Highway Crosswalk | | | | | L | | No | Trans |
| Fifth Street West Pedestrian Crossing | Fifth Street West | Studley Street | | | R | No | No | Trans |
| Fifth Street West Pedestrian Crossing | Fifth Street West | Curtain lane | | | R | No | No | Trans |

| | Table 4.2 Existing Bikeways and Pedestrian Projects | | | | | | | | |
|------------------------------------|--|-----------------|-------|-------------------|------------------------------|--------------------|-------------------------------------|-------|--|
| Project Corridor/ Street | Begin Point | End Point | Class | Length (miles) | Local (L) Regional (R) | Primary Network | SF Bay Area Regional Route | Use | |
| Broadway Pedestrian Crossing | Highway 12 | Patten Street | | | R | Yes | No | Trans | |
| Broadway Pedestrian Crossing | Highway 12 | Andrieux Street | | | R | Yes | No | Trans | |
| Broadway Pedestrian Crossing | Highway 12 | Newcomb Street | | | R | Yes | No | Trans | |
| | | Class | 1 | 3.91 | | | | | |
| | | Class | 11 | 1.99 | | | | | |
| | | Class | | 2.41 | | | | | |

Transit and Multi-Modal Access

Convenient multi-modal connections for bicyclists and pedestrians that are well-integrated into the transportation system are a vital component of the bicycle and pedestrian network. Transit has the potential to extend trip ranges for bicyclists and pedestrians to nearby communities and destinations outside of Sonoma County. This is especially important for Sonoma, and Sonoma County in general, considering existing barriers to bicycle and pedestrian travel such as distances between communities, gaps in the existing bicycle and pedestrian networks between urban areas, heat during summer months and rain during winter months. While these obstacles likely serve as deterrents to existing and potential trips by bike or by foot, convenient multi-modal access can help to address these issues and extend trip ranges.

Sonoma County Transit – Since most transit passengers in Sonoma County walk to their bus stop, pedestrian facilities leading to each stop – including completed sidewalk networks, curb cuts and safe intersection crossings are important components of Sonoma's pedestrian environment. Five Sonoma County Transit routes serve Sonoma. The Route 30 provides regular and express service daily between Santa Rosa and Sonoma via Oakmont, Kenwood, Glen Ellen, Agua Caliente and Boyes Hot Springs. The 32 offers local service between Agua Caliente, Sonoma and Temelec. On weekdays, the Route 34 provides express service between Santa Rosa and Sonoma via Kenwood. The 38 travels between Kenwood and San Rafael, Monday through Friday, serving Agua Caliente, Boyes Hot Springs, El Verano, Sonoma, and Schellville along the way. The Route 40 provides weekday service between Sonoma and Petaluma. There are seven Sonoma County Transit shelters at bus stops throughout Sonoma.

Napa County Transportation and Planning Agency – The Vine Transit operates a Sonoma to Napa regional route on weekdays (Route 25).

Support Facilities and Bicycle Parking

End-of-trip support facilities include bicycle parking, areas to change clothes and shower, and facilities for storing clothes and equipment. An inventory of bicycle parking was performed by staff for this effort; existing and proposed bicycle parking is identified in Table 5 below. There are no known existing shower or locker facilities designated for bicyclists, and none are proposed at this time.

