



Oakdale Accessibility Master Plan

Approved December 4, 2017

Resolution 2017-139

Prepared for the City of Oakdale

By Alta Planning + Design,
Green DOT Transportation Solutions,
Local Government Commission



Oakdale Accessibility Master Plan

Final Plan

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1. Executive Summary

Overview

This Accessibility Master Plan provides Oakdale with a blueprint for becoming a more bicycle- and pedestrian-friendly community. This Plan serves as an outline for Oakdale to become a healthier and more comfortable place for all community members by promoting active transportation. By having an adopted Accessibility Master Plan, Oakdale can apply for grant funding to aid in implementation of the projects, making Oakdale a safer city. Oakdale's Accessibility Master Plan focuses on enhancing the built environment (connectivity and safety) for people that chose to walk, bike, ride a horse, use transit, and/or have physical challenges requiring Americans with Disabilities Act (ADA) infrastructure. Many of the solutions also enhance the connectivity and safety for those choosing to drive a vehicle.

Plan Process

This Plan was developed through an extensive public outreach process focused around a multi-day charrette including site visits, workshops, and stakeholder meetings. An advisory group was formed to help guide the Project Team with outreach and plan development. Advisory Group members included stakeholders and community representatives such as City of Oakdale, Oakdale Planning Commission, Oakdale Senior Commission, Society for disABILITIES, Stanislaus County Bicycle Club, Stanislaus Horse Council, Oakdale Rotary, Oakdale Unified School District, Caltrans, and private citizens.

Existing conditions and collision information was shared between staff, the advisory group, and Project Team. These meetings and information were used to develop the list of recommended projects. This project list was then compared against project evaluation criteria, a quantitative way to prioritize projects for implementation.

Plan Outline

This Plan includes existing conditions analysis (including policy review, infrastructure analysis, and collision analysis), a summary of the community design charrette process, a list of recommendations, and an action plan (including a prioritization matrix, cost estimates, and potential funding sources). It also contains an Accessibility Improvement Strategies chapter which summarizes potential treatments that Oakdale can install, including low-cost solutions, and maintenance information for various treatments.

Accessibility and Complete Streets Goals

This Plan aims to address accessibility issues for roadway users in Oakdale. It helps Oakdale realize the following General Plan goals:

- ◆ Establish an interconnected transportation network that offers safe and convenient mobility options for all modes
- ◆ Ensure the transportation network meets the needs of a variety of users, eliminating barriers where feasible to allow access by people of all abilities

- ◆ Design and construct both new and reconstructed streets with adequate rights-of-way and facilities to support the full range of travel modes
- ◆ Use multi-modal evaluation methods to ensure that projects do not result in worsening facilities or service for transit, bicyclists, and pedestrians

Priority Projects

To ease implementation, recommended projects were prioritized using evaluation criteria. The high priority projects for Oakdale should be implemented first as funding becomes available. Projects lower on the priority list should be pursued as part of a longer-term strategy to complete a robust active transportation network for Oakdale. However, the most competitive project for a specific grant application funding may not be the highest prioritized project, so projects can be implemented out of order as available resources are identified that align with the projects.

Action Steps

There are several key action steps to help bring the Accessibility Master Plan to fruition. These include:

- ◆ Apply for grant funding to implement recommended projects.
- ◆ Reference the ADA Transition Plan to ensure both Plans are completed as efficiently and effectively as possible.
- ◆ Work with Public Works maintenance crews, as well as Caltrans, to review roadway repaving schedules and implement recommended projects with little to no cost through a resurface and repurpose maintenance process. Example projects that can be installed during this process are bike lanes and crosswalks.
- ◆ Work with Utility Department and agencies to review their capital and maintenance project schedules and implement recommended projects with little to no cost as roadways are excavated and repaved.
- ◆ Work with developers, so that as new development projects are approved and constructed, they implement the principles and projects identified in this Accessibility Master Plan.
- ◆ Set aside funding for maintenance where possible.

2. Existing Conditions

The foundation of a successful Accessibility Master Plan is a comprehensive understanding of the walking and bicycling environment in Oakdale, including current planning and policy documents as well as existing infrastructure such as sidewalks, bike lanes, trails/paths, crossings, and other pedestrian and bicycle facilities. This chapter presents the existing conditions for Oakdale that highlight challenges and opportunities for a more accessible community.

Oakdale is located within Stanislaus County, part of the San Joaquin Valley of central California. The city is bisected by two state highways: State Route 120 and State Route 108. These routes provide access to Yosemite National Park and carry heavy truck and tourism traffic. Oakdale is a smaller and relatively flat city, making it easy to walk or bike in. However, many of the existing walking and bicycling facilities are in disrepair including crumbling sidewalks or faded crosswalk paint. Some of the infrastructure facilities do not connect people with their desired destination or are incomplete. Like many of the cities in San Joaquin Valley, roadways are wide, contributing to higher vehicle speeds. All of these factors can make residents feel uncomfortable walking or riding a bike for fun or as a means to travel to their destination. Figure 2-1 shows the major destinations in and near Oakdale. Improving the accessibility around Oakdale will allow reaching these destinations by foot or by bicycle much easier.

In conjunction with this Accessibility Master Plan, the City of Oakdale is developing an ADA Transition Plan to identify locations where ADA access is limited or nonexistent. As funding becomes available, the city can implement projects from both plans at the same time, reducing design and construction costs.

Policy and Plan Review

As part of the Oakdale Accessibility Master Plan, an analysis was conducted of the existing plans and policies that address active transportation and accessibility. These include goals which encourage active transportation, an existing plan for bikeways, design standards, and means to incorporate equity within the planning process. Conducting analysis like this ensures that Oakdale is consistent between its policies and planning documents. The full review of existing plans and policies can be found in Appendix A: Plan and Policy Review. Table 2-1 provides the plans and policy documents reviewed.

Table 2-1: Plans and Policies Reviewed

Plan	Year Adopted
Citywide Plans	
Oakdale 2030 General Plan	2013
Bikeways and Trails Master Plan	2006
Design Manual for Living Streets	2014
Oakdale Pedestrian Safety Assessment	2012
Oakdale Improvement Standards	2015
Oakdale Sewer Master Plan	2015
Oakdale Street Master Plan	2015
Oakdale Water Master Plan	2015
Bridle Ridge Specific Plan	2003
Burchell Hill Specific Plan	1997
Crane Crossing Specific Plan	2014
South Oakdale Industrial Specific Plan	2006
Sierra Point Specific Plan	2014
East F Street Corridor Specific Plan	2006
Regional Plans	
Stanislaus Council of Governments Non-Motorized Transportation Master Plan	2013
North County Corridor Project	-
Statewide Plans and Policies	
Caltrans Mission	2014
Toward an Active California: California State Bicycle and Pedestrian Plan	2017
Caltrans Deputy Directive 64-R2	2014
Caltrans Main Street, California	2013

Site Visit

The Project Team conducted a site visit in conjunction with the first advisory group meeting on September 28, 2016. The observation was conducted during mid-day, in clear and warm weather. The Project Team conducted a city-wide tour by car, visiting a selection of residential and commercial areas in Oakdale where we walked around to further explore on foot. A walking tour was also conducted as part of the advisory group meeting later in the day in the central downtown area. Findings are described below.



The Project Team conducted driving and walking tours of Oakdale neighborhoods to evaluate existing conditions and identify challenges

Multi-Modal Accommodation

There are several distinct areas within Oakdale which exhibit different levels of accommodation for multi-modal travel: The newer suburban-style neighborhoods have sidewalks (in the 5 foot width range), bike lanes (5 foot width approximate), and marked crosswalks. Pedestrian cut-throughs are provided at the end of some culs-de-sac.

Downtown Oakdale has wider sidewalks lining the businesses, pedestrian buttons and signal heads, but also heavy truck and car traffic. Some pedestrian signals cannot be activated during a cycle, so the pedestrian must wait for the next vehicle green cycle to start after the button is pushed.

Older, more rural-feeling neighborhoods do not have sidewalks or bike lanes.

There are a number of gaps in both pedestrian and bicycle infrastructure along main corridors and between neighborhoods. Most multi-modal infrastructure appears to have been constructed with new development, creating gaps where development has not yet occurred.

General Findings

Some more current pedestrian and bicycle treatments have been applied, but not in a consistent manner. For example, some intersections have high-visibility “continental” crosswalks, where others have the basic 12-inch stripe “transverse” crosswalks. These types are

mixed together along the same streets, which can confuse users. Creating a consistent plan and prioritization for crosswalk markings and implementation would decrease confusion.



Crosswalk markings are inconsistent, with some continental markings and some transverse

Signage is not uniform; some signs are more yellow color, while others are fluorescent green. Some signs are dirty and unreadable. Signage should be updated and/or cleaned to ensure visibility and effectiveness, especially around high priority pedestrian areas near schools and within the downtown.

The roundabout near the high school presents design challenges which encourage use at higher speeds. The width of the travel lanes within the roundabout are wide, allowing some motorists to enter and exit the roundabout at higher speeds than are appropriate for roundabouts. The apron is designed to accommodate large vehicles. However, since the travel lanes are wide, the apron is not used by larger vehicles. The roundabout does not have enough deflection in its design to reduce the entry and exit speeds, which allows for undesirable high speed turns and speed differentials on approaches causing yielding issues. A low-cost solution to tighten the entry and exit deflection angles could include the use of eight inch ceramic dome Botts' Dots, paint, and/or flexible delineators. A more expensive solution could include new raised pin down concrete medians.



Wide lanes and insufficient horizontal deflection allow high speeds at a roundabout

Bicyclists ride on the sidewalk on arterials, despite the presence of a bike lane. A wider Class II bike lane, or a buffered Class II bike lane or Class IV separated bikeway, may provide more comfort for people riding a bicycle and encourage them to not ride on the sidewalk. In many cases, the minimum width for bicycle infrastructure is used while the maximum width is exceeded for travel lanes. As roadways are resurfaced travel lane widths can be reduced and bicycle accommodations can be implemented at a preferred width rather than minimum.

Pedestrians often have to cross wide streets to access their destinations on the other side. This creates unnecessary exposure to high speed motorists. Curb extensions and pedestrian refuge islands could be used in many locations to reduce crossing exposure and create a two-stage crossing.

Importantly, the City of Oakdale has begun to implement treatments to assist pedestrians in crossing streets safely. The addition of all-way stops in some residential areas adjacent to parks, as well as curb extensions to shorten crossing distance, as depicted below, are positive changes implemented during this Plan development process.



The City of Oakdale installed curb extensions at the intersection of E C Street and N 8th Street to reduce crossing distances for pedestrians and reduce the turn radius for people driving

Infrastructure Analysis

The City of Oakdale is divided into four quadrants with Yosemite Avenue/State Route (SR) 120 running north-south and F Street/SR 108 running east-west through the center of the city. These roadways serve as the main corridors of commercial activity for the city.

Overall Challenges

Though a majority of roadways in the City of Oakdale contain sidewalks on both sides, significant barriers to pedestrian connectivity exist. Many sidewalks are narrow or have obstructions such as mailboxes and utility poles, limiting the usability to persons with disabilities (see

Table 2-2 and Table 2-3). Curb ramps may be lacking or inadequate, and some roadways have uneven connections to curb ramps, rendering them unusable (see Table 2-4).

Table 2-2: Sidewalk Mileage and Width Summary

Sidewalk	Miles	Percent
Present	127.12	82.4%
Narrow	0.70	0.4%
Standard	109.80	71.2%
Wide	16.61	10.8%
Not Present	27.16	17.6%

Table 2-3: Sidewalk Obstruction Summary

Type	Number	Percent
Utility Pole	331	56.9%
Mailbox	123	21.1%
Sign	60	10.3%
Fire Hydrant	29	5.0%
Light Pole	18	3.1%
Traffic Signal	13	2.2%
Vegetation	4	0.7%
Sidewalk Gap	3	0.5%
Garbage Receptacle	1	0.2%

Table 2-4: Curb Ramp Summary

Curb Ramp	Number	Percent
Present	1,494	86.2%
Not Present	240	13.8%

The downtown area of Oakdale has crosswalks at almost every intersection. Crosswalk presence declines as distance increases from the city center, with peripheral areas having fewer crosswalks as neighborhoods become more residential. While marked crosswalks are present at approximately 19.5 percent of intersections, many roadways are wide and carry fast-moving vehicle traffic, creating difficult crossing situations for many pedestrians. Reducing speed and crossing distance (exposure of most vulnerable roadway users) contribute to safety. On many roadways, sidewalks are directly adjacent to travel lanes, lacking a buffer from fast-moving vehicle traffic. Providing a buffer whether parking vehicles or landscaping/street trees increases pedestrian comfort and a feeling of safety.

For people riding bicycles, few marked routes exist in Oakdale. Fast moving vehicle traffic on the two state highways bisecting Oakdale create significant barriers to bicycling. On residential streets, generous width creates room for marked bicycle facilities, though few currently exist. A limited network of off-road bikeways exist, but lack connectivity across the major roadways. See Table 2-5.

Table 2-5: Bicycle Infrastructure Summary

Class	Miles	Percent
Class I Path	3.96	25.4%
Class II Bike Lane	9.29	59.5%
Class III Bike Route	2.36	15.1%

Maps illustrating existing networks, obstructions, curb ramps, existing speed limits and traffic volumes are shown on the following pages in Figures 2-2 through 2-8.

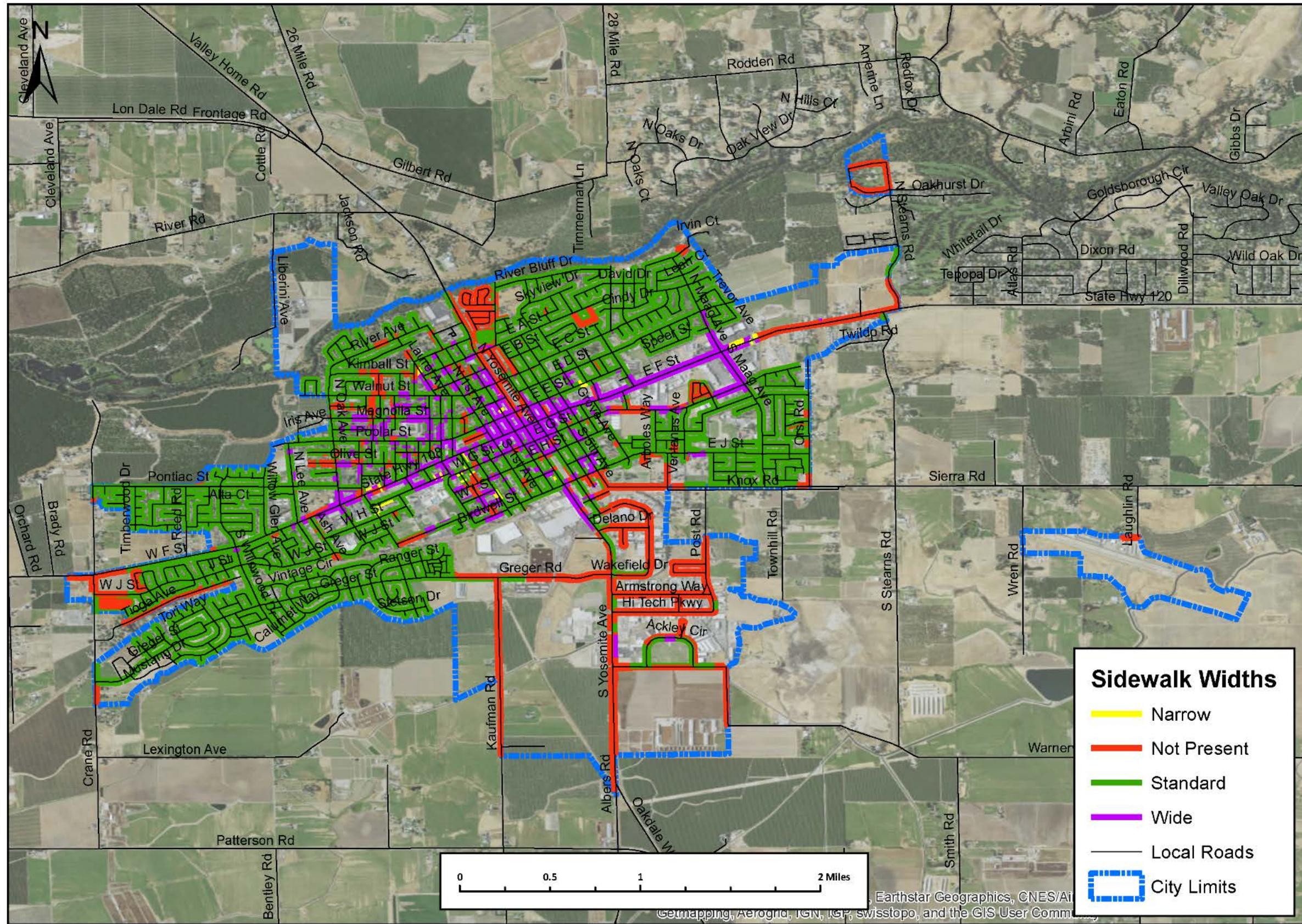


Figure 2-2: Sidewalk Widths Map

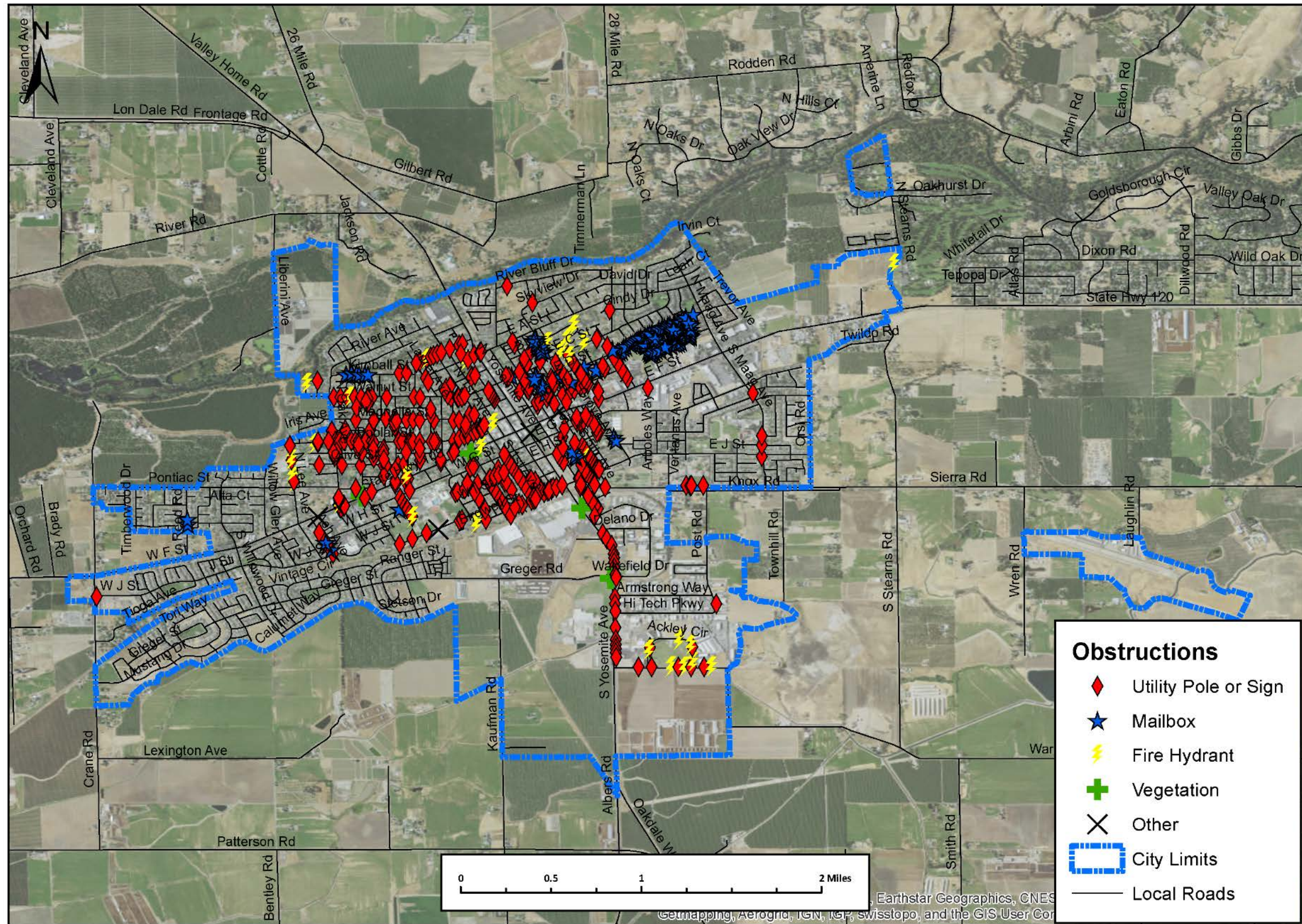


Figure 2-3: Sidewalk Obstructions Map

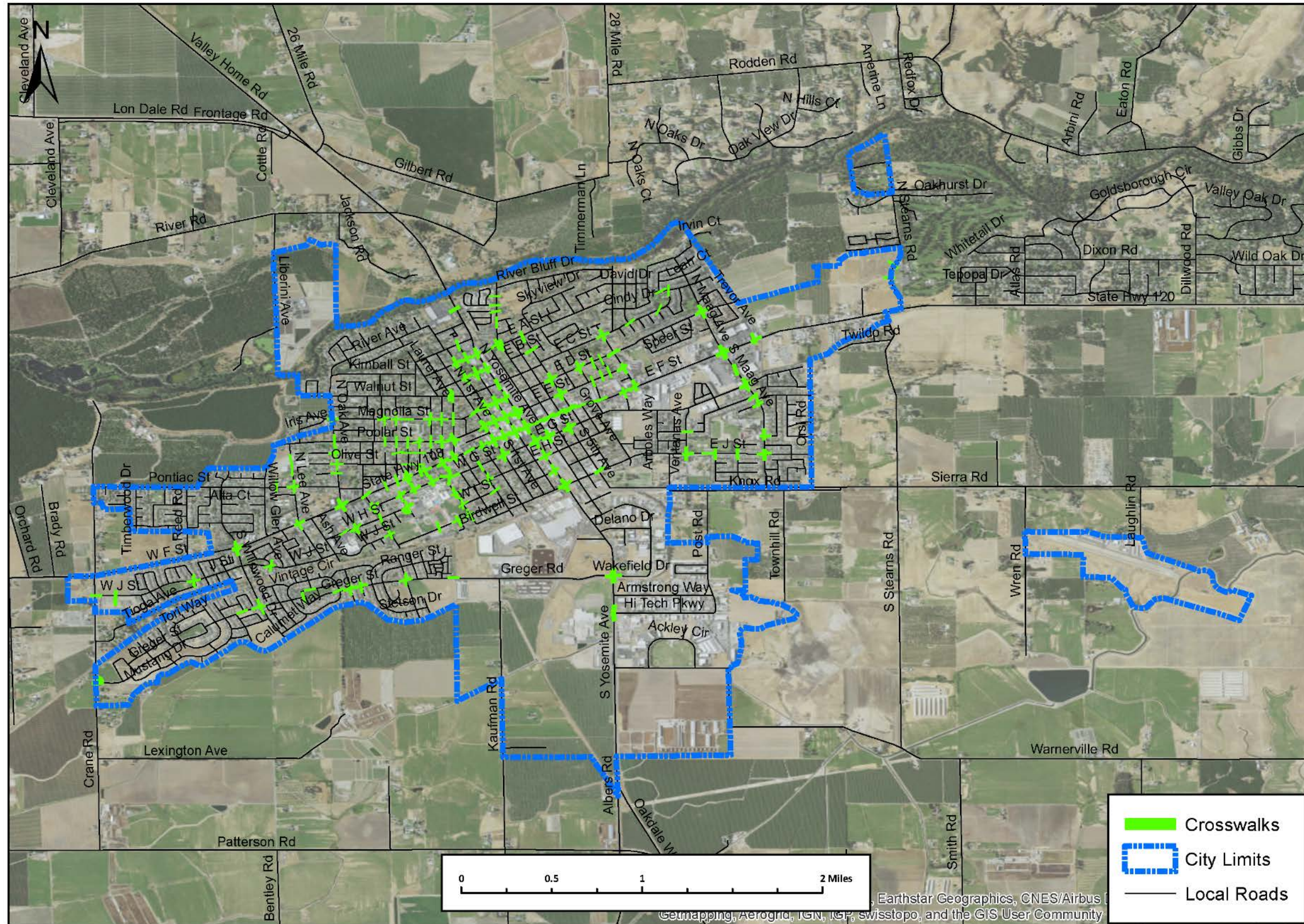








Figure 2-4: Crosswalks Map

OAKDALE ACCESSIBILITY MASTER PLAN

EXISTING BIKEWAYS


- Shared-Use Path (Class I)
3.8 miles
- Bike Lane (Class II)
9.8 miles
- Bike Route (Class III)
2.3 miles

