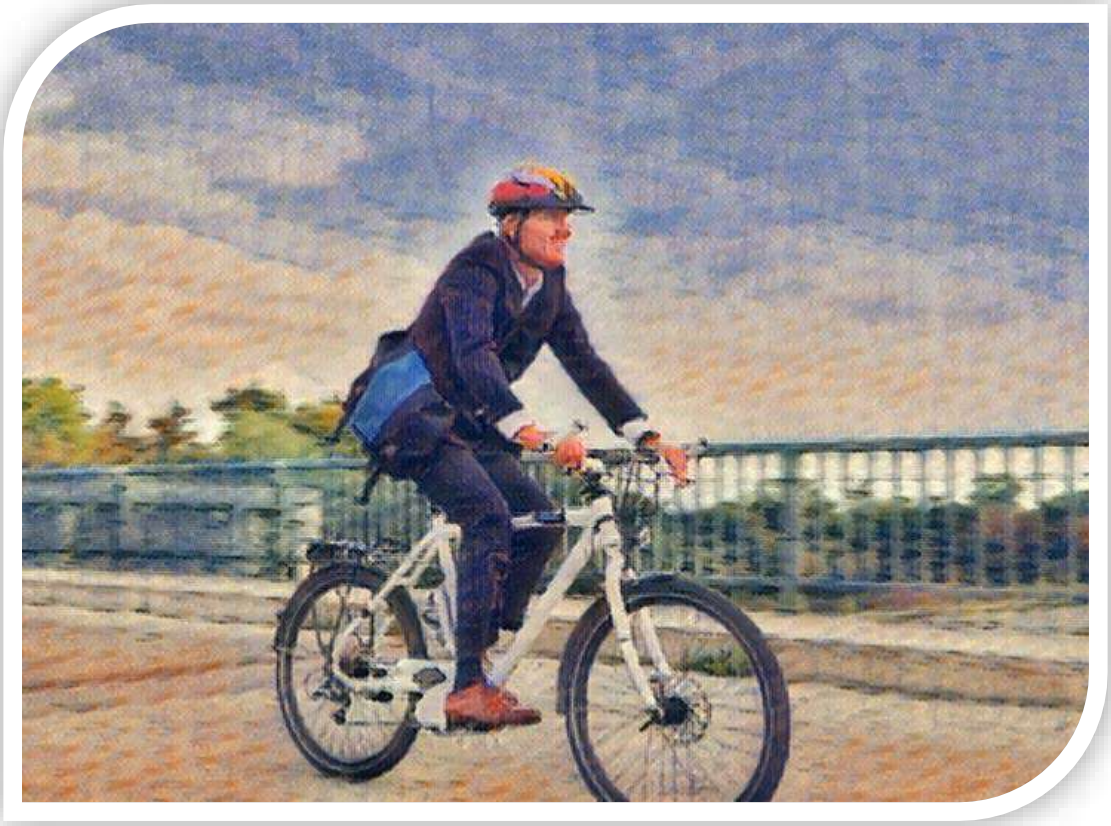
City of

Los Banos

Bicycle-Pedestrian Plan



Introduction

The City of Los Banos Bicycle-Pedestrian Plan is a comprehensive document outlining the future of walking and bicycling in Los Banos.

This plan includes:

- A vision for walking and bicycling in the city
- Policies to achieve this vision
- Planned bicycle and pedestrian networks
- A prioritized list of projects to develop these networks
- Guidelines for elements such as wayfinding signs and bicycle parking

Utilization of this plan will help increase the number of people in Los Banos that travel in the city by walking or bicycling. This plan will also improve the City's access to funding for active transportation projects through the state Active Transportation Program and the regional Measure V program. Funds from these and other sources will be used to implement the infrastructure projects and supporting programs that will make walking and bicycling an attractive travel option for more people in Los Banos.

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Setting

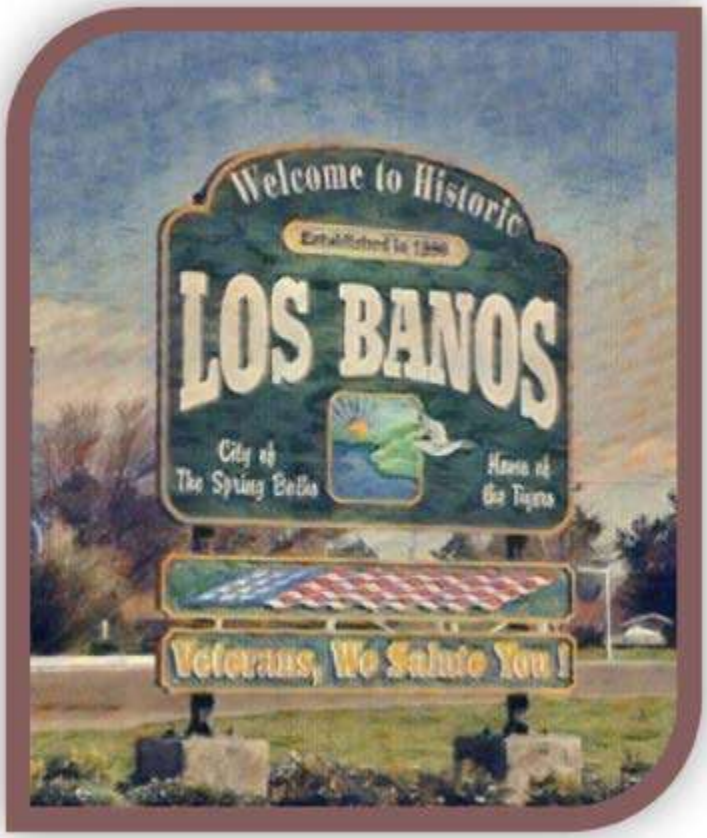
Location

The City of Los Banos is situated within western Merced County, in the northern portion of the San Joaquin Valley. The City is conveniently located in the center of California, near the junction of California State Route (SR)152 and Interstate 5, approximately 120 miles southeast of San Francisco, 83 miles northeast of Monterey and 72 miles northwest of Fresno. Los Banos is the second largest City in the County and borders the communities of Dos Palos, Gustine, Volta, and Santa Nella. The San Luis Reservoir State Recreation Area is west of Los Banos. Various state and federal wildlife areas and refuges surrounding Los Banos include the Volta State Wildlife Area to the northwest, the Los Banos Wildlife Area to the northeast, and the Mud Slough Wildlife Area to the east. It is also bordered by the Grassland Ecological Area (GEA). Yosemite National Park can be reached within 2 hours.

Climate

The Los Banos climate is classified as Mediterranean, warm summer subtype that is characteristic of subtropical west coast interior locations. Summers are dry and warm with daytime temperatures typically in the mid 90's.

Because of the prevailing westerly winds that average 16mph, and occasional airflow through Pacheco Pass, summer temperatures in Los Banos tend to be a few degrees cooler than more interior sections of the San Joaquin Valley.



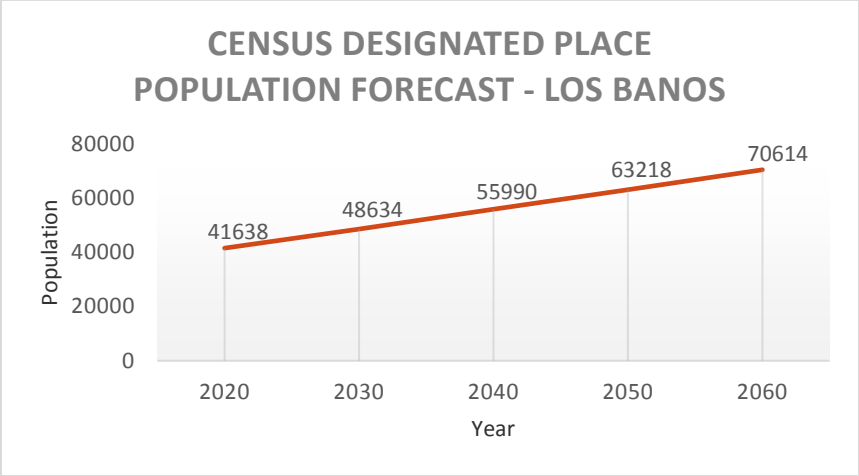
Precipitation in the valley is sparse and occurs typically November through March.This accounts for 90% of the area's average annual precipitation of 10 inches. Storms created to the northwest on the mid-latitude storm belt usually pass well to the north of Los Banos. Winter temperature inversions are common. High relative humidity and windless nights produce winter inversions. Los Banos is fortunate in that it does not experience as many heavy fog days as do other inland parts of the valley. The fog is usually formed between the months of December

and February. The generally mild climate of Los Banos makes it comfortable for people to travel by walking or bicycle all year long.

Demographics

Los Banos is a diverse city that has a total area of 10.1 square miles. According to the State of California Department of Finance, the population of Los Banos as of January 1, 2017, is 39,993. This is an 11% increase over the Census 2010 population of 35,972. The City has maintained a steady growth rate which is projected to continue. **See Figure 1**

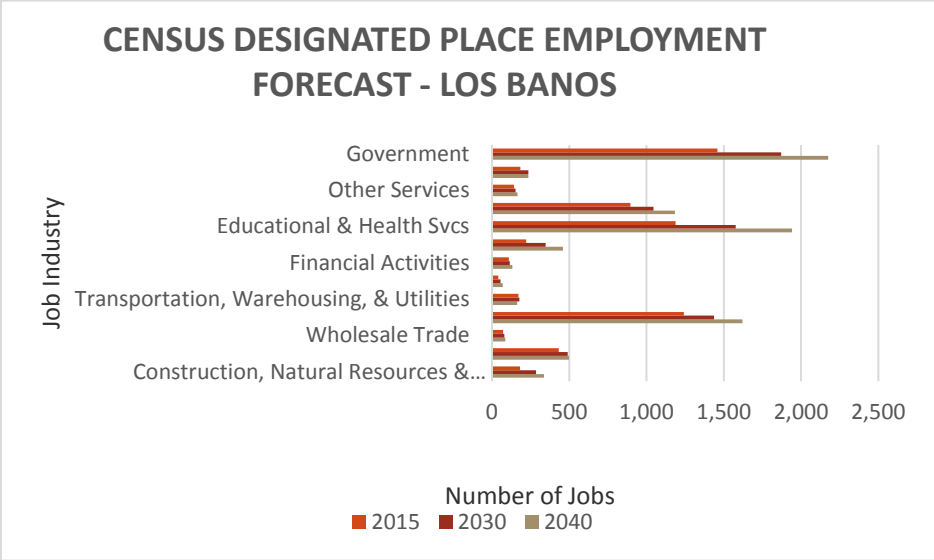
Figure 1-Los Banos Population Forecast - July 2016, University of the Pacific



Economic Profile

The local economy has presented significant challenges for the City during the past several years while experiencing one of the most severe national recessions in history. The City is recovering and has seen an increase in property values and sales tax revenues. The top three employers are Los Banos Unified School District, Memorial Hospital and Walmart. According to the Employment Forecast from the University of the Pacific, there will be an increase in all employment industries in Los Banos, particularly in Government, Educational and Health Services, and Retail Trade. **See Figure 2**

Figure 2 - Los Banos Employment Forecast - July 2016, University of the Pacific

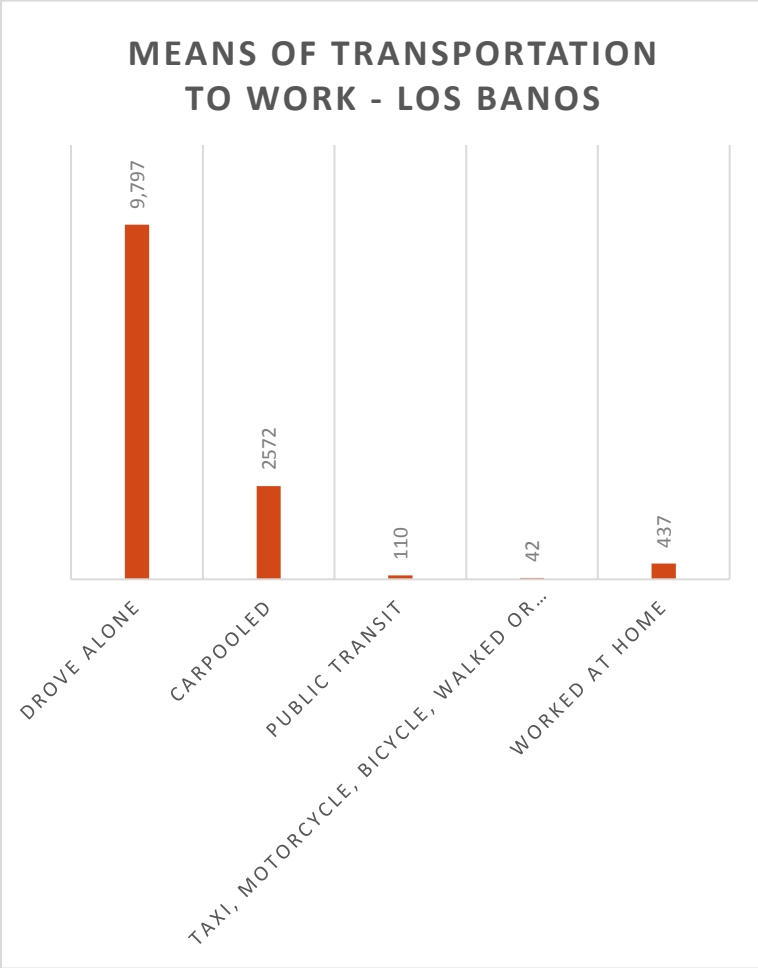


Commuting Patterns

Journey to Work Data was gathered from the U.S. Census Bureau's American Community Survey (ACS) 2015 1-Year estimates. This baseline data provides a starting point to develop improvements and priorities to help increase active transportation usage. **See Figure 3**

The data shows that an overwhelming majority of commuters in Los Banos drive alone to work. Less than 1% of workers commute to work by riding a bicycle or walking. This could be because many residents in Los Banos commute to the Bay Area for work. Also, it should be noted that this data set documents workplace bound travel, therefore it doesn't account for trips by persons going to school, retired individuals, and for recreational purposes. However, it does give an idea of how many people are using vehicles to travel versus using active transportation in Los Banos. Improving bicycle and pedestrian facilities in Los Banos may make it easier for those who work, go to school and shop in Los Banos to walk or bicycle more often.