| | Exist | Table 4. ting and Proposed Bicy | - | ocations | | |
|------------------------------|-------------------------------|--|-----------------|----------------|------------------------|----------|
| Location | Address | On Site Location | Type of Rack | # of Spaces | Existing / Proposed | Notes |
| Plaza1 | No. 1 The Plaza | West side of City Hall | Art Rack | 10 | Existing | |
| Plaza3 | No. 1 The Plaza | West side of City Hall | Post | 2 | Existing | |
| Plaza2 | No. 1 The Plaza | West side of City Hall | Post | 2 | Existing | |
| Plaza | No. 1 The Plaza | Adjacent to First Street West | Post | 2 | Existing | Midblock |
| Plaza | No. 1 The Plaza | Adjacent to West Spain Stret | Post | 2 | Existing | Midblock |
| Plaza5 | No. 1 The Plaza | East side of amphitheatre | Post | 2 | Existing | |
| Plaza | No. 1 The Plaza | East side of Visitor's Center | Post | 2 | Existing | |
| Plaza6 | No. 1 The Plaza | East side of Visitor's Center | Post | 2 | Existing | |
| Sonoma Cheese Factory | 2 West Spain Street | Sonoma Cheese Factory | Rack | 6 | Existing | |
| Sonoma Barracks | 20 East Spain Street | Adjacent to Case Grande parking lot | Rack | 6 | Existing | |
| Sebastiani Winery | 389 Fourth Street East | North of Tasting Room | Rack | 20 | Existing | |
| The Haven | 151 First Street West | In front of building | Rack | 10 | Existing | |
| Sonoma Police Station | 175 First Street West | In front of building | Rack | 4 | Existing | |
| Sonoma Police Station | 175 First Street West | North of building | Rack | 10 | Existing | |
| Depot Park1 | 270 First Street West | West of Depot Museum | Rack | 5 | Existing | |
| Depot Park2 | 270 First Street West | West of swing set | Rack | 5 | Existing | |
| Vallejo Home | Spain at Third Street West | East of home | Rack | 6 | Existing | |
| Curves | 250 West Napa Street | In front of building | Rack | 9 | Existing | |
| Wine Country Cyclery | 262 West Napa Street | In front of building | Rack | 5 | Existing | |
| Sonoma Valley Marketplace | 500 West Napa Street | Throughout Marketplace | Rack | 28 | Existing | |

| Table 4.3 Existing and Proposed Bicycle Parking Locations | | | | | | | | |
|--|-----------------------------|-----------------------------|-----------------|----------------|------------------------|-------|--|--|
| Location | Address | On Site Location | Type of Rack | # of Spaces | Existing / Proposed | Notes | | |
| Staples | 977 West Napa Street | In front of building | Rack | 6 | Existing | | | |
| Fitness Factory | 19310 Sonoma Highway | In front of building | Rack | 3 | Existing | | | |
| Breakaway Cafe | 19101 Sonoma Highway | On south side of building | Rack | 3 | Existing | | | |
| Parkpointe Club | 19101 Sonoma Highway | In front of building | Rack | 5 | Existing | | | |
| Lucky's | 19181 Sonoma Highway | In front of building | Rack | 12 | Existing | | | |
| Maxwell Village Cleaners | 19203 Sonoma Highway | In front of building | Rack | 6 | Existing | | | |
| Rite Aid Pharmacies | 19205 Sonoma Highway | In front of building | Rack | 20 | Existing | | | |
| Little Caesars | 19209 Sonoma Highway | In front of building | Rack | 6 | Existing | | | |
| Beauty Galore | 19225 Sonoma Highway | In front of building | Rack | 4 | Existing | | | |
| Sonoma Valley Regional Library | 755 West Napa Street | On east side of building | Rack | 8 | Existing | | | |
| Safeway Food & Drug | 477 West Napa Street | In front of building | Rack | 12 | Existing | | | |
| Exchange Bank | 435 West Napa Street | In front of building | Rack | 4 | Existing | | | |
| Pharmaca | 303 West Napa Street | In front of building | Rack | 4 | Existing | | | |
| The Toy Shop | 201 West Napa Street # 2 | In front of building | Rack | 3 | Existing | | | |
| Whole Foods | 201 West Napa Street | In front of building | W-rack | 8 | Existing | | | |
| Community Center | 276 East Napa Street | In rear of building | Rack | 7 | Existing | | | |
| Radio Shack | 201 West Napa Street #16 | In front of building | Rack | 6 | Existing | | | |
| Chateau Sonoma | 153 West Napa Street | In front of building | Rack | 3 | Existing | | | |

| | Exis | Table 4 ting and Proposed Bicy | - | Locations | | |
|-----------------------------------|-------------------------|---|-----------------|----------------|------------------------|-----------------------------|
| Location | Address | On Site Location | Type of Rack | # of Spaces | Existing / Proposed | Notes |
| Love & Lovely | 521 Broadway | In front of building | Rack | 6 | Existing | |
| Peet's Coffee | 591 Broadway | North of building | U-rack | 4 | Existing | |
| United States Post Office | 617 Broadway | 17 Broadway In front of building Rack | | 4 | Existing | Located near bus stop |
| Sonoma Old School | 1001 Broadway | In front of building | Rack | 8 | Existing | |
| The Lodge at Sonoma | 1325 Broadway | On east side of Carneros Bistro & Bar | W-rack | 8 | Existing | |
| Friedman's Home Improvement | 1360 Broadway | In front of main entrance | W-rack | 6 | Existing | |
| Whole Foods | 201 West Napa Street | In rear of building | W-rack | 8 | Existing | |

Safety and Security

Safety is a major concern of both current and potential bicyclists and pedestrians. For those who walk or bicycle, it is typically an on-going concern or even a distraction. For those who avoid walking and/or bicycle riding, concern about safety is one of the most compelling reasons not to do so. In discussing bicycle safety, it is important to separate perceived dangers from actual safety hazards.