DESTINATIONS + BOUNDARIES

-  School
-  Civic/Public
-  Library
-  Medical
-  Lake/River
-  Park

0 0.25 0.5 MILES



 Map produced August, 2017.
Data Source: ESRI, Stanislaus County

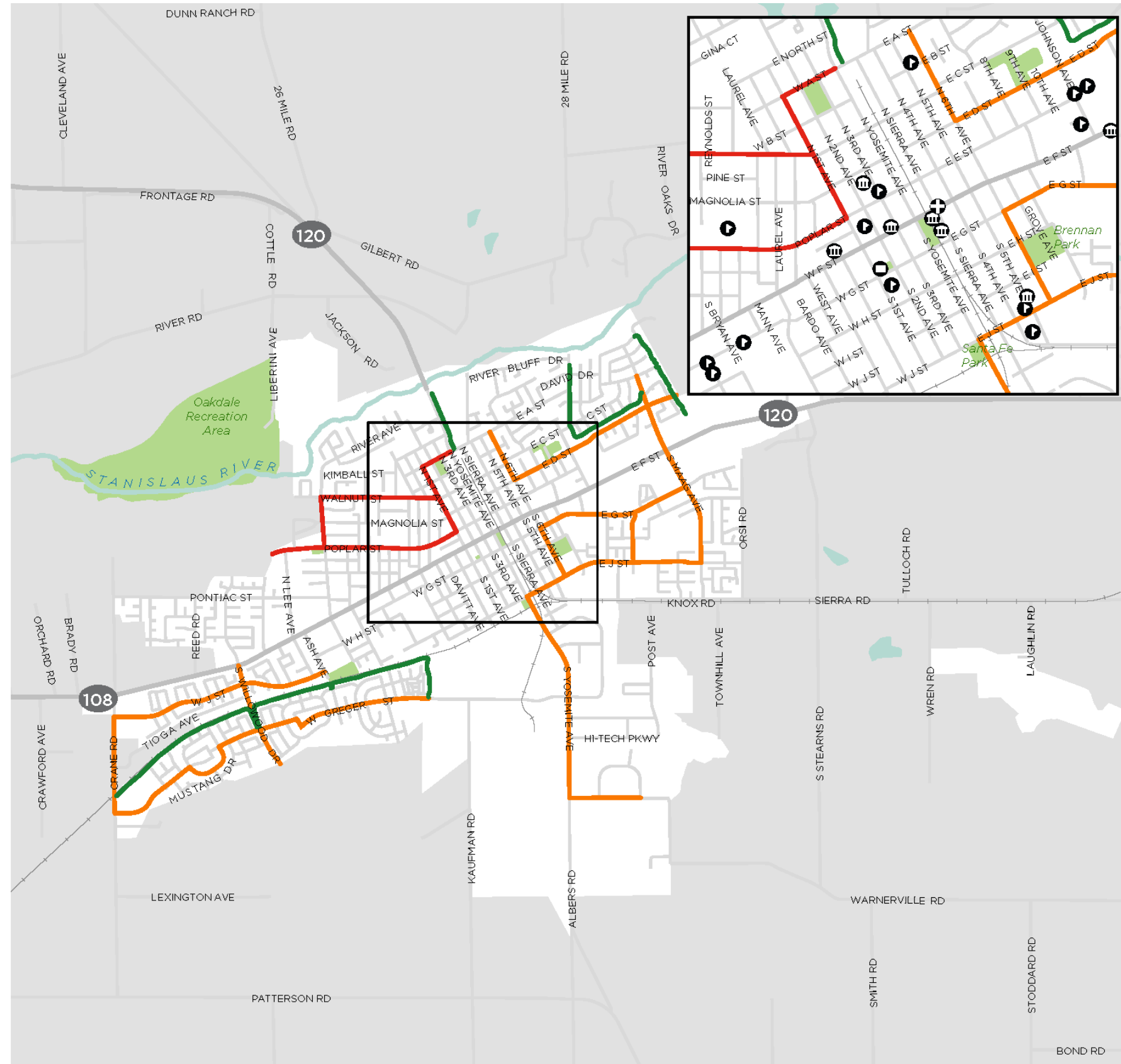
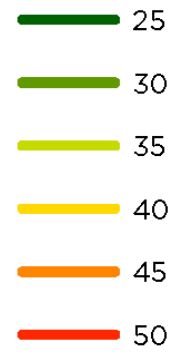


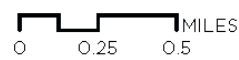
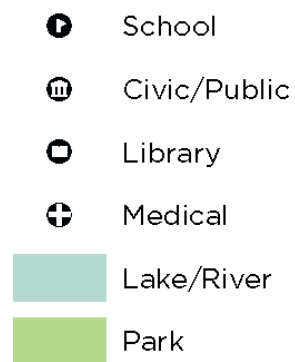
Figure 2-6: Bicycle Network Map

OAKDALE ACCESSIBILITY MASTER PLAN

EXISTING SPEED LIMITS



DESTINATIONS + BOUNDARIES



alta Map produced August, 2017.
PLANNING + DESIGN Data Source: ESRI, Stanislaus County

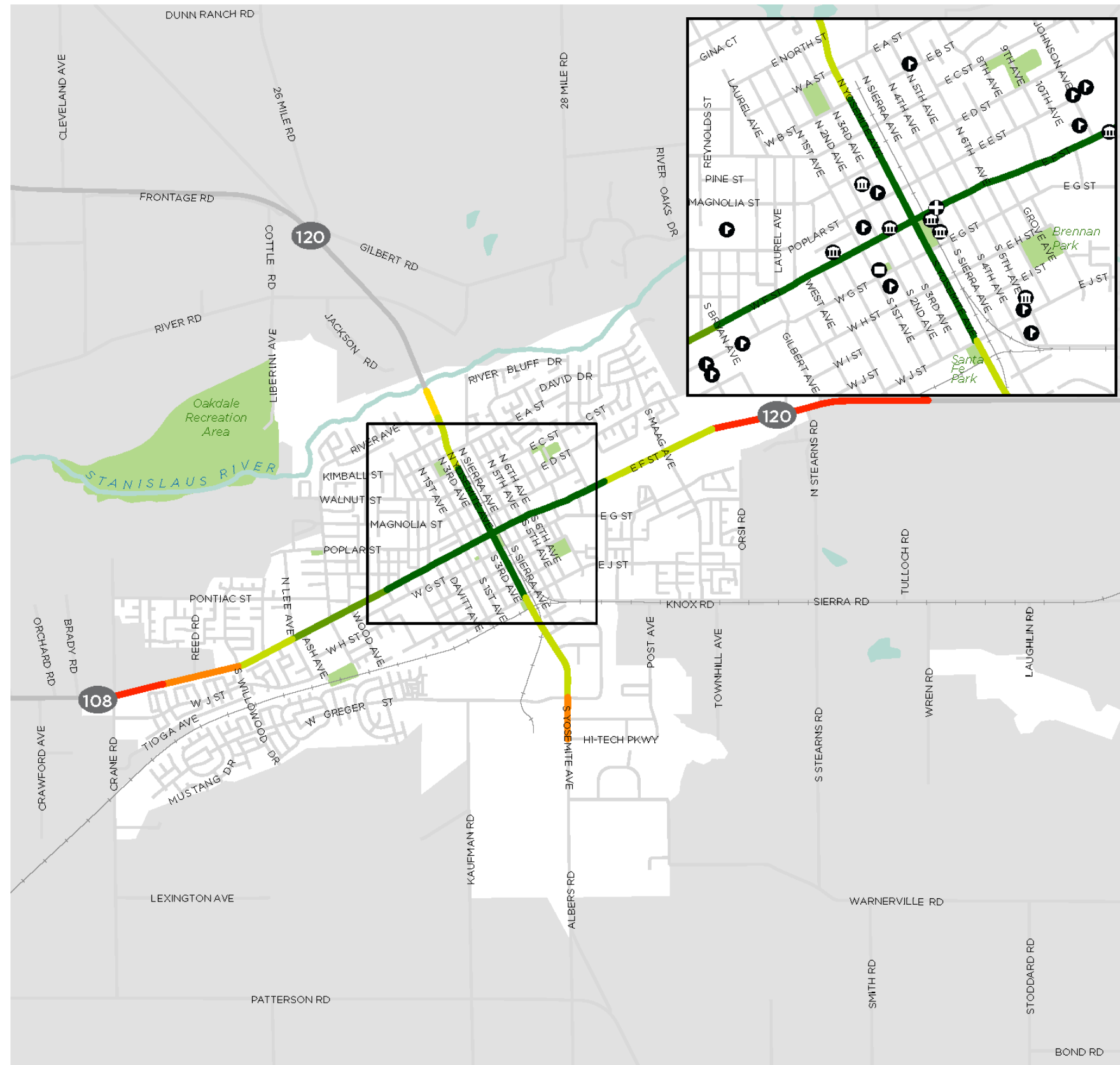


Figure 2-7: Existing Speed Limits on Major Roadways

OAKDALE ACCESSIBILITY MASTER PLAN

TRAFFIC VOLUME

Annual Average Daily Traffic
(2014)

- 24,000 - 25,000
- 25,001 - 28,100
- 28,101 - 35,850

DESTINATIONS + BOUNDARIES

- Lake/River
- Park

0 0.25 0.5
MILES



alta Map produced August, 2017.
Data Source: ESRI, Stanislaus County,
Caltrans

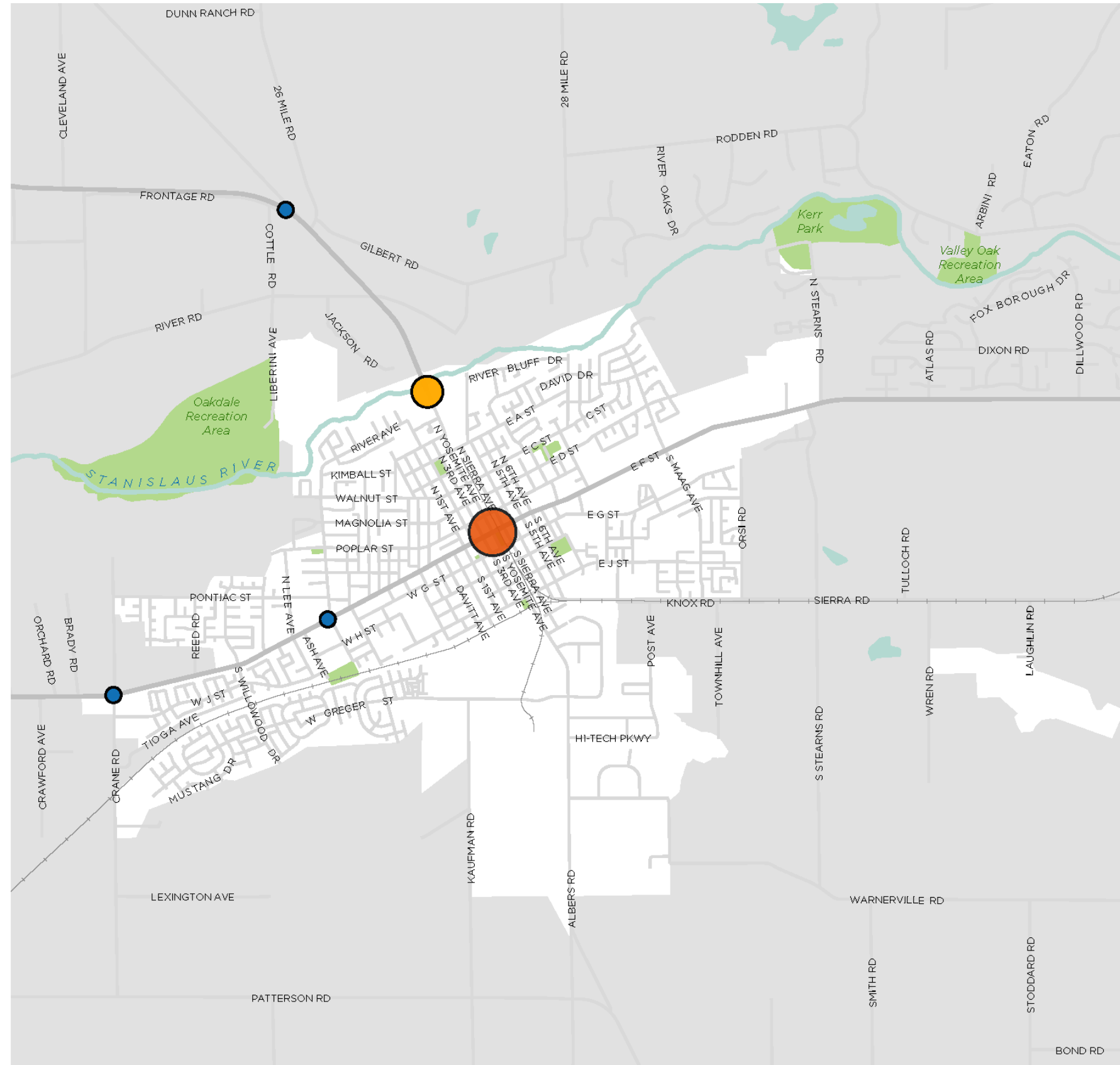


Figure 2-8: Existing Traffic Volumes

Detailed Infrastructure Analysis

For a more in-depth review of the existing infrastructure conditions in Oakdale, the following section presents an analysis and discussion by quadrant, as divided by the major north-south and east-west highways bisecting Oakdale.

Northwest Quadrant

Pedestrian Infrastructure

Several roadways in the northwest quadrant lack sidewalks. These are specifically along Kimball Street, Barton Parkway, Walnut Street, Maple Drive, and Olive Street. Many more intersections have missing curb ramps. This is most notable along Walnut Street and Laurel Avenue. This quadrant also has many obstructions within its sidewalks, mostly utility poles or signs. River Avenue and the side streets off of River Avenue, as well as Pine Street, Laurel Avenue (south), 2nd Avenue, Willow Glen Avenue, and the majority of the roadways west of Willow Glen Avenue are the only roadways in this quadrant without pedestrian obstructions. The northwestern quadrant has the highest number of painted crosswalks of any other quadrant.

Bicycle Infrastructure

The only bicycle infrastructure in the northwestern quadrant are Class III bike routes primarily on segments of Walnut Street, Oak Avenue, Poplar Street, and N 1st Avenue.

Northeast Quadrant

Pedestrian Infrastructure

A few roadways within the northeastern quadrant are missing sidewalks, especially in the River Paradise Mobile Home Park and the other two neighborhoods off of Old Stockton Road. This area also has several intersections with missing curb ramps, as well as along Cloverland Way, A Street, C Street, Terrace Drive, and D Street. This quadrant also has utility poles or sign obstructions along its sidewalks especially along D Street, E Street, 8th Street. The obstructions on Johnson, Brett, and Kathleen Avenues are mailboxes.

Bicycle Infrastructure

The northeastern quadrant has a bike path adjacent to Yosemite Avenue between E Street and the city limit. A path is installed to the east of Maag Avenue that connects Irvin Court to Burchell Hill Drive. There is also a path adjacent to Valley View Drive and north of D Street that connects Valley View Drive to Maag Avenue. Sixth Avenue, D Street, and Maag Avenue have Class II bike lanes installed.

Southwest Quadrant

Pedestrian Infrastructure

The southwestern quadrant has the most roadways with complete pedestrian infrastructure. Tioga Avenue and segments of Greger Street, J Street, and the inside side of Westport Circle are missing sidewalks. Kaufman Road is also missing sidewalks, but sidewalks are usually not installed on rural roadways such as this. A few corners of J Street and Greger Street are missing curb ramps. Ash Avenue, Davitt Avenue, J Street and 1st, 2nd, 4th, 5th, and Sierra Avenues have obstructions within the sidewalks. Most of these are utility poles or signs. This quadrant also has two traffic signals installed that are not on Caltrans roadways, both on Crane Road.

Bicycle Infrastructure

In the southwest quadrant, a Class I Path runs adjacent to the railroad line between Crane Road and Willowood Drive. Bike lanes are installed on J Street, Willowood Drive, and Greger Street.

Southeast Quadrant

Pedestrian Infrastructure

Many roads within the southeastern quadrant are missing sidewalks, especially those in the very southern edge of the city including Armstrong Way, Hi Tech Parkway, Post Road, Wakefield Court, and Delano Drive as well as by the airport. This area of the city is mostly industrial. This area, along with Knox Road, is missing curb ramps. The southeastern quadrant is mostly free of sidewalk obstructions except on Sierra, 4th, 5th, 6th and Grove Avenues. The obstructions are mostly utility poles or signs. This quadrant also has one traffic signal in the city not on a Caltrans roadway, located at the intersection of Maag Avenue and G Street.

Bicycle Infrastructure

The southeastern quadrant has several miles of bike lanes. They are installed on Maag Avenue, G Street, Ventanas Avenue, 5th Avenue, J Street, and Warnerville Road.

Caltrans Roadways

Pedestrian Infrastructure

Yosemite Avenue runs north-south through Oakdale. It is missing sidewalks on the eastern side north of SR 108/F Street. Both sides south of Wakefield Drive are missing sidewalks. Curb ramps are missing in only a few locations: Walnut Street, Hi Tech Parkway, and Warnerville Road. Most of the intersections have crosswalks. Only the southern segment of Yosemite Avenue has obstructions, mostly in the form of utility poles or signs. There are seven traffic signals along Yosemite Avenue, which can aid the crossing of pedestrians and bicyclists.

SR 108/F Street runs east-west through Oakdale. Most of the sidewalks along this roadway are wider than the average four foot sidewalk present in other areas of Oakdale. The very ends of this roadway are missing sidewalks, however. The eastern segment is missing sidewalks on both sides and the western segment is missing sidewalks on the southern side. Except for these two ends of the roadway, the majority of the intersections have curb ramps installed. Also, most of the intersections have crosswalks. Ten intersections have traffic signals installed, including one at Yosemite Avenue, mentioned in the previous paragraph. There are very few obstructions on this roadway.

Bicycle Infrastructure

Yosemite Avenue between Birdwell Street and Warnerville Road has bike lanes installed. There are no bicycle facilities installed on SR 108/F Street.

Collision Analysis

Analysis was conducted on the bicycle- and pedestrian-related collisions in Oakdale in order to identify trends and areas or corridors that should be targeted for safety improvements to the active transportation networks. Collision data for this report was generated using the Transportation Injury Mapping System (TIMS) from the Safe Transportation Research and Education Center at the University of California, Berkeley and from the California Statewide

Integrated Traffic Report System (SWITRS). Because SWITRS combines records from all state and local police departments, data varies due to differences in reporting methods. It is important to note that the number of collisions reported to SWITRS is likely an underestimate of the actual number of collisions that take place because some parties do not report minor collisions to law enforcement, particularly collisions not resulting in injury or property damage.

Collisions were analyzed for the five-year period between 2011 and 2015, the most recent five year period available at the writing of this Plan. A bicycle or pedestrian-related collision describes a collision involving a second party (e.g. motor vehicle, pedestrian, bicycle, stationary object) or without a second party (e.g. the person riding a bicycle has a solo crash due to slippery road conditions or rider error).

During 2011-2015, there were 47 collisions that involved a pedestrian and 40 that involved a person riding a bicycle. As Table 2-6 shows, one collision involved multiple pedestrians. There were no bicycle fatalities as a result of a collision.

Table 2-6: Collision Analysis

Ped & Bike Involved Collisions	Pedestrian Injuries	Pedestrian Fatalities	Bicyclist Injuries	Bicyclist Fatalities
87	48	5	40	0

When examined over time, the number of collisions fluctuated significantly. 2013 saw the highest number of collisions with 26 total collisions and 2015 saw the fewest with 11. See Table 2-7.

Table 2-7: Collisions Over Time

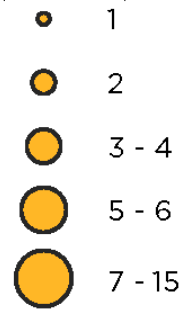
Year	Pedestrian Collisions	Bicyclist Collisions	Bicycle & Pedestrian Collisions	All Collisions
2011	8	9	17	86
2012	8	5	13	88
2013	11	15	26	85
2014	14	6	20	84
2015	6	5	11	82
Total	47	40	87	425

The majority of these collisions are centered on F Street/SR 108/SR120. Yosemite Avenue/SR 120 also saw a higher concentration of collisions that involved a bicyclist or pedestrian. Four of the five fatalities occurred on SR 108. The fifth occurred on Yosemite Avenue. Figure 2-9 shows the location of the pedestrian-involved collisions in Oakdale. Figure 2-10 identifies the locations of the bicycle-related collisions.

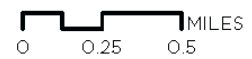
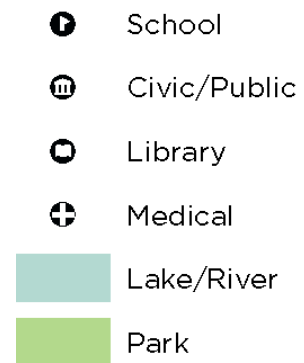
OAKDALE ACCESSIBILITY MASTER PLAN

COLLISIONS

Pedestrian Collisions
(2011 - 2015)



DESTINATIONS + BOUNDARIES



alta Map produced August, 2017.
PLANNING + DESIGN Data Source: ESRI, Stanislaus County, TIMS

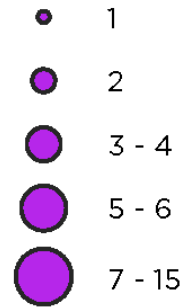


Figure 2-9: Pedestrian-Related Collision Locations (2011-2015)

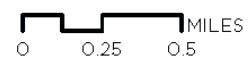
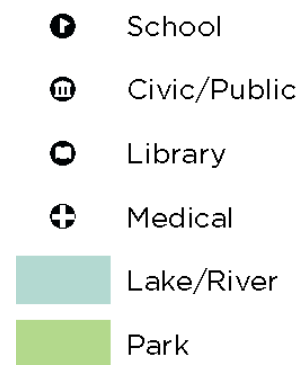
OAKDALE ACCESSIBILITY MASTER PLAN

COLLISIONS

Bicycle Collisions
(2011 - 2015)



DESTINATIONS + BOUNDARIES



alta Map produced August, 2017.
PLANNING + DESIGN Data Source: ESRI, Stanislaus County, TIMS



Figure 2-10: Bicycle-Related Collision Locations (2011-2015)

3. Community Design Charrette

Outreach

An extensive outreach strategy encouraged stakeholder participation and community engagement in the project planning and design process. To meet the needs of Oakdale's community, outreach materials and events were available in both English and Spanish.

In addition to a multi-day design charrette, discussed in the next section, public input was gathered through the following events and tools.

Advisory Group

A Project Advisory Group was formed to help guide the Project Team with outreach and plan development. Advisory Group members included stakeholders and community representatives from the City of Oakdale, Oakdale Planning Commission, Oakdale Senior Commission, Society for disABILITIES, Stanislaus County Bicycle Club, Stanislaus Horse Council, Oakdale Rotary, Oakdale Unified School District, Caltrans and private citizens; see Figure 3-1.

In addition to providing suggestions and guidance on additional stakeholders and groups to target with outreach, the Advisory Group met three times. Advisory Group meetings were held in September 2016 to January of 2017. The purpose of these meetings was to define goals for the project, generate ideas on how to engage the community, and prepare for the accessibility Planning Fair. A third Advisory Group meeting was held after the Planning Fair (see below) to review the Planning Fair outcomes, and refine the outline and components of the Accessibility Master Plan. This offered the Advisory Group the opportunity to comment on the feasibility of recommendations.

Advisory Group Meeting Dates:

- ◆ Meeting 1 - September 28, 2016 (Project Initiation)
- ◆ Meeting 2 - January 26, 2017: (Existing Conditions Review and Community Outreach for Upcoming Charrette)
- ◆ Meeting 3 - May 2, 2017: (Review of Outline and Design Alternatives)



Figure 3-1: The Technical Advisory Group provided guidance and reviewed project deliverables

Community Design Planning Fair

Outreach for this Plan was centered on the Oakdale Accessibility Planning Fair, held from March 21 to March 23, 2017 in the City of Oakdale. The Planning Fair, or charrette, is a community-based design exercise that aims to maximize stakeholder participation and community engagement in the project planning and design process through various events. The Project Team leading outreach efforts included staff from the City of Oakdale, Alta Planning + Design, and the Local Government Commission.

