



La Vina Mobility Study





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La Vina Mobility Study, Madera County, CA



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Purpose and Objectives of Project

This document has been prepared by 4-Creeks Inc. at the direction of Madera County. This study was planned in accordance with the California Department of Housing and Community Development Block Grant program requirements, and within the scope of work agreed to by Madera County, the grant recipient, and by 4-Creeks, Inc., planning consultant.

The purpose of this grant is to provide rural cities and counties funding to improve the quality of living for low and moderate income communities through the creation and expansion of community and economic development. This grant supports multiple project types with this common goal. Implementation of this grant should ultimately result in improvements in community and economic development. This document is a planning level study resulting from a community-based information gathering process. Through our outreach efforts, including multiple surveys, the community stakeholders were invited to participate and guide the direction of this project.



The stated purpose of the California Department of Housing and Community Development Block Grant fund is to:

Photograph 1: Avenue 9 westward view; Source 4-Creeks 3/27/17

*"*Fund housing activities, public works, community facilities, public service projects serving lowerincome people, and planning and evaluation studies related to any activity eligible for these allocations, and set-aside for Native American and Colonia."





In addition, this study is expected to depict a specialized planning document that meets the following 4-Creeks objectives:

- Provide a Traffic Count/Accident Report Analysis to the La Vina community and Madera County.
- Provide design concepts that incorporate community ideas.
- Help the community visualize project build-out by providing illustrations of the built-out project and by providing cost estimates for design concepts.
- Improve community mobility, access, and safety throughout the area.
- Provide potential grant opportunities to implement the planning level study and design.

Location of Project

As shown in Figure 1.1, the community of La Vina is located in the southwest part of Madera County, in the San Joaquin Valley of central California. La Vina is a small, unincorporated, rural town surrounded by agriculture.

Figure 1.2 shows the location of La Vina in Madera County, the study area boundary, and the existing pedestrian infrastructure. The study area encompasses a half mile segment of Avenue 9 from Road 23 ½ to Road 24, as well as the attached side streets including Vina Street, Paraiso Street, Las Palmas Avenue and Uvas Ave.

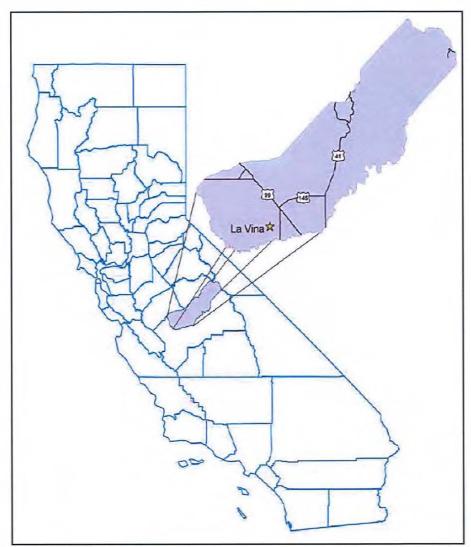


Figure 1.1 - Project Location Map





Physical and Demographic Context

According to the 2010 Census, La Vina is 95% Hispanic with a population of 279 residents. There were 63 households residing in the community and 55 family households. 67% of households had children under the age of 18 living with them. The average household size is 4.43 and the average family size is 4.62. Children under the age of 18 make up the largest portion of the population (28%), while adults age 25-44 made up the second largest group (25%). The median age of residents is 27.6 years. There are approximately 20% more males than females. The median household income in La Vina is \$26,589, which is significantly lower than the state average.

La Vina is located 6.5 miles outside of the City of Madera where most retail, primary commercial and service facilities are located. Presently there is no bicycle infrastructure and only sporadic pedestrian infrastructure within the La Vina community. Sidewalks are located on Vina Street, Paraiso Street, Uvas Avenue, and Las Palmas Avenue, however sidewalks are nonexistent on all other Roadways within La Vina. This discourages walking and bicycling and increases vehicle miles traveled.







Expected Outcome of Project

This La Vina Mobility Study will identify appropriate motorized and non-motorized design concepts in order to increase the functionality and safety of La Vina's circulation system for pedestrians, bicyclists, and drivers.

The implementation and construction of design concepts will require action subsequent to this study. This includes the hiring of consultants to prepare the required engineering drawings, and construction contractors to construct the finalized design concepts. Funding must be secured prior to the start of each activity. The implementation of the design concepts identified in this study will ultimately result in the significant improvement of La Vina's roads and transportation network. The Financial Plan chapter of this Study will identify the subsequent phases of this project, the design concepts to be implemented in those phases, and the cost estimate of each phase.

Implementation of this Study will:

- Increase safety for pedestrians and bicyclists traveling in La Vina.
- 2. Increase the quality of life for residents of La Vina
- Identify information needed to obtain further grant funding to implement the design concepts identified in this report.
- 4. Be consistent with the Madera County General Plan.



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Regulatory Context

Federal

Americans with Disabilities Act

Madera county is obligated to perform publicly accessed projects in a manor that conforms to federal and state laws regulating equal access by persons with disabilities under the Americans with Disabilities Act of 1990 (ADA) amended by the ADA Amendments Act of 2008 and as currently published in the Title III regulations (28 CFR Part 36, revised July 1, 1994(issued by the Department of Justice. The ADA Standards for Accessible Design can be found in Appendix A of the Title III Regulations. These requirements apply to construction features such as curb ramps, detectable warnings, restrooms, benches, doorways, drinking fountains, and the like. In the implementation of this plan, it is required to ensure that all design concepts are in congruence with the applicable requirements of the ADA. [http://www.accessboard.gov/adaag/html/adaag.htm]

National Environmental Policy Act

Any project undertaken on the recommendation of this document may meet the definition of a "project" under the National Environmental Policy Act (NEPA). Madera County is considered the Lead Agency under NEPA, and thus is obligated to honestly determine whether or not the project is subject to NEPA. If it is, Madera County must commence with the appropriate level of environmental assessment as stated by NEPA and the various Federal Guidelines adopted to implement the act. The determinations under NEPA that the Madera County can make as Lead Agency are as follows:

- The implementation project is not a "federal action" as defined by NEPA, 24 CFR 1508.18 and therefore is not subject to further review under NEPA;
- 2. The implementation is a Categorically Excluded project pursuant to Federal Guidelines;
- 3. The implementation project is subject to further environmental study requiring the preparation of an Environmental Assessment pursuant to applicable NEPA Guidelines.





- 4. Following the NEPA Environmental Assessment, a project will require one of the following environmental documents:
 - i. Finding of No Significant Impact (FONSI), a document finding the project will not result in significant impacts on the environment; or
 - ii. Environmental Impact Statement (EIS), a document which conducts an in-depth study of potential environmental impacts from the proposed project and recommends mitigation measures and project alternatives. An EIS is the highest order environmental analysis that can be performed under NEPA.

U.S. Environmental Protection Agency Smart Growth Principles

"Smart Growth" is an approach to community planning that promotes environmental conservation by limiting sprawl which ultimately leads to more sustainable cities. Smart growth is supported by the United States Environmental Protection Agency and requires the consideration of long term sustainability over short term convenience.

According to the U.S. Environmental Protection Agency, "smart growth" encompasses a range of strategies to limit environmental impacts while increasing a community's attractiveness and economic integrity. Smart growth approaches to community planning are shown to result in great neighborhoods. The 10 basic principles of smart growth are listed as:

- 1. Mix land uses
- 2. Take advantage of compact building design
- 3. Create a range of housing opportunities and choices
- 4. Create walkable neighborhoods
- 5. Foster distinctive, attractive communities with a strong sense of place
- 6. Preserve open space, farmland, natural beauty, and critical environmental areas
- 7. Strengthen and direct development towards existing communities
- 8. Provide a variety of transportation choices
- 9. Make development decisions predictable, fair, and cost effective
- 10. Encourage community and stakeholder collaboration in development decisions





Regulatory Context

State

California Environmental Quality Act

Any project undertaken on the recommendation of this document may meet the definition of a "project" under the California Environmental Quality Act (CEQA). Madera County is considered the Lead Agency under CEQA, and thus is obligated to honestly determine whether or not the project is subject to CEQA. If it is, Madera County must commence with the appropriate level of environmental assessment as stated by CEQA and the various State and local Guidelines adopted to implement the act. The determinations under CEQA that the Madera County can make as Lead Agency are as follows:

- 1. The implementation project is not a "project" as defined by CEQA, Guidelines Section 15378 and therefore is not subject to further review under CEQA;
- 2. The implementation project is a Categorically Exempt project pursuant to CEQA Guidelines Section 15354 and 15300-15333, or is a Categorically Excluded project pursuant to Federal Guidelines;
- 3. The implementation project is subject to further environmental study requiring the preparation of an Initial Study pursuant to applicable CEQA Guidelines.
- 4. Following the outcome of the CEQA Initial Study the Lead Agency must cause the preparation of one of the following
- 5. Environmental documents supported by substantial evidence:
 - i. Negative Declaration (ND), a document finding the project will not result in significant impacts on the environment;
 - ii. Mitigated Negative Declaration (MND), a document finding potential significant impact(s) from the project and citing mitigation measure(s) to reduce impacts to less than significant levels, or that will avoid the impacts. Said mitigation measures must be agreed to by proponent/applicant prior to public hearing taking action to approve the project, or;
 - iii. Environmental Impact Report (EIR), is the highest order of environmental analysis that can be required under CEQA. An EIR requires a public hearing on the project and an in-depth analysis of potential Environmental Impacts.