Riding a bicycle on the street is commonly perceived as unsafe because of the exposure of a lightweight, two-wheeled vehicle to heavier and faster moving motor vehicles including autos, trucks and buses. Actual accident statistics, however, show that bicyclists face only a marginally higher degree of sustaining an injury than a motorist, based on numbers of users and miles traveled. Death rates are essentially the same for bicyclists as motorists. Collisions between bicycles and vehicles are much less likely to happen than bicycle-with-bicycle, bicycle-with-pedestrian, or collisions caused by roadway facilities. Additionally, the majority of reported bicycle crashes show the bicyclist to be at fault; generally, this involves younger bicyclists riding on the wrong side of the road or being hit broadside by a vehicle at an intersection or driveway.

Local Enforcement Responsibilities – The Sonoma Police Department enforces the California Vehicle Code and traffic laws in Sonoma, including bicycle and pedestrian violations.

Existing and Proposed Safety and Education Programs –The City of Sonoma sponsors three Bike Rodeos a year at the elementary schools. In addition, the City hosts an annual Street Skills class, which is available free to the entire community.

Collision Analysis

The collision history for Sonoma was reviewed to determine any trends or patterns that could indicate safety issues.

The collision data for 2007-2011 was obtained from the California Highway Patrol (CHP) as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The CHP Accident Investigation Unit maintains SWITRS. It was developed as a means to collect and process data from collision scenes. The program ensures that local police departments and the CHP utilize and maintain uniform data collection tools and methods to collect and compile meaningful data and statistics that can be used to improve roadway conditions and monitor the effectiveness of enforcement efforts.

It is important to note that SWITRS only includes reported collisions, so may not reflect all conflicts that occur. A comprehensive review of the data was performed to help understand the nature and factors involved in bicycle and



pedestrian collisions. A better understanding of these factors may help planners and engineers address some of the physical environments that contribute to these incidents. For example, if it is determined that a high incidence of collisions are occurring in the evening, lighting improvements may help to correct the situation. Conversely, a high incidence of collisions attributed to bicycle riding in the wrong direction or those involving children may be addressed through education and/or enforcement activities.

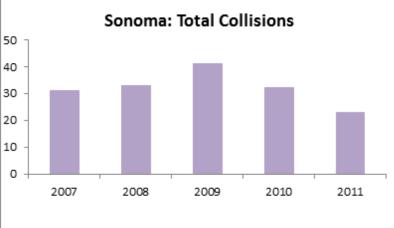
The following types of data were reviewed with an emphasis on the conditions indicated to better understand the factors that may have contributed to the reported collisions:

Collisions: This information includes an analysis of the major causes of each collision, the locations of collisions, and the seasonal variation of collisions.

Conditions: Environmental conditions at or near the collision site at the time of each crash were examined. This included an analysis of weather conditions, lighting conditions, and types of traffic control devices present.

Demographics: This included a determination, by gender and age, of collision rates for bicyclists and pedestrians.

Locations: This portion of the analysis includes a citywide map of bicycle and pedestrian collisions and other spatial analyses of different collision types.

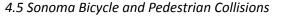


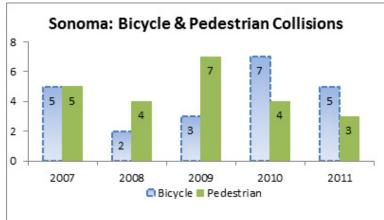
4.4 Sonoma Collisions (2007-2011)

For the five-year period reviewed, a total of 168 collisions were reported in Sonoma, which is a 343 percent decrease from the previous five-year period (2002-2006). Even though total collisions have substantially decreased, both bicycle and pedestrian collisions have increased since the previous five-year period. There were 22 bicycle collisions and 21 pedestrian

Source: Statewide Integrated Traffic Records Systems (SWITRS)

collisions, which demonstrates a 27 percent increase and 38 percent increase respectively. Even though bicycle and pedestrians collisions have increased, there were zero fatalities in Sonoma during this time period. The numbers of bicycle and pedestrian collisions by year are included in the bar graph below.