Outreach Efforts

The Project Team identified various organizations and agencies to distribute outreach materials through their networks. Groups targeted for outreach included:

- ◆ Youth, through 4-H Clubs
- ◆ Service Clubs (Rotary, etc)
- ◆ Bicycle Clubs, Racing Clubs
- ◆ School Council/Student Body Class/Govt. Teachers
- ◆ Teachers (especially bicyclists)
- ◆ Advocacy Organizations on Disability
- ◆ Equestrian Groups/Users
- ◆ Spanish-language speakers

Leading up to the Planning Fair, several methods were used to reach Oakdale residents and stakeholders. Outreach efforts included:

- ◆ **English/Spanish Flyers.** Flyers announcing public workshops were circulated to the Advisory Group, email lists, and posted on other web and social media sites. Print versions were distributed to community centers, library, 4-H Clubs, various Oakdale Unified School District staff, local organizations, businesses and other high foot-traffic areas. See Figure 3-2.
- ◆ **Social Media.** Social media notices were posted on the City of Oakdale sites and accounts, and through other partners from the Advisory Group and Oakdale Chamber of Commerce. Social media included Facebook and Nextdoor. See Figure 3-3.
- ◆ **Print Media.** A media release, “Making the Streets Work for Everybody in Oakdale / Oakdale Accessibility Planning Fair,” was distributed to local print and electronic media.
- ◆ **Public Announcements:** Project Team members attended a City Council Meeting on March 20 to provide details about the Planning Fair. The Council meeting was also broadcast over the City’s network.

Although attempts were made to work through the school district and other organizations to reach out to Spanish-speaking residents and other community members, the project did not have much success attracting Spanish-language speakers. The Project Team offered public events in English and Spanish as needed.



Figure 3-2: Spanish and English flyers announcing the charrette

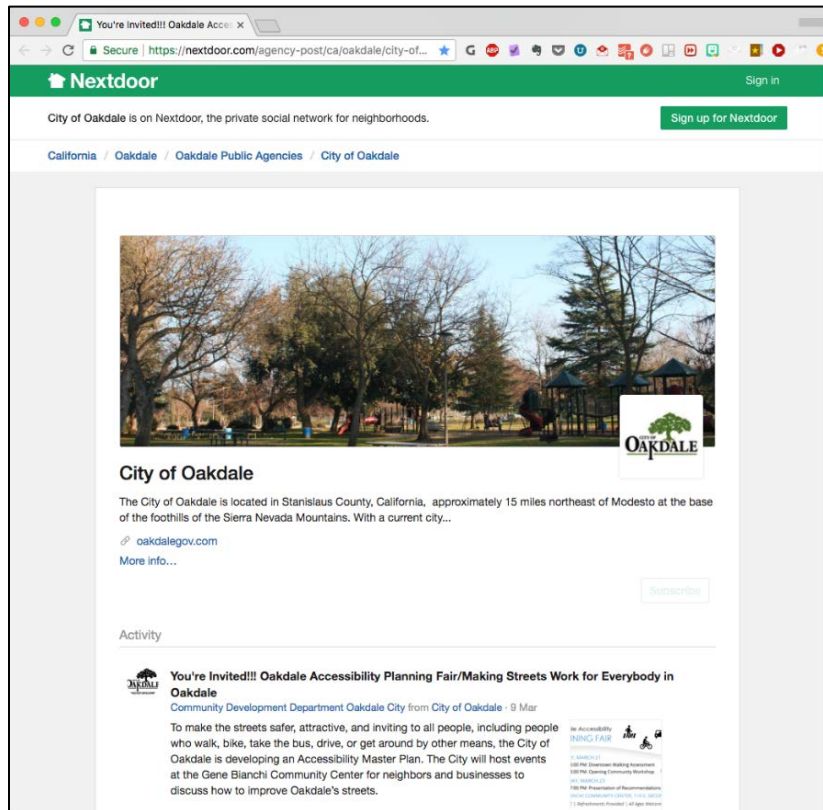


Figure 3-3: Social media networks, such as NextDoor, were also used for outreach

Charrette Activities

From March 20 to 23, 2017 the various public events were held to engage the community and solicit input for the plan. Planning Fair activities consisted of stakeholder group meetings, walking audit and workshops to offer a forum for broad resident and stakeholder input. The Project Team also set up a studio workspace to conduct fieldwork, analysis and design work on site during the Planning Fair. Charrette activities included:

- ◆ Coordination meetings with the Project Team
- ◆ Opening Workshop to collect input on challenges and opportunities
- ◆ Four focus group meetings
- ◆ Pop-up events
- ◆ Walkability assessments and site visits
- ◆ Closing Workshop to gather feedback on draft design concepts

Senior Center Popup

During the morning of March 20, the Project Team set up a table at the Oakdale Senior Center to engage residents in between classes and lunch activities. This was an opportunity to talk to older residents about issues relevant to them as well as advertise the upcoming public workshop.

Agency Focus Group

Early in the week, the Project Team held a technical focus group to meet with City Staff and members of the Police and Fire Departments to understand some of the accessibility issues they have to address in their jobs. See Figure 3-4.



Figure 3-4: Meeting with City engineering staff and safety services

School Popups

Two planned pop-up events at Cloverland Elementary and Oakdale High School on March 21 had to be cancelled due to a thunderstorm. However, visits still occurred at those schools (as well as others) during the week to observe school activity and conflicts during drop-off and pickup times.

Walking Tour

Prior to the first workshop on March 21, 2017, Team members led a walking tour with participants around the SR 108 and 120 corridors and side streets in downtown Oakdale (see Figure 3-5 through Figure 3-7). They observed and discussed existing land uses and street conditions, including design, walkability, traffic patterns, intersections, crossings, sidewalk conditions, and other features. The Team regrouped at the Community Center after the walk for refreshments and the opening workshop.



Figure 3-5: Several participants showed up early to take a walking tour with the Project Team



Figure 3-6: Charrette activities included a walk audit to observe pedestrian facilities and challenges



Figure 3-7: Discussing engineering issues and width for parked vehicles during the walk

Opening Presentation and Community Design Workshop

The opening community workshop for the design charrette process was held on the evening of March 21 at the Oakdale Community Center. At the beginning of the workshop, participants were asked to write down their community vision for Oakdale in the next 10-20 years, and then were asked to share their responses (see Figure 3-8 and Figure 3-9). After that, Project Team members provided background on the Accessibility Master Plan and illustrated principles for improving accessibility for all kinds of users with examples from other communities.

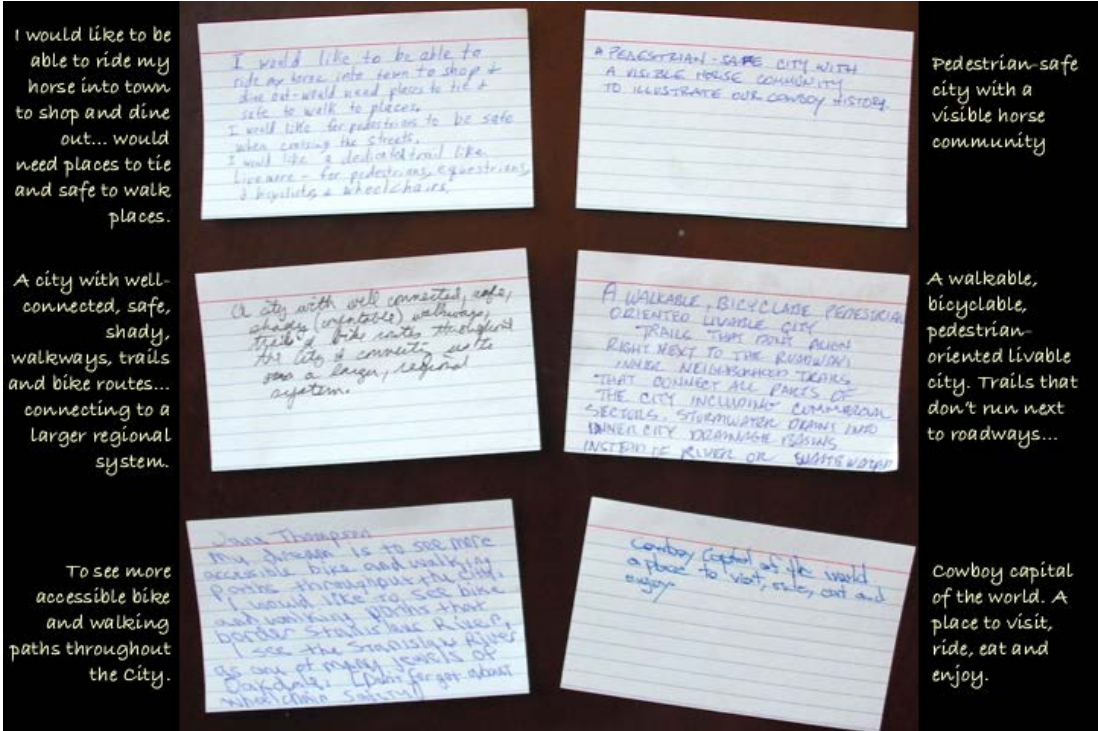


Figure 3-8: Twenty year visions for Oakdale



Figure 3-9: Participants shared their visions for the future of Oakdale



Figure 3-10: The Project Team shared data on existing conditions and examples from other communities to address accessibility

After the presentation, the Project Team asked participants to break up into smaller groups for a design exercise using large aerial maps of Oakdale. For this exercise participants were asked to identify critical issues on the maps of the city, as well as write down some of their own street design solutions. Participants held energetic conversations as they discussed problems and alternative solutions (see Figure 3-11). During this exercise, Project Team members joined the group to observe, commenting if appropriate, and answering questions when asked. Each of the tables then shared their ideas and solutions. Maps from that exercise are presented in Appendix B: Public Comments.



Figure 3-11: Participants discussed their own ideas for improving accessibility

Design Team Working Sessions

The Project Team started the week taking measurements and photos of the study area and observing how the street network functioned. After gathering initial input from the opening workshop and various meetings, activities, and site visits, the Project Team started refining the draft recommendations for the Accessibility Master Plan. They spent two days collating the concepts developed from the public input opportunities and prepared draft recommendations and drawings for the closing session presentation.

Presentation Workshop for Initial Recommendations

On March 23, 2017, the Project Team held a closing workshop at the Oakdale Community Center to present the first draft of recommendations to residents. Project Team leaders reviewed the key findings from the previous public events and shared illustrations of the team's initial recommendations, including before and after visuals of potential changes. At the conclusion, they opened the floor to comments and questions from those in attendance and thanked everyone who participated in the week's activities. See Figure 3-12.



Figure 3-12: Project Team highlighting initial designs for closing workshop participant

After this workshop, the Project Team then began the process of drafting the Accessibility Master Plan. The third Advisory Group was held on May 2, 2017 to help shape the outline of the report and the final project recommendations. The input gathered from the community engagement portion of this project form the basis for the recommendations in this report.

Summary of Input

The following summarizes public input that was gathered over the course of the Planning Fair. More details will be reflected in the recommendations in the following chapters.

Main Takeaways from the Planning Fair

- ◆ Increase access for pedestrians, bicyclists and equestrians.
- ◆ Slow traffic down on SR 108, 120, and side streets.
- ◆ Improve pedestrian crossings along SR 108 and 120.
- ◆ Make the SR 108/120 intersection more bicycle and pedestrian friendly.
- ◆ Develop a trail system along the River and to other parts of the City.
- ◆ Provide access to the Stanislaus River.
- ◆ Improve lighting at crossings (especially along F Street).
- ◆ Develop a complete bicycle network throughout Oakdale.
- ◆ Develop equestrian access routes and horse “parks.”
- ◆ Provide in-pavement flashers in crosswalks.
- ◆ Employ street buffers and curb extensions.

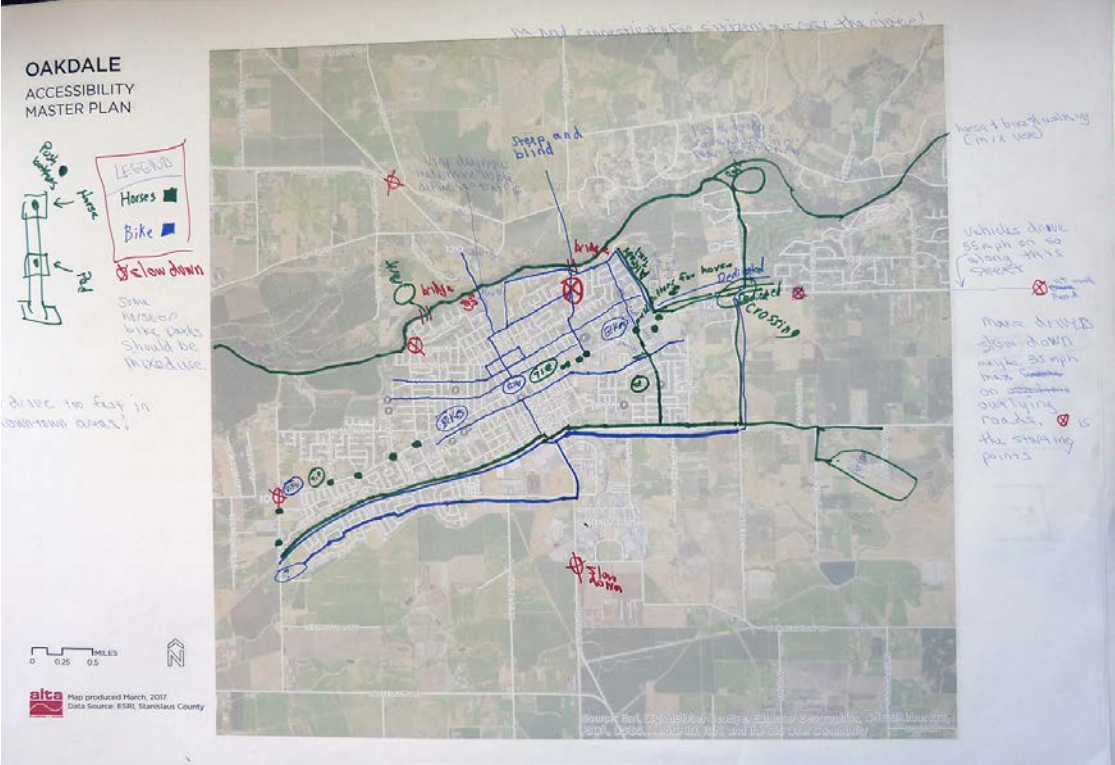
Opening Workshop Vision Cards

- ◆ My dream is to see more accessible bike and walking paths throughout the city. I would like to see bike and walking paths that border Stanislaus River. I see the Stanislaus River as one of the many jewels of Oakdale (Don't forget about wheelchair safety!)
- ◆ A city with well connected, safe, shady (comfortable) walkways, trails, and bike routes throughout the city and community by connecting us to a larger regional system.
- ◆ I would like to be able to ride my horse into town to shop and dine out-would need places to tie and safe to walk to places. I would like for pedestrians to be safe when crossing the streets. I would like a dedicated trail like Livermore-for pedestrians, equestrians, and bicyclists and wheelchairs.
- ◆ Cowboy capitol of the world, a place to visit, ride, eat, and enjoy.
- ◆ A walkable, bikeable, pedestrian-oriented livable city trails that don't align right next to the roadways. Inner neighborhood trails that connect all parts of the city including commercial sectors. Stormwater drains into inner city drainage basins instead of river or wastewater treatment plants.
- ◆ A pedestrian-safe city with a visible horse community to illustrate our cowboy history.
- ◆ A city that highlights its river.
- ◆ Downtown pedestrian, bicycle, horse friendly-slow vehicle traffic. River Trail. Sierra Railroad trail.
- ◆ Bridges over 108 for elementary schools and high schools.
- ◆ To create and fix safe pedestrian and bike paths of travel within the city.
- ◆ If I came back here 20 years later, I would like to see more trails or a youth center to come and play with other children.
- ◆ Like to see more places for horse riders to ride. More bicyclists.
- ◆ Trees lining the streets.
- ◆ Wider streets and more streets and major bypass in south corridor.

Appendix B: Public Comments presents the full list of comments received throughout the Planning Fair.

Aerial Map Exercises

As part of the Opening Community Design Workshop, participants were asked to provide comments and suggestions for improvements on aerial maps. One such map is shown below. All maps are shown in Appendix B: Public Comments.



Challenges & Opportunities

The high-volume, high-speed traffic on the state highways bisecting Oakdale pose a real challenge to developing a well-connected, comfortable bicycle and pedestrian network. In the same vein, the wide local streets, narrow and obstructed sidewalks in some neighborhoods, and general need for sidewalk improvements are also a challenge. However, Oakdale is in a prime position to make improvements to the bicycle and pedestrian network. The relative small size of the town, and grid street network provides a solid base for both bicycle and pedestrian network connectivity, which could be easily utilized by many residents to conduct daily activities. Figure 3-13 shows the distance someone walking could cover 10 minutes from central Oakdale. Figure 3-14 shows the distance someone riding a bike could cover in 10 minutes from central Oakdale. Wide neighborhood streets, while currently encouraging speeding, could be retrofitted with bicycle lanes and other traffic calming features, encouraging increased travel by bicycle and by foot.

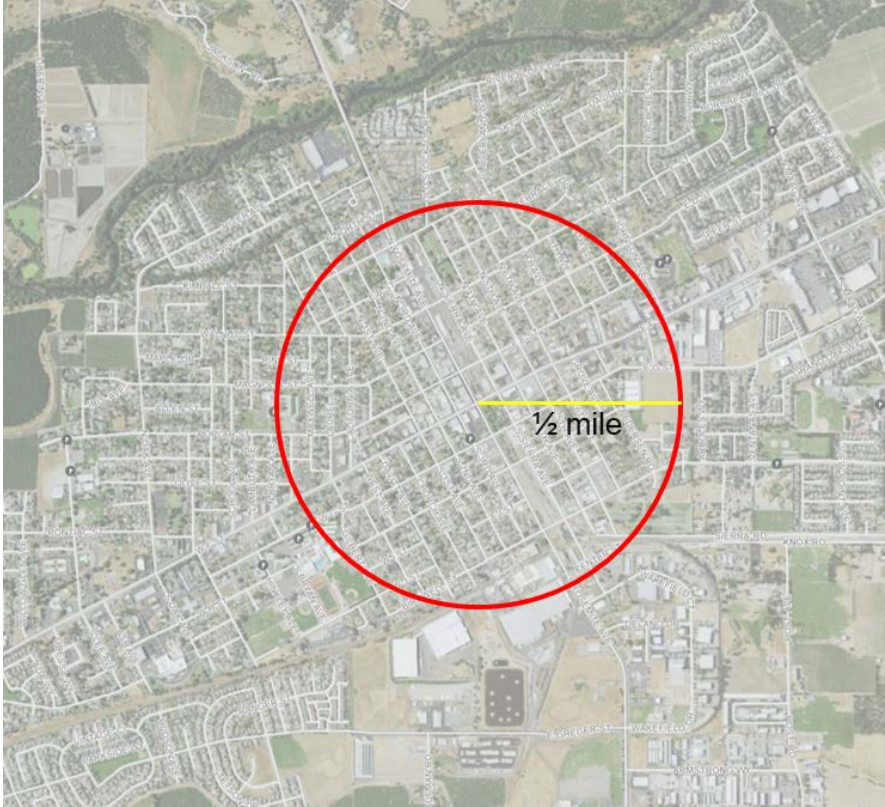


Figure 3-13: Distance someone walking could travel in 10 minutes in Oakdale

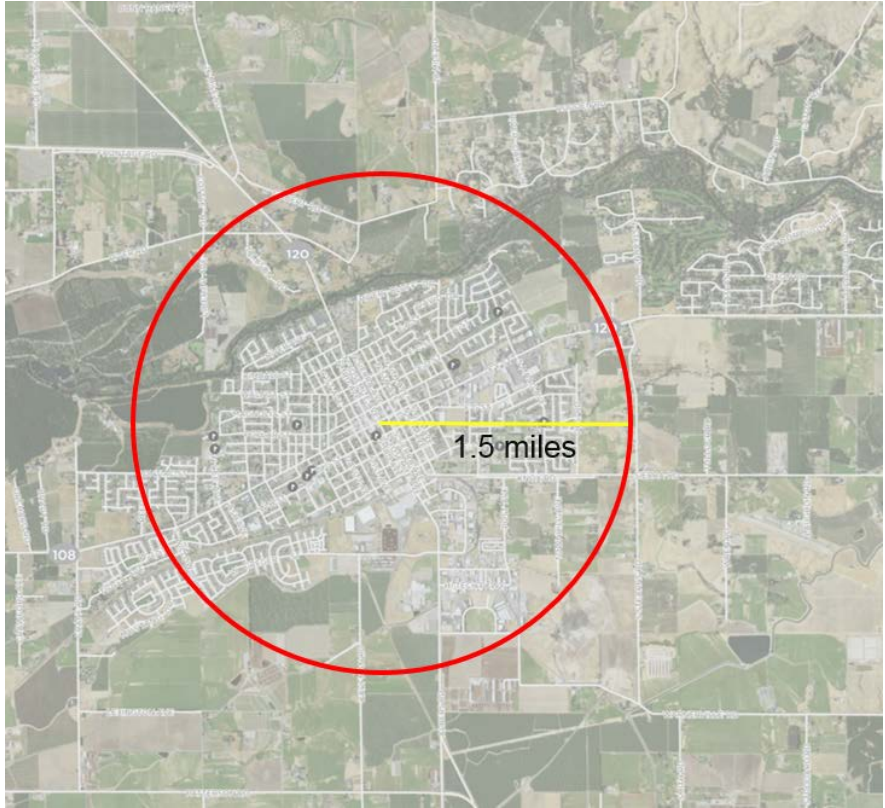


Figure 3-14: Distance someone biking could travel in 10 minutes in Oakdale

4. Recommendations

To create a more accessible Oakdale for pedestrians, bicyclists, and equestrians, quality backbone networks of connected, low-stress facilities for all modes are critical. Through the development of this Plan, including consultation with City staff, stakeholders, and the general public, corridors to facilitate this backbone network have been identified. This section of the plan details the network overview for connected bicycle facilities, improvements to be made to create a more comfortable and safe pedestrian network, and the start of a network for equestrian travel. The section also provides visual examples of network improvements, detailing changes to key intersections, as well as examples of roadway retrofits recommended to help develop bicycle and pedestrian facilities throughout Oakdale.

In addition to providing bicycle, pedestrian, and equestrian network and retrofit recommendations, this section highlights specific locations which would benefit from crossing improvements. These improvements are critical to network connectivity for all active modes, as the network is only as accessible as its least accessible crossing. Many of these improvements would require the participation of Caltrans, as they are located on Caltrans highways where a majority of the severe injury and fatal collisions occur within the city.

The recommendations for Oakdale mainly aim to slow down motorized vehicles and to provide space within the right-of-way for separate and comfortable facilities for pedestrians, bicyclists and equestrians. Many of these recommendation types are detailed in Chapter 6: Accessibility Improvement Strategies. Examples include bike lanes, pedestrian refuge islands, curb extensions, roundabouts, high-visibility facilities and more.

Figure 4-1 through Figure 4-3 show the recommended bicycle, pedestrian, and equestrian network recommendations. Figure 4-4 shows the recommended speed limits on the major roadways after projects have been implemented.

