Patterson Active Transportation Plan

Existing Conditions Report

March 2021

TJKM

City of PATTERSON California

CITY OF PATTERSON
ACTIVE TRANSPORTATION PLAN

Existing Conditions Report

March 2021

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The City of Patterson

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1. INTRODUCTION

The Patterson Citywide Active Transportation Plan (ATP) is being developed by the City of Patterson, with the help of an Active Transportation Grant awarded by Caltrans and California Transportation Commission (CTC).

This report is divided into the following sections:

1. Introduction describes the purpose, key goals & objectives of the Citywide Active Transportation Plan

2. Relevant Plans, Policies & Standards describes adopted plans and standards relevant to bicycling and walking in Patterson, and describes adopted goals and policies that the Citywide Active Transportation Plan aims to support.

3. Setting summarizes relevant aspects of Patterson's built environment including population, employment, street network characteristics, traffic volumes and transit service.

4. Cycling Conditions summarizes existing characteristics of the Patterson's street network relevant to bicycling, describes existing bikeways well as currently proposed bikeways.

5. Walking Conditions describes the existing sidewalk and path network in Patterson, summarizes pedestrian safety data, and identifies key gaps and barriers to walking.

PURPOSE & KEY GOALS

The Citywide ATP will provide a master plan for development of a citywide bikeway network and improvements to the citywide pedestrian network.

The ATP will complement adopted City plans including the General Plan Circulation Element, adopted in 2010, and the Transportation Infrastructure Master Plan (TIMP) approved in 2020, as well as the Stanislaus Council of Government (StanCOG) Non-Motorized Transportation Master Plan (NMTMP), adopted in 2013. The ATP will also:

- Support the City in reaching its goals to plan and develop a multimodal transportation network that is safe and efficient for all users
- Identify measures to implement adopted goals and policies relevant to bicycling and walking described in the NMTMP and TIMP
- Provide an overall framework plan depicting Patterson's future citywide cycling and walking network
- Identify pedestrian and bicycle network deficiencies, and develop implementable improvement options, with extensive input from members of the community
- Prepare conceptual designs for short and long-term improvements suitable for Future CIP funding programming and grant applications
- Specify recommended changes to street deign design standards to enhance walking and bicycling, and to incorporate recommended improvements
- Develop a phasing plan and funding strategy for prioritized projects, programs, and action steps

Key goals of the ATP are to support adopted policies at providing complete streets, increasing mobility, enhancing safety, improving public health, and increase the rate of bicycling and walking for every day transportation in Patterson.

BENEFITS OF ACTIVE TRANSPORTATION

Providing design amenities to create integrated transportation networks that include walkable and bikeable streets and neighborhoods produces multiple benefits including:

- Enhanced mobility: Most daily trips in most communities, including Patterson, are within bicycling or walking distances, including local trips to shopping, schools, local services, parks and public transit. Provision of a complete street network and elimination of barriers to walking and bicycling, including provisions for transit access will result in increased transportation options for all age groups.
- Improved public health: Rates of obesity and other public health risks associated with reduced physical activity increased dramatically in recent decades, for children as well as adults. Provision of active transportation networks is increasingly identified as a recommended component of local public health programs.
- Reduction in greenhouse gas emissions: Successful investments in walking and bicycling lead to reductions in local greenhouse gas emissions.
- Increased property values: Bikeable and walkable neighborhoods help to attract and retain a talented and youthful workforce[1].
- More retail dollars spent at local businesses: Studies in other cities have found that residents who walk and bike to visit local businesses spend more money than customers that drive[2].

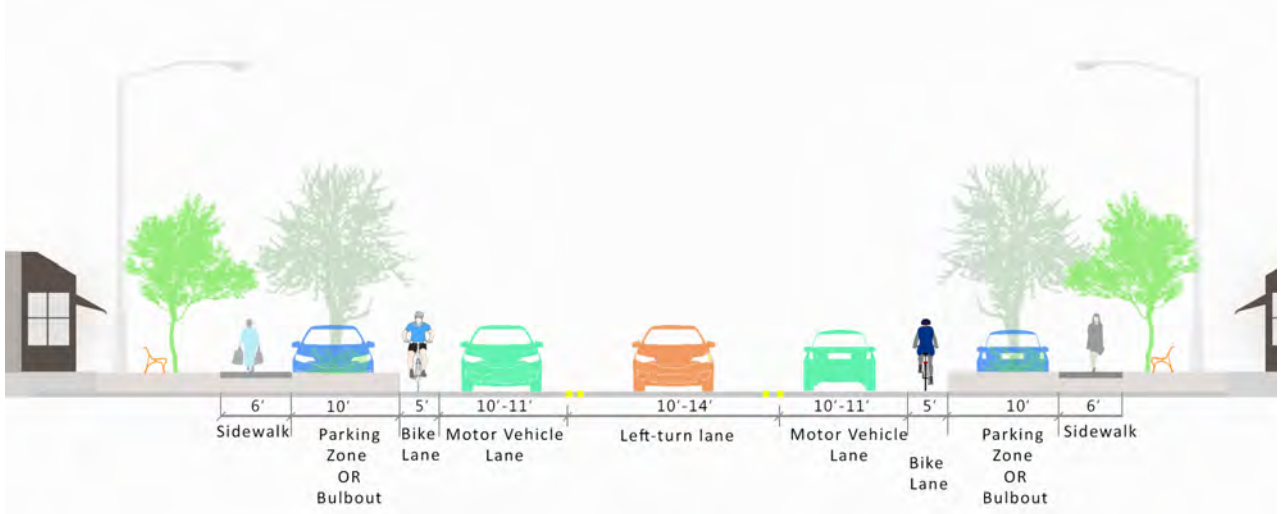
[1]Cortright, Joe for CEOs for Cities. (2009). *Walking the Walk: How Walkability Raises Home Values in US Cities.*

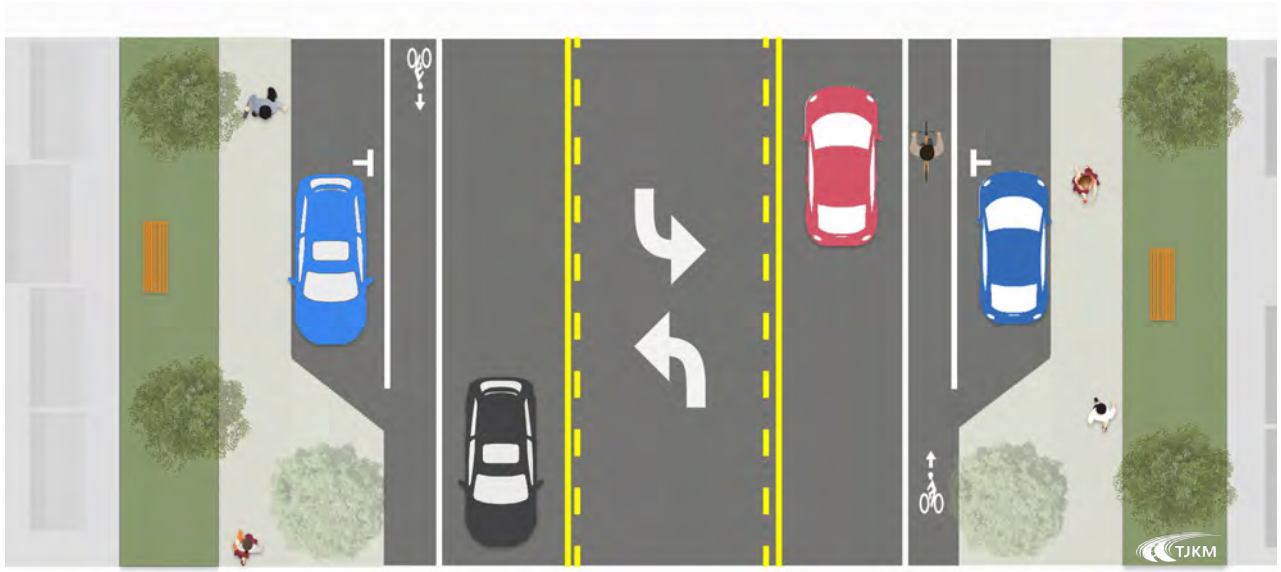
[2]The Clean Air Partnership. (2009). *Bike Lanes, On-Street Parking and Business: A Study of Bloor Street in Toronto's Annex Neighborhood.*

WHAT ARE COMPLETE STREETS?

A complete street is a street that accommodates mobility for all modes of transportation. There is no one design, or "one size fit all" solution for a complete street. It is a street design that enables safe, comfortable access for users of all ages and abilities, no matter how they travel.

- The term "Complete Streets" refers to a balanced, multimodal transportation network that meets the needs of all users of streets -- including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, public transportation, and seniors. A "Complete Street" is one that provides safe and convenient travel in a manner that is suitable to the local context.
- The California Complete Streets Act (AB 1358) adopted in 2008, requires that cities and other public agencies incorporate "Complete Street" policies when updating their General Plan Circulation Element. Complete Streets make travel safe for all users, including bicyclists, pedestrians, motorists, transit vehicles, and people of all ages and abilities. Each and every street does not need to provide dedicated space to all users, but the network must accommodate the needs of all users.
- Design guidance relevant to providing complete streets are provided by various sources including the National Association of City Transportation Officials (NACTO) Urban Street Design Guide.





2. RELEVANT PLANS, POLICIES & STANDARDS

This section summarizes relevant adopted plans, policies or standards that include policies or recommendations relevant to the citywide bicycle and pedestrian networks. Documents relevant to the Citywide ATP include the City of Patterson General Plan, Transportation Infrastructure Master Plan (TIMP) and Parks and Master Plan, as well as the Stanislaus Council of Governments (StanCOG) Non-motorized Transportation Master Plan (NMTMP) and Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS).

GENERAL PLAN CIRCULATION ELEMENT

The City of Patterson General Plan and its Circulation Element were adopted in November 2010. The purpose of the Circulation Element is to provide goals and policies aimed at meeting the transportation needs of the City. The Circulation Element has identified roadway deficiencies, as well as improvements to achieve and maintain established City standards.

The following is a list of adopted General Plan goals and policies relevant to the citywide pedestrian and bicycle networks:

General Plan Goal T-7: To promote pedestrian, bicycle and rail travel as alternatives to automobile use.