The Complete Streets Act (Assembly Bill 1358) was signed into law by California Governor Arnold Schwarzenegger in September 2008. The law requires cities and counties to ensure that all circulation planning accounts for the needs of all roadway users. Specifically, the law requires cities and counties to ensure that local roads and streets accommodate the needs of bicyclists, pedestrians, and transit riders, as well as motorists.

California Department of Transportation Deputy Directive 64

Deputy Directive 64 requires that Complete Street concepts be incorporated in all phases of state highway projects, including planning, construction, and repair. Complete Streets are defined by Caltrans Deputy Directive Number 64-R1 (DD-64-R1) as:



Figure 1.4 - Rural bike path

"A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility."

California Department of Transportation 2015-2020 Strategic Management Plan

The California Department of Transportation views all transportation improvements as an opportunity to improve sustainability, livability, and the economy. The department of transportation has identified specific objectives, performance measures, and targets in its 2015-2020 Strategic Management Plan to achieve this goal. The outline of these specific objectives, performance measures, and targets are shown in Table 1.



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Strategic Objectives	Performance Measures	Targets
PEOPLE: Improve the quality of life for all Californians by providing mobility choice, increasing accessibility to all modes of transportation and creating transportation corridors not only for conveyance of people, goods, and services, but also as livable public spaces	Percentage increase of non-auto modes for: • Bicycle • Pedestrian • Transit	By 2020, increase non-auto modes: • Triple bicycle; • Double pedestrian; and • Double transit. (2010-12 California Household Travel survey is baseline.)
PLANET: Reduce environmental impacts from the transportation system with emphasis on supporting a statewide reduction of greenhouse gas emissions to achieve 80%	Per capita vehicle miles traveled.	By 2020, achieve 15% reduction (3% per year) of statewide per capita VMT relative to 2010 levels reported by District.
elow 1990 levels by 2050.	Percent reduction of transportation system- related air pollution for: • Greenhouse gas (GHG) emissions • Criteria pollutant emissions	 15% reduction (from 2010 levels) of GHG to achieve 1990 levels by 2020. 85% reduction (from 2000 levels) in diesel particulate matter emissions statewide by 2020. 80% reduction (from 2010 levels) in NOx emissions in South Coast Air Basin by 2023
	Percent reduction of pollutants from Caltrans design, construction, operation, and maintenance of transportation infrastructure and building for: • Greenhouse gas (GHG) emissions • Criteria air emissions • Water pollution	By 2020, reduce Caltrans' internal operational pollutants by District from 2010 levels (from planning, project delivery, construction, operations, maintenance, equipment, and buildings) including: • 15% reduction by 2015 and 20% reduction by 2020 of Caltrans' GHG emissions per EO-B-18-12. • 10% reduction in water pollutants. By 2020, 85% reduction (from 2000 levels) in diesel particulate matter emissions statewide. By 2023, 80% reduction (from 2010 levels) in NOx emissions in South Coast Air Basin.
PROSPERITY: Improve economic prosperity of the State and local communities through a resilient and integrated transportation system.	Freight system competitiveness, transportation system efficiency, return on transportation investment.	By 2020, 10% increase in freight system efficiency.





Regulatory Context

Local

Madera County General Plan

The Transportation and Circulation section of the Madera County General Plan document outlines goals and policies to facilitate a functional circulation system within Madera County. As La Vina is an unincorporated community within Madera County, the Madera County General Plan will be the primary authority in the application of any design concepts promoted in this La Vina Mobility Study.

Madera County affirms the implementation of Complete Streets in its General Plan, Adopted October 1995 and strives to meet Level of Service (LOS) "D" or better on all roadways. Any segment of roadway that is worse than LOS D within Madera County is considered to be a deficiency in the transportation system.

In an effort to improve the circulation and mobility throughout Madera county, multi-modal and complete street goals and policies are incorporated into the Transportation and Circulation section of the Madera County General Plan. The following will state these goals and policies along with their applicability to this study:

Goal 2.A "To maintain a comprehensive and coordinated multi-modal transportation system that enhances the mobility of people, improves the environment, and is safe, efficient, and cost effectives."

Multi-modal Transportation System Policies.

2.A.1. The County shall encourage, where appropriate, development of an integrated multi-modal transportation system that offers attractive choices among modes including pedestrianways, public transportation, roadways, bikeways, rail, and aviation.

2.A.2. The County shall develop the transportation system to reduce vehicle miles traveled, conserve energy resources, minimize air pollution, and reduce greenhouse gas emissions.

2.A.7. The County shall support public and private efforts where appropriate to provide alternative choices to single occupant driving.





Goal 2.B. To improve County roadways to include pedestrian, bicycle, and transit facilities to better serve all users, including drivers, pedestrians, bicyclists, and transit passengers of all ages and abilities.

Complete Streets Policies

2.B.1. The County shall require new streets within unincorporated communities to be designed and constructed to serve all users. This includes:

- 1. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel.
- 2. Minimizing curb cuts along non-local streets to improve safety and capacity.
- 3. Planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- 4. Constructing sidewalks and bike lanes on both sides of streets, where feasible;
- 5. Including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- 6. Coordinating with local jurisdictions and the Madera County Transportation Commission to ensure multi-modal connections are established and maintained between jurisdictions; and
- 7. Incorporating traffic calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation by active transportation modes.

2.B.2. The County may require, based on community support and financial feasibility, reconstructed streets to accommodate pedestrians and bicyclists, except where pedestrian or bicycle facility improvements are not feasible or determined to be cost prohibitive. New and reconstructed streets shall be designed to create an environment that provides opportunities for pedestrian and bicycle activity and complementary development and land uses.

2.B.3. The County shall encourage the development of uses that support the use of public transit, bicycling, walking, and other alternatives to the automobile.





2.B.4. The County shall strive to serve all users on rural roadways in the County and shall design and construct rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- 1. Constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- 2. Removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
- 3. Coordinating with local jurisdictions and the Madera County Transportation Commission to ensure multi-modal connections are established and maintained between jurisdictions.

2.B.5. The County may require, based on community support and feasibility, reconstructed streets in rural areas to accommodate bicyclists and agricultural machinery, except where facility improvements are determined to be cost prohibitive.

2.B.6. The County shall ensure the installation of signals, signs, lighting, and other traffic safety and operation improvements necessary for the safe and efficient movement of automobiles, trucks, farm equipment, bicyclists, and pedestrians.

2.B.8. The County shall require that plans for road improvements give maximum consideration to the preservation of existing landscaping to the extent that it will be consistent with road system safety.

2.B.9. The County shall require that all medians on local streets be landscaped. Landscaping shall not interfere with public safety. This developer, in cooperation with the County, shall provide a mechanism for landscaping maintenance.





Goal 2.E. To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation to meet the needs of commuters and recreational users.

Non-motorized Transportation Policies

2.E.1. The County shall promote the development of a comprehensive and safe system of bicycle routes for short-range communing and shopping trips and recreational uses. Bikeways should be constructed that will serve the greatest number of users.

2.E.2. The County shall encourage bicycle facilities and routes in unincorporated areas to interface with city bicycle routes and provides for interand intra-county bicycle circulation.

2.E.3. The County shall work with cities and neighboring jurisdictions to coordinate planning and development of the County's bikeways and multipurpose trails with those of neighboring jurisdictions.

2.E.4. New bikeways should be linked with other bikeways, bicycle rest stops, and parks to provide safe and continuous routes.

2.E.5. The County shall encourage the provision for bicycle routes along the state highways. Where feasible, automobile and bicycle facilities should be separated.

2.E.6. The County shall require that bikeways recommended in the Bicycle Master Plan be developed when roadway projects are constructed and when street frontage improvements are required of new development.

2.E.7. The County shall consider the safety and accessibility of pedestrians when producing transportation plans, studies, and reports.

2.E.8. The County shall continue to enhance pedestrian safety at intersections in

2.E.9. The County shall require that sidewalks in unincorporated communities be developed at sufficient width to accommodate pedestrians in accordance with the Americans with Disabilities Act.





2.E.10. The County shall pursue all available sources of funding for the development and improvement of trails for non-motorized transportation (bikeways, pedestrian, and equestrian).

2E.11. The County shall promote non-motorized travel (bikeways, pedestrian, and equestrian) through appropriate facilities, programs, and information, including through the school system and local media.

2E.15. The County shall strive to implement current California Vehicle Codes for uses as speed management policies that support driving speeds on all streets within that are safe for pedestrians and bicyclists.

2E.16. The County shall support bicycle safety programs for children and commuters in the County.



2. Existing Conditions

Existing Conditions



Existing Street System

Avenue 9 is the primary roadway within the La Vina community and is used to reach all side streets. Avenue 9 is a 2-way, 2-lane street with a sidewalk on its southern side and shoulder on the northern side. There are no posted speed limits within the study area. The right-of-way width on Avenue 9 is designated as 80 ft., however only 60-70 ft. of right-of-way currently exists as the area has not been fully built out.

All other La Vina streets Aare 2-lane, local streets with a right-of-way width of 60 ft. These streets are stop controlled and include Paraiso St, Vina Street, Las Palmas Avenue, and Uvas Avenue. All local streets contain ADA compliant sidewalks and street lighting. Table 2- Description of Existing Street System shows the street classifications, as defined in the Madera County Circulation Element, the designated right-of-way width, and number of lanes for each La Vina roadway.

Table 3- Existing Intersection Control table, lists the local roadways in La Vina and their associated intersection control. The features listed in Tables 2 and 3 are also shown on Figure 2.2 – Existing Roadway Conditions map.