Figure 3 - Workers 16 years and over - U.S. Census Bureau, 2015 American Community Survey 1-year estimates

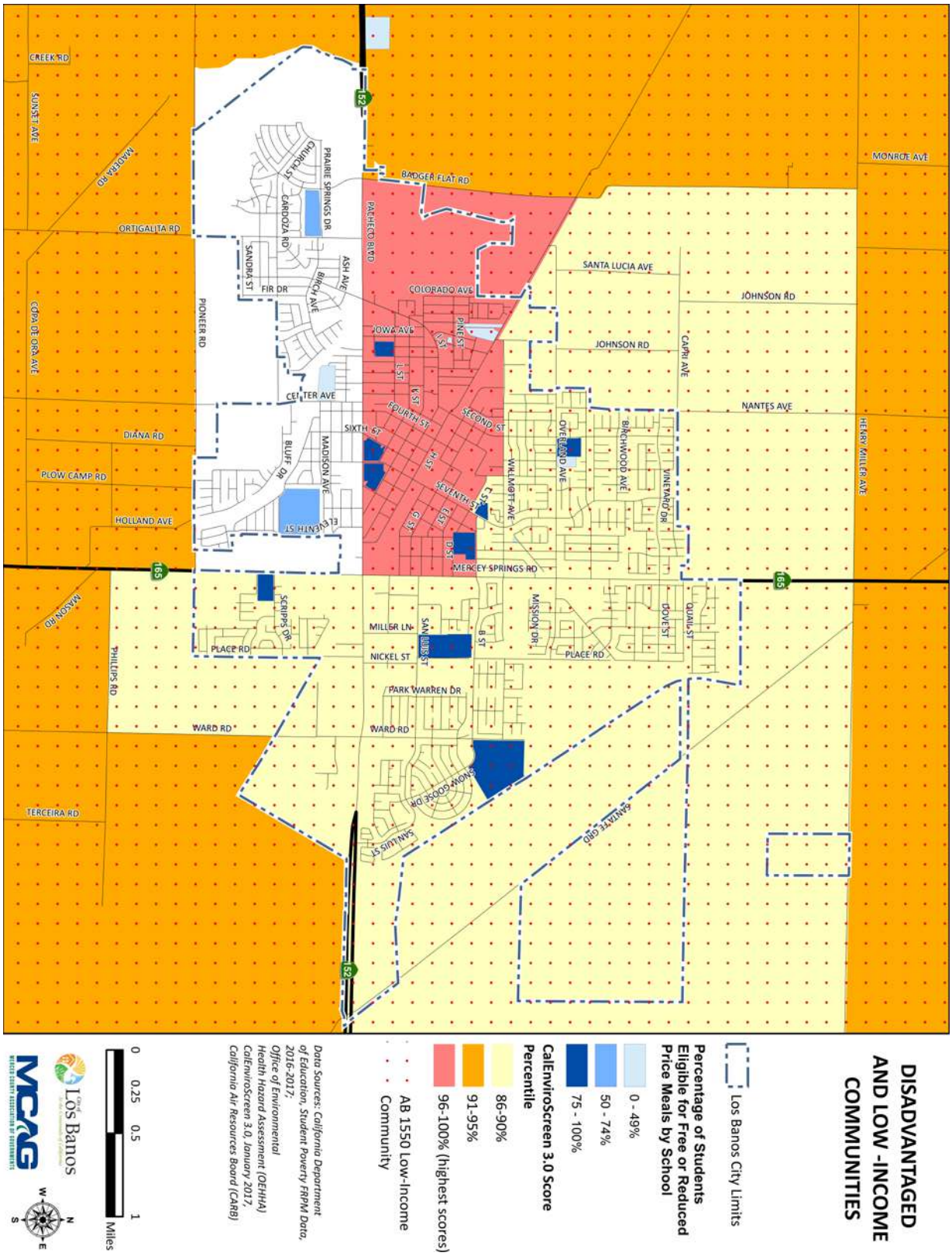


Disadvantaged Community

A disadvantaged community is disproportionately burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution. Disadvantaged communities may particularly benefit from improved bicycle and pedestrian access. **Figure 4** shows indicators of disadvantaged communities within Los Banos. These indicators are:

- **Low-Income**: Census tracts that are either at or below 80% of the statewide median income or at or below the "Low Income" limit designated by the California Department of Housing and Community Development's State Income Limits.
- **CalEnviroScreen 3.0 Score Percentile**: An area identified as among the most disadvantaged 25% in the state according to the CalEPA and based on the California Communities Environmental Health Screening Tool 3.0 (CalEnviroScreen 3.0) scores.
- **Free or Reduced Price Meal Eligibility:** At least 75% of the public school students in the community are eligible to receive free or reduced price meals under the National School Lunch Program.

Figure 4 - Map of Los Banos showing Disadvantaged Community indicators



Key Destinations

Throughout the Los Banos community, there are a variety of destinations that may attract significant bicycle and pedestrian traffic. Improvements to the active transportation network near these destinations have great potential to increase walking and bicycling in Los Banos, and these routes should be considered priorities for investments in sidewalks and bikeway facilities. A map of these key destinations and land use designations can be seen in Figure 5.

Parks: Los Banos has 200+ acres of parks, open space and landscape areas. Los Banos has many well-maintained parks with new playground structures for children. In addition to the many neighborhood parks with playgrounds, picnic areas and open space, the following parks may be destinations for cyclists and pedestrians in Los Banos.

- *Ag Sports Complex*—29.54 acres located north of the city on Mercey Springs Rd (Hwy 165).
- *Colorado Ball Park*—6.0 Acres located on the west side of the city on Colorado Ave near the Los Banos Airport.
- *Gardens Park V*—16.99 acres located on the west side of the city, south of Pacheco Blvd. It is situated in the middle of a developed neighborhood.
- *PAL Park*—8.36 acres located downtown on Seventh St within walking distance from the community center
- *Talbot Park*—10.68 acres located on the east side of the city on San Luis Street, adjacent to Los Banos Junior High School.
- *Pacheco Park*—12.46 acres located on the south side of Pacheco Blvd across the street from Los Banos Elementary School.
- *Oliveira Park*—7.0 acres located in the south west portion of the city situated in a developed neighborhood on the corner of Ortigalita Rd and Cardoza Rd.

Schools: Children below driving age represent a large population of existing and potential bicyclists or pedestrians. There are 12 public schools and 3 private schools within the city limits. These schools present opportunities for Safe Routes to School or other programs encouraging students, faculty, and staff to use active transportation for their commutes. These schools are listed in **Table 1**.

Table 1 - Los Banos Schools

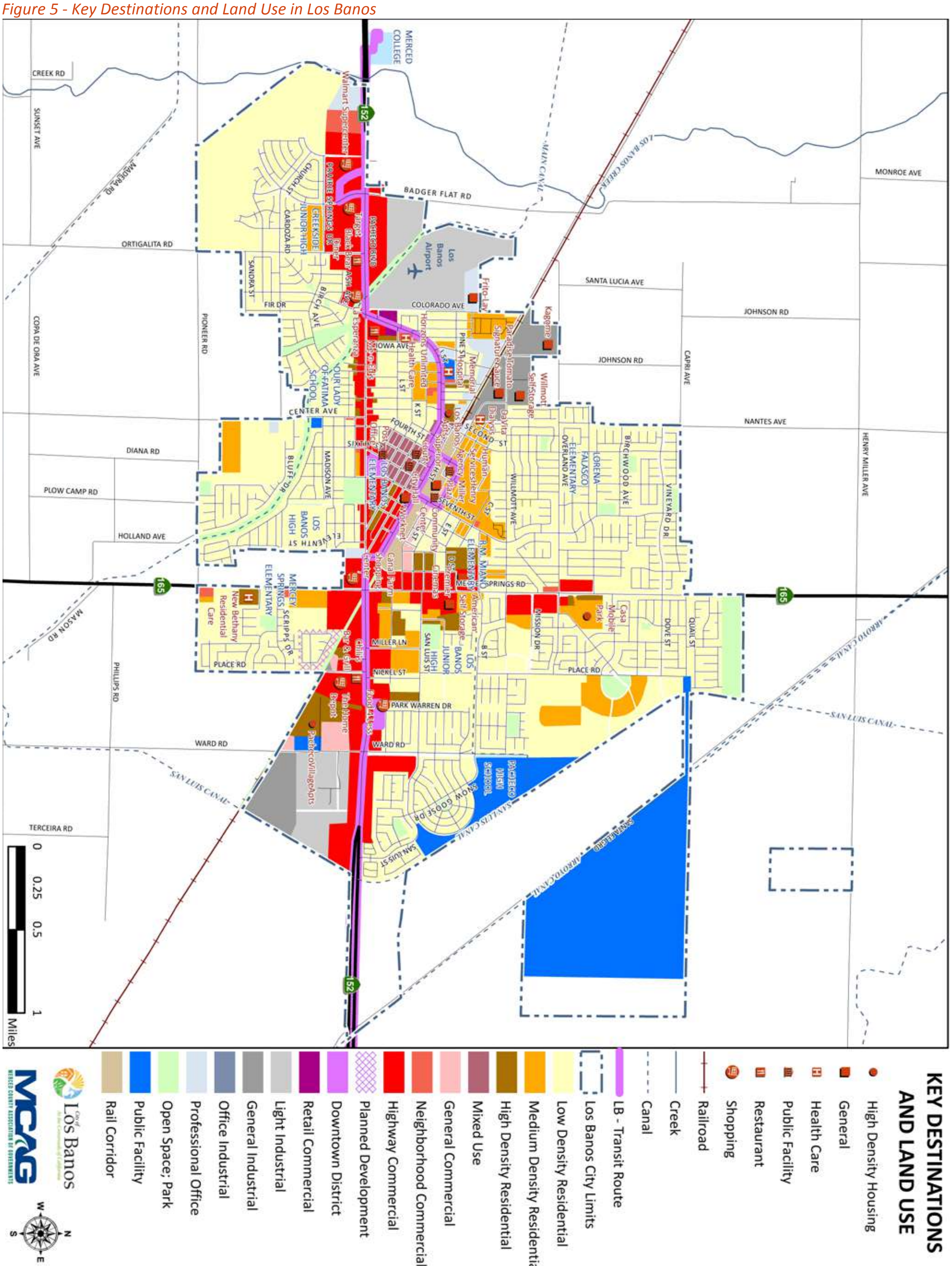
Elementary Schools	Middle or Junior High Schools	High Schools	Private Schools
Lorena Falasco Elementary	Los Banos Junior High	Los Banos High	Los Banos Adventist
R.M. Miano Elementary	Creekside Junior High	Valley Community High	Our Lady of Fatima
Westside Union Elementary		San Luis High	Cornerstone Christian Academy
Mercey Springs Elementary		Pacheco High	
Henry Miller Elementary			
Los Banos Elementary			
Charleston Elementary*			
Volta Elementary*			

*School outside of Los Banos City Limits

In addition to elementary, middle and high schools, Los Banos has a Merced College campus located on Highway 152. It is a full-service educational center of Merced College, providing services to residents of the Westside of Merced County.

Retail and Recreation: Most of the retail locations in Los Banos are concentrated along Pacheco Blvd (Highway 152) and Mercey Springs Rd (Highway 165) in various shopping plazas. The westside of the city is home to major chain stores and restaurants, such as Target, Walmart Supercenter, JcPenney and Black Bear Diner. The eastside of the city has its share of major chain stores and restaurants, such as Big 5 Sporting Goods, Chili's Bar and Grill, and the Home Depot. There is a movie theater and various fitness clubs located throughout the city.

Figure 5 - Key Destinations and Land Use in Los Banos



Benefits

The implementation of a bicycle pedestrian plan in Los Banos has many benefits including:

- Improved Health: Those who walk or bicycle improve their physical health and well-being, thereby reducing health care costs

- Improved Air Quality: When automobile trips are replaced by walking or bicycling, greenhouse gas emissions will be reduced, improving the environment.

- Improved Traffic Congestion: When more people walk or bicycle to get to work, school, or run errands, there will be fewer cars on the roads, reducing traffic congestion.

- Reduced Transportation Costs: Compared with vehicle use, bicycling has a lower operating cost and takes up less parking space.

The Five E's

Communities that support high levels of walking and bicycling demonstrate achievement across five categories, often referred to as the Five E's.

Engineering

Creating operational and physical improvements to the infrastructure that reduce speeds and potential conflicts with motor vehicle traffic, and establish safer and fully accessible crossings, walkways, trails, and bikeways

One of the largest impediments to active transportation is a built environment that feels unsafe to pedestrians and bicyclists. Engineering projects can range from relatively low-cost improvements like painting crosswalks, trimming landscaping, or installing stop signs; to more costly projects like completing missing sidewalk connections, installing curb ramps, or building a bicycle/pedestrian overpass.

Education

Teaching children and adults about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills and launching driver safety campaigns.

Bicycle and pedestrian safety trainings offer children and adults a safe space to learn the basic skills for navigating their communities on foot or by bike. Motorist education is an important component of a walk-and bike-friendly community.

Encouragement

Using events and activities to promote or incentivize walking and bicycling and to generate enthusiasm for active transportation throughout the community.

Special events like Walk and Bike to School or Work Days can motivate people to try walking or biking for the first time. Contests or campaigns where people log miles, days or trips taken using

active transportation to be entered to win rewards are a fun way to kick-start data collection for Evaluation, which is discussed below. Other ways to encourage more people to walk or bike include arranging "walking school buses" where neighborhood parents rotate the responsibility of walking multiple children to school or working with large employers to offer incentives and facilities for employees who bike.

Enforcement

Partnering with local law enforcement to ensure that traffic laws are obeyed—including enforcement of vehicle speeds, yielding to pedestrians in crosswalks, and proper walking and bicycling behavior– and initiating community enforcement such as crossing guard programs.

Enforcement helps ensure all road users are behaving respectfully and abiding by the rules of the road. Beyond issuing tickets or citations, police can increase their presence in the community or near schools to discourage unsafe driving. Working with the local police department to have officers patrol the city by bicycle can contribute to a deeper understanding of the challenges facing cyclists and lend legitimacy to bicycling as a mode of transportation.

Evaluation

Monitoring and documenting outcomes, attitudes and trends through the collection of data before and after the intervention(s).

Evaluation efforts help reveal areas in the community where significant improvements are needed and can point to strategies that have been particularly successful in increasing walking and bicycling. Evaluation methods may include bicycle and pedestrian counts, analysis of collision frequency or severity, and travel surveys.

Goals and Policies

City of Los Banos 2030 General Plan

The City of Los Banos 2030 General Plan makes many references to bicycle and pedestrian travel. Specific guiding policies from the Land Use, Circulation and Parks, Open Space and Resources Elements address the need to provide an environment that encourages walking, particularly at high-activity centers, and facilitate ways to reduce auto-dependence by making alternate modes of travel convenient. Key policies and the implementing actions from those elements are listed below:

Goal 1: Develop a system of bikeways that meets the needs of the community, while also serving both recreational and exercise users

LU-G-9: Provide for a transition between higher density and lower density residential areas, or require buffers of varying size between residential uses and non-residential uses without restricting pedestrian and bicycle access

LU-G-10: Foster viable, pedestrian-oriented neighborhood centers and strong, visually attractive regional commercial centers with a mix of tenants to serve both local and regional needs.