- Policy T-7.1: Safe Pedestrian and Bike Pathways: The City shall create and maintain a safe and convenient system of pedestrian and bicycle pathways that encourages walking and bicycling as an alternative to driving. New development shall be required to pay its fair share of the costs for development of this pathway system.
- Policy T-7.2: Pedestrian Access: All new development shall be reviewed to ensure safe pedestrian access is provided from the street, within parking areas and between new development and surrounding neighborhoods.
- Policy T-7.3: Bike Routes: The City shall establish a safe and convenient network of identified bicycle routes connecting new residential areas by the shortest possible routes with recreation, shopping, and employment areas within the city. The City shall cooperate with surrounding jurisdictions in designing and implementing an area-wide bikeway system.
- Policy T-7.4: Separation of Bike Routes from Motor Vehicles: Bicycle routes shall emphasize paths separated from vehicle traffic (Class I) to the maximum extent possible, but shall also include bicycle lanes within public streets (Class II and III). The City shall limit on-street bicycle routes to those streets where the available roadway width and traffic volumes permit safe coexistence of bicycle and motor vehicle traffic.
- Policy T-7.5: Include Pathways in Open Space: To the extent practicable, bicycle and pedestrian pathways shall be included within open space areas.
- Policy T-7.6: Bike Storage: The City shall require the inclusion of bicycle parking facilities at all new major public facilities and commercial and employment sites and shall encourage large employers to provide showers for employees.
- Policy T-7.7: Bicycle-Automobile Conflicts: The City shall promote the safe "sharing" of roads between automobiles and bicyclists.
- Policy T-7.8: Bike Safety: Bicycle safety shall be considered when implementing improvements for automobile traffic operations
- Policy T-7.9: Coordination with Schools: The City shall collaborate with the School District to promote bike use and shall actively pursue Safe Route to School grants to fund programs that facilitate safe bike routes.
- Policy T-7.10: Coordination with Other Agencies: The City shall coordinate with Stanislaus County, the Stanislaus Council of Governments, Caltrans and other agencies to improve bicycle and pedestrian circulation region-wide.

TRANSPORTATION INFRASTRUCTURE MASTER PLAN (TIMP)

The City Patterson TIMP was prepared in March 2020 and provides transportation infrastructure recommendations based on two future scenarios:

- 10-year near-term scenario based on a future population of 28,900 residents in Patterson (an increase from 22,524 residents in 2019), and 21,980 jobs in Patterson.
- Master Plan Buildout Scenario, to accommodate a buildout population of 66,300 residents and 81,300 jobs in Patterson. The number of jobs in the Master Plan buildout scenario would greatly exceed the size of the local labor force (approximately 30,000 Patterson residents would be part of the working-age population at buildout). Therefore, the majority of the jobs in Patterson would be held by over 50,000 commuters that would travel from other communities to jobs in Patterson.

The TIMP is intended to be used as a tool to help the City plan for anticipated growth in the future. The TIMP recommends to "establish and provide 'Complete Street' policies for all future roadways.

Relevant TIMP policies are listed below:

- Encourage future commercial development to provide bicycle access to surrounding residential areas.
- Require future commercial development to place bike racks near entrances for employees and customers.
- As appropriate require future development to construct bikeways included in the proposed system as a condition of development.
- Meet the requirements of the Americans with Disabilities Act when constructing facilities contained in the proposed system, where applicable.
- Encourage future development to consider schools as important destinations for bicyclists when designing circulation systems within new developments.
- Establish and provide Complete Street policies for all future roadways. Adopt recommended bike facilities plan and provide future funding for its construction. Creation of more continuous bike lanes at key destinations would encourage more people to use bikes instead of autos.
- Focus on redesign of downtown streets based walkable and livable principles.

PARKS AND RECREATION MASTER PLAN

Although not formally adopted by the City yet, the Parks and Recreation Master Plan will guide the City in expanding, improving, and protecting the parks and recreational facilities as the City continues to grow. As the City improves and builds upon its park and facility network, it will be important to improve and build upon the multimodal network as well so that residents of all ages may access the parks and facilities in order to maintain a healthy lifestyle. Relevant guidelines and goals are highlited below:

Planning & Design Guidelines

- Parks should be programmed and designed to appeal to multiple user groups from toddler to senior, and to provide both active and passive, as well as individual and group recreation opportunities.
- Wherever possible, highlight and strengthen connections between the park and other public spaces and community destinations.
- Provide logical, integrated, safe and ADA compliant access and circulation throughout the park.

Goals

- Including parks as “important” and “key” destinations when considering bicycle and pedestrian circulation;
- Prioritizing parks and recreation facilities as well as schools as key destinations when designing Complete Streets;
- Providing a sufficient number of conveniently located bicycle racks at all parks and recreation facilities; and
- Expanding the system of multi-use paths that function as linear parks.

ZACHARIAS AND BALDWIN MASTER PLAN

The City plans to annex approximately 1,227 acres of land just outside the City Limits. Proposed development will consist of residential, mixed-use, commercial, industrial, schools, parks, and open space uses.

The potential build-out will consist of approximately 5,086 dwelling units and 7,765,000 square feet of non-residential uses. According to the study, the neighborhood streets would be constructed with traffic calming measures to provide pedestrian and bicycle safety.

As part of the proposed TDM measures, the project should designate pedestrian and bike lanes to encourage walking and biking, provide secure bicycle parking, and provide adequate street lighting, sidewalks, and pedestrian/bicycle paths. Proposed strategies are listed below:

Proposed Access and Circulation

- Neighborhood streets designed with traffic calming geometric features.

Transportation Demand Management Strategies

- A clearly designated pedestrian circulation network within the site that links to the City of Patterson roadway network. Currently there are Class II on-street bike lane on Baldwin Road and Ward Avenue. Class II bike lane should be provided on both streets in the project area. The existing site plan shows pedestrian routes that connect to adjacent local roadways. Clearly designated bike lanes should be provided that connects to employment centers and downtown areas.
- Secure bicycle parking in safe, strategic locations within the site.
- Safety amenities such as lighting, sidewalks, and off-street pedestrian / bicycle paths.

CITY OF PATTERSON STANDARD SPECIFICATIONS

The City of Patterson Standard Specifications were last updated in 2011 and contain specifications and typical drawings for improvements that intends to aid all persons engaged in the construction of public works within the City limits. The document includes but is not limited to:

- Typical roadway cross sections
- Cul-de-sac geometry, roundabout details,
- Sidewalk cross sections
- Curb ramp details
- Landscaping, and lighting standards

The Active Transportation Plan will include street design recommendations that could result in updates to the City's standard specifications.

STANCOG NON-MOTORIZED TRANSPORTATION MASTER PLAN (NMTMP)

The Stanislaus Council of Governments (StanCOG) updated and adopted the NMTMP in 2013 with the goal of improving the bicycle and pedestrian network in Stanislaus County. The NMTMP has been prepared so that cities may prioritize investments in bicycle and pedestrian infrastructure and increase grant funding opportunities. Planning efforts included an outreach process with stakeholders to identify policy and network recommendations.

Regional NMTMP Facilities within Patterson

Proposed bikeway and pedestrian facilities recommended by the NMTMP within Patterson are described in Chapters 4 and 5.

NMTMP Policy Recommendations for the City of Patterson

The NMTMP includes the following policy recommendations for the City of Patterson:

- Consider revising bicycle parking requirements in Zoning Code based on Section 9-4 of the NMTMP
- Adopt policy language in the next General Plan update that is focused on Complete Streets and balancing the need of all roadway users.
- Consider adoption of a "Complete Streets" policy or "Routine Accommodation" type of policy to encourage accommodation of bicyclists and pedestrians of all ages and experience levels with new construction or improvements to the public right-of-way.
- Prepare, adopt, and implement an ADA Implementation Plan to guide inventory accessibility needs and future improvements.
- Adopt citywide policy of constructing ADA curb ramps and any other accessibility measures routine practice in any new construction or improvement project within the public right-of-way.
- When completing traffic analysis, collect bicycle and pedestrian volumes at each study location to address safety and circulation issues for those modes.

NMTMP Goals and Policies

Goals and policies of the NMTMP are discussed below:

NMTMP Goal 1: Increase Bicycle And Pedestrian Access And Safety. Expand bicycle and pedestrian facilities and access in and between local destinations such as neighborhoods, employment centers, shopping areas, schools, and recreational sites as well as throughout the region to increase the number of bicycling trips to five percent of all trips by 2030.

Objective 1.A: Implement the StanCOG Countywide Bicycle and Pedestrian Master Plan, which identifies existing conditions and planned networks, and provides specific short-term and long-term recommendations for countywide priority facilities and programs, including near-term (five to ten-year) priority projects.

Policy Actions:

- Maximize coordination between all municipalities, schools, and community organizations to review and comment on bicycle and pedestrian issues of mutual concern.
- Implement the recommendations to regularly monitor bicycle- and pedestrian-related collision levels, and seek a reduction in these collision levels on a per capita basis over the next twenty years.
- Update the Plan periodically as required by Caltrans to reflect new policies and/ or requirements for bicycle and pedestrian funding.
- Establish a countywide bicycle/pedestrian coordinator who would help implement the county and local bicycle and pedestrian improvements.

Objective 1.B: Complete a continuous network of bikeways and pedestrian facilities that are feasible, fundable, and serve the needs of bicyclists and pedestrians, especially for travel to employment centers, schools, commercial districts, transit stations, and institutions.

Policy Actions:

- Seek funding for the priority bicycle and pedestrian projects through current local, regional, state, and federal funding programs

and encourage multi-jurisdictional funding applications.

- Complete existing gaps in the pedestrian network, especially in the vicinity of land use attractors such as schools, parks, and neighborhood commercial areas as well as over major barriers such as railroad tracks, highways, and water bodies.
- Codify the existing practice of providing wide shoulders or bicycle lanes during overlay and widening projects as roadway space allows through the adoption of a "Complete Street" policy to encourage construction of bikeways as a part of any roadway project, where feasible and appropriate.
- Provide opportunities for bicycling for recreational purposes, especially to access parks and open space.

Objective 1.C: Address immediate and future safety needs for all roadway users, particularly bicyclists and pedestrians, who are the most vulnerable roadway users.

- Policy Actions:
- Secure funding for and implement priority bikeways and priority pedestrian projects identified in the Plan, many of which are located on corridors with high numbers of bicycle and pedestrian collisions.
- Develop adult and youth bicycle and pedestrian education, encouragement and safety programs aimed at youths, adult cyclists, pedestrians, and motorists.
- Objective 1.D: Improve access and integration with transit for bicycling and walking trips.

Policy Actions:

- Assist transit providers in providing and promoting secure, covered bicycle racks and lockers at transit centers and along key bus routes to facilitate multi-modal trips.
- Support and promote transit facility enhancements, such as bus stop access improvements, that will encourage increased bicycle and pedestrian access to transit.
- • Require future transit service in Stanislaus County to provide adequate bicycle and pedestrian access, bus mounted bicycle racks, and secure bicycle parking.
- • Conduct bicycle and pedestrian counts at regular intervals and include bicycle and pedestrian counts as part of vehicle traffic counts to evaluate usage and demand, and assist in the prioritization of project funding.

NMTMP Goal 2: Increase Bicycle and Pedestrian Trips. Make bicycling and walking a viable option for shopping, school, and work trips in Stanislaus County and other trips of fewer than five miles by implementing and maintaining a bikeway network, providing end-of-trip facilities for bicyclists, improving access and integration with transit, and making walking and biking convenient and safer.

Objective 2.A: Include bikeways and pedestrians facilities in all appropriate future development projects to facilitate on-site circulation and connections to the proposed system.