Photograph 2: Avenue 9 westward view; Source 4-Creeks 3/27/17

Street	Road Class	Street R-O-W (ft)	No. of Lanes (2-dir)	Posted Speed Limit (mph)
Avenue 9	Local	60-70 (varies)	2	No Posted Speed Limit
Vina Street	Local	60	2	No Posted Speed Limit
Paraiso Street	Local	60	2	No Posted Speed Limit
Las Palmas Avenue	Local	60	2	No Posted Speed Limit
Uvas Avenue	Local	60	2	No Posted Speed Limit

Intersection	Signalized / Unsignalized	Туре
Avenue 9 at Vina Street	Unsignalized	SC
Avenue 9 at Paraiso Street	Unsignalized	SC
Paraiso Street at Las Palmas Avenue	Unsignalized	SC
Paraiso Street at Uvas Avenue	Unsignalized	SC
Vina Street at Las Palmas Avenue	Unsignalized	SC
/ina Street at Uvas Avenue	Unsignalized	SC

SC = one-way stop controlled, NSC = not stop controlled



Existing Conditions

Transit

Public transportation services are provided by the County of Madera through the Madera County Connection program. There are three transit stops within the La Vina study area. The Eastin Arcola – Ripperdan- La Vina route operates in the south west region of Madera County and connects to the City of Madera through highway 99. The route has 11 stops and runs from approximately 8:45 AM to 2:00 PM on Wednesdays and Fridays only. Figure 2.3 – Existing Transit Routes map shows the location of the present transit stops in relation to the Eastin Arcola – Ripperdan – La Vina transit route. Figure 2.1 displays the location and time of transit stops in La Vina

Pedestrian Facilities

Sidewalks are non-existent on the north side of Avenue 9. All crosswalks on Avenue 9 and within side streets are unmarked and there is no pedestrian crossing signage. Sidewalks are present on the south side of Avenue 9 and within side streets.

Bike Facilities

La Vina currently has no designated bike facilities. A class 3 bike lane is currently planned for Road 23, which is approximately 0.5 miles away from the study area.



Figure 2.1 - Diagram of transit stops and stop times in La Vina

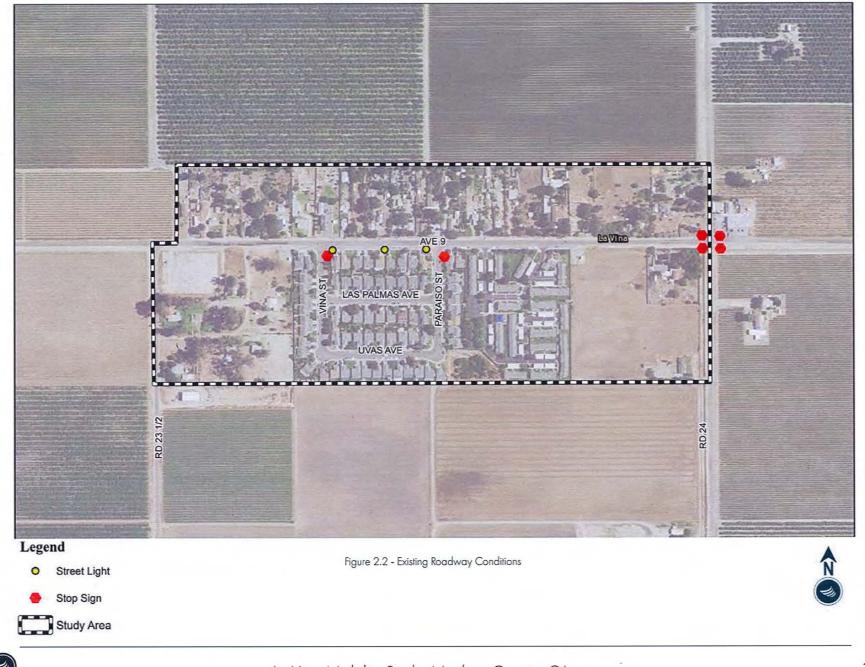
Parking

Street parking is currently allowed on all roadways. On the north side of Avenue 9, vehicles park on the unpaved shoulder or on private property. Several dumpsters are located on the north side of Avenue 9 as well. Figure 2.4 – Existing Parking Facilities map shows the location of all on-street parking locations within the La Vina community.

Speed Enforcement and Collision History

The Madera County Sheriff provides traffic control and speed enforcement on all roadways in La Vina. Accident data was provided from the California Highway Patrol. As discussed in the Traffic Study in Appendix 2, nine accidents occurred in La Vina between 2009 and 2015. Improper turns were listed as the most common cause of collision during the six-year study period and collisions with stationary objects were identified as the most common type of collision. The intersections of Avenue 9 with Paraiso Street and Vina Street were the most common collision locations. Figure 2.5 – Reported Accident Locations map shows the location of these accidents according to California Highway Patrol accident data.



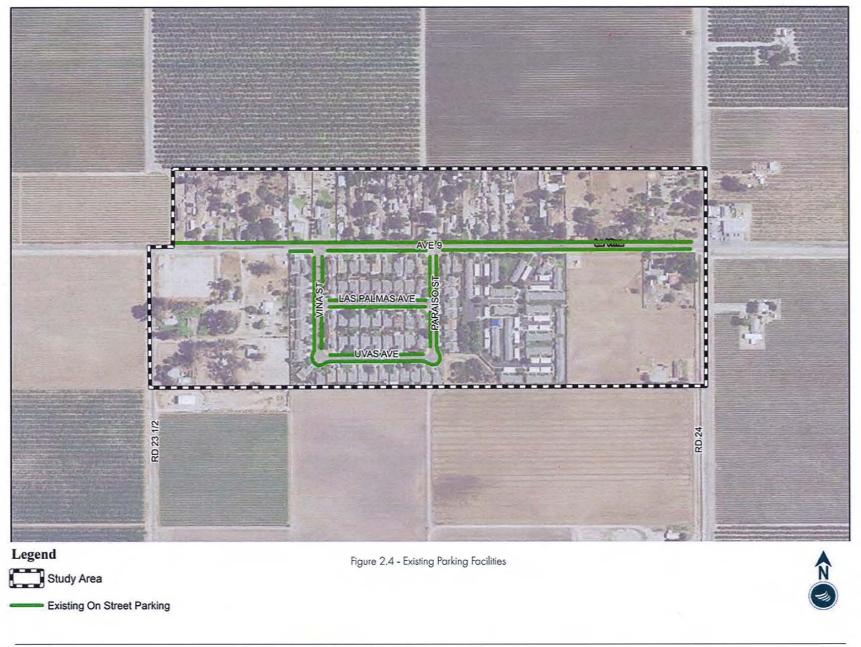


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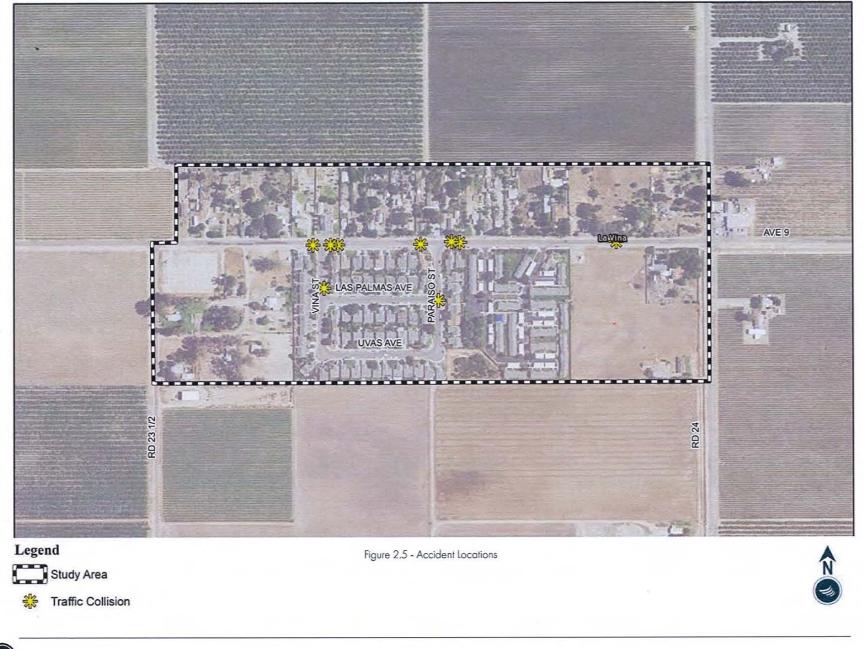


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La Vina Mobility Study, Madera County, CA





La Vina Mobility Study, Madera County, CA



About Community Outreach

Public involvement is essential when identifying useful and appropriate design concepts for a specific community. For this reason, extensive community outreach efforts were made to gather information and gain perspective on La Vina resident's concerns related to mobility and transportation. All community outreach efforts were intended to maximize public involvement. In summary, the following public outreach efforts were made as part of this mobility study:

- Community Meeting #1 Introductory Community Meeting, May 23, 2017, 5:30pm-7:30pm, La Vina Elementary School
- Community Meeting #2 Draft La Vina Mobility Study Presentation
- Public Survey collected through September 2017
- Comment Sheets Provided at all community meetings
- Survey Boards Provided at Community Meeting #1
- Sticky-Note Workshop Provided at Community Meeting #2

Community Meeting #1

The first community meeting was held at La Vina Elementary School on Tuesday, May 23, 2017 from 5:30pm to 7:30pm and included a formal presentation from the Consultant team, informal small group discussion, and a visual preference survey. This location was chosen because it is easily accessible to the community. Representatives from Madera County were present and specific community stakeholders were invited via mail. All materials were provided in English and Spanish and a Spanish translator was present during the Consultant Team presentation and subsequent discussion. A taco truck was provided by the Consultant Team after the Meeting to encourage additional informal discussion. The primary objectives of this meeting were to:

- Introduce the project to the community
- Gain an understanding of public concerns related to transportation and mobility in La Vina
- Receive input from community on potential design concepts



Photograph 3: Community Meeting #1; Source 4-Creeks 5/23/17





Formal Presentation

The 4-Creeks Consulting Team gave a formal presentation with PowerPoint to provide information on the purpose, objectives, and scope of this mobility study. During this presentation, the Consulting Team introduced themselves to the community and a timeline for the mobility study was provided. The presentation also described existing conditions information through a drone flight video of the study area, an existing conditions map, and a traffic count diagram. This was done to establish La Vina's "baseline" conditions. A Spanish translator was present during the presentation to ensure all attendees could easily understand the Consulting Team. The Consulting Team offered business cards to attendees and encouraged them to contact 4-Creeks with any additional questions or concerns.