Source: Statewide Integrated Traffic Records Systems (SWITRS)

Bicycle Collisions

There were 22 reported bicycle collisions in Sonoma during this period, which represents 13 percent of the total collisions. Most bicycle collisions occurred on a Wednesday, with a total of 5. All collisions took place in clear weather, and approximately 68 percent of the bicycle collisions occurred during daylight conditions; therefore, visibility was not a factor in most situations. Approximately half of the bicycle collisions were at the fault of the motorist. There was one collision which occurred between a bicycle and pedestrian, which left the pedestrian severely injured. This collision occurred on Broadway in 2009, and according to the data the pedestrian was not in the street (i.e. not crossing the street or in the street right-of-way). The bicyclist was riding on the sidewalk.

Pedestrian Collisions

Over the five-year period Sonoma experienced 21 collisions involving pedestrians, which is 38 percent increase from the previous five-year period (2007-2011). There were no fatal pedestrian collisions. There is no clear pattern, as the pedestrian collisions occurred on each day of the week at various times of the day. The data suggests that motorists are at fault nearly 75 percent of the time.

Proposed Improvements

Bikeways

A segment by segment breakdown of the proposed bikeways including facility type, length, estimated cost of improvements, project priority, and other criteria are listed in Table 6. The proposed bikeways network has been developed to provide bicycle access to destinations throughout Sonoma. The network consists of primary routes that connect through the City and provide access to neighboring jurisdictions, as well as local bikeways that provide access to neighborhoods and destinations throughout Sonoma. While the projects in this Plan have received a preliminary feasibility evaluation, engineering and environmental studies will be required prior to project implementation to determine project specific issues such as right-of-way impacts, traffic operations, parking impacts, and environmental issues.

Approximately 12 miles of bikeways are proposed in Sonoma, including 0.63 miles of Class I pathways consisting of an extension of the Sonoma City Trail north along Highway 12 to Verano Avenue, a new trail extending north from Andrieux

Street to Sassarini School, an extension of the Madera Park Trail to 2nd Street, and a section of the Sonoma Schellville Trail. Approximately 4.75 miles of Class II bike lanes are proposed including segments on 5th Street East, 7th Street West, Broadway, Highway 12, Junipero Serra Drive, McArthur Street, Riverside Drive, Studley Street, and West Spain Street. Approximately 3.26 miles of Class III bike routes are proposed including segments on, 4th Street East, Andrieux Street, Denmark Street, Highway 12, Loval Valley Road, West Napa Street, Newcomb Street, Palou Street, and Robinson Road. Additionally, a signing campaign of warning signs and destination based 'wayfinding' signshas been installed. Approximately 25-30 signs placed strategically at community gateways, route junctions, and regular intervals along the primary bikeway network and the City's local pathways provides coverage for the entire community. A bicycle parking program is also recommended to supplement existing bicycle parking, replace older non-recommended style racks with current racks, and install bicycle lockers for long-term storage. The total cost of the bicycle facility improvements proposed in this plan is estimated at approximately \$1,013,436.

Pedestrian Facilities

In 2003, the City of Sonoma prepared a Traffic Calming and Pedestrian Improvement Plan. The traffic calming portion of the Plan: details a citywide hazard reporting process; describes how to select the right traffic calming measure for various situations; provides a toolbox of traffic calming measures; and presents conceptual plans of solutions in eight of the locations most in need of calming. Most measures that calm or slow vehicular traffic also help create a more pleasant and inviting pedestrian environment. The "pedestrian" portion of the Plan, then, focuses on the provision of a basic sidewalk network. This section provides a detailed sidewalk gap inventory, which, in addition to gaps in the City's sidewalk network, details broken or cracked segments and sidewalk obstructions, and provides cost estimates and a prioritization for repairs. The Plan also lists three groupings each of traffic calming and pedestrian hot spots, locations that City staff and the public who attended a public workshop agree are particularly difficult and/or dangerous locations for pedestrians.