LU-I-25: Require new residential development adjacent to established neighborhoods to provide a transition zone where the scale, architectural character, pedestrian circulation and vehicular access routes of both new and old neighborhoods are well integrated

LU-I-34: Require pedestrian-oriented design in neighborhood centers.

LU-I-36: Require "street-friendly" designs and amenities for public benefit, such as pedestrian-oriented facilities (outdoor seating, plazas, weather protection, transit waiting areas) in new commercial development

LU-I-42 Promote pedestrian-oriented amenities near Downtown such as outdoor seating, plazas, public art, weather protection, and waiting areas (benches and shelters).

Goal 2: Provide a safe, convenient network of bikeways, interrelated with other modes of transportation throughout the city and vicinity

C-G-2: Provide a wide variety of transportation alternatives and modes to serve all residents and businesses to enhance the quality of life.

C-G-3: Make efficient use of existing transportation facilities and through coordinated land use planning, strive to improve accessibility to shops, schools, parks and employment centers and reduce total vehicle miles traveled per household to minimize vehicle emissions and save energy.

C-G-11: Promote bicycling and walking as alternatives to the automobile.

C-I-4: Provide for greater street connectivity by requiring bicycle and pedestrian connections from cul-de-sacs to nearby public areas and main streets.

C-I-5: Develop a multi-modal transit system map integrating bicycle, public transportation, pedestrian and vehicle linkages within the city to ensure circulation gaps are being met.

C-I-19: Support implementation of the Los Banos Commuter Bikeway Program in coordination with the County's Regional Bikeway Plan

C-I-20 Establish bicycle lanes, bike routes and bike paths consistent with the General Plan

C-I-21 Increase bicycle safety by:

- Sweeping and repairing bicycle lanes and paths on a regular basis;
- Ensuring that bikeways are delineated and signed in accordance with Caltrans' standards, and lighting is provided, where needed;
- Providing bicycle paths or lanes on bridges and overpasses;
- Ensuring that all new and improved streets have bicycle-safe drainage grates and are free of hazards such as uneven pavement and gravel;

Provide adequate signage and markings warning vehicular traffic of the existence of merging or crossing bicycle traffic where bike routes and paths make transitions into or across

roadways; and
- Work with the Los Banos Unified School District to promote classes on bicycle safety in the schools.

C-I-22: Give bicycles equal treatment in terms of provisions for safety and comfort on arterials and collectors as motor vehicles.

C-I-23 Promote the requirement of bicycle facilities at large commercial and industrial employer sites.

C-I-24: Develop a series of continuous walkways within new office parks, commercial districts, and residential neighborhoods so they connect to one another.

C-I-25: Provide for pedestrian-friendly zones in conjunction with the development, redevelopment, and design of mixed use neighborhood core areas, the Downtown area, schools parks, and other high use areas by:

- Providing intersection "bump outs" to reduce walking distances across streets in the Downtown and other high use areas;
- Providing pedestrian facilities at all signalized intersections;
- Providing landscaping that encourages pedestrian use; and
- Constructing adequately lit and safe access through subdivision sites.

C-I-26 Establish specific standards for pedestrian facilities to be accessible to physically disabled persons and ensure that roadway improvement projects address mobility or accessibility for bicyclists and pedestrians.

Goal 3: Sustain a high-quality bicycle network by incorporating bicycle improvements and maintenance into City plans and processes

POSR-G-3: Provide a unified and consistently marked trail system throughout the city, including bikeways, pathways, sidewalks and other trails that link key destinations in the city including parks and recreational facilities, community facilities, public schools, and downtown.

POSR-I-2: Maintain and update a 10-year Park and Recreation Master Plan in consultation with the Parks and Recreation Commission. Community design standards for new park and recreation facilities should include:

Standards for bicycle/pedestrian and handicapped access;
Minimum safety standards in accordance with State guidelines; and
Allowable native and drought resistant plant species

POSR-I-12: Link parks together by a system of trails, bike paths, and/or open space.

POSR-I-13 Continue to develop existing trails and linkages and create new trails where feasible.

POSR-I-14: Amend the Subdivision Ordinance to require developers to dedicate and improve any portion of a planned bike path or trail system that passes through their development project

sites, including any needed linkages to the regional bike and trail system.

POSR-I-15: Include funding for trail acquisition and trail improvements in the Park Development Fee Program.

Relationship to Other Plans

At the state level, the passage in 2008 of Assembly Bill 32 and Senate Bill 375 – which together require a statewide reduction of greenhouse gas emissions (GHG) to 1990 levels by 2025, among other mandates – has propelled many regional planning initiatives that will positively influence the 2018 Regional Transportation Plan (RTP) and transportation investments in Los Banos. Within the regional framework established by Merced County Association of Governments (MCAG), new programs and funding sources are being developed that emphasize:

- **"Complete" streets and the routine accommodation of bicyclists and pedestrians in all projects.**

The California Complete Streets Act (AB1358) requires all cities and counties, when they update their general plan circulation element, to identify how the city or county will provide for routine accommodation of all roadway users including motorists, pedestrians, bicyclists, people with disabilities, seniors and users of public transportation – or to design "complete streets" for all users.

- **Climate action and reduction targets for greenhouse gas (GHG) emissions.**

Senate Bill 375 directs the California Air Resources Board to set regional targets for reducing greenhouse gas emissions. The new law establishes a "bottom up" approach to ensure that cities and counties are involved in the development of regional plans to achieve those targets. SB 375 requires each MPO to include a "Sustainable Communities Strategy" (SCS) in the regional transportation plan that demonstrates how the region will meet the greenhouse gas emission targets. In an effort to reduce greenhouse gas (GHG) emissions from motor vehicle trips, the SCS will focus on promoting alternative travel modes like bicycling or walking.

- **The integration of land use and transportation planning to support livable, walkable, transit-oriented communities.**

More than ever, the viability of transportation planning is viewed in the context of its ability to shape and serve compact neighborhoods and mixed-use centers that help reduce average trip lengths, promote transit patronage, and encourage more active and healthy lifestyles.

Types of Bicycle and Pedestrian Facilities

Bikeways are all facilities that are primarily for bicycle travel. Chapter 1000 of the *Highway Design Manual* (Caltrans, 2015) provides specific design criteria for four primary types of bikeways: Class I bike paths, Class II bike lanes, Class III bike routes, and Class IV separated bikeways.

Bike Paths (Class I Bikeways) - Bike paths are a separate corridor for pedestrians and bicyclists to traverse the city without the inconvenience of vehicle traffic. Usually paths are continuous with very few intersections with vehicle traffic. They are often along natural waterways and greenways providing a comfortable way to bike and walk for recreational and practical reasons.

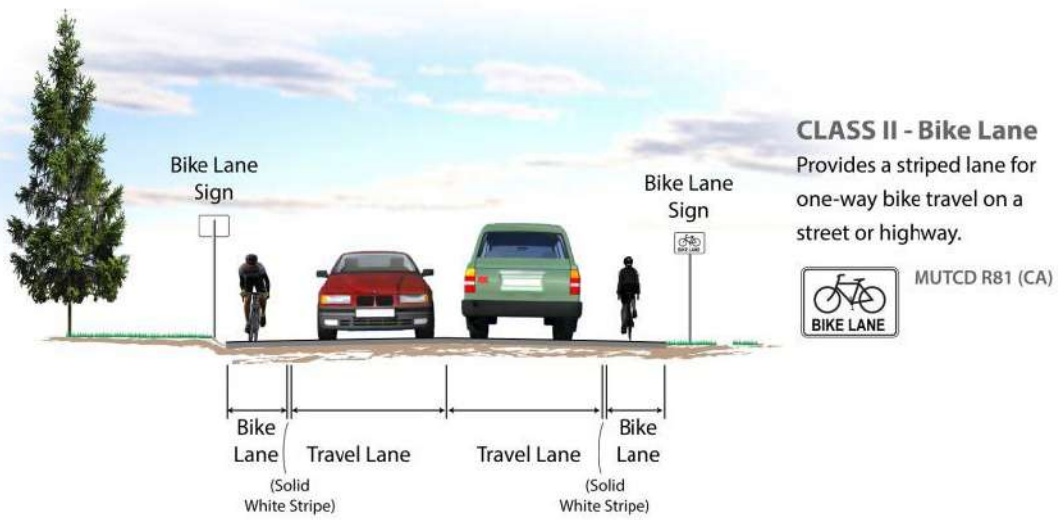
Key components to a successful bike path include:

- Continuous separation from motor vehicle traffic
- Connection to activity centers like schools and parks
- Well-designed street crossings with measures such as grade separated crossings, bike and pedestrian activated traffic signals, median islands, and warning signs
- Curb ramps and curb cuts that are convenient and meet the requirements of the Americans with Disabilities Act (ADA)
- Good design, providing adequate width, sight distance, drainage, etc.
- Pavement marking and signs
- Proper maintenance

Figure 6 - Class 1 Bikeways

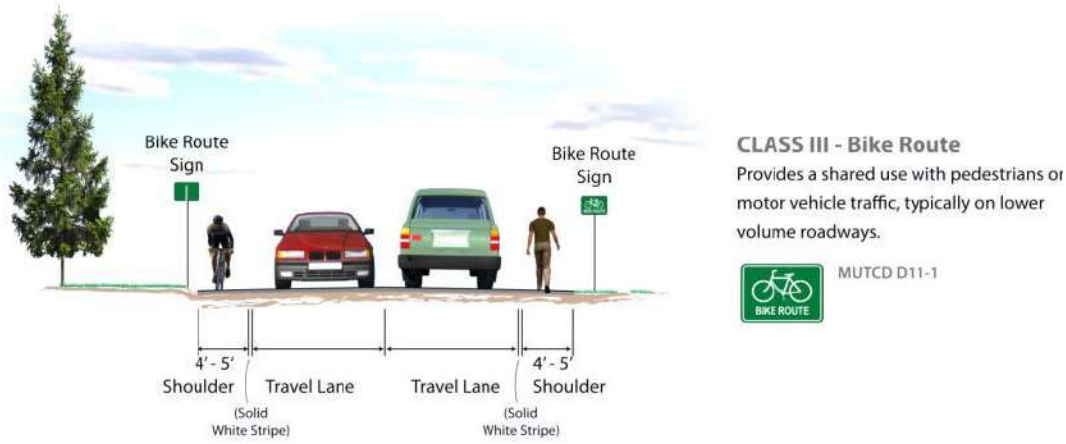
Bike Lane (Class II Bikeways) - Bike lanes are sections of roadway intended for the exclusive use of bicyclists. These bikeways are designated by striping, signage and pavement markings. Bike lanes enable bicyclists to ride along a roadway or highway without interference from prevailing traffic conditions.

Figure 7 - Class II Bikeways



Bike Route (Class III Bikeways) - Bike routes provide an on-street route for bicyclists identified by signage. Bike routes are shared with motorists and are intended to provide continuity to the bikeway system. A bike route contains signs, but no stripes.

Figure 8 - Class III Bikeways



Separated Bikeways (Class IV Bikeways) - Separated bikeways are an exclusive facility for bicyclists physically separated from motor traffic and distinct from the sidewalk. They are within the street right-of-way but offer increased user comfort and protection. The key feature of a separated bikeway is a vertical element that provides further separation from motor vehicle traffic. Common vertical elements used for separation can be a vertical curb, a painted buffer with flexible posts, parked cars, a landscaped area, or a fixed barrier. Streets with high volumes of children and seniors due to the proximity to schools, parks, and senior residential uses may be good opportunities for separated bikeways.

Figure 9 - Class IV Bikeways One-Way Cycle Track

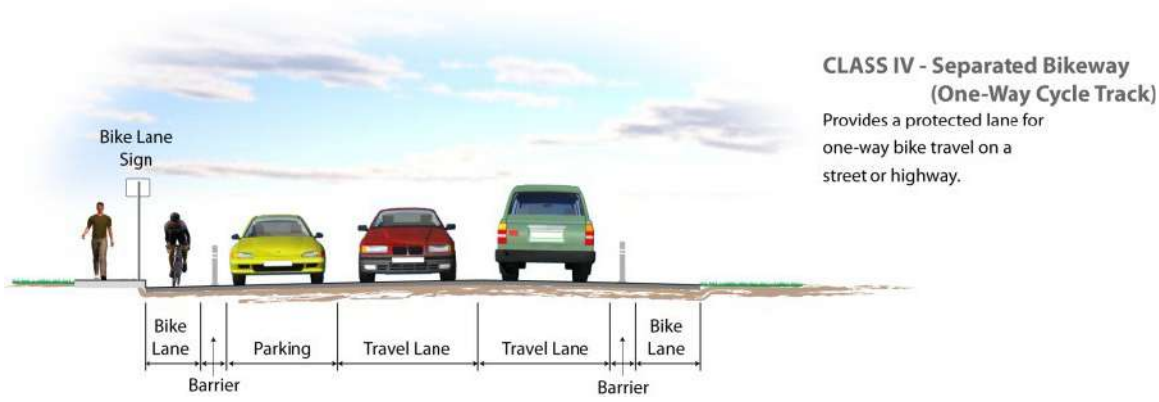
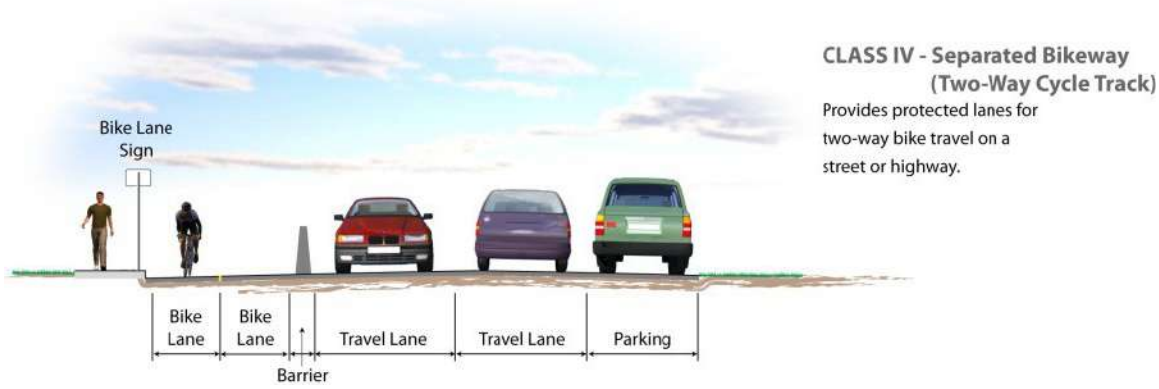


Figure 10 - Class IV Bikeways Two-Way Cycle Track



Sidewalks

Sidewalks are primarily designed and intended for the use of pedestrians and motorized and non-motorized wheelchairs. Sidewalks are generally not appropriate for bicycle use. Bicyclists on sidewalks can encounter many unsafe situations and potentially create hazardous situations for others.