Photograph 4: 4-Creeks Presentation; Source 4-Creeks 5/23/17

Public Comments

Bilingual comment sheets were handed out before the presentation to allow community members to provide written comments at any point during the presentation. Following the formal presentation, community members were given time for informal small group discussion and encouraged to voice their feedback to the Consulting team. Community members were also encouraged to provide feedback using the comment sheets and Survey Boards. All written public comments can be found in Appendix 3.

The primary mobility and transportation related problems that were identified by the community during this meeting were:

- · Lack of sidewalks from study area to nearby elementary school
- Lack of road striping throughout
- Speed bumps in residential areas
- Speeding in residential areas
- Reoccurring potholes
- Abandoned vehicles on Avenue 9 and Paraiso Street.

The comments provided by the community proved to be a valuable source of information as design concepts were developed. The consulting team used these comments to guide their study and identify community improvements that will be most beneficial to the La Vina community.





Survey Boards

Three 24"x36" survey boards were provided after the presentation to encourage public participation in the identification of potential design concepts. These display boards provided visual representations of pedestrian crossing, traffic calming, and multi-modal designs and were annotated in English and Spanish. Next to each photo was a blank box. Participants were given green stickers and encouraged to affix them on designs they liked. A total of 18 attendees participated in this survey. Copies of the three survey boards can be found in Appendix 3.

The most popular design features selected by the community were:

- Elevated pedestrian crossings
- Illuminated crossings
- Bulb-outs/sidewalk extensions
- Reduced road width with diagonal parking
- Separate multi-use trail for bicyclists and pedestrians



Photograph 5: Attendees completing Survey Boards; Source 4-Creeks 5/23/17

Preferred Pedestrian Crossing Design

Increasing pedestrian safety and encouraging pedestrian activity are primary goals of this mobility study. Crosswalks are used to guide pedestrians and make drivers aware of crossing areas. The way a crosswalk is designed has a significant impact on pedestrian safety and overall walkability of a community. Participants were given three pedestrian crossing design options and asked to identify their preferred design. These options were as follows:

- Typical white striped crossings
- Elevated pedestrian crossings
- · Pedestrian crossing with contrasting material



Figure 3.1 - Preferred Pedestrian Crossing Design: Elevated Crossing





Thirteen participants responded with their preferred pedestrian crossing design and eight responded to whether lighting at crosswalks is an issue in La Vina. Of the thirteen that responded with their preferred pedestrian crossing design, eight identified an elevated pedestrian crossing as their preferred design, two identified a typical white striped pedestrian crossing, and three identified a pedestrian crossing with contrasting material.

Because pedestrians are more at risk at night when visibility decreases, participants were also asked as a separate question whether lighting at crosswalks is an issue in La Vina at night.

Of the nine that responded to whether lighting at crosswalks is an issue in La Vina, all nine responded that it was and indicated that an illuminated crosswalk would be helpful.



Figure 3.2 - Illuminated Crosswalk Design Concept

Preferred Design to Reduce Traffic Speeds

Participants were given four options and asked to identify their preferred traffic calming design. These options were as follows:

- Reduce road width and provide landscaping
- Reduce road width and provide parking
- Bulb out/sidewalk extension
- Speed bump

Nineteen attendees responded with their preferred pedestrian crossing design. Of these nineteen participants, nine identified a bulb-out/sidewalk extension as their preferred design, six identified a reduced road width with parking as their preferred design, and four identified a reduced road width with landscaping as their preferred design. Of the eighteen participants, zero identified a speed bump as their preferred design.



Figure 3.3 - Preferred Traffic Calming Design: Bulb-out/Sidewalk extension





Preferred Design to Provide Multi-Modal Access

Participants were given four options and asked to identify their preferred method to provide pedestrian and bicycle access on Avenue 9. These options were as follows:

- Green bike lanes
- Physically separated bike lanes
- Separate multi-use trail
- Shared bike lane

Thirteen attendees responded with their preferred multi-modal access design. Of these thirteen participants, nine identified a separate, multi-use trail as their preferred design, and four identified a shared bike lane as their preferred design. Of the thirteen participants, zero identified green bike lanes or physically separated bike lanes as their preferred design.



Figure 3.4 - Preferred Design to Provide Multi-Modal Access: Separate Multi-Use Trail





Public Survey

Bilingual public surveys were distributed by hand in the La Vina study area, at community meetings, and through the mail to La Vina residents. The surveys could be returned at a community meeting or local drop box location from May to September 2017.

Survey participants were asked a variety of questions related to mobility and transportation in La Vina. The goal of the survey was to identify primary modes of travel in La Vina and primary concerns and issues related to travel in La Vina.

Two distinct surveys were distributed during this process. A longer survey was distributed at the first community meeting while a more concise survey was distributed thereafter. The following discusses the results from the shorter survey, however all surveys can be found in Appendix 3 along with complete public comments and comment translations. A total of 17 surveys were returned.

Question 1

Question 1 asked the participant to rate the quality/ease/and safety of various transportation behaviors on a scale of 1 to 5, with 1 being poor and 5 being excellent. A total of 13 survey participants answered this question. Their scores were averaged to identify which transportation behaviors were more and less favored in the La Vina community. On average, survey participants rated parking in LA Vina as 1.1/5, walking in Parkwood as 1.1/5, traffic in Parkwood as 1.4/5, cycling in Parkwood as 1.1/5 and taking public transit as 1.2/5. See Figure 3.5.

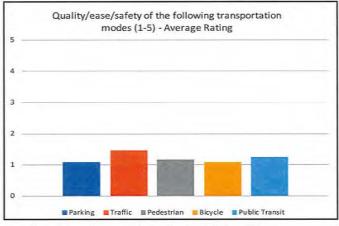


Figure 3.5 - Survey Question #2: Quality/ease/safety of Transportation Modes





Participants were given the opportunity to select more than one answer for Questions 2-5.

Question 2

Question 2 aims to identify which transportation modes the participants and their families use most often when going to work, school, or shopping. Of the 17survey participants, 15 said that they or their children usually drive, 7 said they or their children usually walk, 8 said that they or their children usually take public transportation, and 9 said that they or their children regularly bike. See Figure 3.6.

Question 3-5

Questions 3-5 ask the participants to identify the most significant problems related to driving, walking, and biking, in La Vina.

Question 3 asks the participant to identify significant problems related to driving in La Vina. Of the 17 survey participants, 15 identified conflict with other vehicles as a significant problem, 12 identified conflict with bicyclists and pedestrians as a significant problem, 11 identified missing signage/traffic signals as a significant problem, 7 identified congestion as a significant problem, and 6 identified confusing signage and traffic signals as a significant problem in La Vina. See Figure 3.7.

Question 4 asks the participant to identify significant problems related to walking in La Vina. Of the 17 survey participants, 13 identified a lack of sidewalks, 10 identified poor connection to other areas of La Vina, 9 identified sidewalk width and conflict with vehicles, and 8 identified cleanliness as a significant problem for pedestrians in the La Vina community. See Figure 3.8

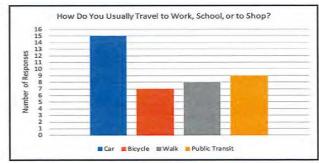
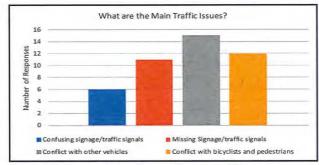
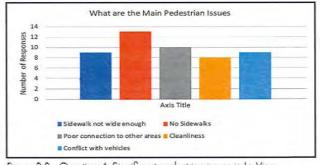


Figure 3.6 - Question 2: Typical Transportation Modes













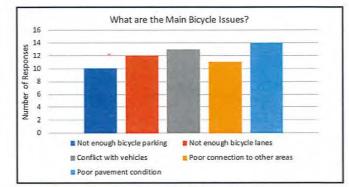
Question 5 asks the participant to identify the significant problems related to cycling in La Vina. Of the 17 survey participants, 14 identified poor pavement condition as a primary cycling issue. 13 participants said that conflict with vehicles is a significant issues. 12 participants said that there were not enough bicycle lanes. 11 participants identified poor bicycle infrastructure connectivity is a significant issue, and 10 participants said that insufficient bicycle parking was a significant issue. See Figure 3.9.

Question 6

Question 6 asked how the participant would like to see transportation improve in La Vina and allowed the participants to provide an open ended response. A total of 16 participants answered this question and a variety of responses were collected. Commonalities between participant responses were discovered and used to identify and prioritize transportation problems within the community. The most common goals within the La Vina community were:

- Reduced Traffic speeds
- Increased pedestrian
- Increased bicycle infrastructure
- Increased community aesthetics
- Repayed Roads
- Safe Route to La Vina Elementary

These community developed goals were used to shape the design concepts in Section 4.