Of the three groups of pedestrian hot spots, there are only a handful that are more than one block from the Broadway/ West Napa corridor, which lends support to the notion that these streets are barriers that prevent walking from being a safe and pleasant transportation and recreation option throughout the City of Sonoma. Conversely, many traffic calming hot spots identified in the Plan are located in Sonoma's neighborhoods, reflecting the need to calm traffic to create a safer pedestrian environment off of the City's arterial network, as well. As a result of the 2003 Plan, the City has implemented a number of traffic calming and pedestrian safety projects, including curb ramp upgrades, high visibility crosswalks, bulbouts, speed bumps, and in-pavement warning lights.

Pedestrian improvements identified in this Plan include the recommendations developed in the City's Traffic Calming and Pedestrian Improvement Plan and incorporate new recommendations identified through this effort, and by working with the public and staff. Proposed crossing improvements are identified on the Sonoma Bicycle and Pedestrian Map on page 26.

| | Table 4.6 Proposed Bikeways, Pedestrian Projects and Project Priorities | | | | | | | | | |
|---------------------------------|--|--------------------|-------|-------------------|------------------------------|--------------------|-------------------------------------|---------------|-----------|----------|
| Project Corridor / Street | Begin Point | End Point | Class | Length (miles) | Local (L) Regional (R) | Primary Network | SF Bay Area Regional Route | Use | Cost | Priority |
| Madera Park Trail | Madera Trail | 2nd Street East | Ι | 0.18 | L | No | No | Trans/ Rec | \$112,906 | Low |
| Sassarini School Trail | Sassarini Elementary School | Andrieux Street | 1 | 0.19 | L | No | No | Trans/ Rec | \$120,915 | High |

| | | Proposed B | ikewav | | Table 4.6 trian Proje | ects and Pr | oject Prior | ities | | |
|------------------------------------|-----------------------|---------------------------------|--------|-------------------|------------------------------|--------------------|-------------------------------------|---------------|----------------|----------|
| Project Corridor / Street | Begin Point | End Point | Class | Length (miles) | Local (L) Regional (R) | Primary Network | SF Bay Area Regional Route | Use | Cost | Priority |
| Sonoma City Trail Extensionª | Verano Avenue | Sonoma City Trail | I | 0.16 | R | No | No | Trans/ Rec | \$100,423 | High |
| Sonoma- Schellville Trailª | Lovall Valley Road | Sonoma- Schellville Trail | I | 0.09 | R | Yes | Yes | Trans/ Rec | \$55,329 | |
| Fryer Creek Bridge | | | Ι | 0.009 | L | No | No | Trans/ Rec | \$168,640 | High |
| 5th Street East | Napa Street | Denmark Street | 11 | 0.75 | R | No | No | Trans | \$64,515 | Low |
| 5th Street East | Denmark Street | Napa Road | 11 | 0.39 | R | No | No | Trans | \$29,169 | Low |
| Broadway | Highway 12 | Napa Road | 11 | 1.12 | R | Yes | Yes | Trans | \$96,944 | High |
| Highway 12 | Verano Avenue | West Napa Street | 11 | 0.64 | R | Yes | Yes | Trans | \$55,666 | Low |
| Highway 12 | Highway 12 | The Plaza | 11 | 1.04 | R | Yes | Yes | Trans | \$89,911 | Low |
| Junipero Serra Drive | Palou Street | Spain Street | 11 | 0.06 | L | No | No | Trans | \$5,032 | High |
| Riverside Driveª | Petaluma Avenue | Highway 12 | 11 | 0.05 | L | Yes | No | Trans | \$4,743 | Low |
| Studley Street | 7th Street West | 5th Street West | 11 | 0.21 | L | No | No | Trans | \$17,800 | Med |
| Napa Road | 5th Street East | Broadway | 11 | 0.54 | L | No | No | Trans | \$5,530 | High |
| 7th Street West | Spain Street | Oregon Street | 111 | 0.27 | L | No | No | Trans | \$23,179 | High |
| 4th Street East | Lovall Valley Road | East Napa Street | 111 | 0.25 | L | No | No | Trans | \$4,307 | Med |
| Andrieux Street | 5th Street West | Broadway | 111 | 0.57 | R | No | No | Trans | \$9,830 | Low |
| Denmark Street | Brockman Lane | 5th Street East | 111 | 0.25 | R | No | No | Trans | \$4,395 | High |
| East Napa Street | The Plaza | 2nd Street East | 111 | 0.19 | R | No | No | Trans | \$3,299 | High |
| Loval Valley Road | 4th Street East | Sonoma City Limits | | 0.37 | L | Yes | No | Trans | \$6,328 | Low |
| East Napa Street | 2nd Street East | Sonoma City Limits | 111 | 0.67 | R | No | No | Trans | \$11,626 | High |
| East Napa Streetª | Sonoma City Limits | 7th Street East | | 0.13 | R | No | No | Trans | <i>\$2,326</i> | Low |