Policy Actions:

- Require future development to construct bikeways, sidewalks, and/or other pedestrian facilities included in the proposed system as a condition of development.
- Encourage future commercial development to provide bicycle and pedestrian access to surrounding residential areas.
- Require future commercial development to place bicycle racks near entrances for employees and customers.
- Meet the requirements of the Americans with Disabilities Act when constructing facilities contained in the proposed system, where applicable.
- Encourage future development to consider schools as important destinations for bicyclists and pedestrians when designing circulation systems within new developments.
- Work with transit authorities to ensure that pedestrian and bicycle concerns are addressed in the design of transit stops.

Objective 2.B: Provide secure, covered short- and long-term bicycle parking in employment and commercial areas, in multi-family housing, at schools, and at transit facilities.

Policy Actions:

- Develop a bicycle parking policy, as described in this Plan, to encourage or require the inclusion of bicycle parking in new development projects.
- Encourage the installation of short- and long-term bicycle parking in the public right-of-way, particularly adjacent to transit stops.
- Encourage the installation of short- and long-term bicycle parking at local elementary, middle, and high schools to promote bicycle commuting.

NMTMP Goal 3: Improve Regional & Local Connections. Increase accessibility within neighborhoods and cities as well between Stanislaus County cities, serving utilitarian, commute, and recreational trips.

Objective 3.A: Complete a network of bikeways that allow for intercity travel between Stanislaus County communities.

Policy Actions:

- Complete countywide priority bikeway network, as detailed in this Plan.
- Focus on development of Class 3 Bicycle Routes with wide shoulders as a lower-cost solution to regional bicycling needs than Class 1 paths, particularly in the near-term.

Objective 3.B: Align countywide bikeways through Stanislaus County cities such that local needs and destinations are served.

Policy Actions:

- Complete existing gaps in the countywide bicycle network, especially in the vicinity of schools, transit stops, neighborhood commercial centers, and major barriers such as railroad tracks, highways, and water bodies.

REGIONAL TRANSPORTATION PLAN

The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for Stanislaus County was developed so that transportation improvements and future land development will be coordinated with each other.

The RTP/SCS identifies policies, projects, and programs over 25 years to enhance the region's transportation network. The RTP/SCS was developed in accordance with state and federal guidelines, and supports California's climate goals.

One of the key RTP/SCS improvement projects is to place "emphasis on bicycle/pedestrian improvements along central corridors, Class I multi-use trails, and complete street improvements." Relevant regional goals include:

RTP/SCS Goal 1: Mobility & Accessibility

Improve the ability of people and goods to move between desired locations, and provide a variety of modal and mobility options.

RTP/SCS Goal 6: Health & Safety

Operate and maintain the transportation system to ensure public safety and security; improve the health of residents by improving air quality, and provide more transportation options.

3. SETTING

Known as the "Apricot Capital of the World", Patterson is located in the middle of Stanislaus County within the San Joaquin Valley, roughly 17 miles southwest of Modesto. The City is approximately six square miles in size. Interstate 5 lies immediately west of the City. Figure 1 provides a map showing Patterson's regional location. Due to its location, the City of Patterson provides plenty of recreational opportunity for residents. Patterson takes pride in its agricultural history, culminating in the annual Apricot Fiesta that takes place each June.

POPULATION AND EMPLOYMENT

In 2019, Patterson's population was estimated by the US Census Bureau to be approximately 22,524. Since 2010, the total population has grown by approximately 9.2%, a rate of roughly one percent annually. There is an approximate 52:48 ratio of male to female residents with over 60% of the population falling into the age range of 18 to 65 years, and 30% under the age of 18. Patterson represents approximately four percent of the population in Stanislaus County estimated at 550,660. Table 1 presents Patterson's population by age.

Table 1: Population by Age

Age Range	2019 Estimate	Percentage
Under 18	6,667	30%
18-65	13,740	61%
Over 65	2,117	9%
Total	**22,524**	**100%**

Figure 1: Regional Location

Patterson's current population of 22,524 residents consists of approximately 6,000 households and includes an estimated labor force of 9,800 workers according to the U.S. Census Bureau.

22,524
Population

$69K
Median Household Income

3.47
Average Household Size

LAND USES AND TRAVEL DESTINATIONS

Patterson is a predominantly residential community with single-family homes throughout the City. Most of the commercial and industrial land uses are present along Sperry Avenue, Ward Avenue and State Route 33. Figure 2 presents land use designations for the City of Patterson from the City's General Plan.

Commercial Destinations

Patterson's commercial destinations are primarily located at the shopping centers at the intersections of Sperry Avenue and Ward Avenue and along State Route 33 from Ward Avenue to City Limits. Some commercial areas are also located near the Sperry Avenue and Interstate 5 interchange. West of Baldwin Road, majority of the land uses are light industrial, serving as distribution centers for major companies such as Amazon, CVS Pharmacy, Kohl's Department Store, Grainger, and several other hardware distribution companies.

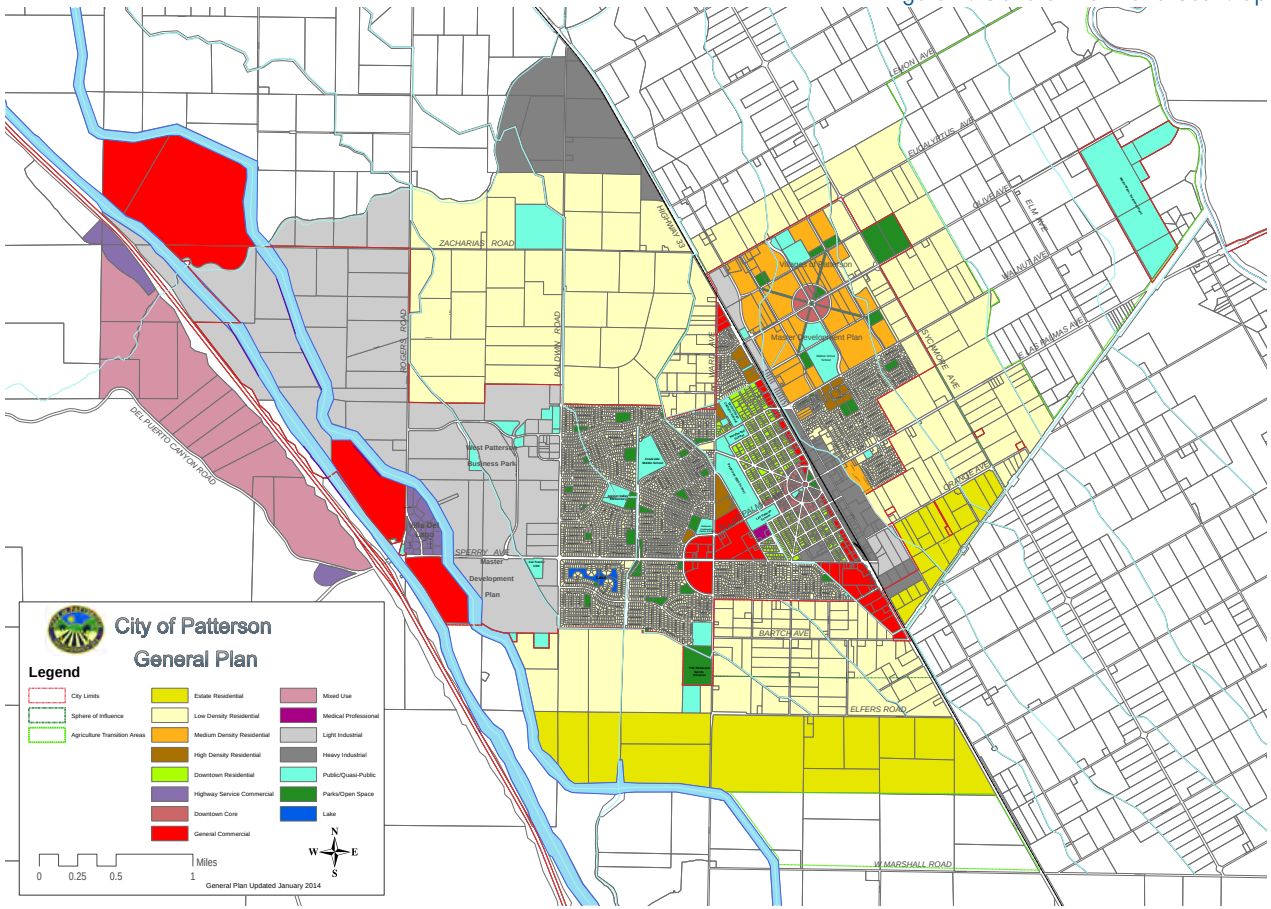
School Destinations

As identified in Table 2, there are 11 schools within Patterson, primarily located west of State Route 33.

Table 2: School Locations

School	Address
Apricot Valley Elementary School	1320 Henley Parkway
Central Valley Art Academy	505 Baldwin Road
Creekside Middle School	535 Peregrine Drive
Del Puerto High School	640 M Street
Las Palmas School	642 W Las Palmas Avenue
Northmead Elementary School	625 L Street
Patterson High School	200 N 7th Street
Patterson Preschool Academy	610 N Hartley Street
Sacred Heart Catholic School	505 M Street
Walnut Grove School	775 N Hartley Street
West Valley Learning Center	610 N Hartley Street

Figure 2: General Plan Land Use Map



Parks and Recreation Destinations

There are 34 public parks/open space locations within the City of Patterson available for recreational activities.

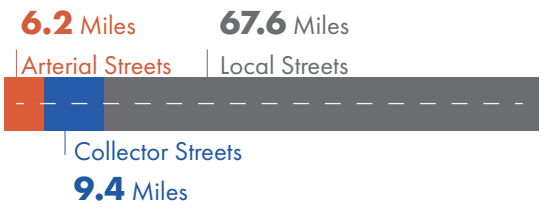
- Amaryllis Park: Located at American Eagle Avenue and Sperry Avenue, this park offers an open lawn, paved pathway and picnic tables and benches under a gazebo.
- Ambercot Park: Located at Creekside Drive and Alpine Creek Drive, this park offers shelters, tables, a playground, a multi-use field, and restrooms.
- Aprigold Park: Located at Hackney Street and New Forest Way, this park provides a playground, shelter and tables, multi-use fields, and shade trees.
- Aurora Park: Located at Roadrunner Drive and Cliff Swallow Drive, this park provides barbecue pits and tables, and open lawn
- Autumn Royal Park: Located along Heartland Ranch Avenue and Peregrine Drive, this park provides a playground, shelter and tables,

a barbecue pit, a multi-use field, basketball court, open lawn, and shade trees.