Community Meeting #2

A second community meeting was held at Parkwood Elementary School on Tuesday, July 24, 2018, from 5:30pm to 7:30pm. This meeting was held concurrently with the Parkwood Mobility Study Community Meeting and members from both communities were present. The purpose of this meeting was to continue the conversations started at Community Meeting #1, inform the community of the Mobility Study's progress, and to receive input from the community on the design concepts proposed by the Consulting team. The meeting consisted of a formal presentation from the Consulting team, followed by informal small group discussion. Large exhibit boards showing the proposed design concepts for each community were positioned around the room. Community members were encouraged to write any questions or comments they had regarding the design concepts on sticky notes and place them directly on the exhibit boards. Comment sheets were also provided.

Formal Presentation

The 4-Creeks Consulting Team gave a formal presentation with PowerPoint to review the feedback provided by the community at Meeting #1 and to introduce the proposed design concepts. First, the consulting team discussed the mobility related issues and preferred design elements identified by the community at the Meeting #1. The Consulting Team then described the proposed design concepts and discussed how they would meet community objectives.



Photograph 6: Community Meeting #2; Source 4-Creeks 7/24/18

Public Comments

Community members were given the opportunity to provide both oral and written feedback during the formal presentation and the following small group discussion period. Participants were provided sticky notes and encouraged to write their comments and place them directly onto the exhibit boards regarding the design concepts proposed by the consulting team. Comment sheets were also provided to allow for open ended comments and questions.



Community Outreach



Community members expressed interest in installing additional street lighting along Avenue 9 from Paraiso Street to La Vina Market, and using bollards along Avenue 9 to separate vehicle traffic from bicyclists. The community also identified a preference regarding crosswalks at the Avenue 9 and Road 24 intersection, stating that crosswalks on the north and west legs of the intersection would be the most beneficial to pedestrian mobility in the community. These comments were considered by the Planning team and used to modify the proposed design concepts identified in Section 4.

Questions from the community included why the multi-use path goes along Road 23 from La Vina Elementary School to Avenue 9, continues east along Avenue 9, and ends near Vina Street, instead of extending through the La Vina community to Road 24. The community also questioned what the multi-use path would be made of, how it would be maintained, and if it would be able to withstand weather, including heavy rains.



Figure 3.10 - Community identified design concept - Install bollards to separate vehicular and bicycle traffic.





The community outreach process highlighted key problem areas where small improvements could have significant impact on the mobility of La Vina residents. The following sites were selected as the potential improvement areas for this study:

Community Identified Improvement Areas:

- Intersection at Road 24/Avenue 9
- Avenue 9
- Route to La Vina Elementary School

The design concepts discussed in this section were developed by the planning team to resolve the community identified problems in these areas and to enhance overall mobility within the La Vina community.

The following design concepts were developed based on community identified needs, community goals, and financial constraints. These design concepts incorporate the goals of La Vina residents as well as the goals of the Madera County General Plan. It should be noted that the following design concepts are intended to identify a broad community vision and should not be regarded as final designs. All final designs must meet the requirements of the Madera County Road Improvement Standards.

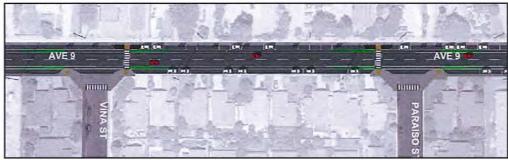


Figure 4.1 - Proposed improvements to Avenue 9



Figure 4.2 - Proposed improvements to Rd 24 and Ave 9 intersection.



Figure 4.3 - Proposed improvements to Ave 9 and Vina St.



Figure 4.4 - Aerial of existing conditions, Rd 24 and Ave 9



La Vina Mobility Study, Madera County, CA



Avenue 9 and Road 24

- Improve safety at intersection
- Increase accessibility to commercial corner
- Shorter crossing distance



Figure 4.5 - Aerial of existing conditions, Rd 24 and Ave 9

Existing

The intersection at Avenue 9 and Road 24 provides important access to the La Vina Market, a popular pedestrian destination for La Vina residents. This intersection also serves as the typical entrance to the La Vina community.

Although the intersection at Avenue 9 and Road 24 is the most trafficked intersection in La Vina, very little infrastructure currently exists to allow safe, multi-modal crossings. It was found that the intersection does not have marked pedestrian crossings, and that the crossing distance is high with respect to traffic speeds along Avenue 9. Additionally, the Market's parking area allows for uncontrolled ingress/egress which creates uncertainty between drivers, pedestrians, and cyclists. This, coupled with a lack of bicycle or pedestrian infrastructure, creates an unsafe environment for all road users.



Figure 4.6 - Aerial with proposed design concepts, Rd 24 and Ave 9

Proposed

- Extend the sidewalk along the north and south sides of Avenue 9 from the La Vina community to the intersection. This will increase pedestrian access to the intersection and decrease the potential for pedestrian-vehicular conflict.
- Reduce the width of the crossing by constructing bulb-outs at all four corners of intersection. This improvement will also slow motorists, making the pedestrian crossing safer.
- Improve pedestrian and cyclist visibility by adding painted bicycle lanes, elevated pedestrian crossings, and blinking crossing lights to the intersection.
- Install a protective curb around the existing parking lot to control ingress and egress from the existing parking area. This will create a safer, more dependable transportation environment.





Avenue 9 and Road 24



Figure 4.7 - Proposed improvements for Rd 24 and Ave 9 intersection.



Avenue 9

- Safer Pedestrian Crossing
- Safer Bike Routes
- Protected Parking



Figure 4.8 - Aerial of existing conditions, Ave 9

Existing

Avenue 9 crosses the full length of the study area and is the primary roadway connecting the La Vina community. Although this segment of Avenue 9 is highly utilized, little infrastructure exists to accommodate cyclists or pedestrians as they travel from one area of La Vina to another.

The north side of Avenue 9 is largely unpaved, creating a large crossing distance for pedestrians. Pedestrian crossings are further restricted by a lack of marked crosswalks and high traffic speeds. The street also lacks designated bike lanes and speed limit signage.

In addition, the unpaved right-of-way on the north side of Avenue 9 is unaccommodating to both cyclists and pedestrians. Abandoned vehicles and large, dumpster-style trash bins within the right-of-way restrict on-street parking availability and create a chaotic atmosphere.



Figure 4.9 - Aerial with proposed design concepts, Ave 9

Proposed

- Repave Avenue 9. Restripe and implement painted bicycle lanes to increase cyclist visibility.
- Improve pedestrian visibility by adding pedestrian signage, elevated pedestrian crosswalks, and blinking crossing lights to the Avenue 9/Vina Street and Avenue 9/Paraiso Street Intersections.
- Add bulb-outs and sidewalk extensions to the Vina St. and Paraiso St. intersections. This will decrease the crossing distance, calm traffic speeds, and create protected, on-street parking.
- 4. Install speed limit signage to reduce vehicular speeds.
- 5. Consider options to remove dumpster-style trash bins from the right-of-way to bring area into compliance with Madera County Solid Waste requirements. These options may include transitioning from dumpster-style trash bins to solid waste carts, constructing trash enclosures to contain bins, or implementing programs to ensure that bins are not left within the public right-of-way on noncollection days.





Avenue 9



Figure 4.10 - Proposed improvements to Avenue 9



Figure 4.11 - Proposed improvements to Avenue 9 and Vino St. intersection.



Figure 4.12 - Proposed improvements to Avenue 9 and Paraiso St. intersection.





La Vina Elementary School

- Create a safer route to school
- Encourage walking and cycling
- Prevent vehicular/pedestrian conflicts



Figure 4.13 - Existing Conditions; Rd 23 and Ave 9.

Existing

Most children within the La Vina community attend La Vina Elementary School. The route to La Vina Elementary School from the La Vina community is approximately 1 mile using Avenue 9 and Road 23.

Although the school is only one mile away, most students most students do not walk or bike to school. There are no sidewalks, crosswalks, or designated bike lanes along the route. These conditions force elementary school students to use the vehicular lanes if they choose to walk or bike to school.

The La Vina Elementary School drop-off area is also lacking in pedestrian safety features. The crossing distance in front of the elementary school is high with respect to typical traffic speeds and there are no crosswalks or pedestrian signage. This creates significant potential for pedestrian/vehicular conflicts, particularly during pick-up and drop-off times when students are out of class and large numbers of parents are driving in the immediate vicinity.



Figure 4.14 - Proposed multi-use path along Avenue 9 and Road 23.

Proposed

- Construct a 8' wide, gravel, multi-use path along Avenue 9 and Road 23 to provide pedestrian and cyclist connectivity between the La Vina community and La Vina Elementary School.
- Install bollards at the intersection of Avenue 9 and Road 23 to prevent vehicles from crossing into pedestrian space. Bollards can be extended along Avenue 9 and Road 23 to provide additional separation between vehicles and children.
- Construct raised pedestrian crosswalks with flashing pedestrian lights and pedestrian signage at elementary school entrance to Increase visibility of pedestrians entering or exiting school premises.
- Reduce pedestrian crossing distance and create protected parking spaces by constructing a sidewalk extension in front of elementary school entrance.





La Vina Elementary School

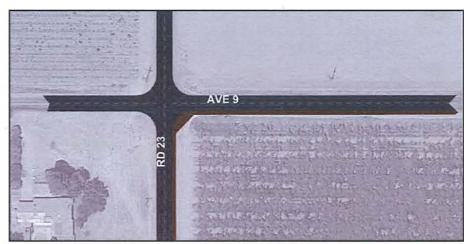


Figure 4.15 - Aerial of proposed multi-use gravel path along Avenue 9 and Road 23.



Figure 4.16 - Street view of proposed school-front improvements.