OAKDALE ACCESSIBILITY MASTER PLAN







RECOMMENDED BIKEWAYS

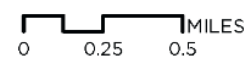
- - - Class I Shared Use Path
- - - Class II Buffered Bike Lane
- - - Class II Bike Lane
- - - Class III Bike Route
- Proposed River Crossing


EXISTING BIKEWAYS

- Shared-Use Path (Class I)
- Bike Lane (Class II)
- Bike Route (Class III)

DESTINATIONS + BOUNDARIES

-  School
-  Civic/Public
-  Library
-  Medical
-  Lake/River
-  Park



 Map produced August, 2017.
Data Source: ESRI, Stanislaus County

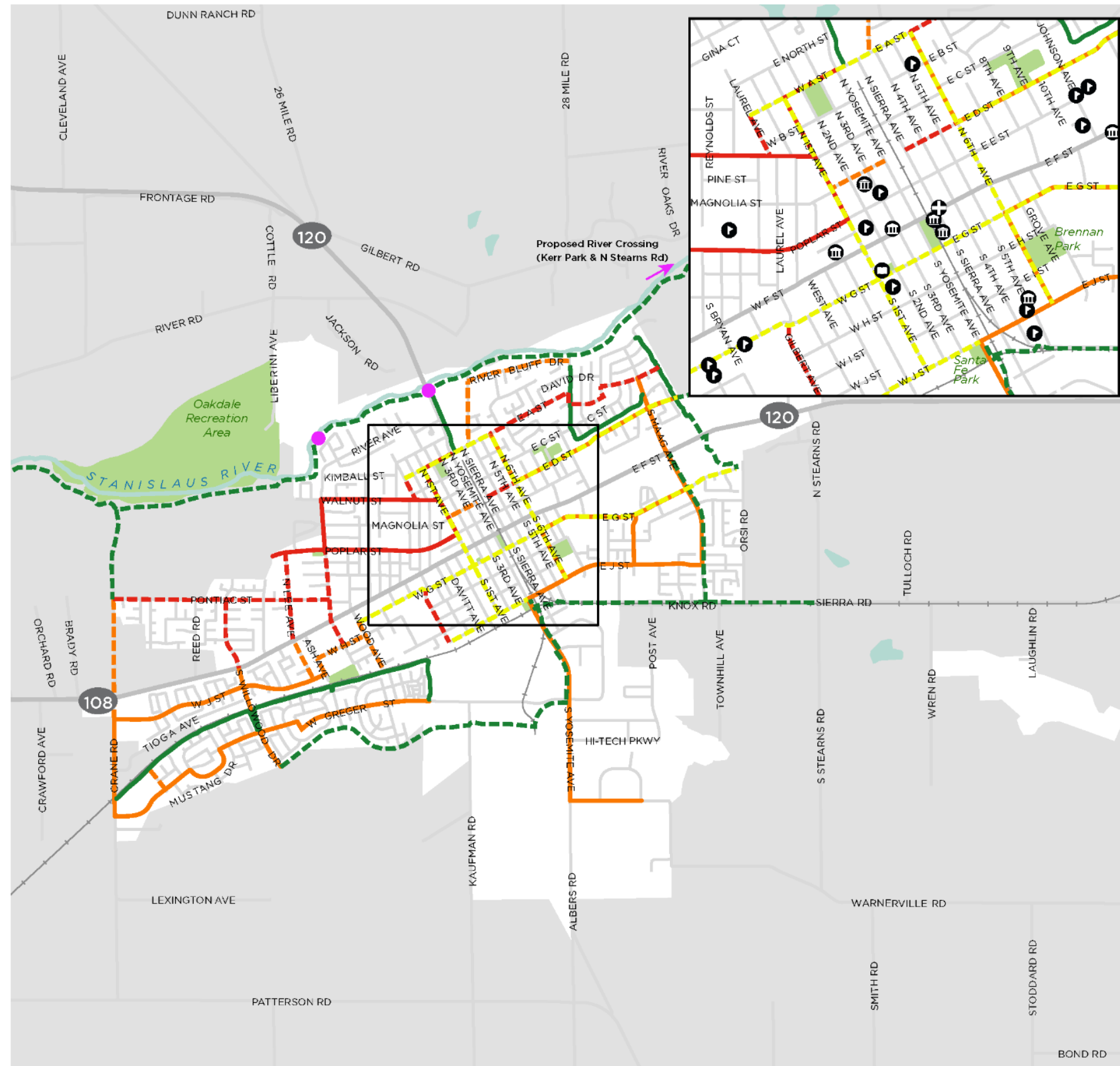









Figure 4-1: Existing and Recommended Bikeway Projects

OAKDALE ACCESSIBILITY MASTER PLAN







PEDESTRIAN RECOMMENDATIONS

 Traffic Calming Corridors
(Reduce Crossing Distance
Where Possible)

SPOT IMPROVEMENTS

-  Pedestrian Refuge Island
-  Flashing Beacon
-  Lighting
-  Roundabout
-  High Visibility Crossing
-  Curb Extension

DESTINATIONS + BOUNDARIES

-  School
-  Civic/Public
-  Library
-  Medical
-  Lake/River
-  Park

0 0.25 0.5 MILES






 Map produced August, 2017.
Data Source: ESRI, Stanislaus County



Figure 4-2: Recommended Pedestrian Projects

OAKDALE ACCESSIBILITY MASTER PLAN







RECOMMENDED EQUESTRIAN FACILITIES

-  Equestrian Trail
-  Crossing Improvement
-  Equestrian Park

EXISTING EQUESTRIAN FACILITIES

-  Equestrian Trail

DESTINATIONS + BOUNDARIES

-  School
-  Civic/Public
-  Library
-  Medical
-  Lake/River
-  Park

0 0.25 0.5 MILES



 Map produced August, 2017.
Data Source: ESRI, Stanislaus County

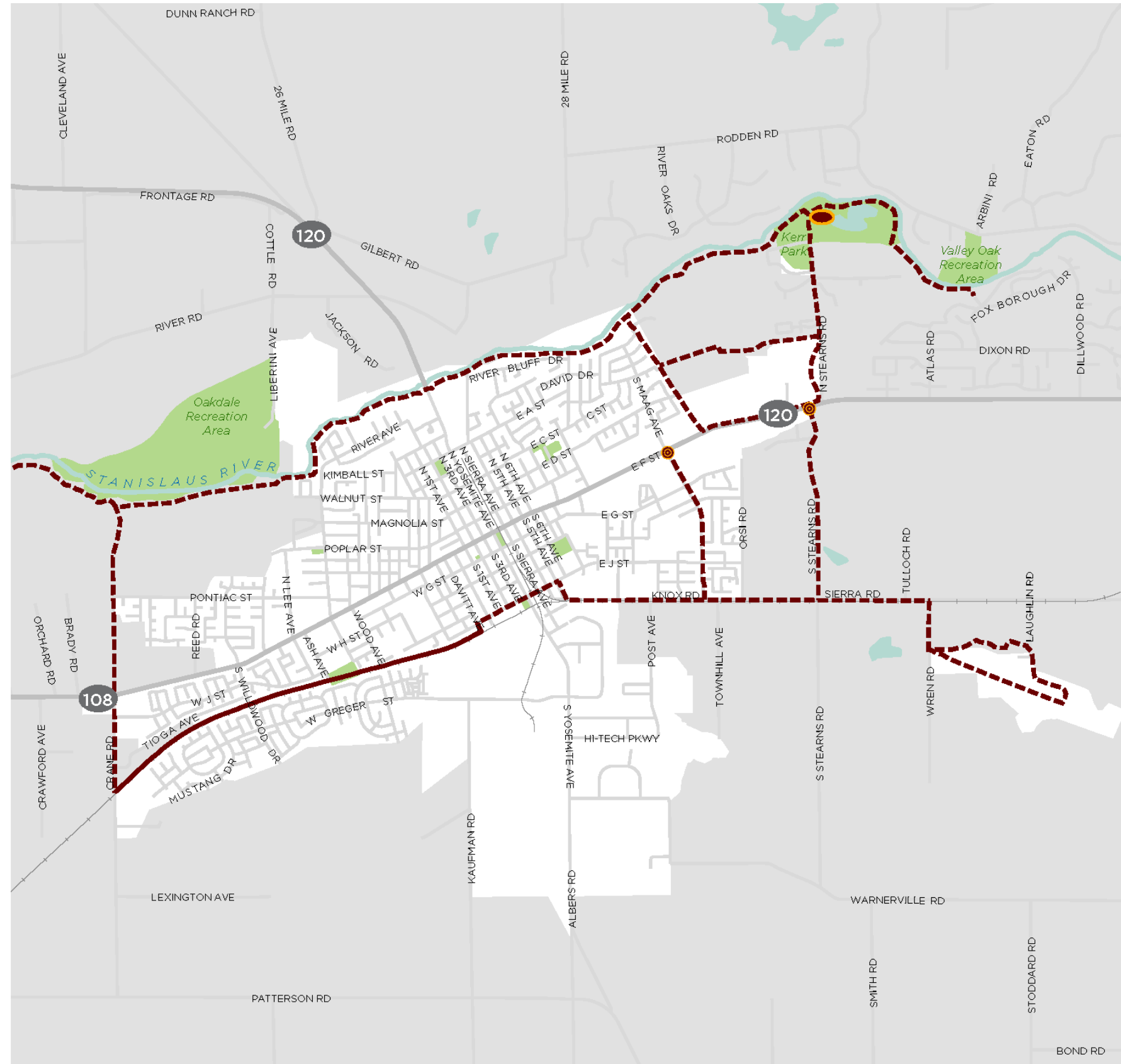
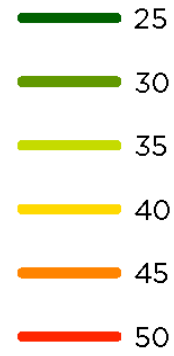


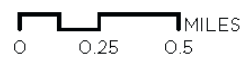
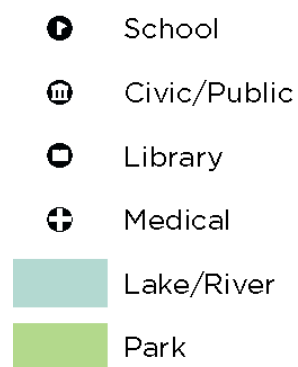
Figure 4-3: Recommended Equestrian Projects

OAKDALE ACCESSIBILITY MASTER PLAN

DESIRED SPEED LIMIT
(ACCOMPLISHED THROUGH DESIGN)



DESTINATIONS +
BOUNDARIES



Map produced August, 2017.
Data Source: ESRI, Stanislaus County

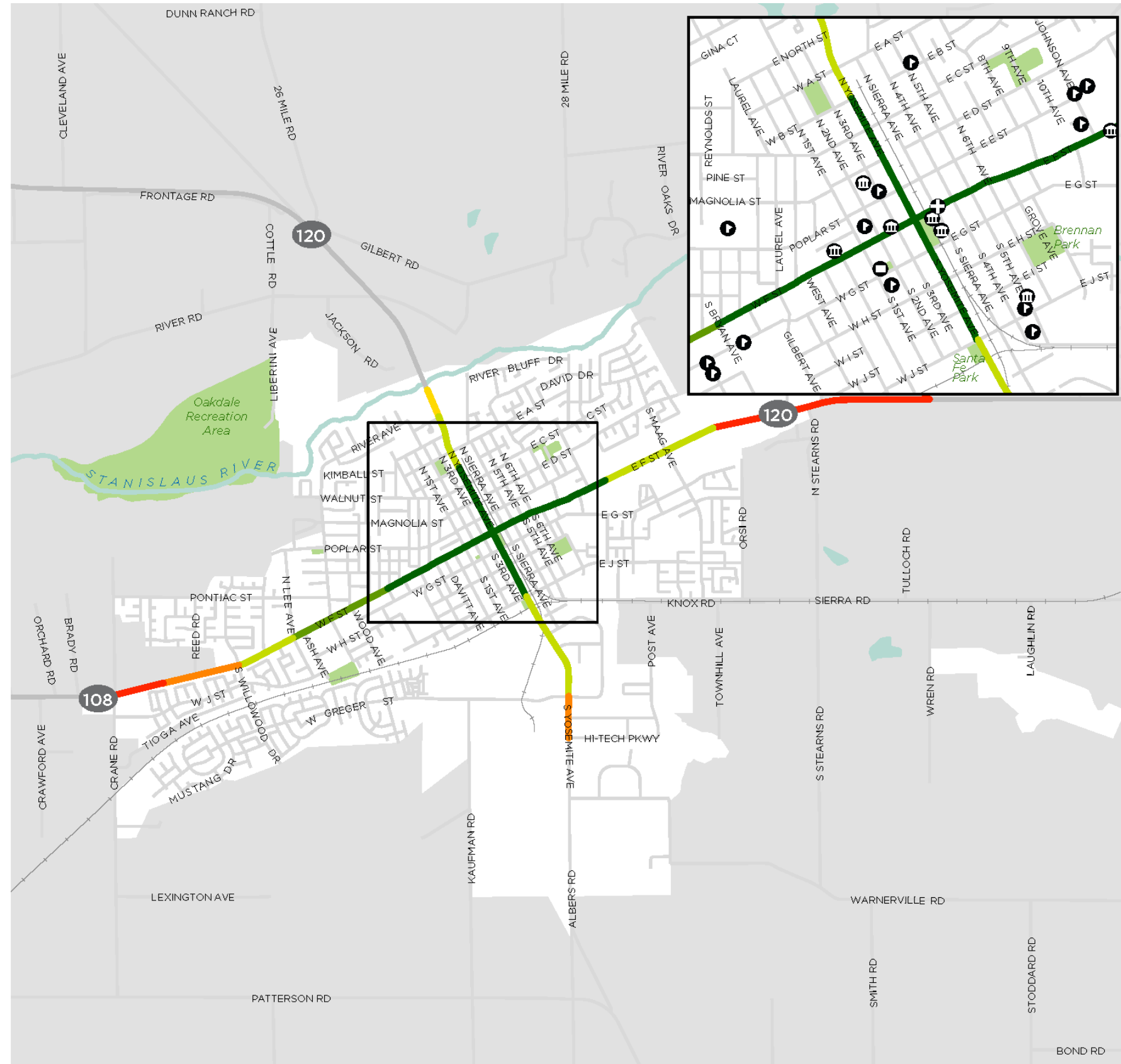


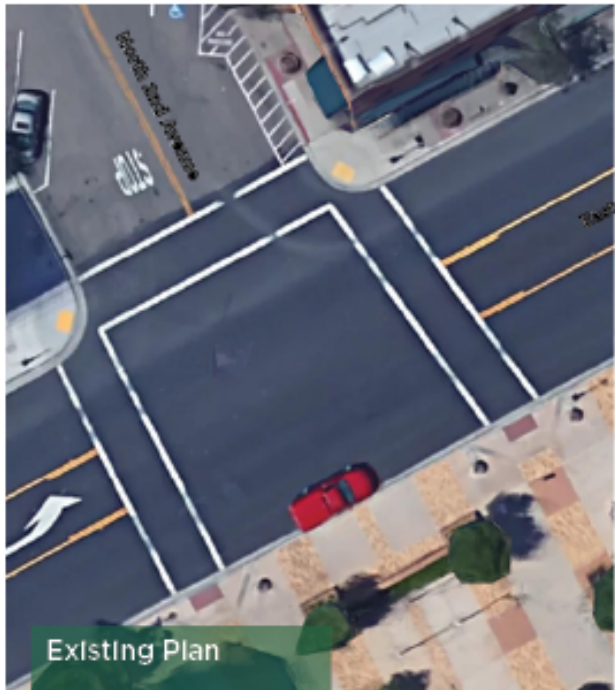
Figure 4-4: Recommended Speed Limits

Roadway Reconfiguration Examples

The following section presents possible road reconfigurations to create complete streets and improve safety for all modes of travel. The recommendations are based on industry best practices, and are in response to requests during public outreach for additional pedestrian and bicycle facilities at the locations shown. These recommendations offer one possible reconfiguration to achieve complete streets at these locations; any recommendation would be subject to review and approval by Staff and/or the Traffic Issue Committee. The project number in the title bar is from the table of recommendations in Appendix C: Project Recommendations.

EAST F STREET AND 2ND AVENUE: P-08

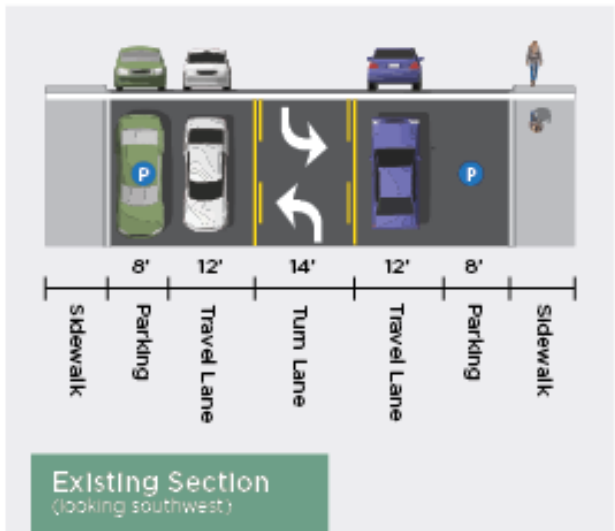
This uncontrolled T-intersection in the center of the City and across from the Community Center plaza is a key hub and destination in Oakdale. It can be made safer for pedestrians by adding curb extensions on all corners and a median on the eastern crossing where left turns are not possible. These techniques can be used at other locations to improve visibility of pedestrians, shorten the crossing distance and improve sight distance for motorists. As with other examples provided in this chapter, all recommendations shall be reviewed and approved by Staff and/or Traffic Issue Committee at the appropriate time.



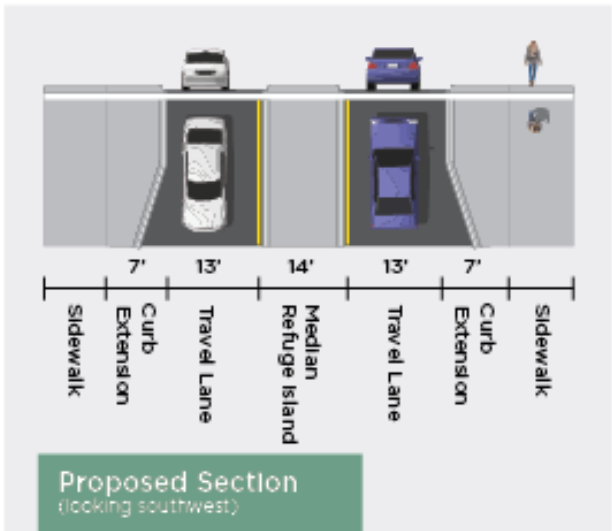
Existing Plan



Proposed Plan



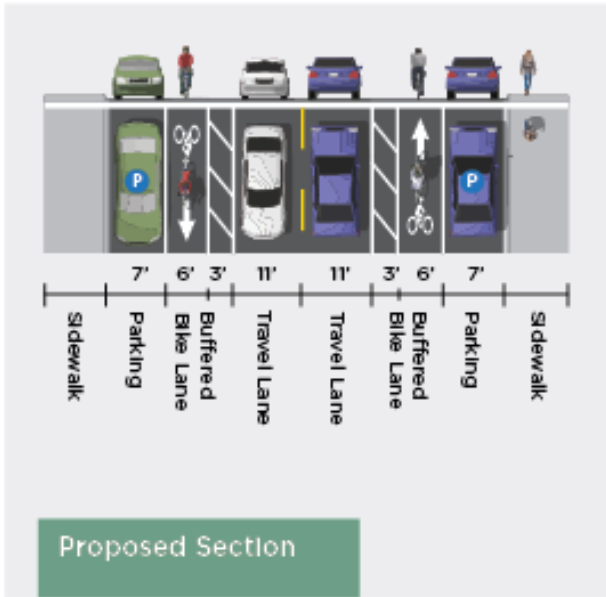
Existing Section
(looking southwest)



Proposed Section
(looking southwest)

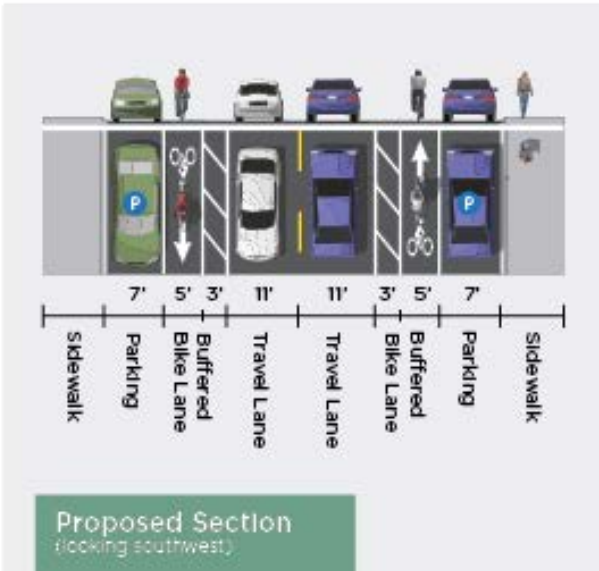
EAST D STREET: **P-05**

The travel lanes on D Street are currently much wider than needed by motor vehicles and provide an opportunity to expand the bicycle network in this part of the City. In fact, the lanes are wide enough to install not just standard, Class I bicycle lanes but buffered lanes that give people on bicycles more distance from moving vehicles and improve their safety and comfort without restricting vehicular capacity. Similar “buffered bicycle lanes” are recommended on other streets with overly wide lanes, as shown in Figure 4-1. As with other recommendations provided in this Chapter, this reconfiguration shall be reviewed and approved by Staff and/or Traffic Issues Committee at the appropriate time.



WEST G STREET: **B-11**

West G Street provides key east-west connections to the high school and middle school and across S. Yosemite Avenue. As a residential street with lower vehicle volumes, we would recommend removing the center turn lane and allocating that space instead to a buffered bicycle lane. If needed, left turn lanes could be added at some intersections (such as at S. Yosemite Avenue) by eliminating the buffers and shifting the bicycle lane slightly into the parking lane. This can be accomplished by restricting parking near the intersection.



ROUNDBABOUT AT WEST G STREET: TC-12

The addition of raised curb extensions serves to narrow the travel lanes and decrease the turning radii for motorists. This reduces vehicular speed through the roundabout and increases visibility, safety and comfort for pedestrians using the crosswalks. *Note: ADA Accessibility issues may need to be reviewed.*



WEST G STREET AND HINKLEY AVENUE: P-10

Curb extensions, median refuge islands, advance stop/yield markings, and high visibility crosswalks create a safer and more comfortable intersection for all users by improving visibility for pedestrians and increasing site distance for motorists. As a short term option, the city could simply install high visibility crosswalks. This recommended reconfiguration, like others presented in this Chapter, shall be reviewed and approved by relevant City Staff. In this case, a review with Oakdale Police Department would be needed to address existing issues.



WEST H STREET AND SOUTH WOOD AVENUE: P-11

Curb extensions, median refuge islands, advance stop/yield markings, and high visibility crosswalks create a safer and more comfortable intersection for all users by improving visibility for pedestrians and increasing site distance for motorists. As a short term option, the city could simply install high visibility crosswalks.



The full list of recommendations can be found in Appendix C: Project Recommendations.

5. Implementation Plan

Action Steps

This chapter presents a strategy for implementing individual infrastructure projects. It includes a list of the prioritized projects from Chapter 4: Recommendations, and potential funding sources. Oakdale should apply for grant funding when available to implement some of these recommendations. City staff should be sure to coordinate with the ADA Transition Plan to ensure projects from both plans are considered. City staff in Engineering and Public Works can coordinate efforts to review roadway re-paving projects and implement recommendations herein. Example projects that can be installed during this process are bike lanes and crosswalks. It is recommended that staff work with developers, so that as new development projects are approved and constructed they implement the principles and designs identified in this Accessibility Plan.

Critical steps to a project implementation foundation with community support include the following:

- ◆ Community involvement
 - The goal here is to create energy around the project through public awareness, community meetings, news media coverage, radio pieces, publications, billboards, posters, newspaper ads, brochures, event booths, and other efforts.
- ◆ Project website
 - Web pages are an inexpensive and helpful way to distribute information and legitimize a project. They can be used to display concept designs, provide meeting materials, and collect feedback. Add-ons such as geographic based comment platforms and survey modules are helpful tools as well.
- ◆ Social media (including Facebook, Twitter, Instagram)
 - Social media can be a good platform to generate feedback and discussion. Other platforms such as YouTube, Snapchat, and LinkedIn can be helpful as well.
- ◆ Community surveys
 - Web-based surveys or questionnaires are an important part of directing a projects path. Data from these surveys can be analyzed and used to support arguments for or against certain project components and projects as a whole. Surveys should be printed in hard copy form as well or available on a mobile device at community events.
- ◆ Data collection
 - Depending on the project type and funding target, data collection should be focused to that end. For Active Transportation Program projects, helpful data includes bicycle user counts, pedestrian user counts, collision data, potential user counts from nearby facilities, infrastructure audit data, and vehicle counts. For safety projects, helpful data includes existing conditions, collision data, user types, traffic counts, bicycle and pedestrian counts and projected use.
- ◆ Comprehensive information analysis
 - Information and the way the information is presented can be a key to successful funding applications. Ideas for analysis include population projections, development growth patterns, land use change patterns, access to public transportation, traffic projections, potential new user projections, and more. There are various ways to display analysis results with graphically oriented charts, maps, heat maps, and graphs being the most effective.