- Blenheim Park: Located at the corner of American Eagle Avenue and Pipit Drive, this park provides a playground, shelter and tables, and an open lawn.
- Blue Fiesta Park: Located along Hyacinth Drive, this park provides a water spray play area, shelter and tables, and an open field.
- Camas Lily Park: Located at American Eagle Avenue and Sperry Avenue, this park provides shelter and tables, a multi-use field and open lawn.
- Castlebirte Park: Located along the Damara Court cul-de-sac, this park provides a playground for young children, picnic tables, and an open lawn.
- City Park: Located at Las Palmas Avenue and Ossie Street, this small park provides a picnic table and bench.
- Del Puerto Park: Located at Del Puerto Avenue and S 5th Street, this park provides an open lawn, benches, and trees that provide shade.
- Early Gold Park: Located at Jersey Lane and New Forest Way, this park provides a playground for young children, shelter, barbecues, tables, a basketball court, and an open lawn.
- El Pescadero Park: Located along Walnut Avenue, this park provides benches and an open lawn.
- Floragold Park: Located at Shearwater Drive and American Eagle Avenue, this park provides a playground, tables, a multi-use field, and open lawn, and restrooms.
- Garza Park: Located at Hartley Street, this park provides a playground, a baseball field, multi-use field, restrooms, on-site parking, and a concession stand.
- Goldbar Park: Located at Amantha Creek Drive and Gold Creek Drive, this park provides a climbing wall, a swing set, shelter and tables, a multi-use field, and an open lawn.
- Golden Amber Park: Located at Red Robin Drive and Heartland Ranch Ave, this park provides a playground for young children, shelter, barbecues, tables, basketball, and an open lawn.
- Meadow Rue Park: Located at Garden Patch Way and Las Palmas Avenue, this park provides tables, a multi-use field, fitness equipment, and an open lawn.
- Mustang Clover Park: Located at Calvinson Parkway and Garden Patch Way, this park provides shelter and tables, a playground, multi-use field, sand volleyball court, and an open lawn.
- Newcastle Park: Located at Red Robin Drive and American Eagle Avenue, this park provides a playground, shelter, barbecue and tables, a multi-use field, basketball court, and an open lawn.
- Noble Park: Located at Noble Park Circle, this park provides a playground and benches.
- North Park: Located at Las Palmas Avenue and N Del Puerto Avenue, this park provides a playground, large picnic shelter, barbecue pits, tables, restrooms, concession stand, and open lawn.
- Rosette Park: Located at Las Palmas Avenue and N Del Puerto Avenue, this park provides a playground, shelter and tables, basketball court, and an open lawn.
- Sorensen Park: Located at American Eagle Avenue and Ward Avenue, this park provides a playground for young children, tables and an open lawn.
- South Park: Located at Las Palmas Avenue and Salado Avenue, this park provides horseshoe pits, Veteran's Memorial, and an open lawn.
- Sunflower Park: Located at Sunflower Drive and Nicastro Drive, this park provides a basketball court and an open lawn.
- Sungiant Park: Located at Samantha Creek Drive and Placer Creek Drive, this park provides a playground, tables, basketball court, benches and an open lawn.
- Sunglow Park: Located at American Eagle Avenue and Gannet Lane, this park provides a playground for young children, picnic shelter, barbecue, a multi-use field, and an open lawn.
- Tilton Park: Located at James Burke Avenue and Kestrel Drive, this park provides a playground, shelter and tables, a multi-use field, open lawn, and benches.
- Trigem Park: Located at Steel Creek Drive and Placer Creek Drive, this park provides a playground, shelter and tables, basketball court, a music panel, and climbing rocks.
- Valley Lupine Park: Located at Las Palmas Avenue and Sperry Avenue, this park provides a playground, shelter, multi-use field, benches, and open lawn.
- Wilding Park: Located at Ashwood Lane and Oakwood Lane, this park provides a playground, tables, multi-use field, basketball court, and an open lawn.
- Woodland Star Park: Located at Marigold Drive and Scarlet Lane, this park provides a playground, shelter and tables, multi-use field, and an open lawn.
- T.W. Patterson Sports Complex: Located along Ward Avenue, this complex provides a playground, shelters, barbecues and tables.

STREET NETWORK

Patterson's street network consists of approximately 83 miles of streets including six miles of arterial streets, nine miles of collector streets, and 68 miles of local streets. A map of the existing street network and street classifications in Patterson is presented on Figure 3. The main thoroughfares within Patterson are Sperry Avenue, Baldwin Road, Ward Avenue, Las Palmas Avenue, and Second Street (Highway 33).



Arterial Streets

Sperry Avenue is Patterson's main east-west arterial that connects Interstate 5 with Second Street (Highway 33), and is one of the longest roadways in the city. Classified as an arterial, it connects Interstate 5 and State Route 33 in an east-west orientation. Majority of land uses surrounding Sperry Avenue are commercial, residential and open space. From Interstate 5 to Baldwin Road, Sperry Avenue is primarily a two-lane roadway bordering commercial uses. East of Baldwin Road to South 9th St, Sperry Avenue is a four-lane divided roadway bordering residential subdivisions, before it transitions to a two-lane roadway from S 9th St to State Route 33. Signalized intersections provide marked crosswalks. The speed limit along Sperry Avenue ranges from 35 to 45 mile per hour (mph).

Las Palmas Avenue is an east-west arterial east of Second Street (Highway 33) to the City limits, and a two-lane collector street west of Second Street to Ward Avenue and south to Sperry Avenue. Los Palmas Avenue passes directly through the heart of downtown, while the segment east of the city limits is a key regional route, connecting with Turlock. Along the collector portion of Las Palmas Avenue, it is primarily a two-lane roadway surrounded by open space, schools, residential and commercial land uses. At the signalized intersection of Las Palmas Avenue and Ward Avenue, ADA-compliant curb ramps, marked crosswalks and pedestrian signal heads are provided. Majority of land uses along the arterial portion are industrial and residential land uses. Signalized intersections along this section provide marked crosswalks and pedestrian signal heads. The posted speed limit is 25 mph west of Second Street, and 35 mph east of Second Street.

Second Street (Highway 33) is a north-south arterial that runs through the eastern portion of Patterson including the downtown core, primarily bordering commercial and industrial land uses. Most of the intersections along Second Street are side-street stop controlled. The two signalized intersections, with Walnut Avenue and Las Palmas Avenue, provide marked crosswalks and pedestrian signal heads. The posted speed limit is 40 mph.

Collector Streets

Rogers Road is a north-south collector street from city limits to Sperry Avenue that primarily has one lane in each direction. Near Sperry Avenue, there are gas stations, fast-food restaurants, a hotel, and RV Park. Majority of land along Rogers Road is undeveloped, but there are distribution centers located on the northern portion of this roadway. The speed limit ranges from 25 to 35 mph.

Shearwater Drive is classified as an east-west two-lane collector street. This corridor is primarily surrounded by single-family homes, Apricot Valley Elementary School and Floragold Park. Class II bike lanes are provided on both sides of Shearwater Drive for a majority of the corridor. The roundabouts provide marked crosswalks for pedestrians. The posted speed limit is 25 mph.

Walnut Avenue is an east-west two-lane collector street from State Route 33 to city limits. This roadway is surrounded by residential land uses on the south side of the roadway. On the north side of the roadway, there are two schools and undeveloped land. The signalized intersections provide pedestrian signal heads and marked school crosswalks. The posted speed limit is 25 mph.

Ward Avenue is a north-south two-lane collector to State Route 33 and the southern city limits. Ward Avenue provides connectivity to T.W. Patterson Complex, shopping centers, residential neighborhoods and Patterson High School. There are bike lanes present near Patterson High School. The speed limit along Ward Avenue ranges from 25 to 35 mph.

South 1st Street is a north-south two-lane collector from Las Palmas Avenue to Sperry Avenue. Majority of the land uses along South 1st Street are industrial land uses. The posted speed limit is 25 mph.

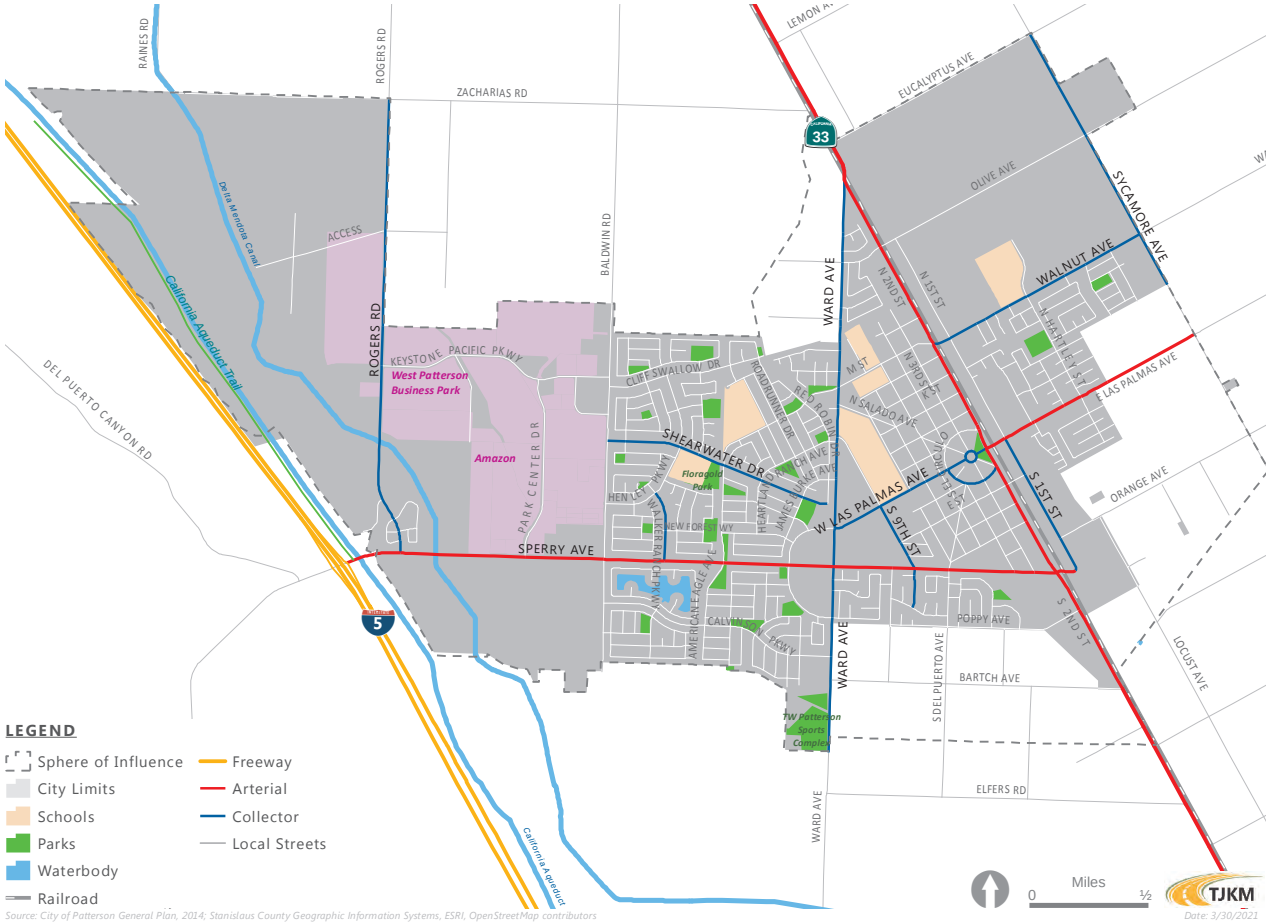
Traffic Volumes and Capacities

The provision of excess motor vehicle lanes, and/or excess street widths, tends to result in higher than desired motor vehicle speeds. A general rule of thumb for estimating the required number of motor vehicle lanes is based on daily traffic volumes. Each motor vehicle lane on a city street can generally accommodate up to about 10,000 daily vehicles (based on peak-hour volumes representing 6 to 10 percent of daily volumes). Thus, a 2-lane arterial or collector street can generally accommodate roughly 20,000 daily vehicles if left-turn pockets are provided, while a 4-lane arterial can accommodate over 36,000 daily vehicles.