Traffic Calmed Streets

Traffic calming is a system of design and management strategies that aim to balance traffic on streets with other uses. Instead of the street being dominated by vehicles, a traffic-calmed street accommodates pedestrian and bicycling activity alongside vehicle traffic, creating an environment that is friendly to people on foot. Traffic calming techniques are designed to lessen the impact of motor vehicle traffic by slowing it down.

Support Facilities

Bicycle parking and support facilities are needed at civic, residential, commercial and office spaces to accommodate both short-term and long-term parking. The most common type of short-term parking are bicycle racks. Long- term bicycle parking facilities are usually for employees at work or commuters at transit stations. Examples include bike lockers and sheltered secure enclosures. Bicycle parking is a low-cost, effective way to encourage bicycling

and improve the functionality of a bikeway network; it reduces the threat of theft, makes bicyclists feel welcome, and increases the visibility of bicycling.

Existing Bikeways

The City of Los Banos has two bicycle path/trail ways: The Central California Irrigation District (C.C.I.D.) Canal Pathway between Pioneer Road and I Street and the Rail Trail Pathway along H Street between Second and the cross of Highways 152 & 165.

The CCID Pathway was funded with Transportation Enhancement Activity (TEA) Funds with a non-federal TEA match by the City of Los Banos. The C.C.I.D. Trail way provides access to the College Green neighborhood (500 homes), the Cresthills neighborhood (650 homes), the California Homes neighborhood (300 homes), Garden V subdivision (450 homes) with several picnic areas, restaurants and miscellaneous shops. The Little League fields, Pacheco Boulevard, the Los Banos Municipal Airport, and other related churches and schools are in close proximity.

The Rail Trail Pathway was funded by grants from the State Department of Parks & Recreation and the City's Redevelopment Agency. It is part of the City's Downtown Revitalization Plan.

The City of Los Banos has extended the network of their commuter bike paths with the addition of bike path projects. The City of Los Banos is striving to develop an integrated bicycle network. The implementation of this plan will result in a comprehensive, continuous, and well-maintained bikeway network, maximizing bicycling benefits to the area's cycling and non-cycling public. **Figure 11** shows existing bikeways in Los Banos in relationship to key destinations.

Bicycle Connectivity to Transit

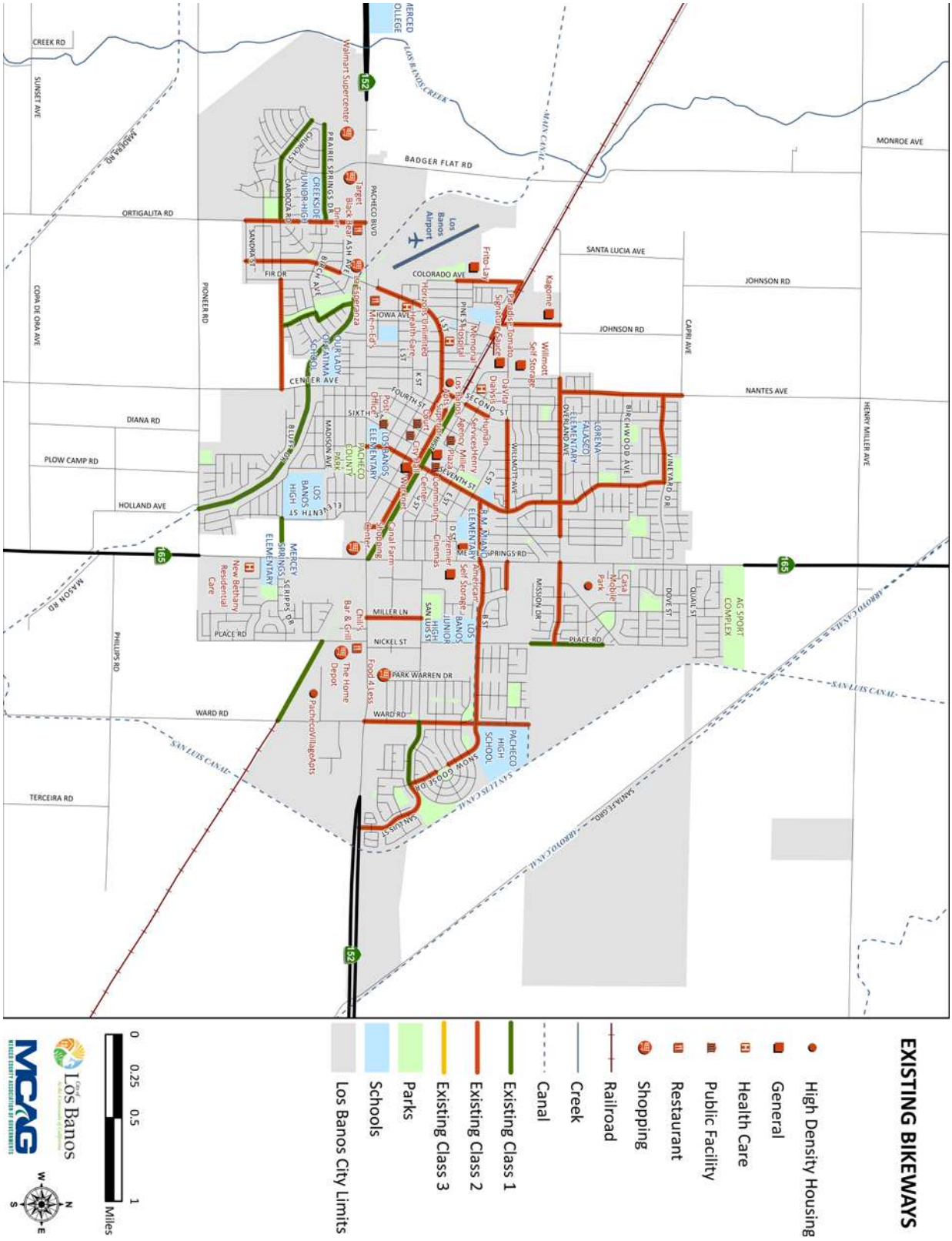
Most transit users often rely on other ways to get to and from their bus stop – like walking, or biking. These types of connections are referred to as “first and last mile” methods of travel. As described in the policies of the Los Banos General Plan, improving connections between public transportation, bicycle and pedestrians is a priority. If pedestrians and bicyclists have safe, clear access to transit routes, single occupancy vehicle trips could be reduced. Improving bicycle facilities and parking in transit corridors can bring new riders to the transit system. For instance, bicyclists are more willing to take public transit when they know they have a safe place to store their bike or can take it on the bus for the trip.

The Bus is the single public transportation service provider for all of Merced County and is administered by the Transit Joint Powers Authority for Merced County and managed by the Merced County Association of Governments (MCAG). In Los Banos, The Bus offers fixed route service along the west-east corridor of Hwy 152/Pacheco Blvd, providing stops at the Merced College campus, the Memorial Hospital, various County offices in the downtown area, and major shopping centers. The LB, G and DP follow the same route at different times throughout the day within the city. The Bus also provides general Dial-A-Ride transportation service throughout the City of Los Banos. Passengers can take their bicycles on the bus if the bicycle is within 80 inches

long and 48 inches high due to weight and space limitations.

The City of Los Banos and the Transit Joint Powers Authority for Merced County can work together to improve bicycling and pedestrian conditions which will subsequently encourage transit ridership in Los Banos.

Figure 11 - Existing Los Banos Bikeways

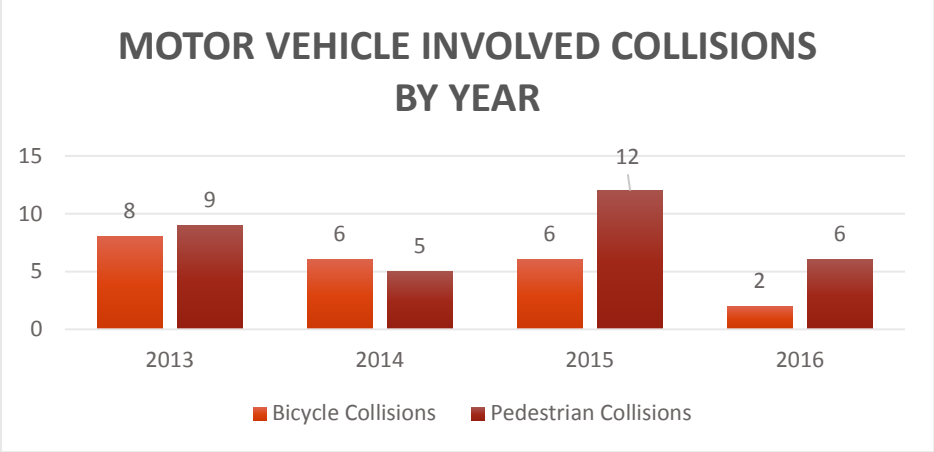


Collision Analysis

An analysis of bicycle and pedestrian related collision data provides the City of Los Banos with a basis for infrastructure and program recommendations that can improve safety. Collision data comes from the Statewide Integrated Traffic Report System (SWITRS). Because this is a statewide repository for all police departments to submit records, there is a potential for the data to be incomplete due to varying reporting methods. While collision data is sometimes incomplete and does not capture the "near misses", it does provide a general sense of the safety issues facing bicyclists and pedestrians in Los Banos.

Figure 12 shows the number of bicycle and pedestrian collisions in Los Banos from 2013 to 2016. In the period between January 1, 2013 to December 31, 2016, there were 54 total motor vehicle collisions involving a pedestrian or a bicyclist, with one pedestrian fatality. In general, more pedestrians than bicyclists were involved in a collision with a motor vehicle. Pedestrians account for nearly 60% of those 54 collisions.

Figure 12 - Motor Vehicle Collisions in Los Banos 2013-2016



Furthermore, pedestrians are more likely than bicyclists to sustain severe or fatal injuries in collisions, as illustrated in **Figure 13** and **Figure 14**. None of the bicyclist-involved collisions in Los Banos between 2013-2016 resulted in a fatality, but 9% of the bicyclists suffered severe injury.

Figure 13 - Pedestrian Injury Due to Vehicle Collisions in Los Banos 2013-2016

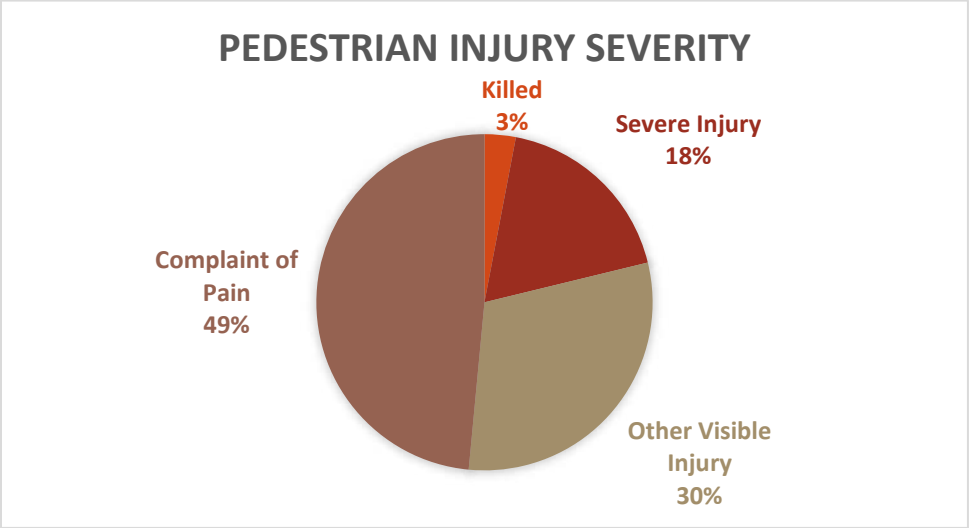
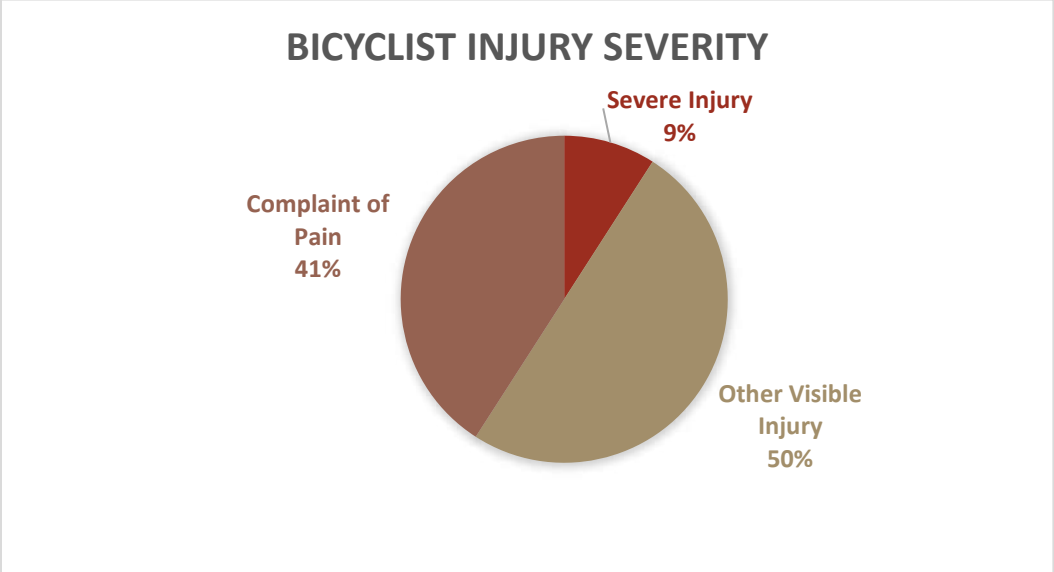


Figure 14 - Bicyclist Injury Due to Vehicle Collisions in Los Banos 2013-2016



By taking a closer look at the locations in Los Banos where high numbers of pedestrian and bicycle collisions have occurred over the past few years, priority intersections and corridors emerge that should be studied for safety improvements. **Figure 15** shows the locations of the motor vehicle involved bicycle and pedestrian collisions and the severity of the injuries sustained. The following heat maps (**Figures 16 and 17**) show frequency of collisions, with the highest frequency indicated by the red areas. The collisions with the highest frequency and severe injuries sustained by bicyclists or pedestrians tend to be on Pacheco Blvd and in the downtown area.