| | | Proposed B | ikoway | | Table 4.6 | ots and Dr | aiact Priar | itios | | |
|-----------------------------------|-----------------------|-------------------------|--------|-------------------|------------------------------|--------------------|-------------------------------------|--------|-------------|----------|
| Project Corridor / Street | Begin Point | End Point | Class | Length (miles) | Local (L) Regional (R) | Primary Network | SF Bay Area Regional Route | Use | Cost | Priority |
| Newcomb Street | Cul de sac | Broadway | 111 | 0.30 | L | No | No | Trans | \$5,227 | High |
| Palou Street | Robinson Road | Junipero Serra Drive | 111 | 0.05 | L | No | No | Trans | \$824 | High |
| Robinson Road | Sonoma City Limits | Palou Street | 111 | 0.34 | L | No | No | Trans | \$5,932 | High |
| Highway 12 ^ь | Highway 12 | Seventh Street West | | | L | Yes | Yes | Trans | \$200,000 | High |
| Broadway ^b | Broadway | Malet Street | | | L | Yes | Yes | Trans | \$200,000 | High |
| Sonoma City Trail ^ь | Sonoma City Trail | Fifth Street West | Ι | | R | Yes | No | Trans | \$80,000 | High |
| Bicycle Parking Program | Citywide | | | | L | | No | Trans | \$8,640 | High |
| | | Class I | .629 | | | | | Total: | \$1,493,436 | |
| | | Class II | 4.8 | | | | | | | |
| | | Class III | 3.39 | | | | | | | |

b = Pedestrian Crossing Enhancement as demonstrated on map on page 26

5 | PROJECT COSTS AND FUNDING

<u>Costs</u>

Project costs for the improvement projects identified in this Plan are identified in Table 6.

Past Expenditures

Sonoma has invested an average of approximately \$95,000 per year on bicycle and pedestrian improvements throughout the City over the past ten years.

Funding Sources

The number of grants available for non-motorized transportation projects has been growing in recent years. Specific funding opportunities for the proposed facilities are shown in Table 7 while a summary of these programs is included in the Overview section.

| | Table 7 Project Implementation and Funding Opportunities | | | | | | | | | | | |
|--------------------------------|--|-----------|----------|------------------------|--|---|--|--|--|--|--|--|
| Project Corridor / Street | Class | Cost | Priority | Implementing Agency | Project Partners | Potential Funding Source | | | | | | |
| Madera Park Trail | 1 | \$112,906 | Low | Sonoma | | SCAPOSD, RBBP, TDA, BTA, TFCA, Local Funds | | | | | | |
| Sassarini School Trail | 1 | \$120,915 | High | Sonoma | Sonoma Valley Unified School Dist. | SCAPOSD, RBBP, TDA, BTA, TFCA, Local Funds | | | | | | |
| Sonoma City Trail Extension | I | \$100,423 | High | Sonoma | Caltrans, Sonoma County Regional Parks | SCAPOSD, RBBP, TDA, BTA, TFCA, Local Funds | | | | | | |
| Sonoma-Schellville Trail | 1 | \$55,329 | Low | Sonoma | Sonoma County Regional Parks | SCAPOSD, RBBP, TDA, BTA, TFCA, Local Funds | | | | | | |
| Fryer Creek Bridge | 1 | \$168,640 | High | Sonoma | | TDA, Local Funds | | | | | | |