Existing traffic volumes on Dinuba's 4-lane arterial streets are well below capacity, which could provide opportunities for reallocating portions of roadway space to better accommodate pedestrians and bicyclists:

- Sperry Avenue carries approximately 15,000 daily vehicles travel east of Baldwin Road, and approximately 20,000 daily vehicles west of Baldwin Road (both segments well below the capacity of over 36,000 daily vehicles for 4-lane arterials.
- Second Street (Highway 33) carries approximately 10,000 daily vehicles within Patterson, also well below the capacity of over 36,000 daily vehicles for 4-lane arterials.

Figure 3: Street Network Map



83

Miles of Street Network

PUBLIC TRANSIT

Stanislaus Regional Transit (StaRT) provides public bus transit services throughout Stanislaus County. Four different bus routes run through Patterson, with 3 operating Monday through Saturday and 1 route running on weekdays only as a Commuter service between Turlock and the East Dublin/Pleasanton BART Station. Table 3 presents the available bus routes, direction, and days of operation. Figure 4 provides a map of the transit routes in Patterson.

Figure 4: Public Transit Routes

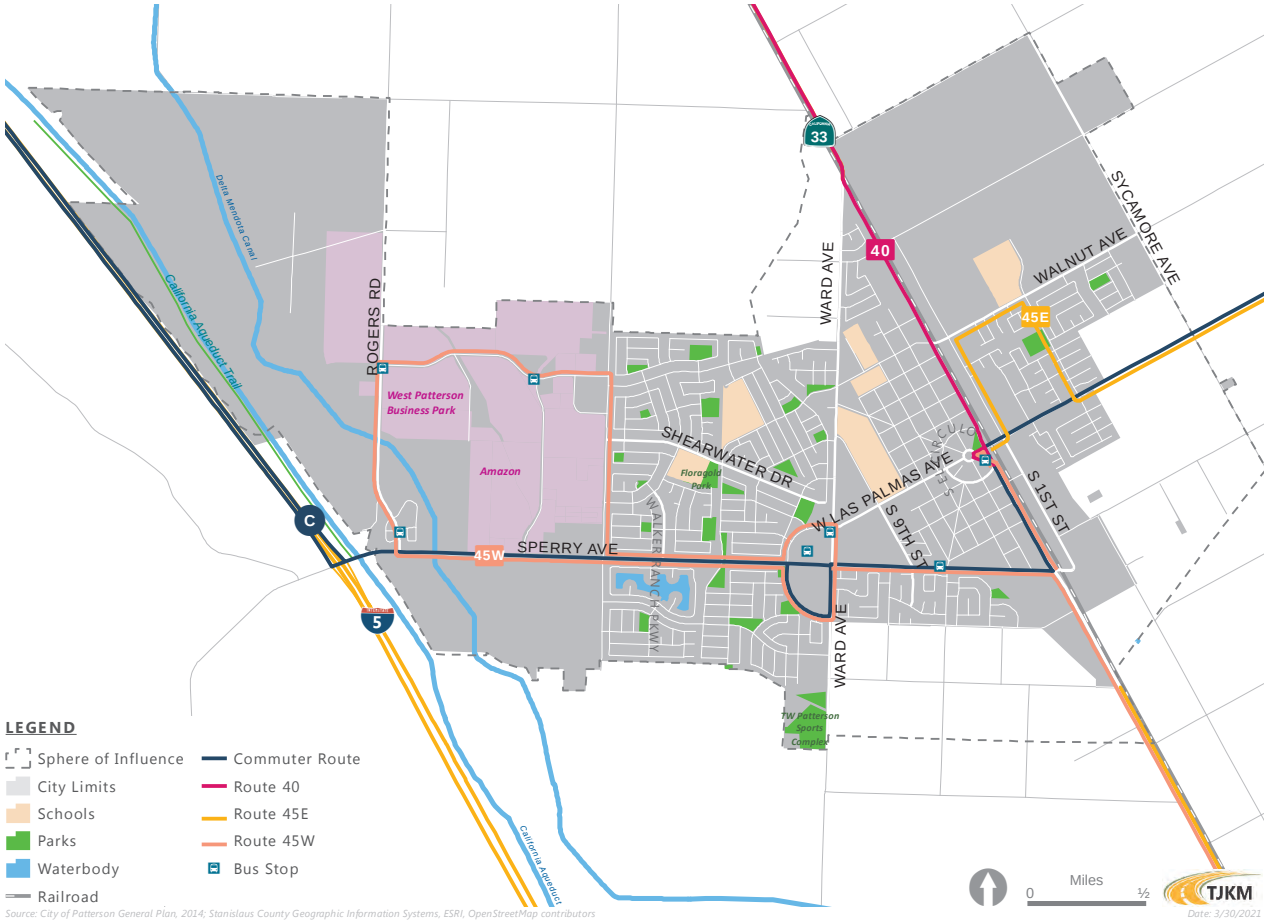
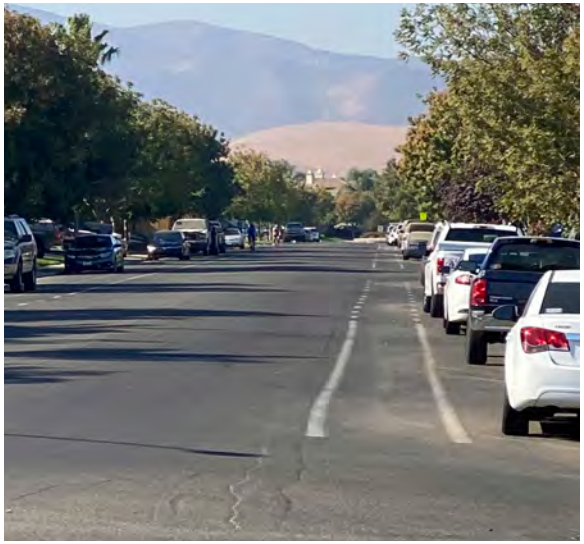


Table 3: Local Bus Routes

Stanislaus Regional Transit (StaRT) Routes	Type	Hours of Operations	Days of Operation
Route 40 (Modesto, Grayson, Westley, Patterson)	Local Route	5:15 a.m. and 9:12 p.m	Monday through Friday
		7:00 a.m. and 6:52 p.m	Saturday Only
Route 45E (Patterson / Turlock)	Local Route	6:15 a.m. and 8:18 p.m	Monday through Friday
		7:15 a.m. and 6:08 p.m.	Satuday Only
Route 45W (Gustine, Newman, Crows Landing, Patterson)	Local Route	5:37 a.m. and 9:21 p.m	Monday through Friday
		6:20 a.m. and 7:56 p.m.	Saturday Only
Commuter	Commuter Route	4:55 am and 6:15 pm	Weekdays Only

4. CYCLING CONDITIONS

This section describes existing bicycle facilities and conditions affecting cyclists within the City of Patterson. Facilities to enhance bicycle travel include designated bikeways as well as bicycle parking facilities.



TYPES OF BIKEWAY FACILITITIES

There are four classifications of bikeway facilities in California as defined by the Department of Transportation (Caltrans) and illustrated on Figure 5:

Multi-Use Paths (Class I Bikeways) – a path physically separated from motor vehicle traffic by an open space or barrier, used by bicyclists, pedestrians, joggers, skater, and other non-motorized travelers. Because the availability of uninterrupted rights-of-way is limited, this type of facility may be difficult to locate and expensive to build relative to other types of bicycle and pedestrian facilities, but inexpensive compared to new roadways. Prime locations for bike paths are areas such as power-line easements, utility easements, canal banks, river levees, drainage easements, railroad or highway rights-of-way, or regional community parks.

Bicycle Lanes (Class II Bikeways) – a travel lane on a roadway that has been set aside by striping and pavement markings for the preferential or exclusive use of bicyclists. Bicycle lanes are intended to promote an orderly flow of bicycle and motor vehicle traffic. This type of facility is established by using the appropriate striping, legends, and signs.

Bicycle Routes (Class III Bikeways) – bicycle routes designated by signage where bicyclists share travel lanes with motor vehicle traffic. Bicycle routes must be of benefit to the bicyclist and offer a higher degree of service than adjacent streets. Class III bikeways are often designated on low-volume local residential streets.

Bicycle Boulevard: addition, many cities have installed an enhanced type of Class III Bicycle Route, referred to as a "Bicycle Boulevard." Bicycle Boulevards are generally installed on relatively low-volume streets and often include elements to facilitate bicycle travel, such as reorienting stop signs to reduce delays to cyclists, and/or discouraging use by motorists making through trips, such as through inclusion of traffic calming measures.

Separated Bikeway (Class IV Bikeways) – a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and adjacent vehicle traffic. The physical separation may include flexible posts, grade separation, inflexible physical barriers or on-street parking. Separated bikeways generally operate in the same direction as vehicle traffic on the same side of the roadway. However, two-way separation bikeways can also be used, usually in lower speed environments (35 miles per hour or less).