Prioritization

The project team prioritized projects based on community and organizational feedback throughout the planning process. Additionally, projects went through a ranking system to develop tier levels.

The Tier 1 priority projects include the following projects which are conceptually designed in the project sheets in Chapter 4: Recommendations.

- ◆ Bike-11 (B-11). West G Street Buffered Bike Lanes.
- ◆ Pedestrian-08 (P-08). East F Street and Second Avenue Intersection Pedestrian Safety Improvements.
- ◆ Pedestrian-05 (P-05). East D Street Buffered Bike Lanes.
- ◆ Pedestrian-10 (P-10). West G Street and Hinkley Avenue Pedestrian Safety Improvements.
- ◆ Pedestrian-11 (P-11). West H Street and South Wood Avenue Pedestrian Safety Improvements.
- ◆ Traffic Calming-12 (TC-12). West G Street and Gilbert Avenue traffic calming curb extensions.

The Tier 2 and 3 projects are shown in the recommendations table from Chapter 4: Recommendations. The following steps can be taken by the City of Oakdale to implement the Tier 2 and 3 projects:

- ◆ Continue working on project development.
- ◆ Implement bicycle and pedestrian count program.
- ◆ Continue community discussion of projects and monitor community priorities.
- ◆ Pursue Caltrans Active Transportation Program and Sustainable Transportation Planning grants for project implementation.

Evaluation Criteria

Table 5-1 shows the evaluation criteria used to score projects for tiering.

Table 5-1: Evaluation Criteria

Criteria	Scoring
Community Support (1-5)	Based on a scale of 1 being a small amount of community support and 5 being a large amount of community support.
Cost (1-3)	Based on a scale of 1 being a project with high estimated costs and 3 being a project with relatively low costs.
Work Effort (1-3)	Based on a scale of 1 being a project with a heavy work effort required and 3 being a project with relatively little work effort. Heavy work effort means acquisition of right of way, working with rail road authorities, building bridges, constructing roundabouts, heavy infrastructure work and significant environmental impacts. Little work effort means projects that involve restriping, installing bike racks and projects with relatively little effort.
Overall Project Ranking	The overall ranking score based on the addition of values from community support, project cost, and work effort. Projects with high ranking are considered priority projects.

Cost Estimates

Table 5-2 presents the planning level cost assumptions used to determine project cost estimates. Unit costs are typical or average costs informed by Alta Planning + Design's experience working with California communities. While they reflect typical costs, unit costs do not consider project-specific factors such as intensive grading, landscaping, or other location-specific factors that may increase actual costs. For some segments, project costs may be significantly greater.

Table 5-2: Unit Cost Assumptions

Item	Unit	Cost Assumption	Notes
Class I Shared-Use Path Study	Each	Varies	Cost depends on need for survey
Class I Shared Use Path	Mile	\$1,500,000	Cost higher if right-of-way acquisition required
Class II Bicycle Lanes	Mile	\$80,000	Includes both sides of road
Class II Buffered Bicycle Lanes	Mile	\$180,000	Includes both sides of road
Class III Bicycle Route	Mile	\$31,000	Includes both sides of road and shared lane markings
Class IV Separated Bikeway	Mile	Varies	Cost depends on type of physical separation selected
Corridor Study	Each	Varies	Cost depends on need for parking occupancy study, traffic counts, or survey
High Visibility Crosswalk (assume 10' x 60') with advance stop bar	Each	\$2,800	
Transverse Crosswalk with advance stop bar	Each	\$1,200	10 ft wide, 60 ft long
Sidewalk, Curb, Gutter	Linear Foot	\$110	
DG walkway	Linear Foot	\$30	6 ft wide
Pedestrian Refuge Island	Each	\$8,000	10 ft wide, 8 ft long

Please note that adding bike lanes or buffered bike lanes as part of a resurfacing project is extremely cost effective. The cost listed in the table is for completely new projects not included in a larger roadway project.

Potential Funding Sources

Many of the funding resources available to the City of Oakdale are competitive in nature and therefore require robust project development efforts. Grant funded programs such as the Active Transportation Program are extremely competitive, but strong applications that show community support and prove the need for the project are successful. It is recommended that the City utilize the Accessibility Master Plan as a catalyst for project development. While the Accessibility Master Plan covers active transportation, equestrian use, and accessibility for persons with mobility impairments, the general understanding of the term "accessibility" is often associated only with access for persons with mobility impairments. In utilizing this Plan as a basis for active transportation funding, Oakdale will need to communicate that accessibility is meant in this broader form. Table 5-3 shows a general list of funding programs available to implement the types of recommendations listed in Chapter 4: Recommendations by project

type. Table 5-4 shows the specific funding program by project recommendation. Full project information can be found in Chapter 4: Recommendations.

Table 5-3: Funding Programs by Project Types

COMMUNITY INFRASTRUCTURE	MULTI-MODAL TRANSPORTATION INFRASTRUCTURE	PUBLIC TRANSPORTATION CAPITAL AND OPERATIONS	INTELLIGENT TRANSPORTATION SYSTEMS	PLUG-IN ELECTRIC VEHICLE CHARGING INFRASTRUCTURE	
					PROGRAM
	X				Active Transportation Program (ATP)
X	X	X	X	X	Affordable Housing and Sustainable Communities Program (AHSC - GHGF)
	X	X	X		Bus and Bus Facilities - FTA Section 5339 (5339)
X					Choice Neighborhoods Implementation Grants Program (CN-IG)
X					Choice Neighborhoods Planning Grants Program (CN-PG)
X	X			X	Community Development Block Grant (Non-entitlement) (CDBG)
		X			Enhanced Mobility of Seniors and Individuals with Disabilities Program (FTA 5310)
					HOPE VI Main Street Program (HOPE VI)
X	X	X	X	X	Infrastructure State Revolving Fund (loans)
	X				Land and Water Conservation Fund (LWCF)
	X	X			Low Carbon Transit Operations Program (LCTOP - GHGF)
		X		X	Low or No Emission Vehicle Deployment Program (LoNo)
		X		X	FTA 5309 Bus and Bus Facilities Program
X	X				Public Works and Economic Development Program (PWEDP)
	X				Recreational Trails Program (RTP)
	X				Sustainable Transportation Planning Grant Program - Strategic Partnerships (STPG-SP)
X	X	X	X		State Transportation Improvement Program
X	X	X	X		Congestion Management Air Quality Improvement Program
	X	X			Regional Surface Transportation Program
	X		X	X	Sustainable Transportation Planning Grant Program - Sustainable Communities (STPG)
	X	X			Transit and Intercity Rail Capital Program (TIRCP - GHGF)
	X	X	X		Transportation Investment Generating Economic Recovery (TIGER)

Table 5-4: Potential Project Funding Source by Project Number

Project Number	Grant Eligible?													
	HRPP	RTF	LWCF	ATP	FTA 5310	FTA 5339	LCTOP-GHGF	ARFVTP	CLEEN	Infrastructure State Revolving Fund (loans)	TIRCP - GHGF	RD-CF	RD-EII	
B-01		X		X			X			X				
B-02				X			X			X				
B-04				X			X			X				
B-05		X		X			X			X				
B-06				X			X			X				
B-07				X			X			X				
B-08		X		X			X			X				
B-11														
E-01			X											
E-02														
E-03	X		X											
E-04	X													
E-05	X													
E-06	X													
E-07	X													
E-08	X													
E-09	X	X	X											
E-10	X	X	X											
E-11	X	X	X											
P-01				X										
P-02				X										
P-03				X										
P-04				X										
P-05				X										
P-06				X										
P-07				X										
P-08				X						X				
P-10														
P-11														
MU-01	X	X	X	X			X			X				
MU-02	X			X			X			X				
MU-03	X			X			X			X				

Project Number	Grant Eligible?												
	HRPP	RTF	LWCF	ATP	FTA 5310	FTA 5339	LCTOP-GHGF	ARFVTP	CLEEN	Infrastructure State Revolving Fund (loans)	TIRCP - GHGF	RD-CF	RD-EII
MU-04	X	X	X	X			X						
MU-05	X	X	X	X			X						
MU-06	X	X	X	X			X						
MU-07	X	X	X	X			X						
MU-08	X	X	X	X			X						
MU-09	X			X			X		X				
MU-10	X			X			X		X				
MU-11	X	X	X	X			X		X				
TC-01									X			X	
TC-02									X			X	
TC-03									X			X	
TC-04									X			X	
TC-05									X			X	
TC-06				X								X	
TC-07				X								X	
TC-08				X								X	
TC-09				X								X	
TC-10				X								X	
TC-11									X			X	
TC-12													
X-01													X
X-02					X	X	X	X	X		X		

The following section provides more details on some of the potential funding sources. Each also includes links to the program website.

Federal Sources

Fixing America's Surface Transportation Act (FAST Act)

The FAST Act, which replaced Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2015, provides long-term funding certainty for surface transportation projects, meaning States and local governments can move forward with critical transportation projects with the confidence that they will have a Federal partner over the long term (at least five years).

The law makes changes and reforms to many Federal transportation programs, including streamlining the approval processes for new transportation projects and providing new safety tools. It also allows local entities that are direct recipients of Federal dollars to use a design publication that is different than one used by their State DOT, such as the *Urban Bikeway Design Guide* by the National Association of City Transportation Officials.

More information: <https://www.transportation.gov/fastact>

Surface Transportation Block Grant Program (STBGP)

The Surface Transportation Block Grant Program (STBGP) provides states with flexible funds which may be used for a variety of highway, road, bridge, and transit projects. A wide variety of bicycle and pedestrian improvements are eligible, including trails, sidewalks, bike lanes, crosswalks, pedestrian signals, and other ancillary facilities. Modification of sidewalks to comply with the requirements of the Americans with Disabilities Act (ADA) is also an eligible activity. Unlike most highway projects, STBGP-funded pedestrian facilities may be located on local and collector roads which are not part of the Federal-aid Highway System.

Fifty percent of each state's STBGP funds are suballocated geographically by population. In Concord, funds are funneled through the California Department of Transportation (Caltrans) to MPOs in the state. The remaining 50 percent may be spent in any area of the state.

STBGP Set-Aside: Transportation Alternatives Program

Transportation Alternatives Program (TAP) has been folded into the Surface Transportation Block Grant Program (STBGP) as a set-aside funded at \$835 million for 2016 and 2017, and \$850 million for 2018, 2019, and 2020. Up to 50 percent of the set-aside is able to be transferred for broader STBGP eligibility.

Improvements eligible for this set-aside fall under three categories: Transportation Enhancements (TE), Safe Routes to School (SR2S), and the Recreational Trails Program (RTP). These funds may be used for a variety of pedestrian and streetscape projects including sidewalks, multi-use paths, and rail-trails. TAP funds may also be used for selected education and encouragement programming such as Safe Routes to School.

Non-profit organizations (NGOs) are now eligible to apply for funding for transportation safety projects and programs, including Safe Routes to School programs and bike share.

Complete eligibilities for TAP include:

1. **Transportation Alternatives.** This category includes the construction, planning, and design of a range of pedestrian infrastructure including “on-road and off-road trail facilities for pedestrians, bicyclists, and other active forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990.” Infrastructure projects and systems that provide “Safe Routes for Non-Drivers” is still an eligible activity.
2. **Recreational Trails.** TAP funds may be used to develop and maintain recreational trails and trail-related facilities for both active and motorized recreational trail uses. Examples of trail uses include hiking, in-line skating, equestrian use, and other active and motorized uses. These funds are available for both paved and unpaved trails, but may not be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads.
3. **Safe Routes to School.** The Safe Routes to School (SRTS) program aims to increase the number of children walking and bicycling to school by making it safer for them to do so. All school levels are eligible, from Transitional Kindergarten through 12th grade.
4. **Planning, designing, or constructing roadways within the right-of-way of former Interstate routes or divided highways.** At the time of writing, detailed guidance from the Federal Highway Administration on this new eligible activity was not available.

These programs are funded in California through the Active Transportation Program.

405 National Priority Safety Program

Approximately \$14 million annually (5 percent of the \$280 million allocated to the program overall) will be awarded to States to decrease bike and pedestrian crashes with motor vehicles. States where bike and pedestrian fatalities exceed 15 percent of their overall traffic fatalities will be eligible for grants that can be used for:

- ◆ Training law enforcement officials on bike/pedestrian related traffic laws
- ◆ Enforcement campaigns related to bike/pedestrian safety
- ◆ Education and awareness programs related to relevant bike/pedestrian traffic laws

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) provides \$2.4 billion nationally for projects that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. Non-infrastructure projects are no longer eligible. Eligible projects are no longer required to collect data on all public roads. Pedestrian safety improvements, enforcement activities, traffic calming projects, and crossing treatments for active transportation users in school zones are examples of eligible projects. All HSIP projects must be consistent with the state’s Strategic Highway Safety Plan.

The 2015 California SHSP is located here:

http://www.dot.ca.gov/hq/traffops/shsp/docs/SHSP15_Update.pdf

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter which reduce transportation related emissions. These federal dollars can be used to build pedestrian and bicycle facilities that reduce travel by automobile. Purely recreational facilities generally are not eligible.

To be funded under this program, projects and programs must come from a transportation plan (or State (STIP) or Regional (RTIP) Transportation Improvement Program) that conforms to the SIP and must be consistent with the conformity provisions of Section 176 of the Clean Air Act. States are now given flexibility on whether to undertake CMAQ or STBGP-eligible projects with CMAQ funds to help prevent areas within the state from going into nonattainment.

In Stanislaus County, CMAQ funding is administered through the Stanislaus Council of Governments (StanCOG) on the local level. These funds are eligible for transportation projects that contribute to the attainment or maintenance of National Ambient Air Quality Standards in non-attainment or air-quality maintenance areas. Examples of eligible projects include enhancements to existing transit services, rideshare and vanpool programs, projects that encourage pedestrian transportation options, traffic light synchronization projects that improve air quality, grade separation projects, and construction of high-occupancy vehicle (HOV) lanes. Projects that are proven to reduce direct PM2.5 emissions are to be given priority.

More information: <https://www.fhwa.dot.gov/map21/guidance/guidecmaq.cfm>

Surface Transportation Program (STP)

The Surface Transportation Program (STP) provides states with flexible funds which may be used for a variety of highway, road, bridge, and transit projects. A wide variety of pedestrian and bicycle improvements are eligible, including trails, sidewalks, crossings, pedestrian signals, and other ancillary facilities. Modification of sidewalks to comply with the requirements of the Americans with Disabilities Act (ADA) is also an eligible activity. Unlike most highway projects, STP-funded facilities may be located on local and collector roads which are not part of the Federal-aid Highway System. Fifty percent of each state's STP funds are suballocated geographically by population. These funds are funneled through Caltrans to the MPOs in the state. The remaining 50 percent may be spent in any area of the state.

More information: <https://www.fhwa.dot.gov/map21/guidance/guidestprev.cfm>

Partnership for Sustainable Communities

Founded in 2009, the Partnership for Sustainable Communities is a joint project of the Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (USDOT). The partnership aims to “improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide.” The Partnership is based on five Livability Principles, one of which explicitly addresses the need for pedestrian infrastructure (“Provide more transportation choices: Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health”).

The Partnership is not a formal agency with a regular annual grant program. Nevertheless, it is an important effort that has already led to some new grant opportunities (including the TIGER grants). Oakdale should track Partnership communications and be prepared to respond proactively to announcements of new grant programs.

More information: <http://www.epa.gov/smartgrowth/partnership/>

State Sources

Project champions will work with Caltrans to identify stand-alone projects as well as ancillary projects from the list that qualify for funding through the State Highway Operation and Protection Program. It is unlikely that projects will be prioritized for the Interregional Transportation Improvement Program, but should this be an option, coordination between the City of Oakdale, Stanislaus Council of Governments, and Caltrans will be critical.

Active Transportation Program (ATP)

In 2013, Governor Brown signed legislation creating the Active Transportation Program (ATP). This program is a consolidation of the Federal Transportation Alternatives Program (TAP), California's Bicycle Transportation Account (BTA), and Federal and California Safe Routes to School (SRTS) programs.

The ATP program is administered by Caltrans Division of Local Assistance, Office of Active Transportation and Special Programs. Program goals include:

- ◆ Increase the proportion of trips accomplished by biking and walking,
- ◆ Increase safety and mobility for nonmotorized users,
- ◆ Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals,
- ◆ Enhance public health,
- ◆ Ensure that disadvantaged communities fully share in the benefits of the program, and
- ◆ Provide a broad spectrum of projects to benefit many types of active transportation users.

The California Transportation Commission ATP Guidelines are available here: <http://www.dot.ca.gov/hq/LocalPrograms/atp/index.html>

The minimum request for non-SRTS projects is \$250,000. There is no minimum for SRTS projects. Eligible pedestrian and SRTS projects include:

- ◆ Infrastructure Projects: Capital improvements that will further program goals, typically including planning, design, and construction.
- ◆ Non-Infrastructure Projects: Education, encouragement, enforcement, and planning activities that further program goals. The focus of this category is on pilot and start-up projects that can demonstrate funding for ongoing efforts.
- ◆ Infrastructure projects with non-infrastructure components

Generally speaking, successful ATP applications include widespread community support and support data for the proposed project. These projects are clearly the community and even regional priority projects. Additionally, successful projects prove they meet the goals of the ATP by improving safety and access for bicyclists and pedestrians.

More information: <http://www.dot.ca.gov/hq/LocalPrograms/atp/>

Office of Traffic Safety (OTS) Grants

Office of Traffic Safety Grants are supported by Federal funding under the National Highway Safety Act and SAFETEA-LU. In California, the grants are administered by the Office of Traffic Safety. Grants are used to establish new traffic safety programs, expand ongoing programs or

address deficiencies in current programs. Eligible grantees are governmental agencies, state colleges, state universities, local city and county government agencies, school districts, fire departments, and public emergency services providers. Grant funding cannot replace existing program expenditures, nor can traffic safety funds be used for program maintenance, research, rehabilitation, or construction. Grants are awarded on a competitive basis, and priority is given to agencies with the greatest need. Evaluation criteria to assess need include potential traffic safety impact, crash statistics and rankings, seriousness of problems, and performance on previous OTS grants. The California application deadline is January of each year. There is no maximum cap to the amount requested, but all items in the proposal must be justified to meet the objectives of the proposal.

More information: <http://www.ots.ca.gov/>

Regional & Local Sources

Work with the Stanislaus Council of Governments toward regionally available funding through the State Transportation Improvement Program (STIP) and the Congestion Management and Air Quality Improvement Program (CMAQ). This should be done at the level of the region's Technical Advisory Committee and coordinated with other local agencies to find equitable distribution of regionally available funding.

It is recommended that the City of Oakdale elevate projects identified in Tier 1 to further project development. These project foundations must be supported with additional data and studies to prepare them for competition in the federal and state funding programs. Most funding programs require a Project Study Report be prepared for the project and the competitive nature of the programs requires additional support data, cost benefit analyses, and ongoing community engagement. If a Project Study Report is not a requirement of the program, equivalent documentation can be prepared.

Regional Active Transportation Program

The Regional ATP targets projects that increase walking, improve safety, and benefit disadvantaged communities. The Active Transportation Program (ATP) was created to fund bicycle and pedestrian infrastructure and non-infrastructure projects. The ATP combines many federal and state funding streams previously used for pedestrian, safety, and other related purposes into one funding stream with broad eligibilities.

Metropolitan Planning Organizations receive an allocation from the state ATP which is then distributed according to a regional competitive process. Regional ATP applications are generally the same as the application for the statewide program, with a few additional questions. Applications not funded in the statewide program are automatically considered for the regional program, provided they complete the additional questions.

6. Accessibility Improvement Strategies

Accessibility and Complete Streets Goals

For many projects across the United States, transportation engineers prioritized the fast movement of motor vehicles over the safety of neighbors and users of the road. Complete streets reverses that approach and works to create streets that are welcoming and pleasant for everyone and, most importantly, safe for everyone. This includes people with accessibility or mobility needs, children, and seniors.

A complete street is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the street's function and context. Every complete street looks different, according to its context, community preferences, the types of road users, and their needs.

Like any large-scale project, the recommended projects are made up of a cumulative impact of smaller elements. These elements are founded on local and national guidelines, and apply standard traffic engineering tools and designs. Key street features recommended in these guidelines are described below. For more specific details about the tools, facilities and design elements referred within, refer to Caltrans Complete Streets Resources and Complete Streets Elements Toolbox, the 2012 *AASHTO Guide for the Development of Bicycle Facilities*, the 2004 *AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities*, the 2012 *NACTO Urban Bikeway Design Guide*, and the 2017 *FHWA Small Town and Rural Design Guide*. The proposed improvements in Oakdale include some elements of complete streets, which were selected based on feedback from the public and stakeholders, and given the context and constraints of the project areas. Some of these features may be included in the recommendations in Chapter 4, or may be added in at a later time.

Complete Streets Elements

Caltrans supports the implementation of Complete Streets efforts and policies along Caltrans right of way in Oakdale. For information from Caltrans relating to Complete Streets, please visit <http://www.dot.ca.gov/transplanning/ocp/complete-streets.html>.

Pedestrian Improvements

High Visibility Crosswalks

There are a number of marked crosswalk types. Standard transverse crosswalks consist of two parallel lines that mark the edges of the crosswalk.

High visibility markings include ladder-style crosswalks, which include transverse lines in addition to bold bars across the crosswalk. These markings are more noticeable to drivers and are typically used where there is existing or anticipated high walking activity, where slower walkers are expected (near schools and senior centers), at uncontrolled crossings, and where high numbers of pedestrian related crashes have occurred. In school areas, the crosswalks are yellow whereas outside school areas the crosswalks are white.



Ladder and transverse crosswalk markings

Artistic crosswalks serve as high visibility crosswalks and can improve the attractiveness of public space and create a sense of place. The most recent guidance from the Federal Highway Administration (Interpretation Letter 3(09)-24(I)) has recommended limited colors and patterns. However, cities across California and the U.S. have installed designs that may not comport to the FHWA guidance. The City of Oakdale should explore their level of acceptable risk versus creating a sense of place or unique design highlighting Oakdale's culture and values related to compliance with federal regulations before implementing these designs.

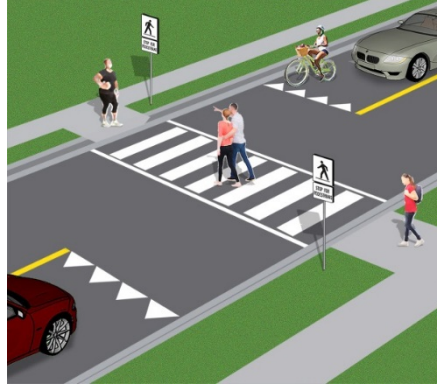


Artistic crosswalk

Advance Stop Line and Advance Yield Line

Advance stop lines are placed six to ten feet before a marked crosswalk to indicate to motorists where they should stop. Advance yield lines are used at uncontrolled or midblock crossings (see graphic on the next page). Advance stop lines improve visibility of pedestrians by discouraging drivers from encroaching into the crosswalk. This is especially important at uncontrolled crossings on multi-lane streets, where a vehicle stopped too close to the crosswalk may hide a pedestrian from view of an approaching driver in the second lane. Advanced yield lines on multilane streets will vary depending on speed and other conditions but should be placed 20 to 50 feet from the crosswalk.

This Plan recommends advance stop lines or yield lines be installed at all new or retrofitted marked crosswalks, especially on multi-lane streets.



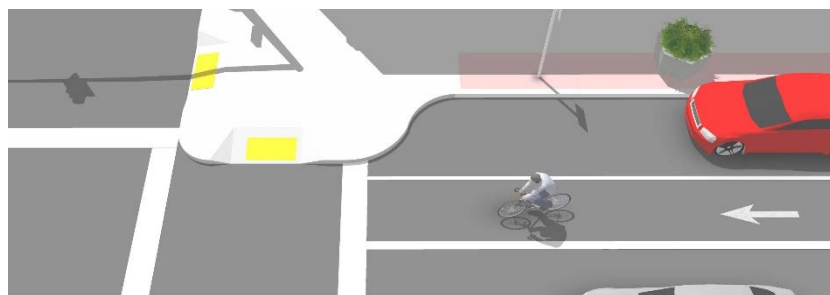
Advance Yield Line. Source: Ontario Ministry of Transportation

Curb Extensions

Curb extensions are an effective method to improve pedestrian visibility and reduce pedestrian crossing time. This may improve safety for pedestrians, as it reduces the length of time that pedestrians are exposed to potential conflicts with motor vehicles. Curb extensions also narrow the perceived roadway width for drivers, which may reduce speeds. They reduce vehicle speeds by reducing turning radius, which increase the chance of survival for a pedestrian in the event of a collision. At signalized intersections, curb extensions can reduce delays by allowing for shorter pedestrian “walk” phases due to the reduced crossing distance.