Figure 4.17 - Aerial of proposed school-front improvements on Road 23.



5. Action Plan and Implementation

Action Plan and Implementation



This Mobility Study was developed in accordance with the California Department of Housing and Community Development Block Grant Program and is intended to serve as a planning guide to enhance mobility within the La Vina community. Implementation of this plan is based on the following assumptions:

- All improvements to Avenue 9, Road, 23, Road 24, Paraiso St., and Vina St. will be consistent with the Madera County General Plan, as well as all other applicable agency standards.
- Implementation of the Plan's identified design concepts will occur as funding sources become available. This may be in phases depending on the funding source and timing availability.
- Project funding may be obtained from State or Federal funding sources.
- Because the design concepts identified in the Plan are proposed to take place within the existing right-of-way, it is anticipated that environmental
 review for Plan-related projects can be accomplished under a Negative Declaration under the California Environmental Quality act (CEQA)
 or Finding of No Significant Effect under the National Environmental Policy Act (NEPA).

Based on these assumptions, the following implementation actions are recommended.

Intersection at Road 24/Avenue 9

- Construct bulb-outs and add elevated pedestrian crossings with blinking crossing lights to the intersection.
- Paint designated bicycle lanes leading up to the intersection.
- Install a protective curb around the existing parking area with controlled ingress and egress points.

Avenue 9

- Widen north side of the street within the existing right-of-way, add designated bicycle lanes, and extend the sidewalk along the north and south sides of Avenue 9 to the intersection at Road 24.
- Add speed limit signage, bulb-outs, sidewalk extensions, elevated pedestrian crossings, pedestrian signage, and blinking crossing lights to the Vina Street and Paraiso Street intersections.

La Vina Elementary School

- Construct a multi-use path along Avenue 9 and Road 23 with bollards at Avenue 9 and Road 23 intersection.
- Construct a sidewalk extension and add elevated pedestrian crosswalk with blinking crossing lights and pedestrian signage at La Vina Elementary School entrance.





Environmental Review Compliance Process

The proposed improvements to Avenue 9, Road, 23, Road 24, Paraiso St., and Vina St. should be reviewed by Madera County prior to project implementation to ensure compliance with either CEQA or NEPA, depending on the source of project funding. CEQA compliance will be required for State funding, while NEPA compliance will be required for Federal funding. It is likely that environmental impacts associated with Plan implementation will be adequately accounted for through a Negative Declaration under CEQA or Finding of No Significant Impact under CEQA, however the final determination of the appropriate environmental compliance documents will be made by Madera County, who will act as lead agency pursuant to CEQA guidelines.

Implementation Schedule

The following implementation schedule was developed to approximate the construction time required to build out the proposed design concepts. Actual implementation may be delayed due to funding availability, acquisition of entitlements, and completion of technical studies.

Table 4: Imp	plementation Sche	edule	-	
	January 2019	February 2019	March 2019	April 2019
Avenue 9 Right-of-Way Improvements				
Avenue 9 and Road 24				
Avenue 9 and Vina Street				
Avenue 9 and Paraiso Street				
La Vina Elementary School				



Action Plan and Implementation



Financial Plan

Because implementation of the proposed design concepts is completely dependent on the acquisition of adequate funding, cost estimates and identification of potential funding sources is necessary to ensure the practicality of this mobility study. This section will discuss the estimated costs of proposed design concept projects identified in this mobility study, and identify potential funding sources to support project implementation.

Project Costs

Preliminary cost estimates for implementation of the proposed design concepts were developed by 4-Creeks. These estimates should be used as a guideline for funding requests and scheduling. Cost estimates may need to be updated throughout the design and approval process as more information becomes available.

			Table 5: Project Cost Estimate		
Item Quantity Units			Units Description of Work		Total
			General		
1	1	LS	Mobilization/Demobilization	\$100,000.00	\$100,000.00
2	1	LS	Clearing and Grubbing	\$15,000.00	\$15,000.00
3	1	LS	Worker Protection	\$2,500.00	\$2,500.00
4	1	LS	Traffic Control	\$5,000.00	\$5,000.00
5	1	LS	Storm Water Pollution Control	\$5,000.00	\$5,000.00
6	1	LS	Dust Pollution Control	\$5,000.00	\$5,000.00
			Demo		
7	78,428	SF	Existing Asphalt Removal	\$1.50	\$117,642.00
8	5	LS	Adjust Manhole to Grade	\$1,000.00	\$5,000.00
9	216	LF	Sawcut	\$1.00	\$216.00
10	4	LS	Adjust Water Valves to Grade	\$1,000.00	\$4,000.00



Action Plan and Implementation



Item	Quantity	Units	Description of Work	Unit Price	Total
	1		Construction Hardscape		
11	8,500	CY	Earthwork & Roadway Excavation	\$16.00	\$136,000.00
12	4,500	TN	Hot Mix Asphalt (Type B, 3/4")	\$90.00	\$405,000.00
13	12,000	TN	Aggregate Base (Class II)	\$45.00	\$540,000.00
14	4 30,420 SF Concrete (3-'/2" thick) \$6.00 \$				\$182,520.00
15	5 4,188 LF 24" Curb & Gutter \$22.00 \$			\$92,136.00	
16	14	EA	ADA Ramp	\$3,000.00	\$42,000.00
17	32 EA Drive Approach \$4,500.00		\$144,000.00		
18	699	CY	8 ft wide DG travel path to Elementary School	\$250.00	\$174,634.26
			Utilities		
19	1	LS	Street Lighting & Electrical System	\$70,000.00	\$70,000.00
20	2	EA	LED Pedestrian Flashing Beacon Assembly	\$7,500.00	\$15,000.00
			Landscaping		
21	1	LS	Landscaping & Irrigation	\$68,000.00	\$68,000.00
	1		Striping, Signage & Markings		
22	1	LS	Striping, Signage & Markings	\$15,000.00	\$15,000.00
23	1	LS	Raised Pavement Markers	\$2,500.00	\$2,500.00
				Subtotal	\$2,146,148.26
				20% Contingency	\$429,229.65
				Total	\$2,575,377.91





Potential Funding Sources

Successful implementation of the design concepts identified in this Plan will require acquisition of reliable funding. Because La Vina is a relatively low income community, there is limited ability for the community to raise local revenue for projects related to transportation and mobility. Although there is a significant degree of uncertainty in terms of state and federal funding availability, financing for these projects will be primarily reliant on State or Federal grant programs and loans. Madera County will be responsible for developing individual applications in response to grant program solicitations.

The number and type of grant and loan programs available to public agencies in any given year can vary significantly based on Legislature appropriations. Many of the grant programs below are on-going with rounds of grant monies provided upon availability of funding. The grant and loan programs listed below are not exhaustive and should be updated regularly upon implementation of this Mobility Study. Madera County will be responsible for developing individual applications in response to solicitations.

Federal Funding Sources

- Transportation Investment Generating Economic Recovery (TIGER) program: Provides funding for selected projects and programs based on considerations for safety, state of good repair, economic competitiveness, quality of life and environmental sustainability.
- Infrastructure for Rebuilding America (INFRA) discretionary grant program. Provides funding to State and regional governments for public infrastructure projects.
- Fixing America's Surface Transportation (FAST) Act. A fairly flexible program to provide federal funding to state and regional governments for transportation related projects and programs. The Safe Routes to School program, Transportation Enhancements Program, and Transportation Alternatives Program grants are also provided under the FAST Act.

State Funding Sources

- California Department of Housing and Community Development Block Grant Program: Provides funding for projects related to housing, public works, and community facilities for low-income areas.
- Road Repair and Accountability Act (SB1): Provides increased funding to fix roads, freeways, and bridges in communities across California with funds split equally between State and Local Investments.
- State Bicycle Transportation Account: Provides funding for city and county projects that improve safety and convenience for bicycle commuters.
- San Joaquin Valley Air Pollution Control District (SJVAPCD): Provides funding for a variety of local transportation related projects that support the goals of the SJVAPCD. These include funds for bike paths, electric vehicle charging stations, and public transportation subsidies.



Action Plan and Implementation



Recommended Funding Plan

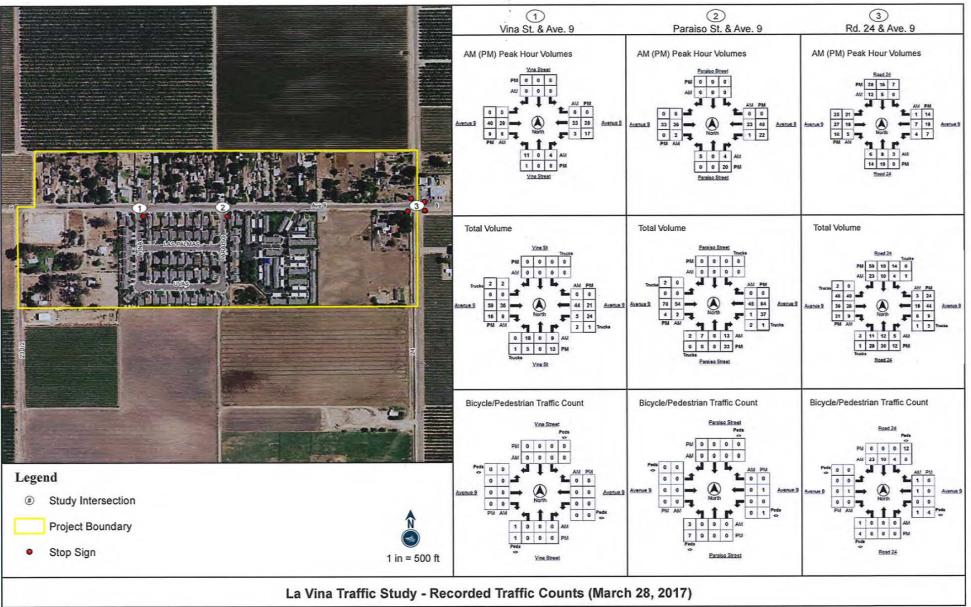
As stated in the previous sections, there are several potential funding sources to aid in implementing the design concepts identified in this Mobility Study. Many state and federal grants are specifically developed to facilitate these types of projects. Madera County is encouraged to pursue a variety of grant options in order to obtain the funding necessary to implement these projects.