Figure 5: Types of Bikeways

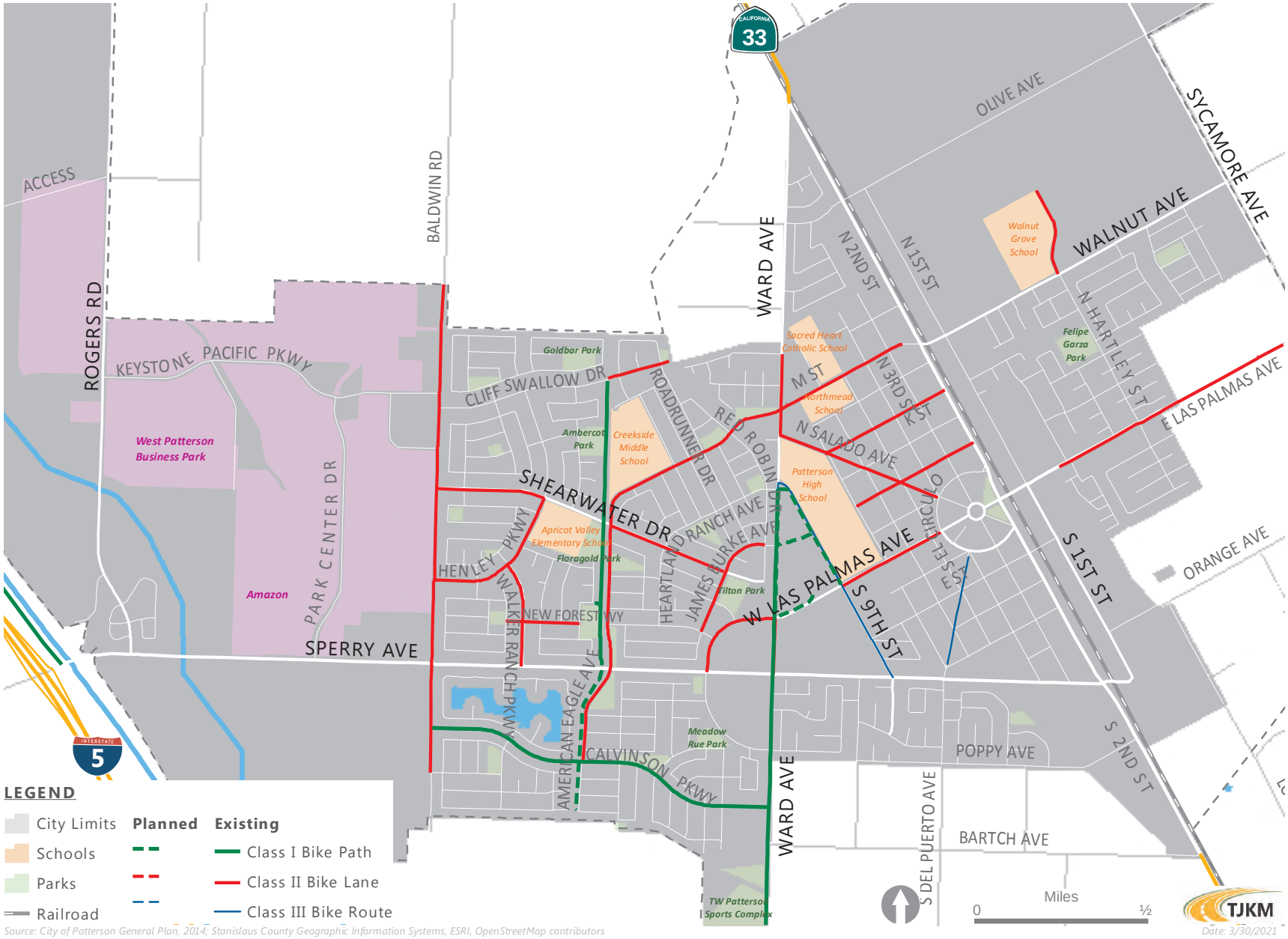
Multi-Use Path (Class I Bikeway)

Bicycle Lane (Class II Bikeway)

Bicycle Route (Class III Bikeway)

Separated Bikeway (Class IV Bikeway)

Figure 6: Existing & Currently Planned Bikeway Network



Patterson Active Transportation Plan

EXISTING BIKEWAY NETWORK

Figure 6 provides a map of the existing bikeway network in Patterson, as well as planned future bikeways that are already funded.

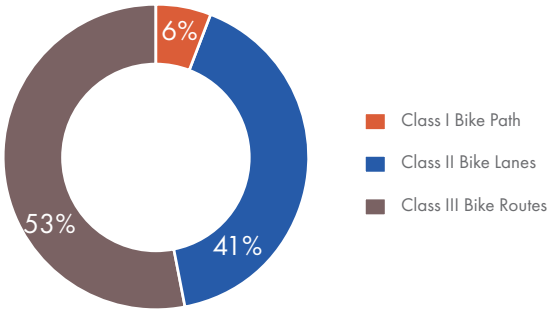
- The existing bicycle infrastructure is primarily located in residential neighborhoods, connecting residents to schools and recreational facilities.
- Bicyclists were involved in eight percent of reported collisions during the five-year period from 2015 to 2019, based on collision data described in the following chapter (see Table 5 and Figure 10).
- None of the reported collisions involving bicyclists from 2015 to 2019 resulted in serious injuries or fatalities.

Existing bikeways in Patterson include:

- Las Palmas Avenue: Bicycle lanes east of First Street to the city limits, west of El Circulo Avenue to Ninth Street, and west of Ward Avenue to Sperry Avenue.
- American Eagle Avenue: Bicycle lanes from Calvinson Parkway to Third Street, terminating just west of Second Street (Highway 33).
- Baldwin Road: Class II bicycle lanes from the northern city limit to Sperry Avenue, and a northbound bicycle lane on the east-side of Baldwin Avenue south of Sperry Avenue.
- Shearwater Drive: Intermittent bicycle lanes from Baldwin Road and Ward Avenue.
- Henley Parkway: bicycle lanes from Baldwin Road to Shearwater Parkway, providing school and park access.
- Salado Avenue: Bicycle lanes from Ward Avenue to El Circulo Avenue.
- 9th Street: Class III bicycle route from Sperry Avenue to Ward Avenue.
- Del Puerto Avenue: Class III bicycle route from Sperry Avenue to El Circulo Avenue.
- Patterson Bicycle Trail: Intermittently paved multi-use path from Cliff Swallow Drive to Sperry Avenue.

A key goal of the ATP is to improve bicycle connectivity throughout the City to encourage an increase in bicycling. Provision of bicycle facilities will improve connection between existing facilities. Bicycle facility designation through signage and striping tends to increase community awareness among roadway users. With improvements, bicycle rider safety and comfortability can be enhanced with minimal impacts to vehicular traffic.

17
Miles of Bikeway Network



BARRIERS TO CYCLING

Key barriers to cycling in Patterson under existing conditions include:

- Lack of bicycle accommodations on Sperry Avenue and Second Street (Highway 33) limits access to commercial destinations and job sites located adjacent to Patterson's key east-west and north-south arterials.
- Gaps in existing bicycle lanes including segments of Ward Avenue, and on Los Palmas Avenue in the heart of Patterson, between Second Street and El Circulo Avenue, and between 9th Street and Ward Avenue.
- Narrow bike lane widths adjacent to on-street parking on segments of Los Palmas Avenue just west of El Circulo Avenue. Adequate bike lane widths could be provided by narrowing the width of the adjacent motor vehicle lanes.
- No provisions for bicycle access to commercial destinations and employment locations west of Baldwin Road including the West Patterson Park sites accessed via Park Center Drive and Keystone Pacific Parkway, as well as the commercial sites bordering Rogers Road.
- Bicycle lane markings have worn off on some segments.

BICYCLE LEVEL OF TRAFFIC STRESS

Bicycle Level of Traffic Stress (LTS) is an evaluation that quantifies the amount of discomfort that people feel when bicycling near motor vehicle traffic. It assigns a numeric stress level to roadway segments, trails, and intersections based on attributes such as motor vehicle speed, volume, number of lanes, lane blockage, on-street parking, and ease of intersection crossing. The higher the Bicycle LTS, the higher the discomfort. The implication of higher LTS is the possibility for improving bicycle infrastructure to make such bicycle facility safe and comfortable for all types of users. Figure 7a summarizes the four bicycle LTS ratings as generally perceived from the user perspective:

- LTS 1: Very low traffic stress. Most children feel comfortable bicycling.
- LTS 2: Low traffic stress. The mainstream adult population feels comfortable bicycling.
- LTS 3: Moderate traffic stress. Bicyclists who are considered "enthused and confident" but still prefer having their own dedicated space feel comfortable while bicycling.
- LTS 4: High traffic stress. Only "strong and fearless" bicyclists feel comfortable while bicycling. These routes have high-speed limits, multiple travel lanes, limited or non-existent bicycle lanes and signage, and large distances to cross at an intersection.

The bicycle LTS analysis evaluates street segments and intersections based on the roadway characteristics and provided bicycle facility. The analysis is based on the following factors:

- Posted Speed Limit
- Number of Travel Lanes
- Typical Traffic Volume or Roadway Classification
- Presence and Characteristic of bicycle facilities
- Presence of On-Street Parking & Width of Parking Lane

Tables 4a to 4c describes the additional criteria for evaluating the Bicycle LTS score based on street characteristics including average daily traffic (ADT) volume, number of through traffic lanes and automobile parking lane width. Markings and signs give bicyclists more perceived safety and warn drivers about bicycles potentially being in the roadway, which tends to lower overall speeds. Street segment criteria is based on the speed limit or the prevailing speed if different, and the number of lanes by direction, and the two-way average daily traffic (ADT).

Figure 7b provides a map showing the bicycle LTS patterns in Patterson, to help identify stress corridors and opportunities for infrastructure improvements.

Figure 7a: Bicycle Level of Traffic Stress (LTS) Definitions

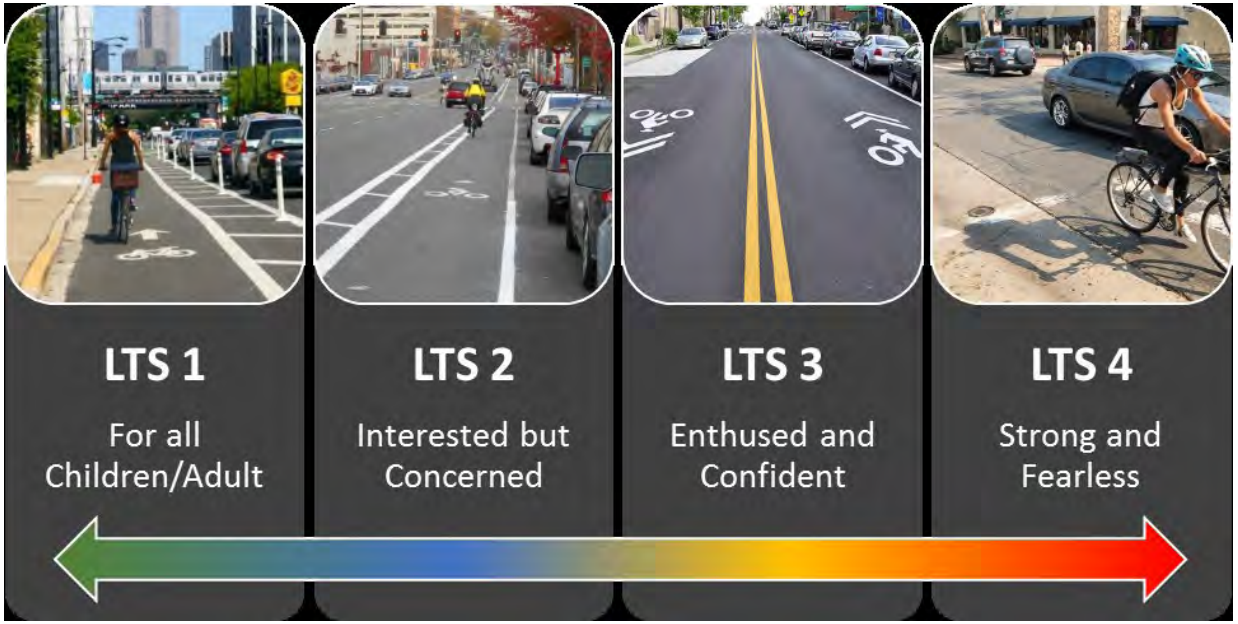


Table 4a: Bicycle LTS Criteria for Roadway Segments

Number of Lanes	ADT (vpd)	Functional Class	Posted or Prevailing Speed (mph)				
			25	30	35	40	>45
1 through lane per direction	≤750	Local	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3
	750 - ≤1,500	Local/ Collector	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4
	1,500 - ≤3,000	Collector	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4
	>3,000	Arterial	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4
2 through lane per direction	≤8,000	Arterial	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4
	>8,000	Arterial	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4
3+ through lanes per direction	Any ADT	Arterial	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4