| | | Project Imple | | able 7 1 and Funding Op | oportunities | |
|------------------------------|-----------|-----------------|----------|----------------------------|---------------------------------------|---|
| Project Corridor / Street | Class | Cost | Priority | Implementing Agency | Project Partners | Potential Funding Source |
| 5th Street East | 11 | \$64,515 | Low | Sonoma | Sonoma County Regional Parks | SCAPOSD, RBBP, TDA, BTA, TFCA, Local Funds |
| 5th Street East | 11 | \$29,169 | Low | Sonoma | | RBBP, TDA, BTA, TFCA, Local Funds |
| Broadway | 11 | \$96,944 | High | Sonoma | Caltrans | RBBP, TDA, BTA, TFCA, Local Funds |
| Highway 12 | | \$55,666 | Low | Sonoma | Caltrans | RBBP, TDA, BTA, TFCA, Local Funds |
| Highway 12 | 11 | \$89,911 | Low | Sonoma | Caltrans | RBBP, TDA, BTA, TFCA, Local Funds |
| Junipero Serra Drive | | \$5,032 | High | Sonoma | | RBBP, TDA, BTA, TFCA, Local Funds |
| Riverside Drive | 11 | \$4,743 | Low | Sonoma | | RBBP, TDA, BTA, TFCA, Local Funds |
| Studley Street | | \$17,800 | Med | Sonoma | | RBBP, TDA, BTA, TFCA, Local Funds |
| Napa Road | 11 | \$5,530 | High | | | |
| 7th Street West | | \$23,179 | High | Sonoma | | RBBP, TDA, BTA, TFCA, Local Funds |
| 4th Street East | | \$4,307 | Med | Sonoma | | TDA, Local Funds |
| Andrieux Street | | \$9,830 | Low | Sonoma | | TDA, Local Funds |
| Denmark Street | | \$4,395 | High | Sonoma | | TDA, Local Funds |
| East Napa Street | | \$ <i>3,299</i> | High | Sonoma | | TDA, Local Funds |
| Loval Valley Road | | \$6,328 | Low | Sonoma | | TDA, Local Funds |
| East Napa Street | | \$11,626 | High | Sonoma | | TDA, Local Funds |
| East Napa Street | | \$2,326 | Low | Sonoma | | TDA, Local Funds |
| Newcomb Street | | \$5,227 | High | Sonoma | | TDA, Local Funds |
| Palou Street | | \$824 | High | Sonoma | | TDA, Local Funds |
| Robinson Road | | \$5,932 | High | Sonoma | | TDA, Local Funds |
| Bicycle Parking Program | | \$8,640 | High | Sonoma | | RBBP, TDA, Local Funds |
| | Class I | \$389,573 | | | | |
| | Class II | \$369,310 | | | | |
| | Class III | \$77,273 | | | | |
| | Total: | \$1,013,436 | | | | |

APPENDICES

Appendix A: Bicycle and Pedestrian Count Data by Metropolitan Transportation Commission (MTC) Appendix B: Bicycle and Pedestrian Count Data by Sonoma County Transportation Authority (SCTA) Appendix C: Future Potential Bicycle and Pedestrian Count Locations Appendix A: Bicycle and Pedestrian Count Data by Metropolitan Transportation Commission (MTC)

| Bicycle Counts | | | | | | | | | |
|-----------------------------------|--------------|------|------|------|------|---------------|---------------|--|--|
| LOCATION | СІТҮ | 2002 | 2010 | 2011 | 2012 | 2010- 2012 | 2002- 2012 | | |
| OLD REDWOOD HWY & COTATI AVE | COTATI | 45 | 16 | 25 | 67 | 319% | 49% | | |
| HEALDSBURG AVE & MATHESON | HEALDSBURG | 48 | 47 | 112 | 156 | 232% | 225% | | |
| PETALUMA HILL RD & ROHNERT EXPRWY | ROHNERT PARK | 17 | 24 | 16 | 8 | -67% | -53% | | |
| SANTA ROSA AVE & 2ND | SANTA ROSA | 46 | 66 | 128 | 158 | 139% | 243% | | |
| MENDOCINO AVE & PACIFIC | SANTA ROSA | 130 | 180 | 166 | 225 | 25% | 73% | | |
| PETALUMA AVE & JOE RODOTA TR | SEBASTOPOL | 34 | 82 | 107 | 180 | 120% | 429% | | |
| HWY 12 & VERANO AVE | SONOMA | 70 | 64 | 102 | 206 | 222% | 194% | | |
| BROADWAY & NAPA ST | SONOMA | 58 | 81 | 97 | 144 | 78% | 148% | | |
| SONOMA COUNTY TOTALS: | | 448 | 560 | 753 | 1144 | 104% | 155% | | |