Figure 15 - Locations of Motor Vehicle Involved Bicycle and Pedestrian Collisions 2013-2016

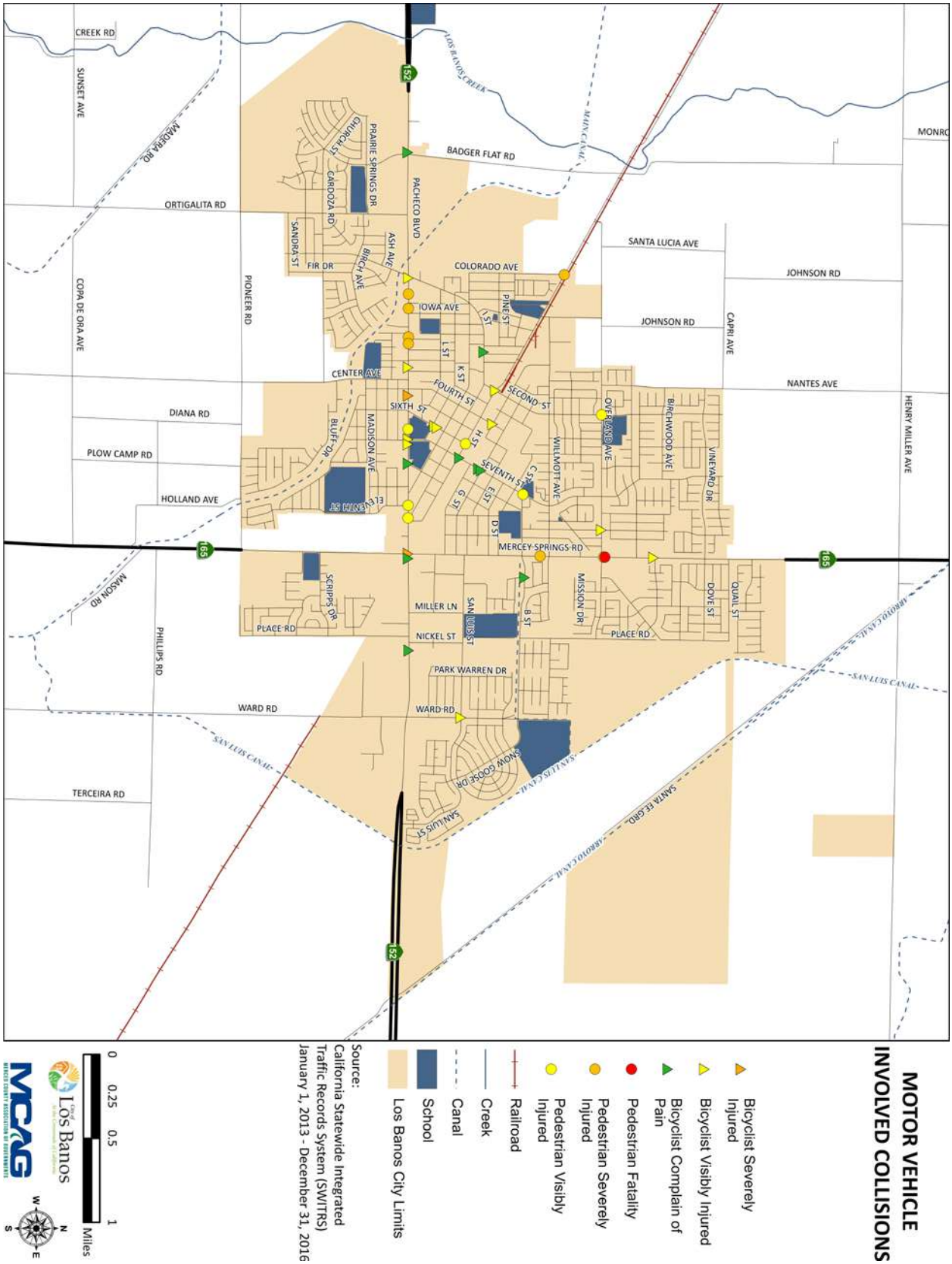


Figure 16 - Heat Map of Pedestrian Involved Collisions in Los Banos from 2013-2016

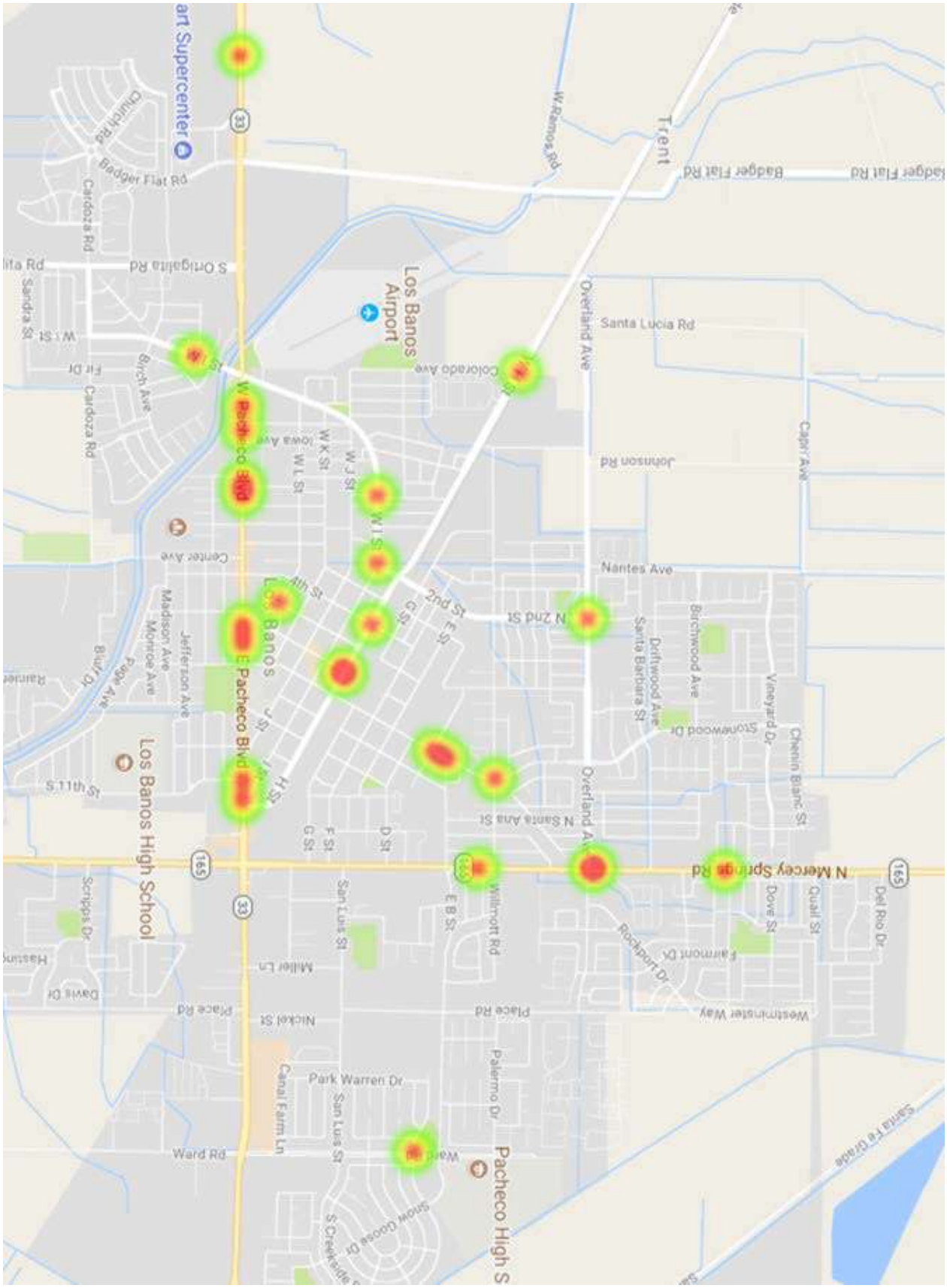
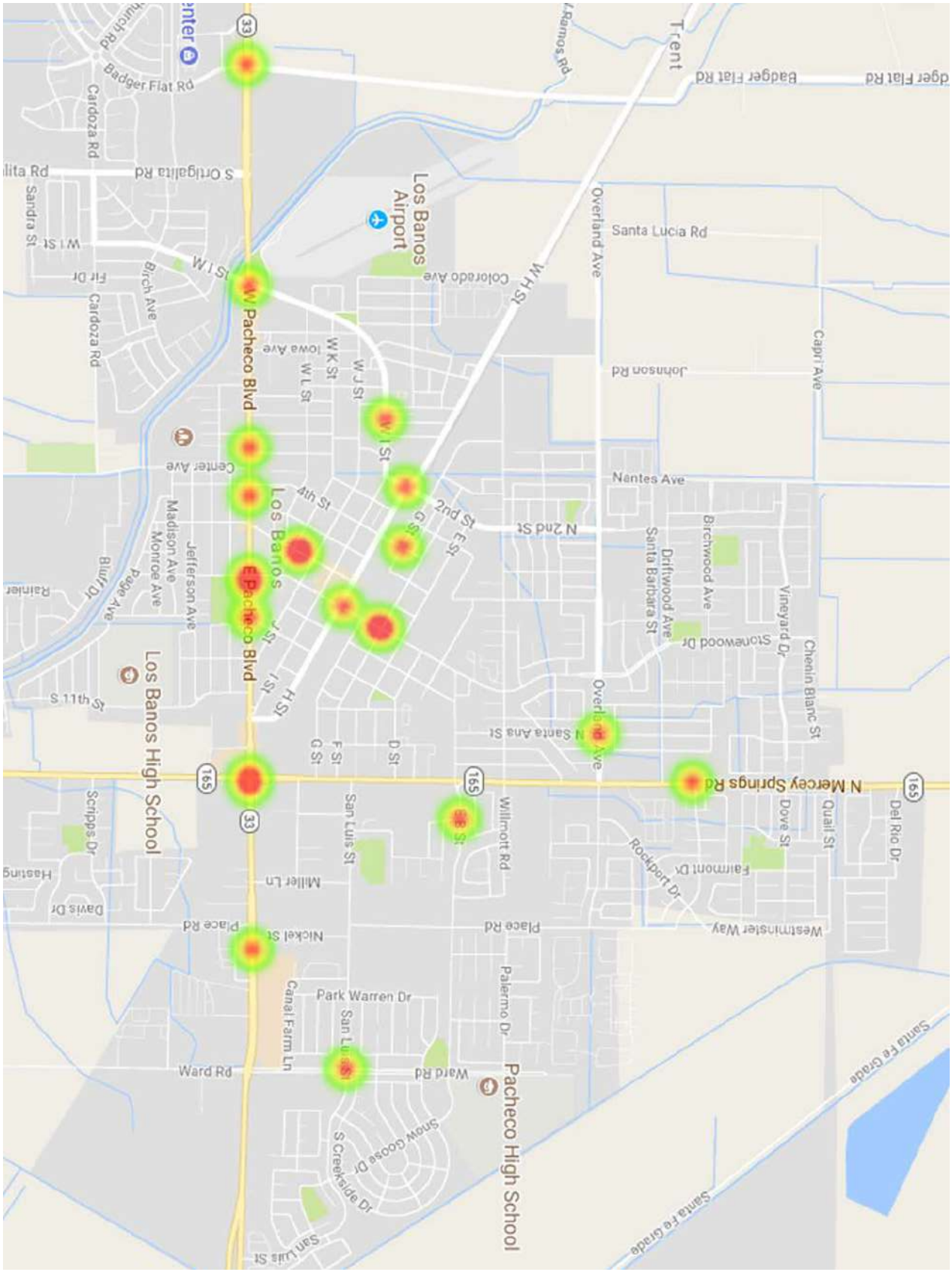


Figure 17 - Heat Map of Bicycle Involved Collisions in Los Banos 2013-2016



Pedestrian Facilities

The City of Los Banos maintains the sidewalks and trails in the city. Most of the city has sidewalk access, particularly in residential neighborhoods. The majority of schools in Los Banos have sidewalks leading up to and adjacent to them, making it convenient for children to walk to school.

In 2011, using the Geographic Information System, aerial photographs, and field inspections, Merced County Association of Governments staff completed a survey of the amount of sidewalk coverage in each city and the larger unincorporated communities in Merced County. **Table 2** below presents the results of this survey. The "Sidewalk %" is an approximate number and represents the amount of linear distance in public rights of way where pedestrian activity can be expected to occur, and which do in fact have sidewalks to accommodate any such activity.

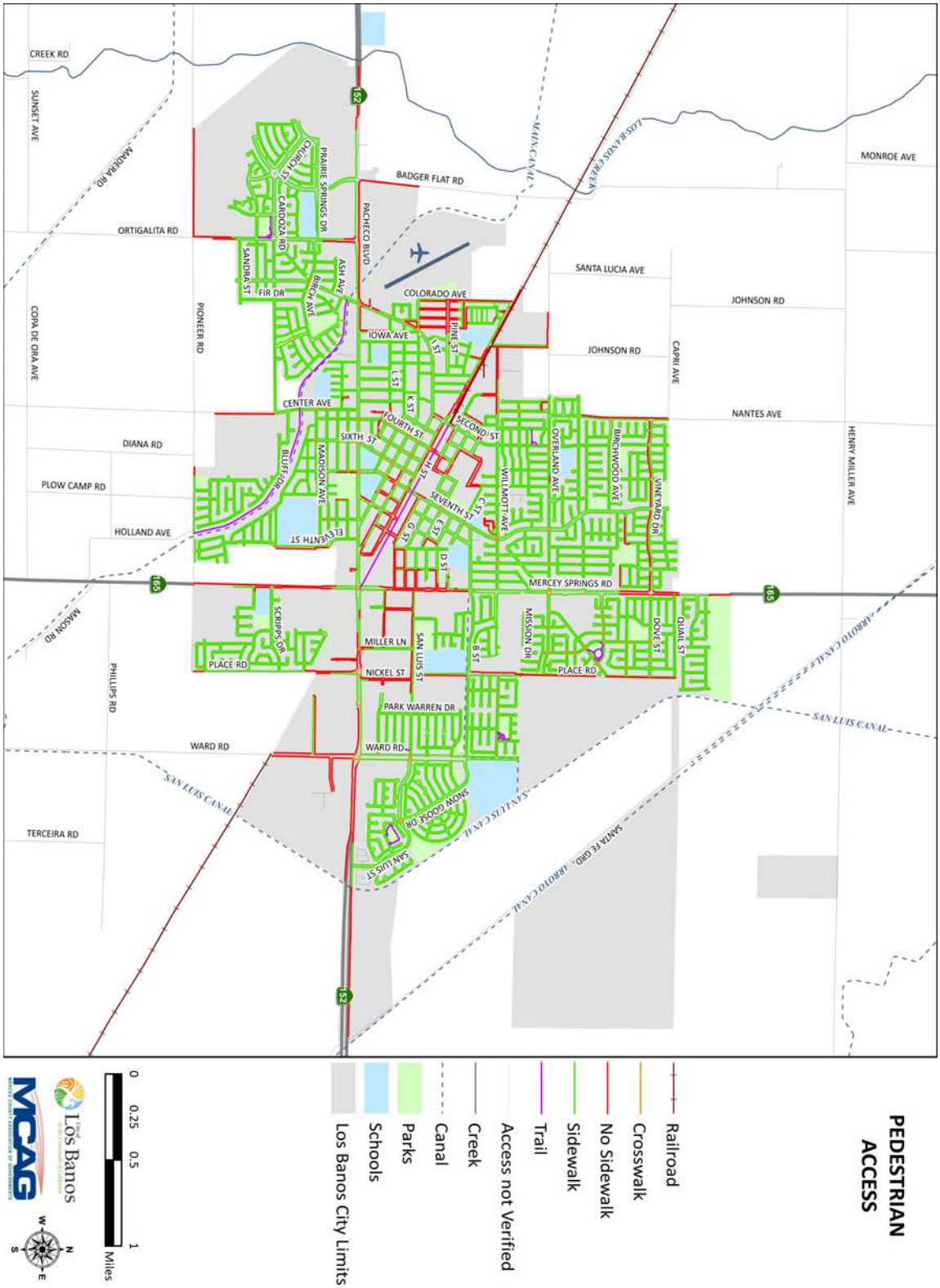
Table 2 - Sidewalk Coverage in Merced County 2011

City	Population (2010)	Sidewalk Coverage (%)
Atwater	28,168	90
Dos Palos	4,950	80
Gustine	5,520	90
Livingston	13,058	98
Los Banos	35,972	95
Merced	78,958	95
Unincorporated Community or Area	**Population (2010)**	**Sidewalk Coverage (%)**
Delhi	10,755	60
Hilmar	5,197	70
Le Grand	1,659	60
Planada	4,584	70
Santa Nella	1,380	80
Winton	10,613	40
Remainder of County	54,979	10
	255,793	

According to the survey, the City of Los Banos had 95% sidewalk coverage in 2011. **Figure 18** illustrates the location of pedestrian facilities within the city and where gaps exist.