Table 4b: Bicycle LTS Criteria for Bike Lanes Adjacent to On-Street Parking

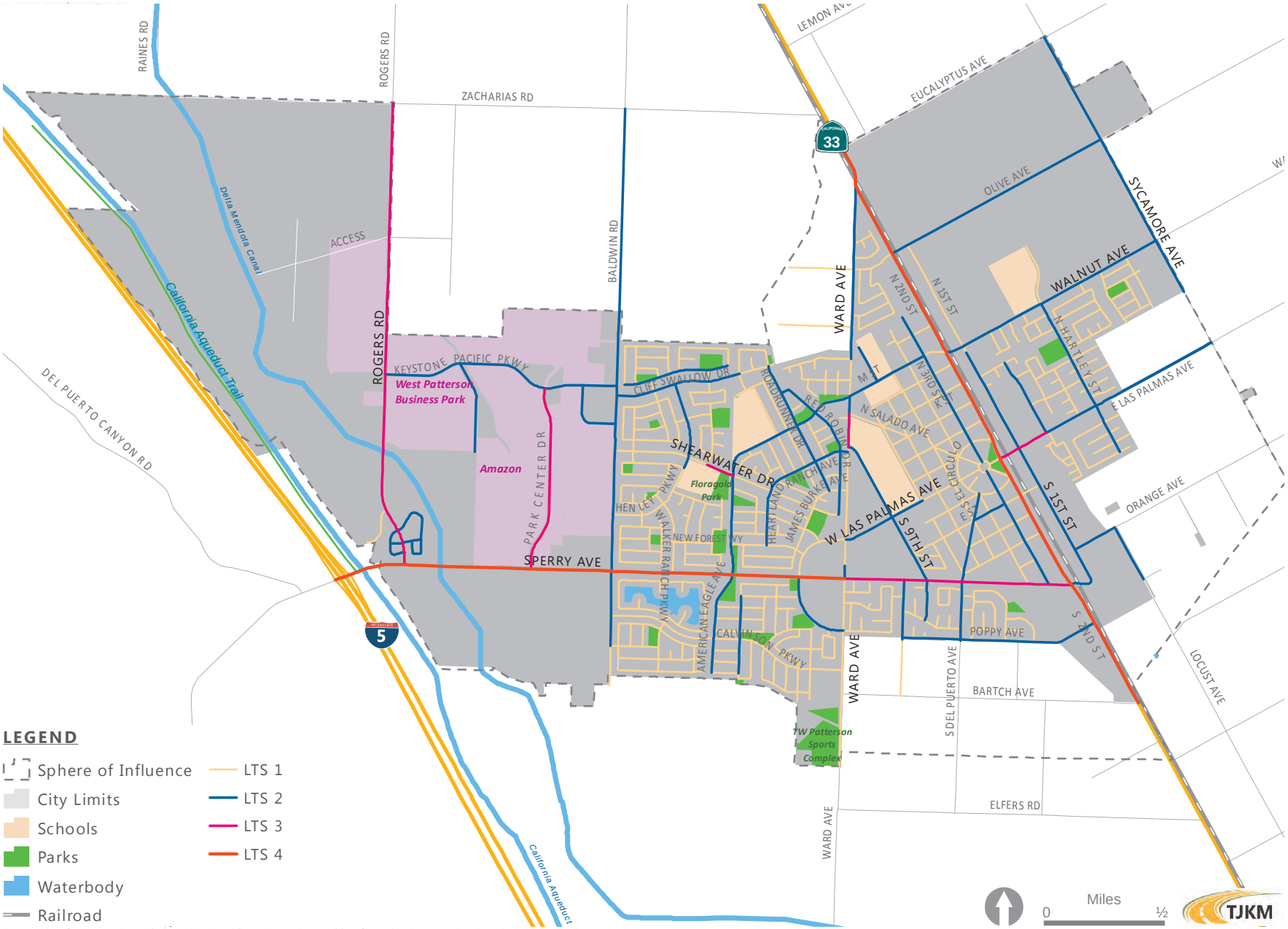
Prevailing or Posted Speed	Combined width of parking lane & bicycle lane				
	1 automobile lane per direction			≥ 2 automobile lanes per direction	
	≥ 15′	14′ – 14.5′	≤ 13′ or Frequent blockage	≥ 15′	≤ 14.5′ or Frequent blockage
≤ 25 mph	LTS 1	LTS 2	LTS 3	LTS 2	LTS 3
30 mph	LTS 1	LTS 2	LTS 3	LTS 2	LTS 3
35 mph	LTS 2	LTS 3	LTS 3	LTS 3	LTS 3
≥40 mph	LTS 2	LTS 4	LTS 4	LTS 3	LTS 4

Table 4c: Bicycle LTS Criteria for Bike Lanes with No Adjacent On-Street Parking

Prevailing or Posted Speed	1 automobile lane per direction				≥ 2 automobile lanes per direction	
	≥ 7′ Buffered bike lane	5.5′ – 7′ Bike lane	≤ 5.5′ Bike lane	Frequent bike lane blockage	≥ 7′ Buffered bike lane	<7′ bike lane or frequent blockage
≤30 mph	LTS 1	LTS 1	LTS 2	LTS 3	LTS 1	LTS 3
35 mph	LTS 2	LTS 3	LTS 3	LTS 3	LTS 2	LTS 3
≥40 mph	LTS 3	LTS 4	LTS 4	LTS 4	LTS 3	LTS 4

Source: Oregon Department of Transportation. (2020). Analysis Procedures Manual. Chapter 14 Multimodal Analysis

Figure 7b: Bicycle Level of Traffic Stress



Source: City of Patterson General Plan, 2014; Stanislaus County Geographic Information Systems, ESRI, OpenStreetMap contributors

Date: 3/30/2021

Patterson Active Transportation Plan

PROPOSED REGIONAL BIKEWAYS

The Stanislaus County Non-motorized Transportation Master Plan (NMTMP) specifies the following proposed regional bikeways that would serve Patterson, as illustrated on Figure 8a and Figure 8b:

- Las Palmas Avenue is identified by the NMTMP as a first-tier priority location for a regional east-west bikeway connecting Patterson and Turlock. Within Patterson, the NMTMP envisions continuous bicycle lanes from the city limits, extending westward through downtown Patterson to Ward Avenue, and south from Ward Avenue to Sperry Avenue.
- Second Street (Highway 33) is identified as a second-tier priority location for a north-south bikeway south of Eucalyptus Avenue that would extend through Patterson and connect with communities to the south.
- Class II Bicycle Lanes are proposed by the NMTMP on Sperry Avenue, E Street and Walnut Avenue.
- Class I Multi-use Path is proposed by the NMTMP for an east-west alignment north of Cliff Swallow Drive that would connect the existing Patterson Bicycle Trail with Ward Avenue.

Figure 8a: Priority Bikeways (StanCOG NMTMP)

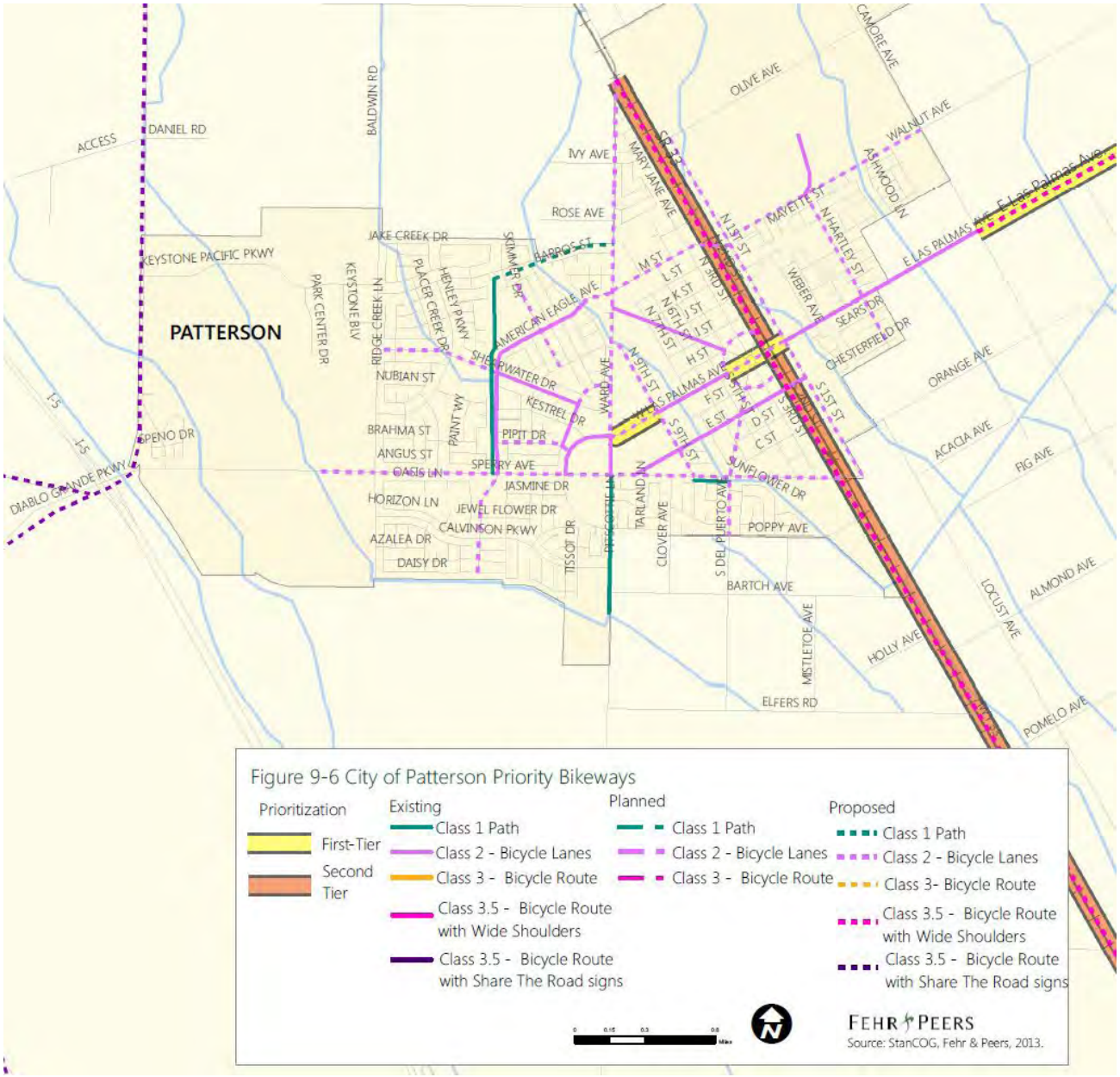
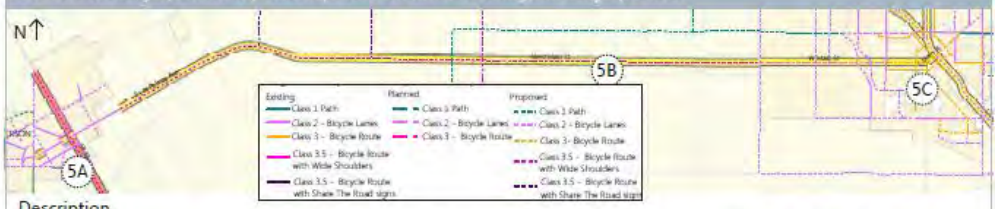


Figure 8b: Tier-one Priority Regional Bikeway – Las Palmas (StanCOG NMTMP)

5. Las Palmas Street - Main Street

Jurisdictions: City of Patterson, Unincorporated Stanislaus County, and City of Turlock



Description

This east-west bikeway connects Las Palmas Avenue in Patterson through the unincorporated County to Main Street in the City or Turlock, connecting to Downtown Turlock and the priority bikeway on Golden State Boulevard (#8).