| Pedestrian Counts | | | | | | | | |
|-----------------------------------|--------------|------|------|------|------|---------------|---------------|--|
| LOCATION | СІТҮ | 2002 | 2010 | 2011 | 2012 | 2010- 2012 | 2002- 2012 | |
| OLD REDWOOD HWY & COTATI AVE | COTATI | 62 | 54 | 54 | 72 | 33% | 16% | |
| HEALDSBURG AVE & MATHESON | HEALDSBURG | 294 | 1070 | 1057 | 1113 | 4% | 279% | |
| PETALUMA HILL RD & ROHNERT EXPRWY | ROHNERT PARK | 2 | 172 | 106 | 69 | -60% | 3350% | |
| SANTA ROSA AVE & 2ND | SANTA ROSA | 471 | 751 | 859 | 791 | 5% | 68% | |
| MENDOCINO AVE & PACIFIC | SANTA ROSA | 643 | 542 | 584 | 680 | 25% | 6% | |
| PETALUMA AVE & JOE RODOTA TR | SEBASTOPOL | 486 | 253 | 199 | 260 | 3% | -47% | |
| HWY 12 & VERANO AVE | SONOMA | 63 | 156 | 160 | 231 | 48% | 267% | |
| BROADWAY & NAPA ST | SONOMA | 304 | 916 | 967 | 1078 | 18% | 255% | |
| SONOMA COUNTY TOTALS: | | 2325 | 3914 | 3986 | 4294 | 10% | 85% | |

| | SCTA 2009-2012 Bicycle & Pedestrian Count Data | | | | | | | | | | | |
|---------------|--|--------|----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| | | | 20 | 09 | 20 | 10 | 20 | 11 | 20. | 12 | 20 | 13 |
| STREET NAME | CROSS STREET | CITY | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| Bicycle | Bicycle | | | | | | | | | | | |
| East Napa St. | Broadway | Sonoma | 27 | n/a | 4 | 51 | 25 | 66 | 24 | 32 | 21 | 23 |
| Newcomb St. | Broadway | Sonoma | | | | | | | 28 | 36 | 51 | 23 |
| Newcomb St. | 2nd St. W. | Sonoma | | | | | | | 13 | 52 | | |
| Pedestrian | | | | | | | | | | | | |
| East Napa St. | Broadway | Sonoma | 86 | n/a | 92 | 485 | 102 | 975 | 97 | 224 | 96 | 512 |
| Newcomb St. | Broadway | Sonoma | | | | | | | 89 | 72 | 131 | 25 |
| Newcomb St. | 2nd St. W. | Sonoma | | | | | | | 37 | 54 | | |

Appendix B: Bicycle and Pedestrian Count Data by Sonoma County Transportation Authority (SCTA)

| | | City of Sonoma | a |
|-----|---------------------------|---|--|
| # | Primary Street | Cross Street | Notes |
| 1 | Sonoma City Trail | Sonoma Highway (SR 12) | Primary Network / Regional Park / Commercial District |
| 2 | Sonoma City Trail | 3rd Street West | Primary Network / Local Bikeway |
| 3 | Sonoma City Trail | 4th Street East - Lovall Valley Road | Primary Network / Community Gateway |
| 4 | Spain Street | 3rd Street West | Local Bikeway / Downtown bypass |
| 5 | Spain Street | 2nd Street East | Local Bikeway / Downtown bypass |
| 6 | McArthur Street | 3rd Street West | Local Bikeway / Fryer Creek Path Trail Entry |
| 7 | McArthur Street | 5th Street East | Local Bikeway |
| 8 | McArthur Street | 5th Street West | Local Bikeway |
| 9 | McArthur Street | Nathanson Creek Trailhead | Local Bikeway / School |
| 10 | Sonoma Creek Trail | Riverside Drive | Primary Network / Local Bikeway |
| 11* | Broadway (SR 12) | Napa Street (SR 12) | Primary Network / Downtown |
| 12 | Broadway (SR 12) | Andreiux Street | Primary Network |
| 13* | Broadway (SR 12) | Newcomb Street | Primary Network / School |
| 14 | Broadway (SR 12) | Leveroni Road | Primary Network Junction |
| 15 | West Napa Street | 5th Street West | Primary Network / Local Bikeway |
| 16 | Studley Street | 7th Street West | Local Bikeway |
| | *Location has already bee | n counted as part of the SCT. | A Bicycle and Pedestrian Count Program |

Appendix C: Future Potential Bicycle and Pedestrian Count Locations