Continued maintenance and improvements to existing walkways and trails would enable residents in Los Banos to make better use of these facilities for commutes to work and school and to access transit stops for travel out of the city.

Figure 18 - Pedestrian Access in Los Banos



Proposed Projects

Bikeways

All countywide roads through Los Banos should have bike lanes, as vehicular traffic travels at high speeds on these roads, especially Mercey Springs Road/State Route 165 and Pacheco Boulevard/ State Route 152. An effort will be made to locate commuter bikeways on City right of ways adjacent to Pacheco Boulevard /State Route 152 and Mercey Springs Road /165 in the City of Los Banos. The first step would be to designate all roads that are wide enough as bike routes. This would involve pavement repairs and posting bicycle route signs.

Mercey Springs Road/State Route 165 and Pacheco Boulevard/ State Route 152 would be top priorities, as they are the high volume major commute routes. The next step is signing all shoulders that are four feet wide or wider from bike routes to bike lanes. These two steps could be completed with relatively low associated costs. The City of Los Banos can then schedule the necessary two to eight feet of pavement to roads now designated as bike routes in order to provide bike lanes on these roads.

The next priority is to lay the groundwork for the construction of additional bike paths along the canals and Southern Pacific Railroad rights-of-way, namely the continuation of the Canal Trail northwest to Los Banos Creek, and the continuation of the Rail Trail northwest of Second Street to Badger Flat Road and southeast of Highways 152 and 165 to San Luis Canal.

The following is a list of proposed bicycle transportation planning projects. These projects construct bike paths, bike lanes and bike routes where none presently exist. Commuter needs were taken into consideration in terms of potential routes, preferred projects, incentives to commute, safety concerns, support facilities and connectivity to target sites.

Table 3- Proposed Class I Los Banos Bicycle Projects

RECOMMENDED LOS BANOS BICYCLE COMMUTER SYSTEM			
#	Class 1 Projects	Cost	Approximate Miles
A1	Pacheco Boulevard/State Route 152 from Badger Flat Road to Merced College Campus Drive	$1.2 Million Coordinate with Caltrans/County	0.95
B1	Rail Trail at Mercey Springs Road/State Route 165 and Pacheco Boulevard/State Route 152 to Place Road	$196,000	0.56
C1	Rail Trail from Ward Road to San Luis Canal	$144,000	0.41
D1	CCID Trail from West "I" Street to Los Banos Creek	$560,000	1.6
E1	Rail Trail from Second Street to Los Banos Creek	$553,000	1.58
F1	Merced College Campus Drive at Pacheco Boulevard/State Route 152 to Pioneer Road; Pioneer Road from Merced College Campus Drive to Ward Road; Ward Road from Pioneer Road to Pacheco Boulevard/State Route 152	$2,140,000	6.11
G1	Badger Flat Road from the Rail Trail to Pioneer Road	$466,000	1.33
H1	San Luis Canal from Henry Miller Road to the Rail Trail	$1,460,000	4.18
I1	Los Banos Creek from Henry Miller Road to Pioneer Road	$1,500,000	4.3
J1	Henry Miller Road from Los Banos Creek to San Luis Canal	$1,232,000	3.52
K1	Cardoza Road from Badger Flat Road at roundabout to Los Banos Creek	$260,000	0.73
L1	Stonecreek Drive from Pacheco Boulevard/State Route 152 to Los Banos Creek	$310,000	0.88
M1	Park Road from Mercey Springs Road/State Route 165 to San Luis Canal	$215,000	0.61
N1	Regency Drive from Place Road to San Luis Canal	$120,000	0.34
O1	Overland Avenue from Place Road to San Luis Canal	$210,000	0.6
P1	Place Road from Mission Drive to San Luis Street	$221,000	0.63
Q1	Mulberry Street from Cardoza Road to Pioneer Road	$175,000	0.5
R1	Las Palmas Street from Willmott Avenue to Mission Drive	$42,000	0.12
S1	Mission Drive from Las Palmas Street to Place Road	$38,500	0.11
T1	I Street from Pacheco Boulevard/State Route 152 to 2nd Street	Not calculated at this time	0.94
U1	Pacheco Boulevard/State Route 152 from I Street to Badger Flat Road	Not calculated at this time	0.72

Table 4 – Proposed Class II Los Banos Bicycle Projects

RECOMMENDED LOS BANOS BICYCLE COMMUTER SYSTEM ...continued			
#	Class 2 Projects	Cost	Approximate Miles
A2	San Luis Street from Mercey Springs Road/State Route 165 to Ward Road	$185,000	0.97
B2	Eleventh Street from Pacheco Boulevard/State Route 152 to Pioneer Road	$207,000	1.09
C2	Center Avenue from Pacheco Boulevard/State Route 152 to Pioneer Road	$207,000	1.09
D2	Scripps Drive from Mercey Springs Road/State Route 165 to Place Road	$97,000	0.51
E2	Second Street from Overland Avenue to "E" Street	$86,000	0.45
F2	Place Road from Pacheco Boulevard/State Route 152 to Scripps Drive	$93,000	0.49
G2	Ortigalita Road from Sandra Street to Pioneer Road	$52,000	0.27
H2	Overland Avenue from Honeywell Street H Street	$171,000	0.9
I2	Colorado Ave from Pine Street to J Street	$36,000	0.19
J2	J Street from Colorado Avenue to West I Street	$34,000	0.18
K2	Vineyard Drive from Stonewood Drive to Mercey Springs Road/State Route 165	$95,000	0.5
L2	Dove Street from Meadowlark Avenue to San Luis Canal	$91,000	0.48
M2	Willmott Avenue from Wisteria Avenue to Las Palmas Street	$42,000	0.22
N2	Willmott Avenue from Second Street to Johnson Road	$110,000	0.58
O2	Place Road from Scripps Drive to Pioneer Road	$103,000	0.54
P2	West I Street from Sandra Street to Pioneer Road	$91,000	0.48
Q2	H Street from Texas Avenue to Second Street	$82,000	0.43
R2	Ward Road from north end of Ward Road to Overland Avenue	$16,000	0.08

Table 5 - Proposed Class III Bicycle Projects in Los Banos

RECOMMENDED LOS BANOS BICYCLE COMMUTER SYSTEM...Continued			
#	Class 3 Projects	Cost	Approximate Miles
A3	Mercey Springs Road/State Route 165 from Pioneer Road to Henry Miller Road	Coordinate with Caltrans	3.97
B3	Cardoza Road from Ortigalita Road to Fir Drive	$3,600	0.36
C3	Fourth Street from H Street to Pacheco Boulevard/State Route 152	$4,800	0.48
D3	Page Avenue from CCID Trail to Eleventh Street	$3,200	0.32
E3	Willmott Avenue from Stonewood Drive to Mercey Springs Road/State Route 165	$3,000	0.3
F3	Overland Avenue from Santa Ana Street to Mercey Springs Road/State Route 165	$1,700	0.17
G3	Dove Street from Mercey Springs Road/State Route 165 to Meadowlark Avenue	$1,800	0.18
H3	Sixth Street from H Street to Page Avenue	$7,500	0.75

Figure 19 - Proposed Bikeways in Los Banos

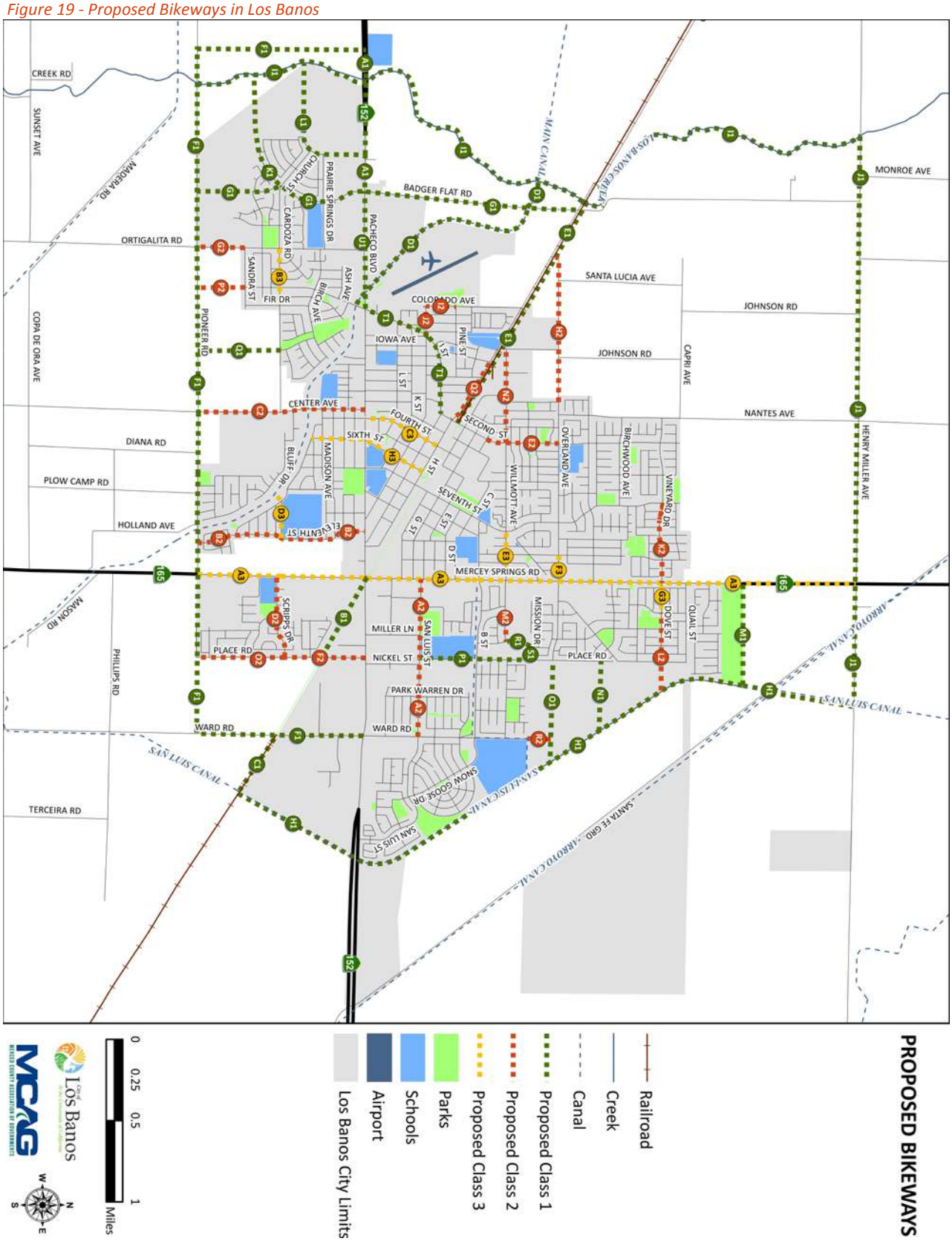
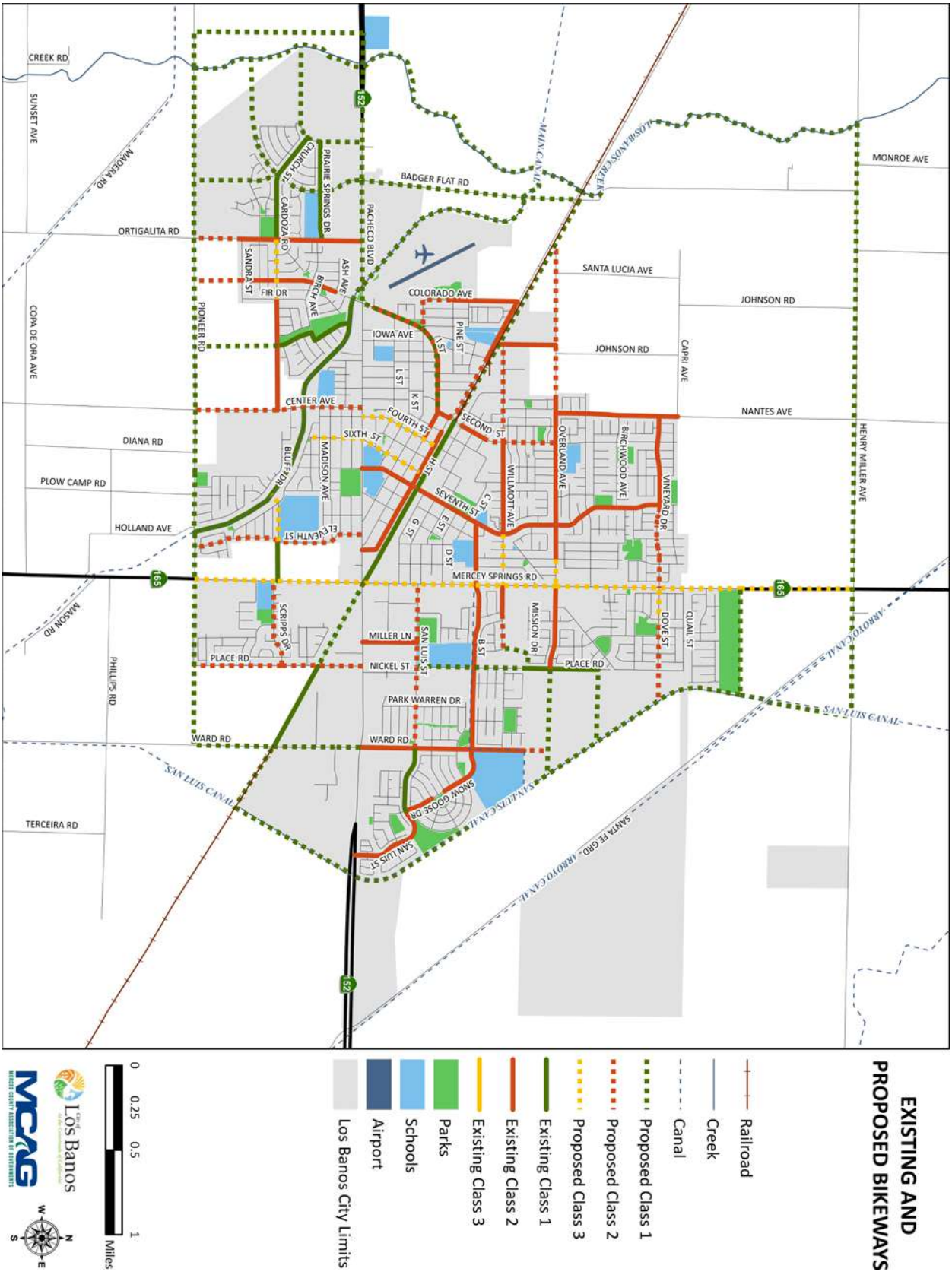


Figure 20 - Existing and Proposed Bikeways



Bicycle Support Facilities

Surveys have shown that the leading deterrent to potential bicycle commuters is lack of a safe, secure parking spot on the other end. So, it makes sense, in order to increase the amount of bicycle commuters in Los Banos, there needs to be adequate bicycle parking throughout the city. Providing adequate bicycle parking in convenient locations can encourage more people to ride their bicycle for daily transportation needs instead of driving.