Proposed Improvements

5A. Class 2 on Las Palmas Avenue between Ward Avenue and 9th Street and El Circulo and 1st Street
5B. Class 3.5 with wide shoulders on Las Palmas Avenue/Main Street between Sycamore Avenue and Walnut Road
5C. Class 3 on Main Street between Walnut Road and Golden State Boulevard

Design Requirements

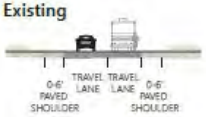
5A Class 2 Bicycle Lanes
- Widen roadway between Ward Avenue and 9th Street
- Stripe within existing right of way from El Circulo to 1st Street

Existing

Proposed

5B Class 3.5 with Wide Shoulders
- Widen shoulder to 4' minimum
- Existing shoulders are 0-6'
- Install Class 3 signs each 1/4 mile

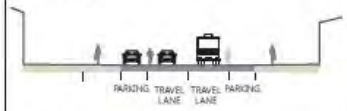
Existing



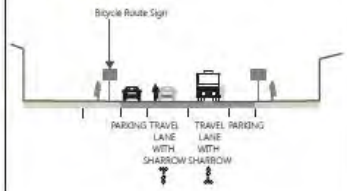
Proposed

5C Class 3.5 Bicycle Route with Sharrows
- Install Class 3 bicycle route signage
- Stripe sharrows 14' from face of curb
- Install Class 3 signs each 1/4 mile

Existing



Proposed



Implementation and Funding

- 4 pedestrian-auto collisions, 4 bicyclist-auto collisions on West Las Palmas Avenue/Main Street corridor between 2008-2010
- May be candidates for SJVAQD Remove II, CMAQ competitive funding, and HSIP funding
- Total project cost, including design, environmental, and contingency, is approximately $5,150,000

5. WALKING CONDITIONS

This section describes the existing sidewalk and ADA-compliant curb ramp network within Patterson.

SIDEWALK NETWORK

Majority of the roadways within Patterson have continuous sidewalks, providing access to parks, schools, and shopping centers.

Majority of the curbs in Patterson are the standard barrier curb, which provides a barrier between the roadway and sidewalk. Having barrier curbs prevents vehicles from mounting and possibly encroaching on to the sidewalks.

Providing ADA-compliant curb ramps at intersections increases access for residents with mobility issues to parks, schools, and locally-owned business. ADA-complaint curb ramps are provided intermittently through the city, particularly in or near West Patterson Business Park, Apricot Valley Elementary School, the Walmart and Save Mart Shopping Center, and the neighborhoods surrounding the downtown core. Most of the curb ramps in the city are missing the ADA-compliant truncated domes.

SIDEWALK GAPS & ADA CURB RAMP DEFICIENCIES

There are various intermittent segments that lack sidewalks on one or both sides of:

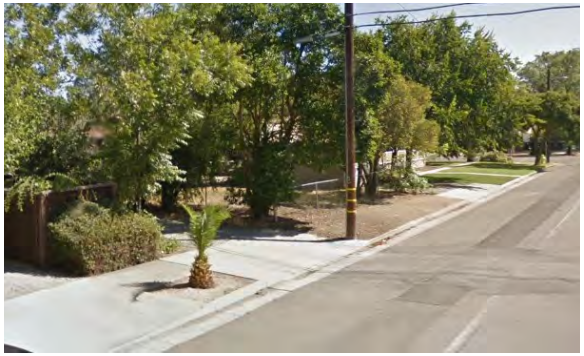
- Second Street (Highway 33)
- Sperry Avenue
- B Street
- C Street
- D Street
- I Street
- M Street
- 4th Street
- 5th Street
- 6th Street
- 7th Street.

Most of the sidewalk gaps are located near the downtown core of Patterson. Lack of sidewalks may force pedestrians to walk on the roadway alongside motor vehicles and create unsafe situations.

In addition, many of the street corners lack ADA-compliant curb ramps. Figure 9 illustrates the sidewalk gap locations, and corners lacking ADA-compliant curb ramp gaps in the City of Patterson.

Standard Curb along 4th Street

ADA-Compliant Curb Ramp



Sidewalk Gap in the Downtown Core

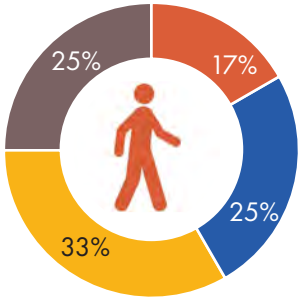
Figure 9: Pedestrian Gaps and Barriers

Patterson Active Transportation Plan

PEDESTRIAN SAFETY

Available collision data was reviewed for a five-year period from January 1, 2015 to December 31, 2019. The data review indicates 131 reported motor vehicle collisions, including 11 that resulted in severe injuries and six fatalities. Figure 10 shows the pedestrian collision locations within Patterson from 2015-2019. Key findings are that:

- Pedestrians are disproportionately involved in collusions resulting in serious injuries or fatalities. Although just 8% of reported collisions involved a pedestrian, pedestrians accounted for 43% of collisions with serious injuries, and 67% of fatalities
- Roughly half of the collisions involving pedestrians occurred on Patterson's two major arterial streets, Sperry Road and Second Street.



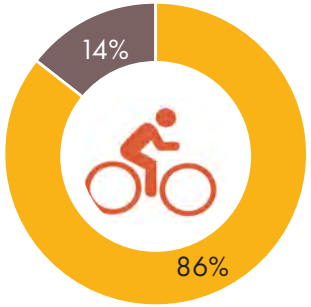


Figure 10: Pedestrian & Bicycle Collision Locations (2015-2019)

Speed is especially lethal for vulnerable users like pedestrians and people biking. The risk of injury and death increases as speed increases.

Patterson Active Transportation Plan

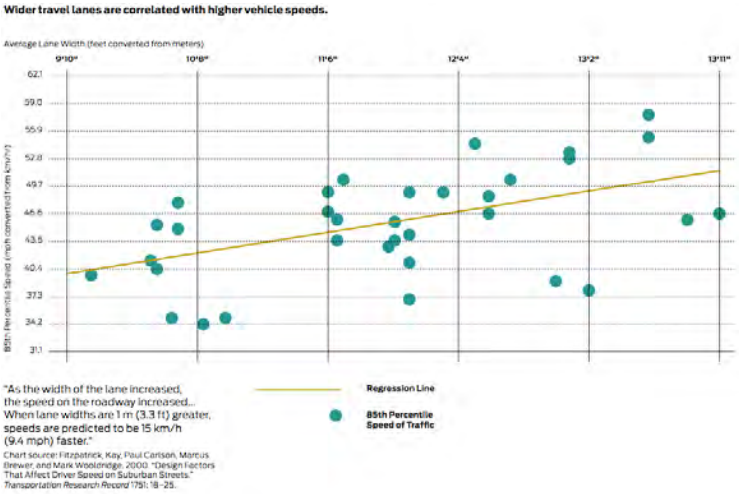
Street design guidelines tailored towards city streets typically aim to encourage speeds not to exceed 35 miles per hour (mph), while speeds of 20 to 25 mph are desirable in many cases.

Speed limits in California are based on 85th percentile travel speeds. The speed limits on Patterson's arterial streets exceed 35 mph on some segments:

- Sperry Avenue: 35 to 45 mph speed limit
- Second Street: 40 mph speed limit

Travel speeds tend to correlate with the width of travel lanes and roadways: Figure 11 shows the effect of lane width on typical 85th percentile speeds.

- Travel lane widths greater than 10 feet tend to result in 85th percentile speeds exceeding 35 mph (and often exceeding 40 mph).



Source: National Association of City Transportation Officials (NACTO) Urban Street Design Guide, 2013.

SUMMARY OF KEY BARRIERS TO WALKING

Incorporating the topics described on the preceding pages, key barriers to walking in Patterson under existing conditions include:

- Gaps in the sidewalk network and corners that lack ADA-complaint curb ramps
- Safety concerns may limit the frequency of walking in Patterson, since pedestrians are disproportionately involved in collusions resulting in serious injuries or fatalities
- Motor vehicle speeds greater than 35 mph on Sperry Avenue and Second Street (Highway 33)
- Few signalized pedestrian crossings on Second Street (Highway 33)
- Lack of "eyes on the street" on Sperry Avenue between Baldwin Road and Las Palmas Avenue
- Lengthy pedestrian distances across arterial streets such as Sperry Avenue
- Very few intersections include corner treatments to enhance pedestrian crossings and reduce pedestrian crossing distances at key intersections, such as bulbouts, reduced curb radii and high-visibility crosswalks. Examples of such treatments are shown on Figure 11

Figure 11: Pedestrian Bulbout & High-visibility Crosswalk Treatment Examples

PEDESTRIAN PRIORITY AREAS & IMPROVEMENT PROJECTS (NMTMP)

The Stanislaus County Non-motorized Transportation Master Plan (NMTMP) identified the following two areas within Patterson as Pedestrian Priority Areas:

- Neighborhood Commercial areas along Ward and Sperry Avenues
- Residential Areas/School zones west of Ward Avenue

As envisioned by the NMTMP: each priority area would be prioritized for pedestrian improvements and investments.

The NMTMP recommended several potential pedestrian improvement projects as shown on Figure 12. These improvements would include:

- Modifying corners to reduce pedestrian crossing distances with bulbouts (curb extensions) and tightened curb radii
- Providing directional ADA curb ramps whenever feasible
- Widening medians on Sperry Avenue to provide pedestrian refuges to mitigate the effect of the long crossing distances
- Installing high-visibility crosswalk treatments, advanced yield markings, and flashing beacons where appropriate
- Proposed pedestrian priority projects on Sperry Avenue also included installation of Class II bicycle lanes

Figure 12: Pedestrian Priority Area Projects (StanCOG NMTMP)

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