Curb extensions extend the sidewalk or curb line out into the parking lane, reducing the effective street width. They can only be used where there is on-street parking, and should not encroach into bicycle lanes.

The location of curb extensions should include a number of considerations. Curb extensions should be designed so they allow buses to complete turning movements and load and unload passengers safely. Curb extension geometry should allow mechanical street sweepers to clean transitions from the parking lane to the extended curb. Curb extensions may also require storm drainage re-engineering, or may be constructed with a channel to preserve existing drainage and reduce costs.



Curb extension



Curb extension with high visibility crosswalk

Rectangular Rapid-Flashing Beacons (RRFBs)

Rectangular rapid-flashing beacons (RRFBs) are used to increase visibility of pedestrians at marked crosswalks where traffic signals or stop signs are not warranted. They consist of a pedestrian crossing sign supplemented by a pair of bright rectangular lights that flash in a rapid alternating pattern when a pedestrian presses a button. Many assemblies are solar powered stand-alone units that can be installed without costly wiring work.



Rectangular Rapid Flashing Beacon with Advance Yield Lines



Rectangular rapid flashing beacon

Planted Medians & Street Trees

Street trees and landscaped medians can reduce head-on and turning collisions and provide refuge for pedestrian crossings, all while beautifying the area. Sidewalk plantings can provide shade and a pleasant street experience for people walking, and create a buffer between pedestrians and vehicle traffic.



Planted median and street trees

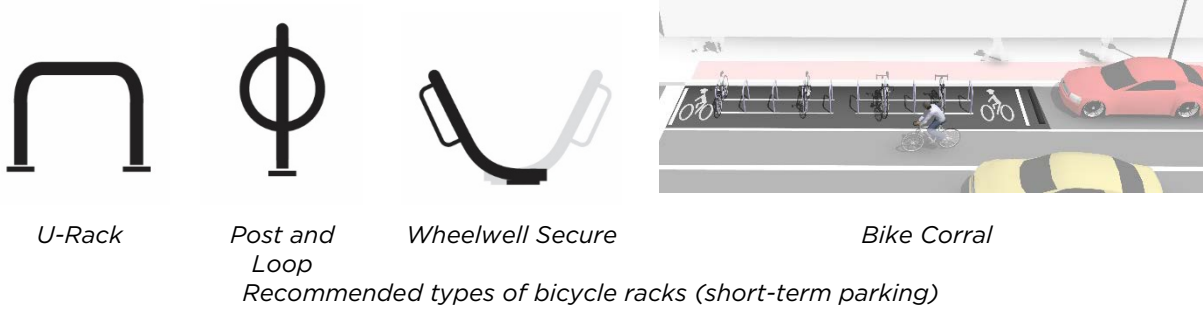
Bicycle Improvements

While Class I paths, Class IV bikeways, or streets that require widening or road diets or right-sizing the street to accommodate bicycle facilities may be expensive to implement, there are other opportunities for low-cost improvements to the bicycling environment.

Bicycle Parking

No bicycle network is complete without secure places to park bicycles near desired destinations in visible, well-situated locations. Bicycle racks for short-term parking are relatively inexpensive and can be installed in unused space along building frontages, in furniture zones on sidewalks, or in underutilized parking spaces (often called a 'bike corral'). The rack types

illustrated below and recommended for use in Oakdale are consistent with those recommended in the Association of Pedestrian and Bicycle Professionals [Essentials of Bike Parking: Selecting and Installing Bike Parking that Works \(2015\)](#).



Bicycle Detection at Traffic Signals

Traffic signals control traffic by either using timers or actuation (detection). Bicycle detection at actuated traffic signals provides a substantial improvement for bicycle access and mobility. California Assembly Bill 1581 requires all new and modified actuated traffic signals to detect bicyclists. Caltrans Policy Directive 09-06 clarifies the requirements. By installing bicycle detection at actuated intersections in coordination with roadway repaving or other maintenance activities, costs may be reduced.

On-Street Separated Bikeways (Class IV)

Separated bikeways provide full physical separation between bicyclists and motor vehicles, but are part of the roadway network. On-street separated bikeways are becoming more common in California and provide additional protection beyond bike lanes only marked by paint. The City of Modesto has implemented cost effective Class IV separated bikeways to connect their two college campuses. In 2015 Caltrans issued DIB 89 to establish Class IV bikeways and provide design guidance for their use in California.



Separated bikeway

Bike Lanes (Class II)

Class II bike lanes provide a designated space for bicyclists to ride, helping to define where each mode of traffic can travel. Some bike lanes, like the one pictured here, can include an additional buffer between bicyclists and moving vehicles.



Buffered bike lane

Shared Lane Markings (“Sharrows”)

Sharrows help remind motorists that bicyclists are allowed to use the full lane and remind bicyclists to avoid riding too close to parked cars for safety. These markings are primarily recommended on low-speed streets.



Sharrow marking

Protected Intersections

Protected intersection reduce turning conflicts between drivers and bicyclists by providing clear paths for each user. Protected intersections are relatively new to the United States and have been shown to reduce collisions.



Protected intersection

Bike Boxes

Bike Boxes designate an area for bicyclists to queue in front of automobiles, but behind the crosswalk, at signalized intersections. These designs increase visibility and reduce vehicle incursion into crosswalks. Bike Boxes are also helpful at facilitating left turns for cyclists.



Bike box

Road Diets

Road Diets, or “Roadway Reconfigurations” reduce the number of travel lanes or their width to create space for all roadway users. The traditional road diet converts streets with four lanes to two lanes with a center turn lane and bike lanes. However there are other ways to accomplish a road diet. Separating the left-turning vehicles from through traffic can reduce the chance of both rear end, side-swipe, and left turning collisions. The extra space can also be used for planted medians, pedestrian refuges or curb extensions.



Road diet before and after. Source: Dom Nozzi

Roundabouts

Roundabouts and traffic circles have been proven to reduce collisions, as well as the severity of collisions. Roundabouts also allow for a greater capacity of vehicle traffic throughout the day, improving traffic flow without widening roadways.



Roundabout

Equestrian Improvements

Wide Path Shoulders

Provide wider soft shoulder surface with path installation to accommodate equestrian use.



Wide shoulders for equestrian use

Review Vegetation Maintenance Practices

Trim trees and other overhead landscaping to a higher level than required for bicyclists and pedestrians.

Equestrian Push Buttons

Provide push buttons for equestrians waiting to cross a crosswalk. These will need to be placed higher than pedestrian push buttons.



Equestrian push button

Routine Maintenance

Monitoring

Monitoring the quality of Oakdale's bicycling and walking environment will help ensure it remains an accessible community, and can reduce long-term maintenance costs. A successful monitoring program consists of:

- ◆ Reporting Tools: The City should consider implementing a system for residents to submit concerns or notify the city of maintenance needs on sidewalks, paths, and bikeways.
- ◆ Regular Inspections: Regular inspections of the physical environment can ensure maintenance needs are identified in a timely manner. The City should develop a regular inspection schedule of the walking, bicycling, and equestrian environment and train staff on common challenges to look for. Inspection records should be routed to the appropriate staff member for prompt follow up.
- ◆ Schedule Repair: Some issues may be addressed with upcoming funded projects, or as part of regular maintenance. If an issue requires separate maintenance or repair, the City should schedule this as soon as feasible following identification of the challenge.

Maintenance

Maintaining the walking, bicycling, and equestrian environment once it has been implemented preserves the investment and helps support a high quality of life for Oakdale residents. Maintenance costs are a concern for most cities, because there are grants to construct projects but not to maintain them.

Setting Priorities

A detailed and systematic Maintenance Management System will help set priorities, though staff may be doing this effectively already. Sound overall advice on setting trail maintenance priorities is provided in the U.S. Forest Service *Trail Construction and Maintenance Notebook* 2004 edition (this edition is more specific on this topic than the updated 2007 edition). Though directed at backcountry trails, it is valid for pedestrian, bicycling, and equestrian settings.

High-quality and timely maintenance will greatly extend the useful life of walking facilities.

Even though you know the proper maintenance specifications, sometimes there is too much work for the time you have to spend. How do you decide what to do?

Since it is a given that there will always be more work to do than people to do it, it's important to:

- ◆ Monitor your conditions closely
- ◆ Decide what can be accomplished as basic maintenance
- ◆ Determine what can be deferred
- ◆ Identify what area will need major work

Setting priorities is critically important if maintenance dollars are going to be spent keeping facilities in the best possible condition.

The first priority is to correct truly unsafe situations. The second priority is to correct things causing significant damage. The third priority is to restore the facility to the planned design standard.

Whatever the priority, doing maintenance when the need is first noticed will help prevent more severe and costly damage later.

Maintenance Costs and Frequencies

Activity	Frequency	Unit	Cost Estimate per Unit
Crosswalk restriping	Arterials: 5-7 years Minor Streets: 10 years	Each	\$2,800
Sidewalk and curb ramp repair	As needed		Varies
Path repair and maintenance	Annually	Linear mile	\$4,000
Tree trimming	Annually		Varies
Sign repair or replacement	As needed	Each	\$300

Demonstration Projects and Phasing

“Demonstration projects” are a way to test the impacts of changes to the transportation network by temporarily constructing improvements using non-permanent materials, in place for a specified, limited amount of time. These projects enable the City to study the real-world efficacy of such changes, often at a relatively modest cost due to the short-term materials used. Utilizing before and after data collection, they can be monitored to understand benefits and tradeoffs, with the goal of adjusting the final design before committing to a more expensive permanent capital project.

Short-term demonstration projects, sometimes called tactical urbanism or temporary installations, are installed for one or two days in order to quickly evaluate a project and to gather feedback from the public. Demonstration projects usually use cones, temporary marking tape, moveable planters, and other non-permanent materials that can easily be installed, modified, and removed, as needed.

Longer-term demonstration projects can be installed for a longer period of time prior to permanent implementation. This allows for extensive data collection and public input, especially for potentially contentious projects. Materials such as traffic paint, flexible traffic delineator posts, and moveable planters are often used during pilot projects and then may be later upgraded to permanent treatments such as thermoplastic, asphalt, concrete, and rigid bollards.

Short-term demonstration projects can be upgraded to longer-term demonstration projects in phases. The City can prioritize the phasing based on collision analysis and public input.

Both demonstration and long-term pilots should be approached from a Complete Streets design perspective in the context of modal priorities. Demonstration Projects should integrate improvements for all modes of transportation whenever possible, including consideration of

people walking, biking, riding transit, and driving. For example, demonstration projects on transit routes should seek to test transit operations and access improvements whenever possible, utilizing the latest national design best practices, such as the National Association of City Transportation Officials (NACTO) *Transit Street Design Guide* and *Urban Street Design Guide*.

Low Cost Improvements

In many locations, there may be opportunities for low-cost, easy-to-implement projects that require little funding or work and can quickly begin to improve the active transportation environment in Oakdale. These treatments may also be appropriate as interim solutions while long-term projects seek funding or complete design work.

Many of treatments described in the Completes Streets section previously provide these low-cost solutions including high visibility crosswalks, advance stop and yield lines, flexible/temporary curb extensions, Class II bike lanes, bike parking, wide path shoulders, and a review of vegetation maintenance policies.

Where streets currently have underutilized parking or vehicle lanes, or where excess width exists, adding on-street bicycle lanes can be a very cost-effective way to improve comfort for bicyclists. Class II bicycle lanes or Class III bicycle routes can be implemented using this strategy.

Roads that are being resurfaced should be evaluated for feasibility of bikeways so new striping plans can be applied when the road is restriped.

Appendix A. Plan and Policy Review

This appendix contains a review of adopted planning and policy documents relevant to the Accessibility Master Plan. Documents are grouped into citywide, specific area, regional, and statewide efforts.

Citywide Plans & Policies

Oakdale 2030 General Plan (2013)

The preface of the general plan states that the city has already maximized opportunities to improve traffic flows as feasible and continues to promote alternatives to the automobile. The mobility element supports policies to create a balanced transportation network across all modes that will serve both present and anticipated future needs while increasing interconnectivity and reducing vehicle trips. While the plan does state that the automobile is and will continue to be the primary mode of travel, the plan strives to promote increased accessibility and use of alternative modes.

The plan opens by acknowledging that the attractiveness of travel options is directly influenced by the type and pattern of land uses, as well as the availability of transportation facilities and services.

Within the mobility chapter of the general plan, the section on multi-modal transportation contains the following goals that encourage active transportation:

- ◆ Establish an interconnected transportation network that offers safe and convenient mobility options for all modes
- ◆ Ensure the transportation network meets the needs of a variety of users, eliminating barriers where feasible to allow access by people of all abilities
- ◆ Design and construct both new and reconstructed streets with adequate rights-of-way and facilities to support the full range of travel modes
- ◆ Integrate transportation and land use decisions to enhance opportunities for development that is compact, walkable, and transit friendly
- ◆ Use multi-modal evaluation methods to ensure that projects do not result in worsening facilities or service for transit, bicyclists, and pedestrians

In addition, a section on traffic calming is included. Traffic calming often includes infrastructure changes to reduce vehicle speed which can be accomplished by narrowing streets and travel lane widths, such as with the use of curb extensions (or “bulb-outs”) and other techniques in high pedestrian areas to slow traffic and provide a safer crossing experience in neighborhood settings.

The bicycle and pedestrian section contains references to the Bikeways and Trails Master Plan, and how that plan should be used to guide the planning, design, and funding of new and enhanced pedestrian and bicycle facilities. The section also focuses its attention on several key areas: creating a cohesive network and regional system, providing public access to and along the Stanislaus River (Stanislaus River Corridor Action Plan), implementing streetscape and trail improvements (shade trees, street furniture, lighting, etc.), improving pedestrian crossings on major roadways, and adding and/or requiring support facilities. The plan also requires new

developments include pedestrian and bicycle facilities, and the city is considering acquiring and repurposing railroad right-of-way or other unused easements for pedestrian and bicycle purposes. Maintenance is also a priority to ensure continued accessibility. Lastly, the city wishes to work with the School District to support the Safe Routes to School Program and continue to encourage walking and bicycling to school.

Bikeways and Trails Master Plan (2001, 2006 update)

In 2001, the City of Oakdale adopted a Bikeways and Trails Master Plan (BTMP), which was subsequently updated in 2006. The stated purpose is to serve as a blueprint for developing a bikeway and trails system that includes both on-street and off-street facilities, in addition to support facilities and safety/education programs within Oakdale. Oakdale desires to provide residents and visitors with a connected bikeway and trail system that can accommodate both commute and recreational trips throughout the city. This is clearly defined by the seven goals of the plan:

1. Provide a well-connected bikeway system within the City of Oakdale to improve the quality of life for all residents and visitors
2. Promote safe, convenient, and enjoyable cycling by establishing a comprehensive system of bikeways that link the City of Oakdale with other Stanislaus county communities
3. Include bikeway facilities in all appropriate city development projects to facilitate on-site circulation for bicycle and pedestrian travel, on-site bicycle parking, and connections to the proposed system
4. Develop a bikeway system that enhances safety and convenience of bicycling to and within the City of Oakdale
5. Maintain an updated system map and educational brochures to inform the public where and how to ride bicycles within the city
6. Avoid adverse environmental impacts associated with the implementation of the proposed system
7. Acquire sufficient funding to construct the proposed system within the next twenty years

The BTMP also notes that to encourage bicycling and walking, the plan should contain connections to all of the surrounding communities and it should contain connections to other forms of travel such as public transit at transfer locations. For a map of existing and proposed bicycle facilities, see Figure A-1.

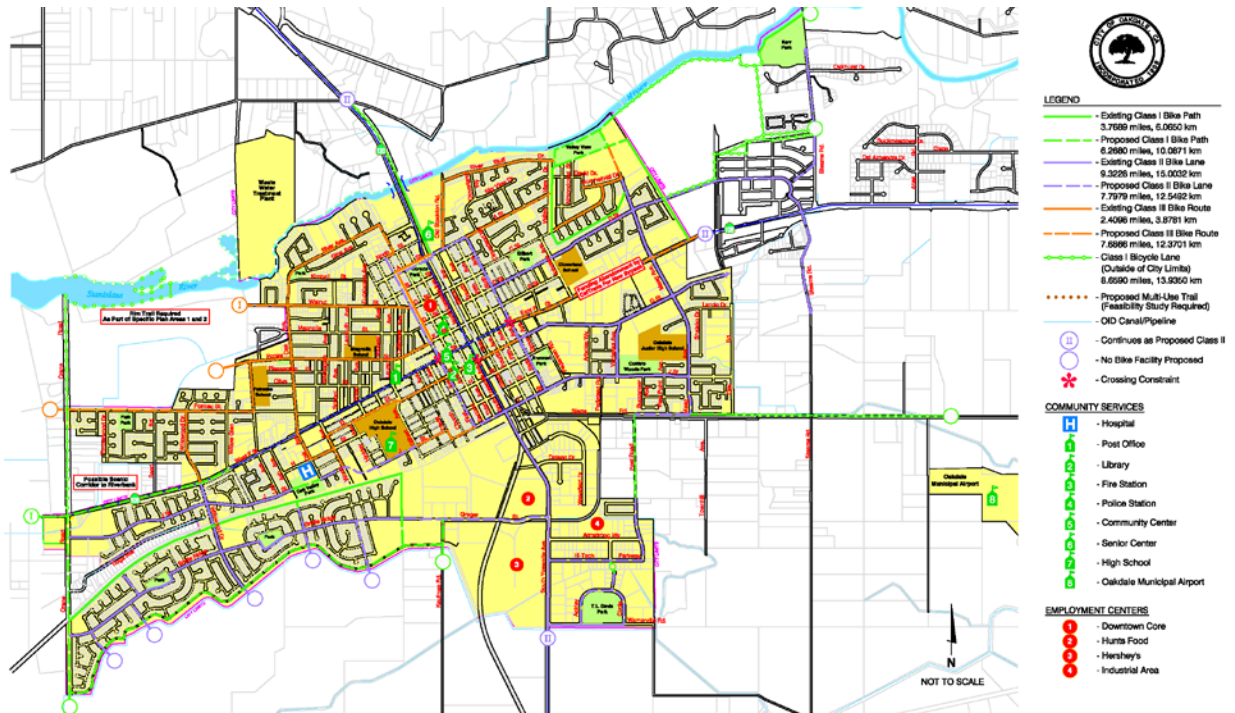


Figure A-1: City of Oakdale Bikeways and Trails Master Plan – Existing and Proposed Bikeways

Design Manual for Living Streets (2014)

The Design Manual for Living Streets provides resources to communities to “design their streets for health, safety, livability, sustainability, and more.” This document lays out a vision for living streets that will:

- ◆ Integrate income, racial, and social equity into their design and function
- ◆ Are designed for people of all ages and physical abilities for all modes
- ◆ Integrate connectivity and traffic calming with pedestrian-oriented site and building design to create safe and inviting places
- ◆ Connect people through everyday interaction
- ◆ Involve local people to share the responsibility for designing their streets
- ◆ Strengthen and enhance neighborhoods as envisioned by community members without displacing current residents
- ◆ Encourage active and healthy lifestyles

Adopted by the City of Oakdale, the design manual provides a framework and reference for creation and maintenance of livable community amenities within Oakdale.

Oakdale Pedestrian Safety Assessment (2012)

This Pedestrian Safety Assessment was conducted by the UC Berkeley Institute of Transportation Studies Technology Transfer Program for the City of Oakdale. “Enhancement areas” where the City is meeting best practices include the following:

- ◆ ADA improvements
- ◆ Systemic collision and safety analysis

- ◆ Reduce barriers to walking
- ◆ Citywide design guidelines, development standards, routine accommodation, and form-based zoning
- ◆ Pedestrian Master Plan
- ◆ School accessibility
- ◆ Street tree and open space requirements
- ◆ Enforcement and speed reduction
- ◆ Public outreach and safety education
- ◆ Coordinate with health agencies and emergency responders

“Opportunity areas” where the City is not yet meeting best practices include:

- ◆ ADA Transition plan
- ◆ Citywide crosswalk policy
- ◆ Data collection, including pedestrian counts and infrastructure inventories
- ◆ Lead pedestrian intervals at key signalized intersections
- ◆ Safe Routes to School, pedestrian safety, transportation demand management, and traffic calming programs
- ◆ Pedestrian/Bicycle Coordinator and ADA Coordinator
- ◆ Ordinances guiding bicycle parking, street and sidewalk furniture, and newspaper racks

Oakdale Improvement Standards (2015)

The Oakdale Improvement Standards document contains detailed engineering information and drawings of the various infrastructure components that can be built within the City and surrounding areas of influence.

Oakdale Sewer Master Plan (2015)

The Sewer Master Plan contains information about current and planned sewer needs and projects. Close coordination between sewer upgrades and repairs and other street improvements can lead to a reduction in cost by pooling and minimizing street repaving and striping resources. No transportation conditions were mentioned in this document.

Oakdale Storm Drain Master Plan (2015)

The Storm Drain Master Plan is a long-term plan to manage the city’s storm drains, pumps, and other related systems. No aspects of transportation were mentioned in this document.

Oakdale Street Master Plan (2015)

In response to the 2030 General Plan, the Street Master Plan was created to form a Capital Improvement Plan; this will identify individual projects and costs. The Design Manual for Living Streets forms the basis for roadway development and standards that documents and addresses the concerns of all modes.

Oakdale Water Master Plan (2015)

The Oakdale Water Master Plan is a component of the general plan and addresses the current and future water and conservation needs of the city. No aspects of transportation were mentioned in this document.

Specific Area Plans**Bridle Ridge Specific Plan (1998, 2003 Errata subdivision addition)**

Bridle Ridge is an area of about 530 acres immediately southwest of the central portion of the City of Oakdale. In the circulation element of the Specific Plan (Section 4.2.3 and Section 6), a preference for vehicular circulation to be convenient and efficient is balanced by a desire to give residents a choice in selecting their preferred mode, putting emphasis on walking, bicycling, and transit. Street standards in the plan balance the needs of all three modes, including recommendations narrowing streets to slow traffic, adding bike lanes, paths, sidewalks, and off street facilities. The plan also stresses the importance of linking Bridle Ridge facilities with neighboring facilities. Section 6 adds language stating the need for the development of a non-automobile dependent community.

Burchell Hill Specific Plan (1997)

Burchell Hill is envisioned as a unique single-family residential neighborhood with tree lined streets, walking trails, and a central park. One of Burchell Hill's organizing features is "Pedestrian Friendly Community Design." This includes elements like having a grid-based street system, open ended cul-de-sacs, narrow streets, street trees in parkways, using traffic calming elements, and having a trail system. Section 5, pedestrian and bicycle circulation, has the objective of providing a street network and system of trails which encourages pedestrian usage and bicycle circulation.

Crane Crossing Specific Plan (2014)

The Crane Crossing Specific Plan (CCSP) strives to create a mobility system that allows for the safe and convenient movement of automobiles, bicyclists, pedestrians, and transit users. Roadways in the area "are to integrate the concept of 'Complete Streets' promoting designs that comfortably provide for pedestrians, bicyclists, transit, and vehicles." The CCSP hopes to provide network connectivity both within the Crane Crossing area and throughout the City.

South Oakdale Industrial Specific Plan (2006)

The South Oakdale Industrial Specific Plan covers a part of the city that is primarily zoned for various levels of industrial uses. The plan does include pedestrian and bicycle projects that would connect this part of the city to other areas, and to the multi-purpose trail system. There are public facilities in this area, such as the City Sports Complex, which strengthen the case for these multi-modal projects. Unlike other areas of the city, this area has a higher volume of truck traffic and a network of railroad tracks.

Sierra Pointe Specific Plan (2014)

Sierra Pointe sits at the southern end of the City of Oakdale. The area is sparsely populated and developed with some rural residences and agricultural uses, though increased development is planned for the area. It is desired that all roadways in the area are to integrate complete streets concepts by promoting designs that comfortably provide for pedestrians, bicyclists, transit, and vehicles. The plan calls for a pedestrian and bicycle network for both internal circulation

and to link up with neighboring areas; additionally, four enhanced pedestrian intersections are planned.