In addition to the existing policies in the General Plan that support walking and bicycling, adopt a bicycle parking policy with minimum bicycle parking requirements for the following uses, listed in **Table 6**. Consider allowing developers to substitute additional bicycle parking and remove some vehicle parking spaces. Incorporate these standards into development codes. It could also be beneficial to establish a program to encourage existing public, commercial and industrial development to provide bicycle parking. Such a program might include city cost sharing or underwriting of bicycle racks, and other bicycle support facilities, to lower the cost and provide an incentive to those wishing to provide them.

There are several types of support facilities that can be installed to help encourage commuting to work, shop or school on a bicycle. These include:

Bike Racks - Have high quality bike racks at all employment locations. Due to increasing popularity in bicycle commuting, bike racks exist at a number of sites in employment areas. Other major employers in the City of Los Banos that are not within target sites also provide bike racks. It is recommended to increase the number of bike racks at all schools.

Lighting – Provide lighting along bicycle paths to increase the users sense of safety and security.

Bike Racks on Buses – Transit Joint Powers Authority of Merced County has equipped all fixed route buses with bike racks.

Transit Center Connections – Work with Transit Joint Powers Authority to coordinate and provide bike-to-transit connections at transit centers.

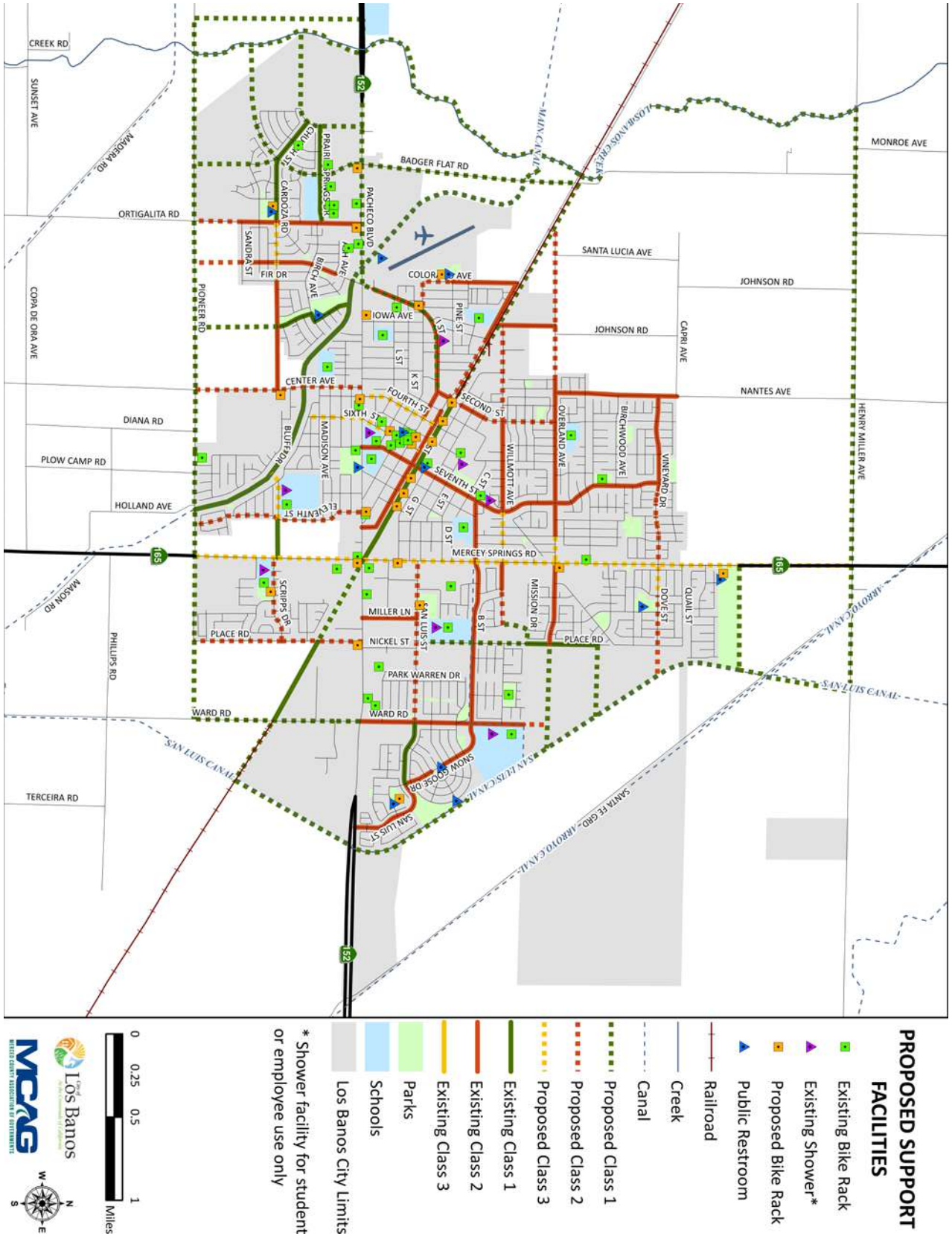
Transit Connections – Work with Transit Joint Powers Authority to align transit stops at bike lines, paths, routes and place bike racks at these bus stops.

Air, Oil and Bicycle Repair - Establish a program of citywide bicycle support facilities that includes access to air, oil, and other bicycle repairs at public places throughout the city and at other public places, such as service stations.

Table 6 - Bicycle Parking Policy for Los Banos

Land Use or Location	Physical Location	Quantity
Parks	Adjacent to restrooms, picnic areas, fields, and other attractions	8 bicycle parking spaces per acre
Schools	Near office and main entrance with good visibility	8 bicycle parking spaces per 40 students
Public Facilities (libraries, community centers)	Near main entrance with good visibility	8 bicycle parking spaces per location
Commercial, retail and industrial developments over 10,000 square feet	Near main entrance with good visibility	1 bicycle parking space per 15 employees or 8 bicycles per 10,000 square feet
Shopping centers over 10,000 square feet	Near main entrance with good visibility	8 bicycle parking spaces per 10,000 square feet

Figure 21 - Proposed Support Facilities



Wayfinding Signage

Wayfinding signs direct bicyclists along the bicycle network and to community destinations. These signs may also include “distance to” information, which displays mileage to community destinations.

Recommendations

This plan recommends installation of wayfinding signs at decision points and confirmation signs that display destinations and mileage.

Decision signs (**Figure 22**) mark the junction of two or more bikeways. Decision signs are comprised of a Bicycle Route Guide Sign (D11-1) and a Destination Supplemental Sign (D1-1b). Decision signs are located on the near-side of intersections. They include destinations and their associated directional arrows, but not distances.

Figure 22 - Decision Making Sign Example, NACTO, Urban Bikeway Design Guide

Oakland, CA | Concept | Portland Metro Cities, OR

Confirmation signs (**Figure 23**) confirm that a bicyclist is on a designated bikeway. Each confirmation sign includes a Bicycle Route Guide Sign (D11-1) and a Destination Supplemental Sign (D1-1b). Confirmation signs are located mid-block or on the far-side of intersections. Confirmation signs include destinations and their associated distances, but not directional arrows.

Figure 23 - Confirmation Sign Example, NACTO, Urban Bikeway Design Guide

Berkeley, CA | Chicago, IL | Oakland, CA

Recommended Bicycle-Pedestrian Policies and Standards

Design Standards and Guidance

In California there are two key design manuals that guide the development of transportation facilities:

1. The **California Highway Design Manual (HDM)** establishes uniform policies and procedures to carry out the State highway design functions of the Department of Transportation. Chapter 1000 of the HDM also contains descriptions of the various bicycle facility types.
2. The **California Manual on Uniform Traffic Control Devices (MUTCD)** provides uniform standards and specifications for all official traffic control devices in California, including the types of signs allowed. Another pertinent guide includes Assembly Bill (AB) 819 (Bikeway Research, Experimentation, Testing, Evaluation, or Verification Related to Design Criteria), which outlines the procedures for when a bicycle project is planned a State highway system or used federal funding.

In addition, there are several national design standards and guidelines that the City of Los Banos may take into consideration for existing and proposed bicycle-pedestrian projects, including:

- Americans with Disabilities Act Standards
- American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities
- National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- NACTO Urban Bikeway Design Guide

Road Standards

Traffic Signals – Provide activated signals at intersections where bicyclists and pedestrians must cross roads with traffic levels high enough to warrant signals, where bikeways are within the roadway, and install push button signal actuators in a location where they are not within the roadway but are on a separate path or on the sidewalk. Provide push button actuators for pedestrians as well.

These improvements should be targeted for all major intersections on the proposed bikeway network, and at locations where school children cross a busy street to gain access to school.

Install detectors at all signalized intersections, along the bikeway system as intersections are upgraded. Detectors should be located within the striped bike lane, either along the curb or between the right turn lane and through lane. Detectors should be installed so as to be triggered by bicycles.

For roadways where bikeways are within the roadway, and even for other roadways where bikeways are not designated, but that might nevertheless accommodate bicyclists, establish standards regarding uniform pavement edges and repair of potholes.

In the local Department of Public Works program, initiate a bikeway improvement and maintenance system within existing pavement management systems, where all observed and recorded hazardous conditions are listed and scheduled for replacement or repair. This includes all grates and railroad crossings that do not meet specific criteria.

Obstructions and potholes should be repaired as soon as feasible after being reported. Set up a phone number for people to call and report bicycle facilities that need repair/maintenance.

Drainage Grates - Prohibit drainage grates that have openings running parallel to the direction of bicycle travel. Require grates with openings perpendicular to the direction of bicycle travel, or with "waffle" patterns that do not trap bicycle tires regardless of the direction in which they are installed.

Railroad Crossings - Adopt specific guidelines for all railroad crossings and other potential hazards to bicyclists that meet Caltrans or other relevant guidelines. All railroad crossings will be at 90 degrees, preventing bicycle wheels from becoming lodged.

Trenching and Repair - Maintain bicycle access where maintenance operations, roadway improvement projects, or other operations are likely to cause disruptions to bicycle facilities. Require the local provision for maintenance of a clear, safe passage for bicycles as would be required for automobile traffic.

Provide safe pavement surfaces when trenching or repair of roadway surfaces designated for bicycle traffic requires replacement or repair of roadway surfaces. Locally require that such repairs or replacement of pavement extend the full width of the bicycle facility, to minimize joints, grooves, or other disruptions to bicycles.

Sweeping - Establish a regular schedule for sweeping bikeways that ensures that bikeway surfaces are clean and safe. Each bikeway should be scheduled for sweeping at least four times per year. Establish a volunteer maintenance program where the city organizes regular work parties and provides support. Bike paths may be "adopted" by corporations or clubs and maintained by them, in exchange for public acknowledgment.

Development Policies and Standards

Density - Plan for new residential, commercial and employment development at a density, and mix of uses that support bicycle, pedestrian and other non-motorized forms of transport.

Continuous, Uninterrupted Bicycle and Pedestrian Systems – Plan for new development that allows full, continuous and uninterrupted access for bicycle, pedestrian and other non-motorized forms of transport. Limit dead-end cul de-sacs, unless bicycle and pedestrian connections between such streets are provided to adjoining streets. Continuous access systems, such as the traditional grid or modified grid are preferred over cul-de-sacs. Newer subdivisions are encouraged to include moonlight cul-de-sacs that have built in access through to allow a continuous and uninterrupted connection.

The street system should be clear, and paths and routes should be clear and clearly marked. In no case, should the bicyclist or pedestrian unexpectedly come up against a dead end.

Frequent, Safe Crossings - Plan roads to have frequent, safe crossings. Plan for bicycle-actuated signals where bicyclists use the roadway, or manually controlled traffic signals where they do not. Plan for clearly marked crossings.

Plan for pleasant, safe, and direct at-grade crossing of busy roads, highways, creeks, rail lines and other potential barriers. Discourage the use of separate bicycle and pedestrian bridges and under crossings, except where infeasible to provide crossings otherwise.

Integral Bicycle and Pedestrian Facilities and Systems – Provide for bicycle and pedestrian access adjacent to all new public roads.

Bicycle and Pedestrian Safety

The subject of bicycle and pedestrian safety cannot be addressed without the importance of educational programs. Many bicycle accidents involve improper actions on the part of bicyclists, motorists, or both. Therefore, accident reduction efforts need to include educational programs to increase awareness of improper driver actions, which are known to contribute to accidents. The education programs must include components for bicyclists, as well as motorists.

Formal education programs alone will not provide all the needed education on bicycle and pedestrian safety. It is important that parents inform themselves of proper safety considerations and pass them on to the children. Also, adult bicycle riders must inform themselves of the rules and regulations for safe operation of a bicycle just as they would for safe operation of a motor vehicle. As part of the bicycle registration, the City of Los Banos Police Department has safety-related material available to give out. Information regarding the importance of wearing helmets and commuter riding tips is available on www.mercedbicyclecoalition.org. The City promotes bicycle safety at appropriate venues, such as the local hospital foundation's annual Teddy Bear Clinic.

For obvious reasons, bicycle paths are considered to have an increased margin of safety over bicycle lanes or bicycle routes as cyclists enjoy a greater distance from motorized modes of transportation. However, in two respects, bicycle paths in some isolated areas of Los Banos are potentially less safe than on-street facilities.