The following funding plan is based on the identified funding sources, however it should be noted that federal and state funding programs may change in the future and that the following funding plan should be updated regularly to reflect changes to existing programs, as well as opportunities with new funding programs.

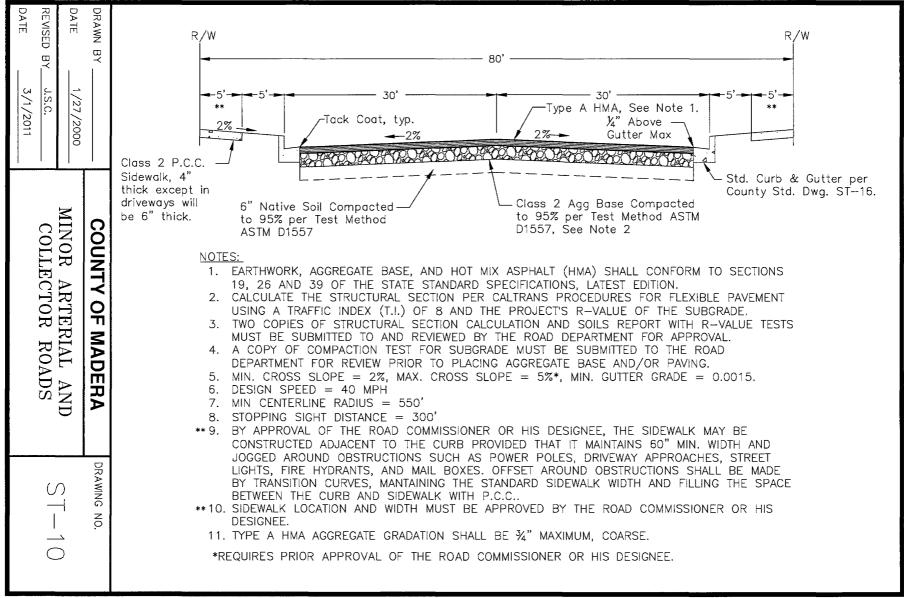
- Pursue funding from Safe Route to School program under Fixing America's Surface Transportation Act for proposed multi-modal path along Avenue 9 and Road 23 and proposed improvements to La Vina Elementary School frontage.
- Pursue FAST Act funding for improvements along Avenue 9 and at intersection of Road 24 and Avenue 9.
- Pursue TIGER program funding for improvements at intersection of Road 24 and Avenue 9.
- Pursue California Department of Housing and Community Development Block Program for improvements along Avenue 9, Road 23, and at intersection of Avenue 9 and Road 24.
- Pursue Road Repair and Accountability Act (SB1) funding for improvements along Avenue 9.
- Pursue State Bicycle Transportation Account and SJVAPCD Bicycle Path Construction program funding for proposed Class II bike lanes along Avenue 9.



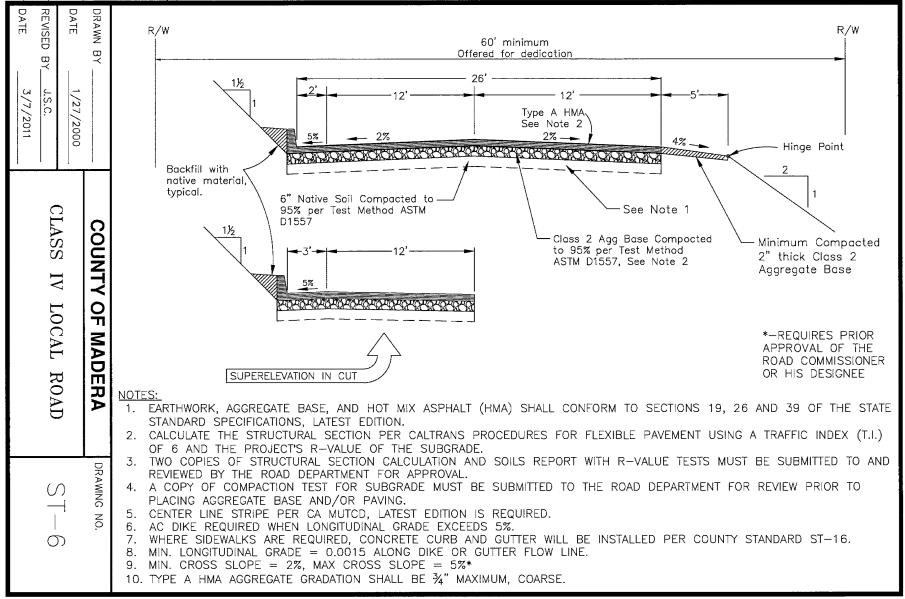
Appendix 1



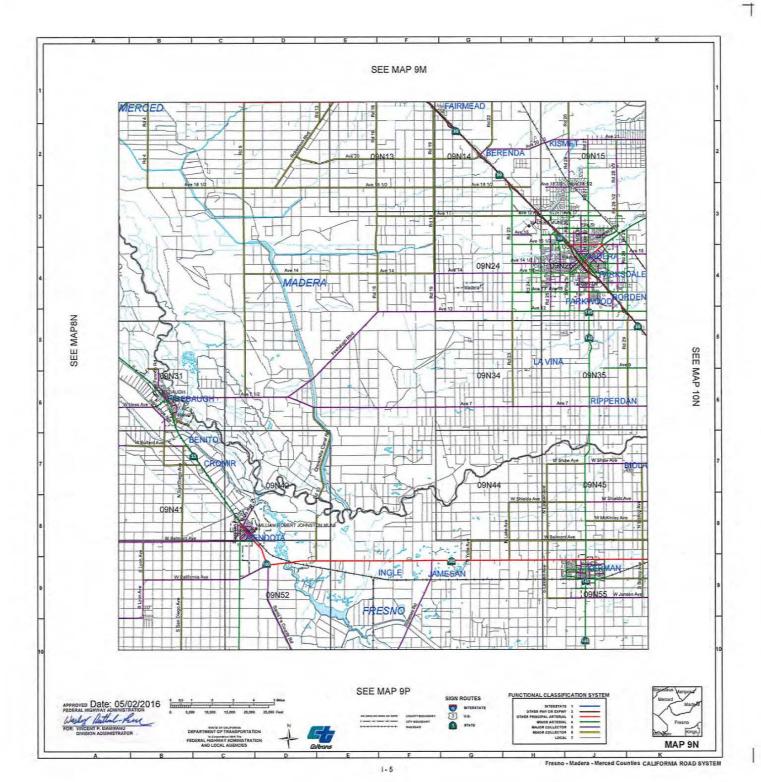
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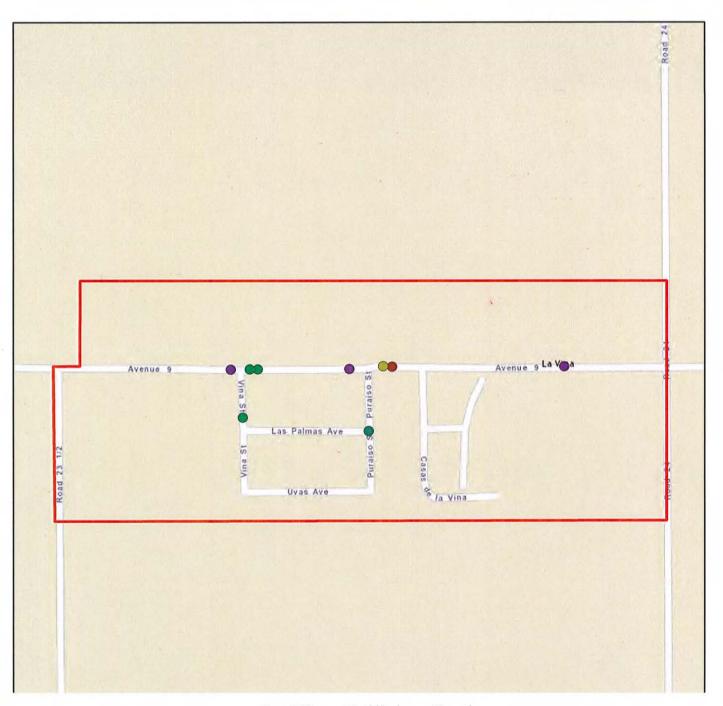