East F Street Corridor Specific Plan (2006)

The East F Street Corridor Specific Plan is a “broader vision established to enhance Oakdale’s image, while preserving the rural and quaint characteristics of the community.” Within this planning area, it is desired that the streets do more than just move the maximum amount of cars, but also serve as an inviting and safe place for people to gather and shop. The primary circulation goal is “to provide a safe and efficient transportation network of vehicles, bicyclists, pedestrians, and transit throughout the Plan Area.” Two of the plan’s six objectives have explicit pedestrian and bicycle impacts:

- ◆ Establish a network for pedestrian and bicycle circulation
- ◆ Create a pedestrian-scaled and accessible environment

Many of the plan’s specific policies encourage active transportation as well. All of these factors work to create a pedestrian and bicycle circulation system that links neighborhoods to recreational, commercial, and public facilities.

Regional Plans & Policies

Stanislaus Council of Governments Non-Motorized Transportation Master Plan (2013)

This county-level document provides both macro (at the county scale) and city-specific analysis of existing bicycle and pedestrian conditions. The document discusses county-wide issues for bicyclists such as navigating large intersections or other crossings, improper striping, limited or non-existent shoulders, high-speed roads, and limited connectivity. The county-wide network includes 35.63 proposed miles of bikeways in Oakdale. In terms of pedestrian conditions, the plan discusses both urban and rural issues. Urban issues include long crossing distances and wide curb radii, which increase pedestrian exposure. Rural areas face lack of sidewalks and limited shoulder areas on state routes. These issues limit both connectivity, accessibility, and access to transit.

At the city level, the plan discusses transportation patterns along with collision data from the Statewide Integrated Traffic Records System (SWITRS). Key constraints include discontinuous street networks and larger block sizes in newer development areas, and railroad tracks that can create barriers to connectivity. The StanCOG plan also discusses the lack of bicycle parking and other rider amenities throughout the city. In terms of pedestrian facilities, the plan notes that Oakdale’s network is one of the best in the county, but the northern and southern sections of city have more walking barriers than other areas. Oakdale is addressing these barriers with new developments and reconstruction projects; an ADA Transition Plan is under development at the writing of this accessibility master plan. The StanCOG plan also discusses enforcement programs and how to target certain moving violations that effect pedestrians and bicyclists.

For a map of existing and proposed bikeways, see Figure A-2 and Figure A-3.

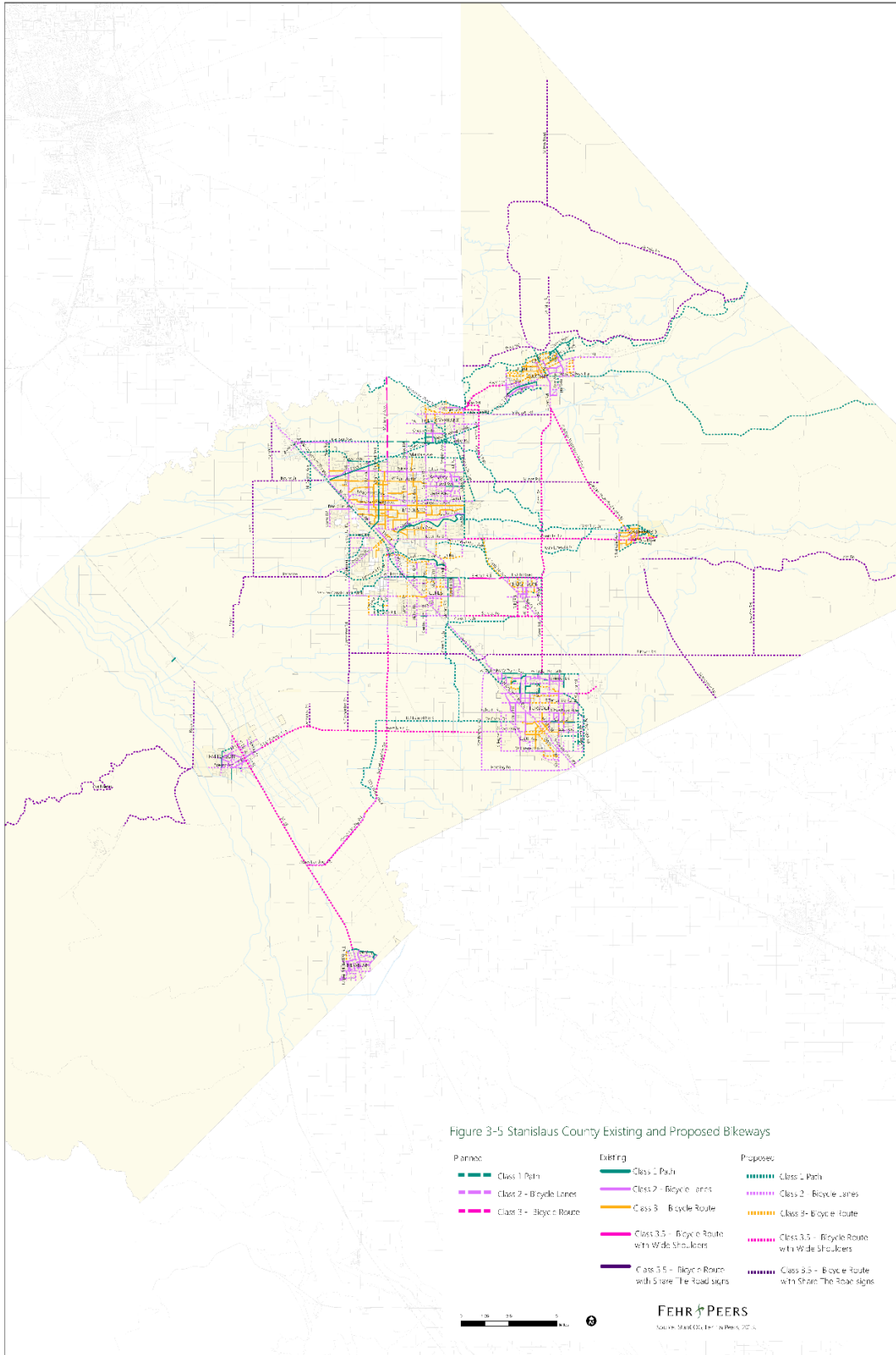


Figure A-2: StanCOG Non-Motorized Transportation Master Plan - Countywide Existing and Proposed Bikeways

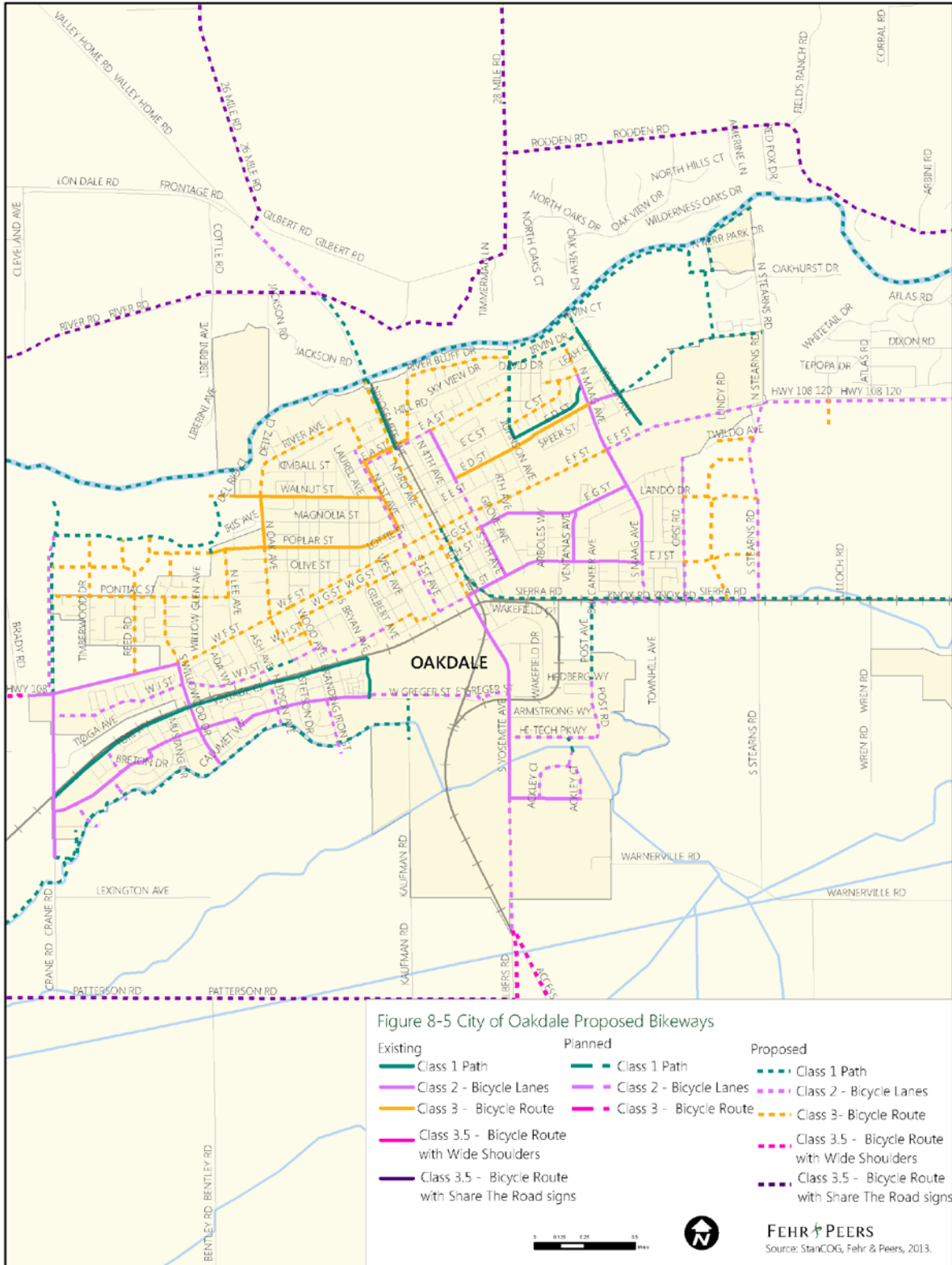


Figure A-3: StanCOG Non-Motorized Transportation Master Plan - Oakdale Existing and Proposed Bikeways

North County Corridor Project

The North County Corridor Project is a significant Caltrans infrastructure project relevant to discussion within this project. The project is proposed to connect State Route 99 to State Route 120, bypassing the Cities of Riverbank, Oakdale, and Modesto. For Oakdale, the project would mean a reduction in through truck traffic on State Route 108.

Statewide Plans & Policies

Caltrans Mission (2014)

State Routes 108 and 120 bring truck traffic, people passing through on the way to Yosemite National Park, and other long-distance travelers through Oakdale. With these two state highway corridors transecting Oakdale, the policies of the California Department of Transportation (Caltrans) are important to note. In 2014, Caltrans adopted a new mission statement to reflect the changes in the state as well as signal a new approach to its work. Previously, the Caltrans mission focused on improving mobility, mainly that of motor vehicles. The new Caltrans mission is to “provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability.” This mission reflects a statewide effort to reduce environmental harms, improve health, and increase viability of non-motorized transportation.

Alongside the new Caltrans mission, several policy and guidance documents have been adopted which are applicable to state highways within incorporated cities such as Oakdale. The documents include Deputy Directive 64-R2 and Main Street, California guide, described below. These are especially important as Oakdale works to improve its transportation network to benefit all users.

Toward an Active California: California State Bicycle and Pedestrian Plan (2017)

Toward an Active California: California State Bicycle and Pedestrian Plan is the first statewide plan of its kind for California. Mainly a policy document, the plan complements local and regional active transportation plans being developed across the state and supports agencies as they undertake their own efforts to improve the walking and bicycling environment in California. While Caltrans has the greatest control over state transportation facilities, it exerts considerable influence on bicycling and walking facilities on local roads through funding programs, design, and design guidance. The State Plan provides policy directives that makes it easier for all jurisdictions, especially more rural communities like Oakdale, to work with Caltrans to design and install innovative bicycle and pedestrian treatments across Caltrans roadways, such as SR 120 and SR 108.

More information: <http://www.goactiveca.org/>.

Caltrans Deputy Directive 64-R2 (2014)

Deputy Directive 64-R2, Complete Streets—Integrating the Transportation System, was adopted in 2014 to supersede the earlier DD 64-R1 of the same topic. DD-64 R-2 describes complete streets as context-sensitive transportation facilities for all users, and calls out the mandate of Caltrans to address needs of all users in all stages of planning, design, implementation, and maintenance. The directive also describes the state and federal laws which require Caltrans and local agencies to facilitate and promote walking and bicycling. It then

spells out specific responsibilities across Caltrans for carrying out these requirements, from the director down to the employee level.

Caltrans Main Street, California (2013)

The Main Street, California document is a guidance document providing options for Caltrans staff, local agencies, and others to optimize Main Streets throughout California on the state highway system. By providing information on meeting state roadway needs while addressing the unique needs of local communities, this document provides a way to assist Caltrans District staff and local agencies working together to augment state highways that also serve as main streets in local communities. As two such highways traverse Oakdale, this document is especially relevant to this project. Options for accommodating bicycle, pedestrian, wheelchair, and transit users, improving sustainability of main streets, and long-range planning are provided in this resource. Planning tools such as developing cooperative agreements, determining ownership and relinquishment agreements, and planning for maintenance, are also provided.

More information: <http://www.dot.ca.gov/design/lap/news/news-main-streets-cali.html>.

Appendix B. Public Comments

This appendix presents the comments received during the Planning Fair, including written comments and those provided on aerial maps.

Table B-1 shows the comments received throughout the Planning Fair.

Table B-1: Comments Recived during Planning Fair

Category	Sub-Category	Comment	Street	Cross Street	Current Condition
Pedestrian	Accessibility	Add chirping to East/West crossings at 120/108.	120/Yosemite	108/F Street	No chirping on these legs
Motorist	Traffic Calming	Slow traffic down.	Albers Road	Warnerville Road	Fast traffic
Motorist	Traffic Calming	Slow traffic down.	Crane Road	Highway 108	Fast traffic
Equestrian	Support Facility	Install hitching posts along Crane Road.	Crane Road	Tioga Ave. and W J Street	No hitching posts
Equestrian	Equestrian Trail	Create horse route along new connection of D Street from current terminus to N Stearns Road, up to the equestrian area around Kerr Park.	D Street (new alignment) and N Stearns Road	None	No horse route
Motorist	Traffic Calming	Install Roundabout.	E A Street	Melva Street	Fast Traffic
Bikeways	Class II Buffered	Install buffered bike lanes.	E A Street	N Yosemite/ Highway 120 to Valley View Drive	No facility
Motorist	Traffic Calming	Install curb extensions.	E A Street	Valley View Drive	Difficult crossing
Motorist	Traffic Calming	Slow traffic down.	E A Street	Valley View Drive	Fast traffic
Pedestrian	Crossing Improvement	Reduce pedestrian crossing distance on E F Street along length of road.	E and W F Street	Entire length within City limits	Long crossing distance
Pedestrian	Accessibility	Curbs should be lower at E D Street and S Third Ave.	E D Street	S Third Ave.	Curbs too high
Pedestrian	Lighting	Add lighting to Crosswalk at E F Street and Eighth Ave.	E F Street	Eighth Ave.	No lighting at night
Pedestrian	Crossing Improvement	Improve crosswalk at E F Street and S Sixth Ave.	E F Street	S Sixth Ave.	Difficult to cross

Category	Sub-Category	Comment	Street	Cross Street	Current Condition
Equestrian	Crossing Improvement	Install actuation button for equestrian users.	E F Street	S Maag Ave.	Equestrians can't use crosswalks.
Multi-User	Class I	Create the Sierra Rail Road Trail from S Sierra Ave. south/east along Sierra Road as previously proposed.	E G Street, Knox Road, Sierra Road	E G Street to past Laughlin Road	Unused rail corridor
Equestrian	Support Facility	Install hitching posts along E/W F Street throughout City limits.	E/W F Street	Various	No hitching posts
Motorist	Traffic Calming	Slow traffic on Highway 120 from N Stearns east out of City limits.	Highway 120	N Stearns and eastward	Fast traffic
Multi-User	Grade Separation	Create a pedestrian and bicycle crossing over Stanislaus River along Highway 120.	Highway 120	Stanislaus River	No connection
Motorist	Traffic Calming	Speeding abatement for traffic coming into town on 120.	Highway 120/N Yosemite	Along length from northern edge of City to Kimball Street	Fast traffic
Motorist	Traffic Calming	Slow traffic down.	Kimball Street	River Ave.	Fast traffic
Equestrian	Equestrian Trail	Create horse friendly path along Knox Road and Sierra Road.	Knox Road and Sierra Road	Post Ave. to Laughlin Road	No horse route
Pedestrian	Crossing Improvement	Reduce pedestrian crossing distance on N and S Yosemite along length of road.	N and S Yosemite	Entire length within City limits	Long crossing distance
Equestrian	Crossing Improvement	Create dedicated equestrian crossing.	N Stearns Road	Highway 120	Equestrians can't use crosswalks.
Motorist	Motorist	Intersection is tough for trucks to turn right.	N Yosemite	W F Street	
Bikeways	Class I	Install a bicycle path along N Yosemite/ Highway 120 at northern edge of City.	N Yosemite/ Highway 120	Grocery Outlet Center to E A Street	Already Exists
Bikeways	Class I	Create bicycle path from Riverbluff Drive to the city park at Irvin Drive.	New connection	Riverbluff Drive to Irvin Drive	No connection
Multi-User	Trails	Trail along Stanislaus River, connecting to adjacent communities. This could also connect to Valley Oak Recreation, Valley View Park, and Kerr Park.	North side of Stanislaus River	None	Undeveloped

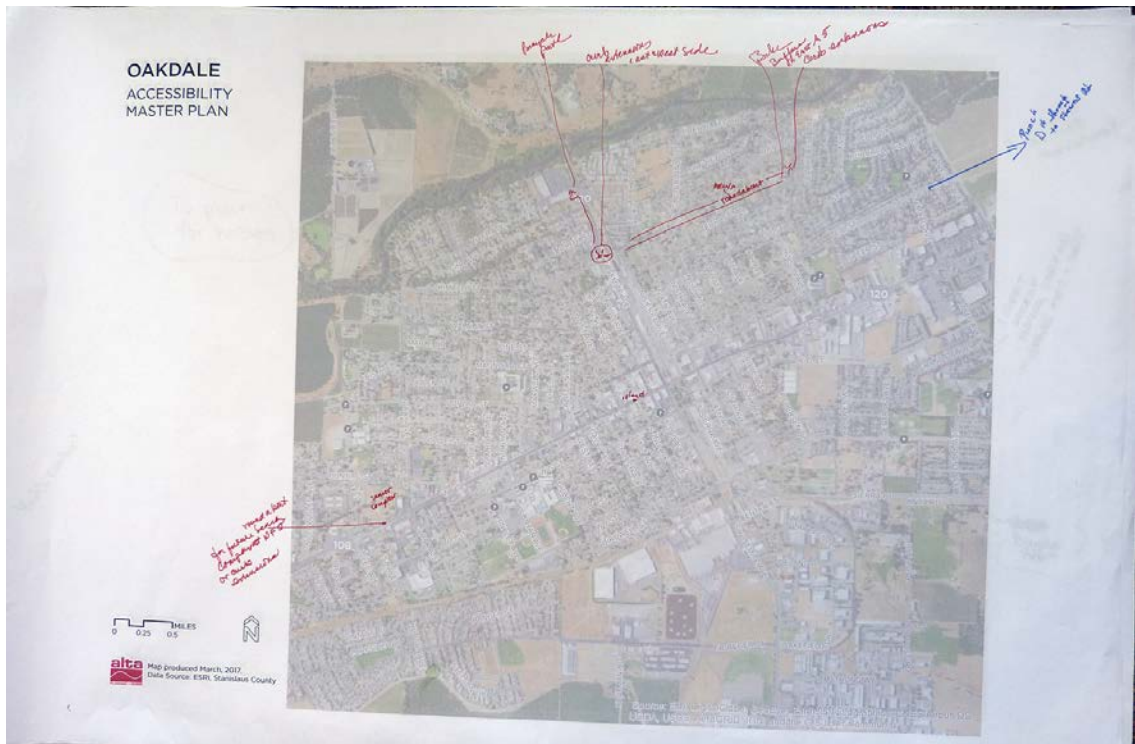
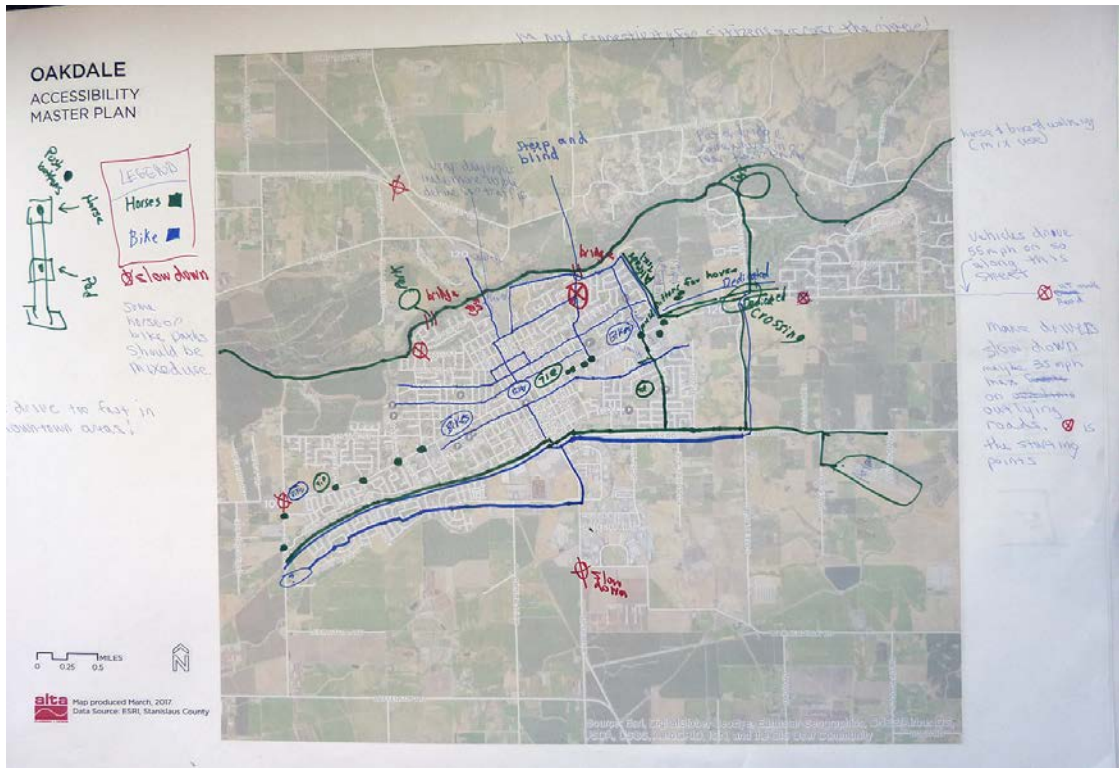
Category	Sub-Category	Comment	Street	Cross Street	Current Condition
Bikeways	Class I	Create path connecting north end of Orsi Road to Highway 120.	Orsi Road	Hwy 120/E F Street	No connection to Yosemite for this neighborhood
Multi-User	Grade Separation	Install a pedestrian bridge connecting north west side of Oakdale to park on north side of Stanislaus River.	River Ave.	None	No connection at this location
Motorist	Traffic Calming	Install traffic circle.	River Road	Highway 120	Fast traffic
Bikeways	Class II	Opportunity to narrow pavement width and add bike lanes and bioswale.	Riverbluff Drive	Old Stockton Way to Valley View Drive	Wide roadway
Equestrian	Support Facility	Utilize unused parking in KMart lot for horse hitching/rest area.	S Maag Ave.	E F Street	Unused parking
Bikeways	Class II	Create bicycle paths.	S Maag Ave., Knox Road, Sierra Road	E F Street (Hwy 120) to S Stearns Road	Bicycle Lane
Global	Gateway	Make Sierra Ave./ H-B saloon building a main entrance to town. Rezone for retail or restaurants. Keep design consistent with Old West theme. Consider equestrian "parking." Keep west side of Sierra Ave. unobstructed for views of Dinner Train and park.	Sierra Ave.		No notable gateway to City
Multi-User	Grade Separation	Install pedestrian bridge along river near Kerr Park.	Stanislaus River	Kerr Park	No connection
Multi-User	Trails	Create mixed use bicycle and equestrian path along Stanislaus River.	Stanislaus River	Length of City	No trail along river
Equestrian	Equestrian Trail	Create horse trail along Stanislaus River.	Stanislaus River	Length of town	No horse route
Multi-User	Grade Separation	Create pedestrian bridge across Stanislaus River near N Stearns Road, connecting River trail to horse area and creating connection between sides of river.	Stanislaus River	N Stearns Road	No pedestrian crossing
Multi-User	Trails	Create trail along Stanislaus River from N Yosemite east to Old Stockton Road (City Lot).	Stanislaus River	N Yosemite/ Highway 120	Informal trail behind trailer park, steep in some locations