First, unlike bicycles routes and bicycle lanes, bicycle paths are generally shared between bicyclists and pedestrians. In some instances, the line of sight can be limited. Second, since most bicycle paths do not have lighting, these above conditions are made more difficult when it is dark and when fog is present. The presence of lighting would help alleviate this problem. Isolated paths can increase problems of theft and security, where law enforcement cannot provide frequent patrols. It is recommended that call boxes be placed at frequent intervals along bike paths.

In Los Banos, irrigation canals provide an excellent opportunity for bicycle paths for commuter trips from home to school and employment centers. However, there are issues on locating bicycle paths on canals. These include, but are not limited to, access, ownership, liability, security and safety. Specificities of construction for waterway paths are outlined in the Caltrans Highway Design Manual.

Recommended Bicycle-Pedestrian Programs

As mentioned previously, less than 1% of workers in Los Banos commute to work by walking or bicycling. As statistics indicate, there is potential for increased bicycle and pedestrian commuting within the City of Los Banos. As bikeway facilities are constructed and connectivity to public transportation is improved, the number of trips made by walking or bicycling can be expected to increase. A reasonable estimate is that with the implementation of this Los Banos Bicycle Pedestrian Plan, bicycle use can be expected to double in ten years.

Given this assumption, bicycle commuting can be expected to increase to approximately 1% of all commute trips by 2027.

Inform the Public

A way to generate interest in alternative modes of transportation is to provide more information on bicycle safety, how to connect bicycle/walking trips to transit, and community bicycling events by using various forms of outreach, including the City of Los Banos website and www.mercedbicyclecoalition.org.
Producing and updating a double-sided Los Banos area bikeway map with a map on one side and safety tips on the other side could also be helpful to community bicyclists.

Coordination with the Police Department to patrol and target bicyclists violating traffic and helmet laws and motorists violating bicyclist's rights, to issue warnings and educational literature instead of citations could increase the community's awareness of bicycle safety and laws.

Educational Programs

A comprehensive education program includes:

Bicycle commuting awareness programs

- bicycling rules
- safe bicycling

Education of children

- bicycling rules
- safe bicycling

Education of motor vehicle operators

- bicycle/vehicle safety
- bicycling road rules

Education of public officials and law enforcement officers

- value of bicycle and pedestrian facilities
- rights of bicyclists and pedestrians

Bicycle system map illustrating bike routes, paths, lanes, and destinations

- Create an updated bicycle system map with safety tips on the back

Incentive Programs

- Incentive programs may include:

- Formation of a Bicycle Commuters Club

- Classes on bicycle safety and maintenance taught by an individual certified in the *Effective Cycling Trainers Course* or an equivalent

- Employer "Guaranteed Ride Home Program" which guarantees access to a ride home in case of an emergency

- Employer provided transportation for work related travel

- Employer offers flexible work schedule for cycling commuters

- Employer provided loaner cycling accessories and repair equipment (i.e. helmets, lights, reflectors, baskets/bags, tool kits, hand pumps) to employees as needed.

- Employer based financial assistance towards bicycle purchase for cycling commuters

- Make use of a cycling commuters database to link current or prospective cycling commuters with other commuters in their community

- Transportation awareness workshops

- Annual bike parade event

- Installation of bike racks at parks and schools

Funding

There are a variety of potential local, state and federal funding sources available for bicycle and pedestrian facilities.

Measure V, administered by Merced County Association of Governments, is an important source of funding that wasn't available in past years. The measure is a half-cent sales tax aimed at improving the overall quality of Merced County's transportation system. This local program can be used on pedestrian and bicycle facilities and trails. Funding is allocated to cities and the county based on population.

The Active Transportation Program (ATP) is the only significant source of funds dedicated to increasing bicycling and walking in California. ATP funds bike and pedestrian infrastructure projects, educational and promotional efforts, safe routes to school projects, and active transportation planning.

TDA Article 3 funds – also known as the Local Transportation Fund (LTF) are used by cities for the planning and construction of bicycle and pedestrian facilities.

The following table is a list of viable funding sources that can be used for bicycle or pedestrian projects.

Table 7 - Funding Sources

Funding Source	Programming Agency	Approving Agency	Required Matching Funds	Application Cycle/Deadline	Eligible Bikeway/ Support Projects	Available Funding
REMOVE II	San Joaquin Valley Unified APCD	San Joaquin Valley Unified APCD	None	Until program funds are exhausted	Class 1 Class 2 Class 3	Class 1— $150,000 Class 2— $100,000 Class 3— $100,000
Congestion Mitigation/Air Quality (CMAQ)	Merced County Association of Governments	Merced County Association of Governments	11.5% - 20%	Call for projects every two years. Evaluated on a region-wide competitive basis	Bicycle and pedestrian projects	Federal funding varies : Approximately $3M each fiscal year

Active Transportation Program (ATP)	Caltrans	California Transportation Commission	None	Applications accepted in even numbered years in April –June. Funds awarded in odd numbered years	New bikeways and walkways or improvements; traffic control installation; Safe Routes to School; bicycle parking; recreational trails; functional landscaping	Total of $5M distributed: 40% to MPO's in urban areas; 10% to small urban/rural areas; 50% to projects competitively awarded
Environmental Enhancement and Mitigation (EEM)	California Transportation Commission	California Natural Resources Agency	None	For each fiscal year, cycle opens in April. Application due in June	Urban Forestry; Resource Lands; Mitigation projects	$7M each fiscal year
Urban Forestry Grant (UFG)	California Department of Forestry and Fire Protection	California Dept. of Forestry and Fire Protection	25% but can be waived if hardship is demonstrated	Annual, applications due in December	Urban Forest Expansion and Improvement	$150,000—$1,000,000
Measure V	MCAG	City Council	N/A	N/A	Alternative Modes Projects	20% of the "Local Projects" Funds
Local Transportation Fund	Transportation Development Act	City Council	N/A	N/A	Pedestrian and Bicycle projects	Allocated to each jurisdiction based on population after Unmet Transit Needs Process

Progress Reporting

The City of Los Banos will maintain GIS maps of the existing and planned bicycle and pedestrian networks. As projects are completed and plans are changed, the City will make public announcements (via the City website) and these maps will be updated. At least annually, these maps will be published on the City website.

Previous Expenditures

Recent expenditures on active transportation projects and maintenance by the City of Los Banos are listed in Table 8.

Table 8 - City of Los Banos Active Transportation Project Expenditures

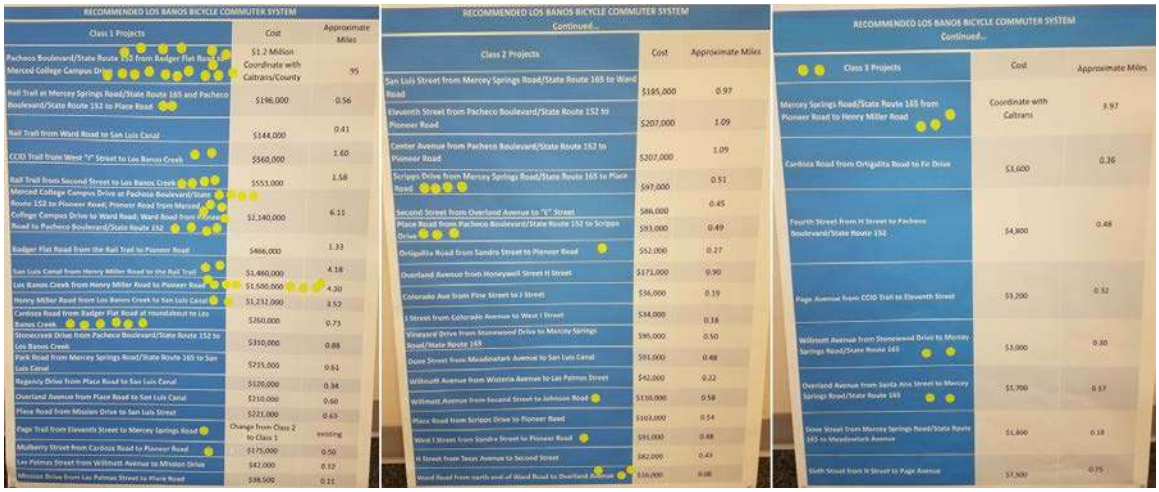
ACTIVE TRANSPORTATION EXPENDITURES, 1997-2019		
Project	**Year**	**Cost**
CCID Trail	1997	$560,000
Page Trail	1998	$73,000
Rail Trail	2006	$1,330,000
Bike Lane Improvements	2006	$106,000
Safe Routes to School Sidewalks	2013	$285,000
Sidewalks Infill (Future project funded by CMAQ)	2019	$360,000

Public Participation

On December 4, 2017, a public workshop was held at the Los Banos Community Center. 15 people attended and provided input on specific locations for bicycle and pedestrian improvements within the city. Several students from the Merced College campus were in attendance, as well as local bicycling advocates. The attendees were able to discuss their vision for Los Banos within the next 20 years, current obstacles to walking and biking in Los Banos, and what a walkable-bikeable community meant to them. The contents of the draft Plan were considered, and public input was used to prioritize the proposed network of bikeways. Attendees were asked to place sticky dots on the projects that they wanted to be implemented most. Each attendee received the same number of dots, and they were permitted to place all their allotted dots on one project or choose to distribute dots to multiple projects. After the prioritization exercise, projects that were the most important to the attendees were very clearly

seen. The City of Los Banos Bicycle Pedestrian Plan was approved by the Los Banos Parks and Recreation Commission on January 16, 2018 and the Los Banos Planning Commission on January 24, 2018. The Plan was approved and adopted by the City Council of the City of Los Banos on March 21, 2018.

Figure 24 - Results of Prioritization Exercise at Los Banos Bicycle-Pedestrian Plan Public Workshop



Project Prioritization

Based on the input from members of the public from the workshop conducted in December 2017 combined with the vision of City staff to transform Los Banos into a walkable-bikeable community, ten projects emerge as top priority for implementation. **See Table 9.**

Table 9 - Proposed Bicycle Projects by Priority Ranking

RECOMMENDED LOS BANOS BICYCLE COMMUTER SYSTEM				
Rank	Project Description	Cost	Approximate Miles	Project Type
1	Pacheco Boulevard/State Route 152 from Badger Flat Road to Merced College Campus Drive	$1.2 Million Coordinate with Caltrans/County	0.95	Class 1
2	Scripps Drive from Mercey Springs Road/State Route 165 to Place Road	$97,000	0.51	Class 2
3	Place Road from Pacheco Boulevard/State Route 152 to Scripps Drive	$93,000	0.49	Class 2
4	Mercey Springs Road/State Route 165 from Pioneer Road to Henry Miller Road	Coordinate with Caltrans	3.97	Class 3
5	Rail Trail at Mercey Springs Road/State Route 165 and Pacheco Boulevard/State Route 152 to Place Road	$196,000	0.56	Class 1
6	Merced College Campus Drive at Pacheco Boulevard/State Route 152 to Pioneer Road; Pioneer Road from Merced College Campus Drive to Ward Road; Ward Road from Pioneer Road to Pacheco Boulevard/State Route 152	$2,140,000	6.11	Class 1
7	Los Banos Creek from Henry Miller Road to Pioneer Road	$1,500,000	4.3	Class 1
8	Cardoza Road from Badger Flat Road at roundabout to Los Banos Creek	$260,000	0.73	Class 1
9	Rail Trail from Second Street to Los Banos Creek	$553,000	1.58	Class 1
10	CCID Trail from West "I" Street to Los Banos Creek	$560,000	1.6	Class 1

RESOLUTION NO. 5947

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS BANOS APPROVING AND ADOPTING THE CITY OF LOS BANOS BICYCLE-PEDESTRIAN PLAN

WHEREAS, on October 18, 2006, the City of Los Banos City Council adopted the City of Los Banos Commuter Bike Plan; and

WHEREAS, at this time, this Commuter Bike Plan is out of date and not considered an active plan; and

WHEREAS, City of Los Banos staff is presenting a City of Los Banos Bicycle-Pedestrian Plan to the City Council; and

WHEREAS, the City of Los Banos Bicycle-Pedestrian Plan has been presented to the public at a Public Workshop on December 4, 2017, approved by the Los Banos Parks & Recreation Commission on January 16, 2018, and approved by the Los Banos Planning Commission on January 24, 2018; and

WHEREAS, the City of Los Banos Bicycle-Pedestrian Plan will make walking and bicycling an attractive travel and recreational option for more people in the City of Los Banos by improving access to funding sources to provide Bicycling-Pedestrian related infrastructure.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Los Banos does hereby approve and adopt the City of Los Banos Bicycle-Pedestrian Plan.

The foregoing Resolution was introduced at a regular meeting of the City Council of the City of Los Banos held on the 21st day of March 2018, by Council Member Silveira who moved its adoption, which motion was duly seconded by Council Member Faria and the Resolution adopted by the following vote:

AYES:	Council Members Faria, Johnson-Santos, Lewis, Silveira, Mayor Villalta
NOES:	None
ABSENT:	None

APPROVED:

Michael Villalta, Mayor

ATTEST:

Lucille L. Mallonee, City Clerk

METROPOLITAN PLANNING ORGANIZATION (MPO)

PROOF OF CERTIFICATION OF COMPLETENESS

Merced County Association of Governments provides this letter as **proof of certification of completeness for the City of Los Banos Bicycle-Pedestrian Plan,** within the meaning of Sections 890.6 and 891.2 of the California Bicycle Transportation Act and in compliance with the Complete Streets Act, Assembly Bill 1358 (Chapter 657, Statutes of 2008).

The City of Los Banos Bicycle-Pedestrian Plan contains the following required elements:

a. The estimated number of existing bicycle trips and pedestrian trips in the plan area and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan;
b. A map and description of existing and proposed land use and settlement patterns;
c. A map and description of existing and proposed pedestrian facilities;
d. A map and description of existing and proposed bicycle transportation facilities;
e. A map and description of existing and proposed end-of-trip bicycle parking facilities;
f. A description of existing and proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations;
g. A description of existing and proposed bicycle and pedestrian education, encouragement, enforcement, and evaluation programs conducted in the area included within the plan, including efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians;
h. The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area and a goal for collision, serious injury, and fatality reduction after implementation of the plan;
i. Identify census tracts that are considered to be disadvantaged or low-income and identify bicycle and pedestrian needs;
j. A description of the extent of community involvement in the development of the plan, including disadvantaged and underserved communities;
k. A description of how the plan has been coordinated with neighboring jurisdictions within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan;
l. A description of the projects and programs proposed in the plan and a listing of their priorities for implementation;
m. A description of future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area;
n. A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan;
o. A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities;
p. A resolution showing adoption of the plan by the City of Los Banos.

Merced County Association of Governments in collaboration with the City of Los Banos has prepared a bicycle-pedestrian plan that complies with state law as described above, and with the Regional Transportation Plan.

Patrick Pittenger, Executive Director
Merced County Association of Governments
April 12, 2018

MCAG
MERCED COUNTY ASSOCIATION OF GOVERNMENTS