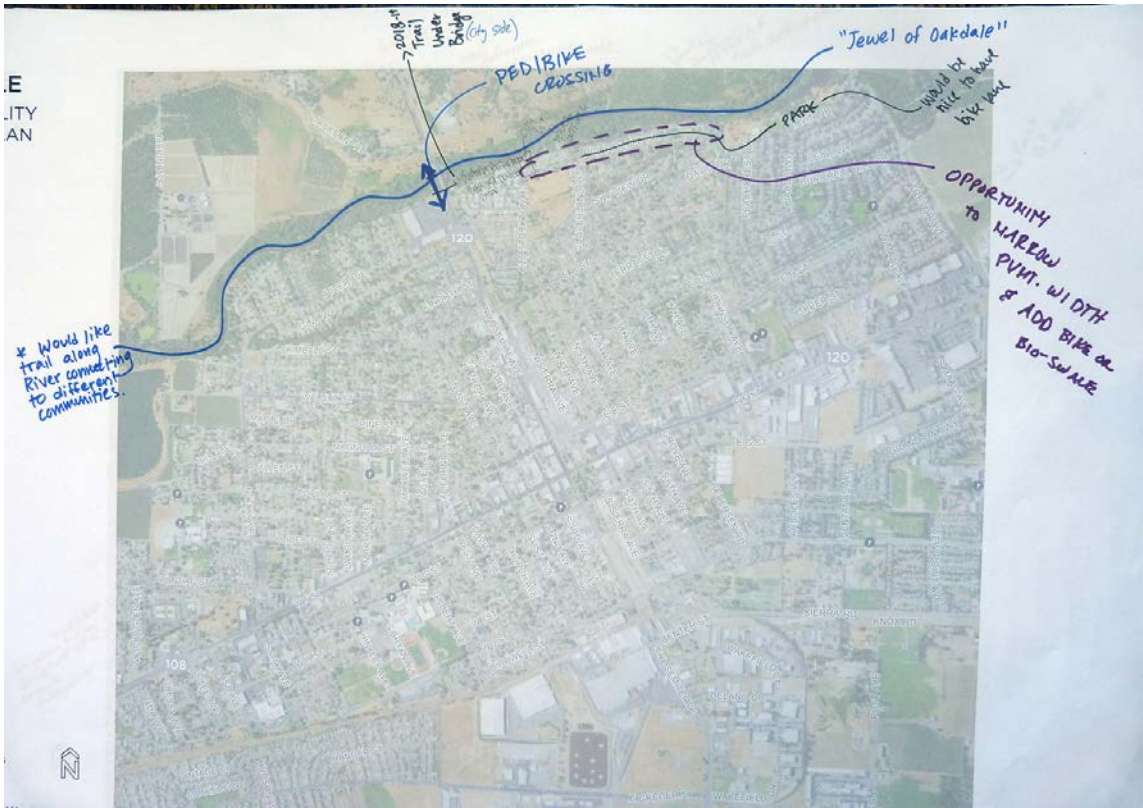
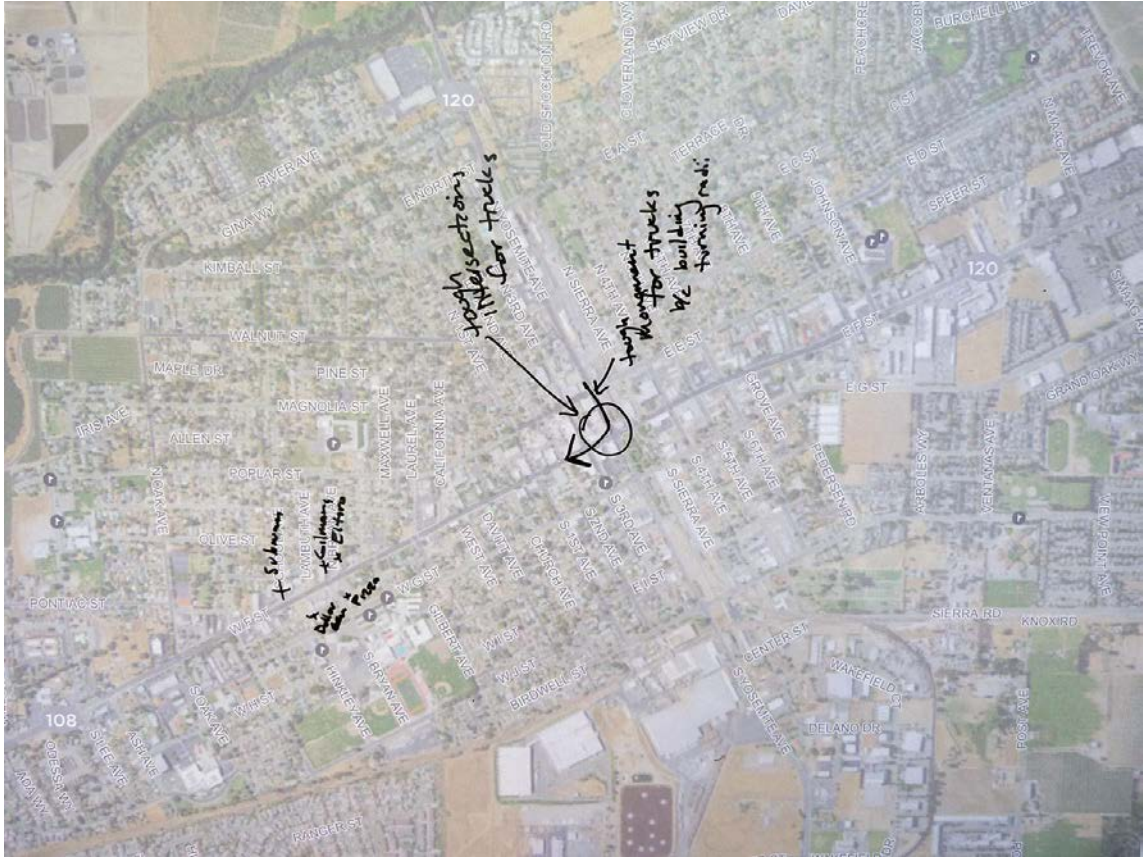
Category	Sub-Category	Comment	Street	Cross Street	Current Condition
Multi-User	Trails	Create river trail along North and South side of Stanislaus River, with connections across river at Highway 120, and Stearns Road. Connect to existing trail systems to the east.	Stanislaus River	None	No trail along river
Multi-User	Trails	Create a trail along the Stanislaus River to other nearby communities.	Stanislaus River	None	No trail
Multi-User	Trails	Create river trail along Stanislaus River, connecting to existing trail on eastern edge of City.	Stanislaus River	Parallel to Trevor Ave.	No trail along river
Equestrian	Global	Create a horse park.	Unspecified	Unspecified	No horse park
Bikeways	Class II	Create dedicated bike facility on Greger Street, north on S Yosemite, east on Knox Road, north on S Sterns Road.	Various	Various	No dedicated facility
Bikeways	Global	Make connections between existing bike lanes/facilities.	Various	Various	Disconnected lanes/facilities
Equestrian	Support Facility	Put more hitching posts for horses in areas people want to travel to, such as 4H, downtown shops.	Various	Various	Lack of hitching areas
Equestrian	Crossing Improvement	Install crossing actuation buttons for equestrian use.	Various	Various	Equestrians can't use crosswalks.
NEV	Route	Create Neighborhood Electric Vehicle (Golf Cart) route network for seniors in Oakdale. Utilize streets parallel to major roadways, such as W J Street, W H Street, W G Street, Pontiac Street, River Ave., E A Street, E G Street, S. Maag Ave., E. D Street and connection to N Stearns Road. Provide connections to local parks, Rodeo Grounds.	Various	Various	Not provided
Motorist	Traffic Calming	Roundabout on W F Street in front of Senior Complex under development.	W F Street	Between Oak and Ash Ave.	Lack of traffic calming

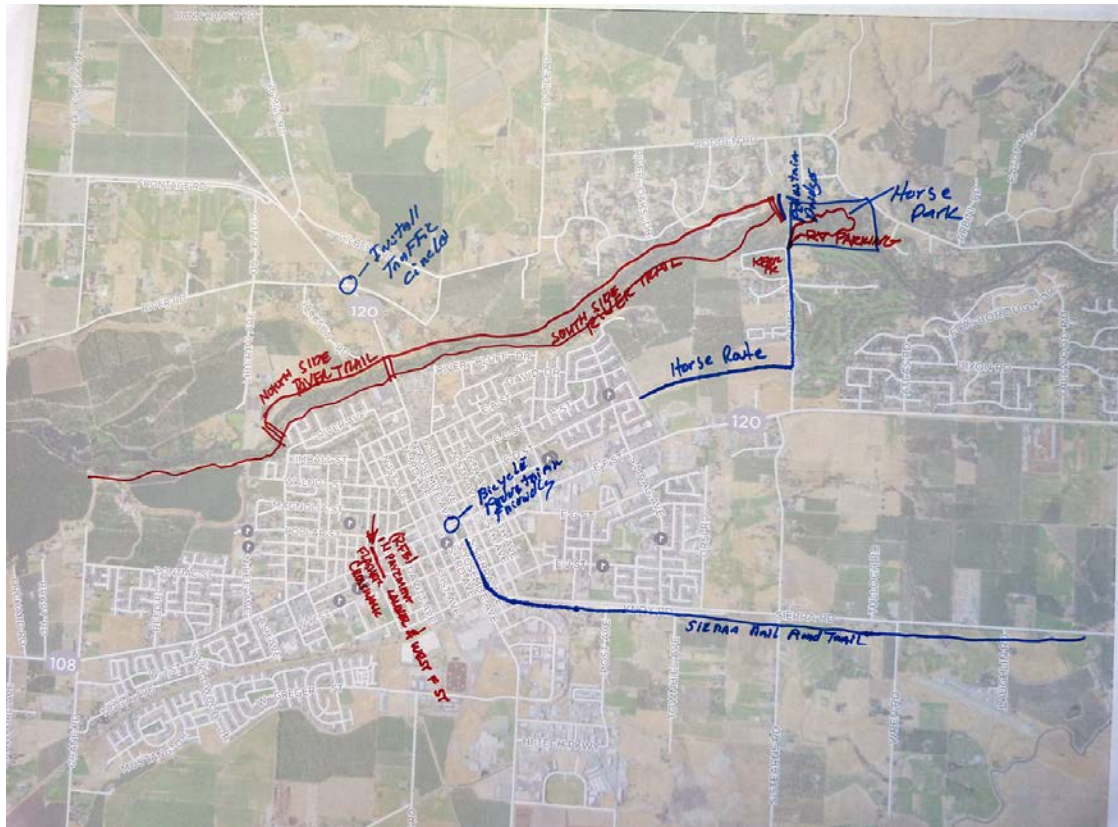
Category	Sub-Category	Comment	Street	Cross Street	Current Condition
Pedestrian	Crossing Improvement	Rapid Flashing Beacon and In Pavement Flashers.	W F Street	Laurel Ave.	Difficult to cross
	Crossing Improvement	Upgrade crosswalk to yellow high visibility markings and add appropriate yield lines and signage.	W F Street	Lee Street	Standard crosswalk markings, challenging visibility/ yielding
Pedestrian	Crossing Improvement	Move crosswalk to west leg, and add raised median refuge island and curb extensions.	W F Street	Mann Ave.	Current location on east leg means adding refuge would block left turn queue
Pedestrian	Crossing Improvement	Pedestrian refuge island in front of Gene Bianchi Community Center.	W F Street	S Second Ave.	Center left turn lane
Motorist	Traffic Calming	Add curb extensions to increase lateral diversion on roundabout entrances and exits to manage speeds. May require reshaping some splitter islands.	W G Street	Gilbert Ave.	Roundabout geometry allows higher speeds than desired on E, S, and W exits
Pedestrian	Crossing Improvement	Enhance existing crosswalk with curb extensions, median refuge island, in-road yield signs, and advance yield markings.	W G Street	Mann Ave.	Existing marked crosswalk on west leg
Pedestrian	Crossing Improvement	Add stop signs in north-south directions and crosswalks in east-west directions.	D Street	Johnson Ave.	Stop signs in east-west directions and crosswalks in north-south directions

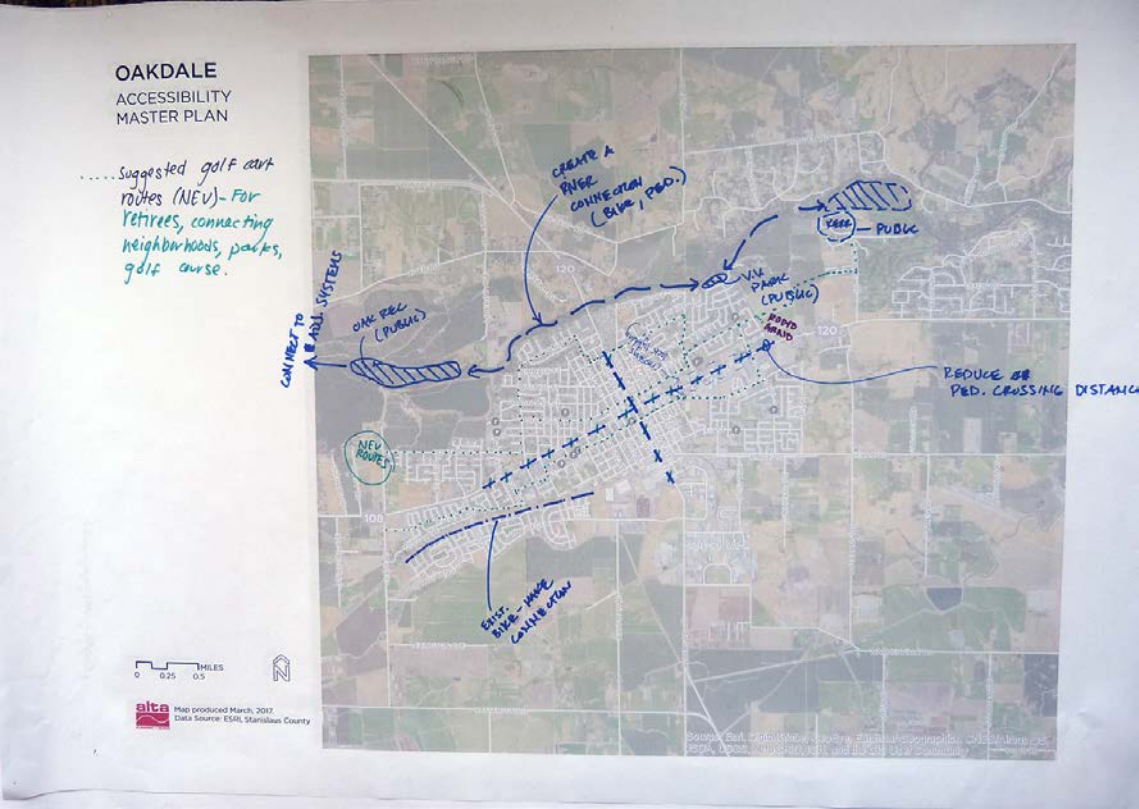
Aerial Map Exercises

The following images show the recommended solutions from the group discussions at the Opening Community Design Workshop.









Appendix C. Project Recommendations

Table C-1 shows the project key list used in Table C-2, which shows the full list of recommendations.

Table C-1: Project List Key

Code	Key
B	Bike
P	Pedestrian
E	Equestrian
MU	Multi-Use
TC	Traffic Calming
X	Other

Table C-2: Project Recommendations

Project Number	Street	Cross Street	Recommendation	Ranking			
				Community Support (1-5)	Cost (1-3)	Work Effort (1-3)	Tier Ranking
B-01	S Maag Ave, Knox Rd, Sierra Rd	E F Street (Hwy 120) to S Stearns Rd	Create bicycle paths.	2	3	3	8
B-02	E A Street	N Yosemite/ Highway 120 to Valley View Drive	Install buffered bike lanes.	2	3	3	8
B-04	Riverbluff Drive	Old Stockton Way to Valley View Drive	Opportunity to narrow pavement width and add bike lanes and bioswale.	1	3	3	7
B-05	New connection	Riverbluff Drive to Irvin Drive	Create bicycle path from Riverbluff Drive to the city park at Irvin Drive.	3	2	2	7

Project Number	Street	Cross Street	Recommendation	Ranking			
				Community Support (1-5)	Cost (1-3)	Work Effort (1-3)	Tier Ranking
B-06	Various	Various	Create dedicated bike facility on Greger Street, north on S Yosemite, east on Knox Road, north on S Sterns Rd.	2	3	3	8
B-07	Various	Various	Make connections between existing bike lanes/facilities.	5	3	3	11
B-08	Oris Road	Hwy 120/E F Street	Create path connecting north end of Oris Road to Highway 120.	3	2	2	7
B-11	G Street	Entire length within City limits	Remove center turn lane, narrow travel lanes, install buffered bike lanes	5	3	3	11
E-01	S Maag Ave	E F Street	Utilize unused parking in KMart lot for horse hitching/rest area.	1	3	3	7
E-02	Various	Various	Put more hitching posts for horses in areas people want to travel to, such as 4H, downtown shops.	3	2	3	8
E-03	Unspecified	Unspecified	Create a horse park.	2			2
E-04	E/W F Street	Various	Install hitching posts along E/W F Street throughout City limits.	3	2	3	8
E-05	Crane Road	Tioga Avenue and W J Street	Install hitching posts along Crane Road.	1	2	3	6
E-06	Various	Various	Install crossing actuation buttons for equestrian use.	5	2	3	10
E-07	N Stearns Rd	Highway 120	Create dedicated equestrian crossing.	3	3	3	9
E-08	E F Street	S Maag Ave	Install crossing actuation button for equestrian users.	3	2	3	8

Project Number	Street	Cross Street	Recommendation	Ranking			
				Community Support (1-5)	Cost (1-3)	Work Effort (1-3)	Tier Ranking
E-09	D Street (new alignment) and N Stearns Road	None	Create horse route along new connection of D Street from current terminus to N Stearns Avenue, up to the equestrian area around Kerr Park.	4	1	1	6
E-10	Stanislaus River	Length of town	Create horse trail along Stanislaus River.	3	1	1	5
E-11	Knox Rd and Sierra Rd	Post Ave to Laughlin Rd	Create horse friendly path along Knox Road and Sierra Road.	1	2	2	5
P-01	E F Street	Eighth Avenue	Add lighting to Crosswalk at E F Street and Eighth Avenue.		2	3	5
P-02	E and W F Street	Entire length within City limits	Reduce pedestrian crossing distance on E F Street along length of road.	5	3	3	11
P-03	N and S Yosemite	Entire length within City limits	Reduce pedestrian crossing distance on N and S Yosemite along length of road.	5	3	3	11
P-04	120/Yosemite	108/F Street	Add chirping to East/West crossings at 120/108.	2	2	3	7
P-05	E D Street	S Third Avenue	Curbs should be lower at E D Street and S Third Avenue.	3	2	2	7
P-06	W F Street	Laurel Avenue	Rapid Flashing Beacon and In Pavement Flashers.	3	2	2	7
P-07	E F Street	S Sixth Ave	Improve crosswalk at E F Street and S Sixth Ave.	4	3	3	10
P-08	E F Street	S Second Ave	Pedestrian refuge island in front of Gene Bianchi Community Center.	5	1	1	7
P-09	N Yosemite	East F Street	Aligns with N Yosemite Ave Improvements, decreases through lanes, add curb extension.	4	3	2	9

Project Number	Street	Cross Street	Recommendation	Ranking			
				Community Support (1-5)	Cost (1-3)	Work Effort (1-3)	Tier Ranking
P-10	D Street	Johnson Ave	Install stop signs in north-south direction and crosswalks in east-west direction.	5	2	2	9
P-11	W H Street	S Wood Ave	Install high-visibility crosswalks and yield markings (phase 1) and curb extensions and median refuge islands (phase 2)	5	2	2	9
MU-01	E G Street, Knox Road, Sierra Rd	E G Street to past Laughlin Rd	Create the Sierra Rail Road Trail from S Sierra Ave south/east along Sierra Road as previously proposed.	4	2	1	7
MU-02	Stanislaus River	N Stearns Road	Create pedestrian bridge across Stanislaus River near N Stearns Road, connecting River trail to horse area and creating connection between sides of river.	2	1	1	4
MU-03	Highway 120	Stanislaus River	Create a pedestrian and bicycle crossing over Stanislaus River along Highway 120.	3	1	1	5
MU-04	North side of Stanislaus River	None	Trail along Stanislaus River, connecting to adjacent communities. This could also connect to Valley Oak Recreation, Valley View Park, and Kerr Park.	3	2	2	7
MU-05	Stanislaus River	Parallel to Trevor Avenue	Create river trail along Stanislaus River, connecting to existing trail on eastern edge of City.	3	2	1	6
MU-06	Stanislaus River	None	Create river trail along North and South side of Stanislaus River, with connections across river at Highway 120, and Stearns Road. Connect to existing trail systems to the east.	4	2	1	7

Project Number	Street	Cross Street	Recommendation	Ranking			
				Community Support (1-5)	Cost (1-3)	Work Effort (1-3)	Tier Ranking
MU-07	Stanislaus River	N Yosemite/ Highway 120	Create trail along Stanislaus River from N Yosemite east to Old Stockton Road (City Lot).	1	2	2	5
MU-08	Stanislaus River	None	Create a trail along the Stanislaus River to other nearby communities.	3	2	1	6
MU-09	Stanislaus River	Kerr Park	Install pedestrian bridge along river near Kerr Park.	1	1	1	3
MU-10	River Avenue	None	Install a pedestrian bridge connecting north west side of Oakdale to park on north side of Stanislaus River.	1	1	1	3
MU-11	Stanislaus River	Length of City	Create mixed use bicycle and equestrian path along Stanislaus River.	5	1	1	7
TC-01	River Road	Highway 120	Install traffic circle.	1	1	1	3
TC-02	W F Street	Between Oak and Ash Avenue	Roundabout on W F Street in front of Senior Complex under development.	2	2	2	6
TC-03	E A Street	Melva Street	Install Roundabout.	2	2	2	6
TC-04	E A Street	Valley View Drive	Install curb extensions.	3	2	2	7
TC-05	Highway 120/N. Yosemite	Along length from northern edge of City to Kimball Street	Speeding abatement for traffic coming into town on 120.	5	3	3	11
TC-06	Kimball Street	River Avenue	Slow traffic down.	3	3	3	9
TC-07	Crane Road	Highway 108	Slow traffic down.	3	3	3	9
TC-08	E A Street	Valley View Drive	Slow traffic down.	3	3	3	9
TC-09	Albers Road	Warnerville Road	Slow traffic down.	3	3	3	9
TC-10	Highway 120	N Stearns and eastward	Slow traffic on Highway 120 from N Stearns east out of City limits.	4	3	3	10

Project Number	Street	Cross Street	Recommendation	Ranking			
				Community Support (1-5)	Cost (1-3)	Work Effort (1-3)	Tier Ranking
TC-11	N Yosemite	W F Street	Intersection is tough for trucks to turn right.	1	2	2	5
TC-12	G Street	Gilbert Avenue	Install raised curb extensions to narrow travel lanes and decrease turn radii for motor vehicles.	5	2	2	9
X-01	Sierra Road		Make Sierra Avenue/ H-B saloon building a main entrance to town. Rezone for retail or restaurants. Keep design consistent with Old West theme. Consider equestrian "parking." Keep west side of Sierra Avenue unobstructed for views of Dinner Train and park.	1	2	1	4
X-02	Various	Various	Create Neighborhood Electric Vehicle (Golf Cart) route network for seniors in Oakdale. Utilize streets parallel to major roadways, such as W J Street, W H Street, W G Street, Pontiac Street, River Ave, E A Street, E G Street, S Maag Avenue, E D Street and connection to N Stearns Road. Provide connections to local parks, Rodeo Grounds.	1	3	3	7