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Appendix 2



La Vina Collision Study Primary Collision Factor

Legend

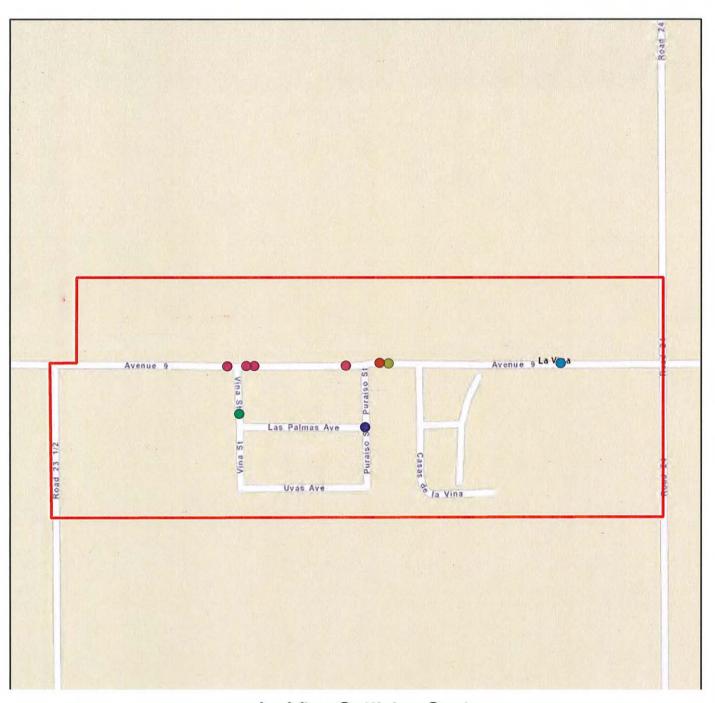
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Project Boundary

Primary Collision Factor

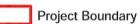
- Drvr Alc/Drg
- Inprop Turn
- Not Driver
- Starting/Backing
- Wrong Side





Legend

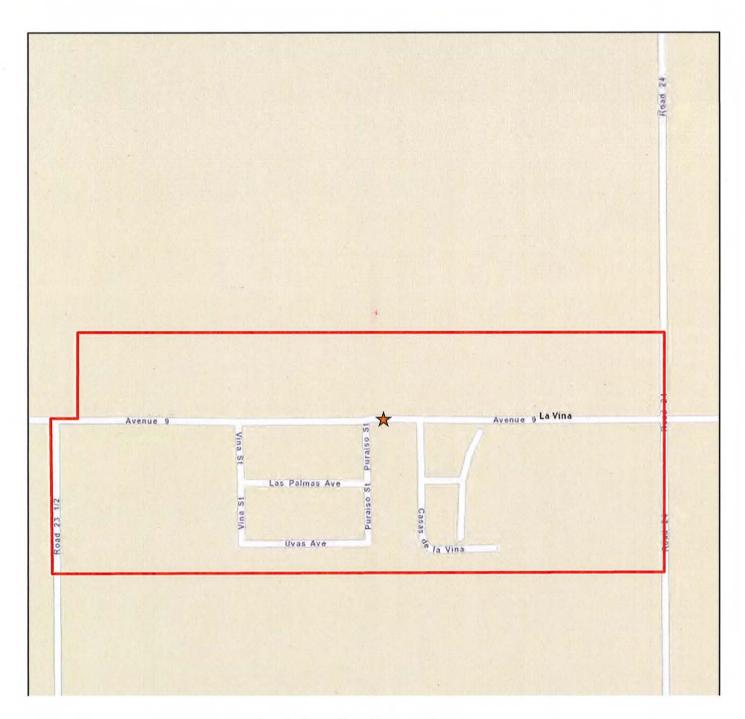
La Vina Collision Study Collision Type



Collision Type

- Auto/Ped
- Broadside
- Head-On
- Hit Object
- Sideswipe
- With Animal





La Vina Collision Study Areas of Potential Improvement



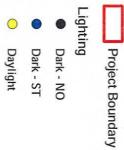
Project Boundary

Number of Collisions Occuring at Location

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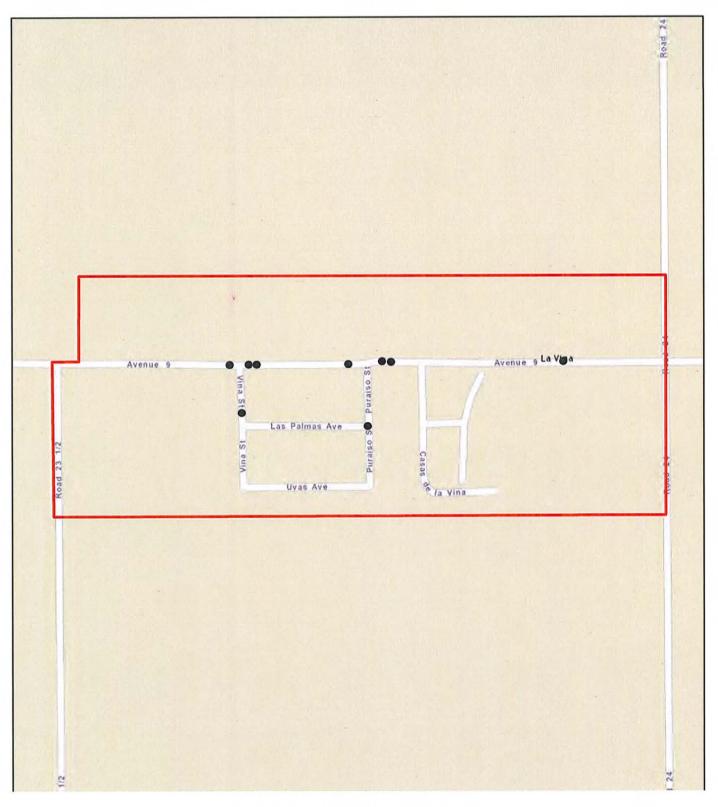






La Vina Collision Study Lighting Condition





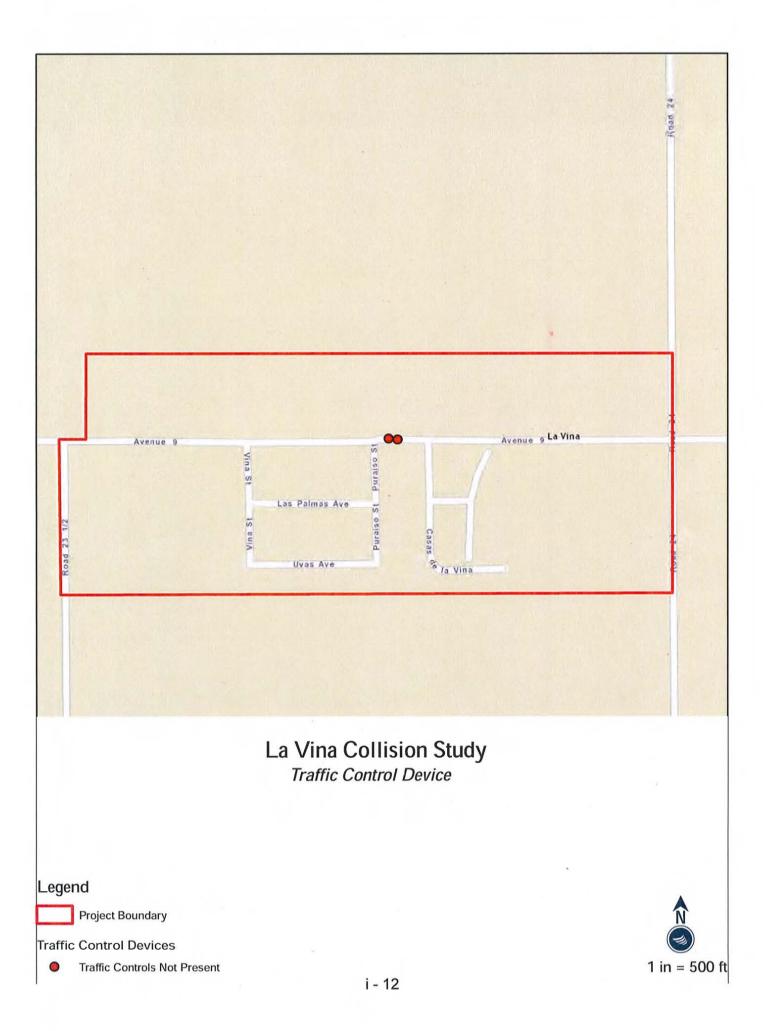
La Vina Collision Study Traffic Collisions

Legend



Location of Collision





Appendix 3



- 1. Tell us about yourself (check all that apply):
- 🔲 I live in La Vina
- 🛛 I do not live in La Vina
- 🗖 I work/go to school in La Vina
- □ I work/go to school outside of La Vina

2. In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina? 1=poor, 5=excellent

Parking	1	2	3	4	5
Traffic	1	2	3	4	5
Pedestrian	1	2	3	4	5
Bicycle	1	2	3	4	5
Transit	1	2	3	4	5

- 3. How often do you drive to work/school?
- Less than 1 day per week
- □ 1-3 days per week
- □ 3+ days per week

- 14

- 4. How often do you/your children walk to work/school?
- □ Less than 1 day per week
- 1-3 days per week
- 3+ days per week
- 5. How often do you/your children bike to work/school?
- 🗖 Less than 1 day per week
- □ 1-3 days per week
- □ 3+ days per week

6. How often do you/your children take public transportation to work/school?

- Less than 1 day per week
- □ 1-3 days per week
- 3+ days per week
- 7. What are the main parking issues in La Vina?
- □ Not enough off-street parking
- □ Not enough on-street parking
- There aren't parking issues in La Vina.

	8. What are the main traffic issues in La Vina?
	Congestion
	Confusing signage/traffic signals
	Missing signage/traffic signals
	Conflict with other vehicles
	Conflict with bicyclists and pedestrians
	9. What are the main pedestrian issues in La Vina?
	□ Sidewalk not wide enough
	□ No Sidewalks
	Poor connection to other areas of La Vina
	Cleanliness
	Conflict with vehicles
	10.144 et ere the main bisude issues is 15.142
	10. What are the main bicycle issues in La Vina?
	Not enough bicycle parking
	Not enough bicycle lanes
	Conflict with vehicles
	Poor connection to other areas of La Vina
	Poor pavement condition
15	11. What are the main transit issues in La Vina?
	Not enough buses
	□ Not reliable
	□ Not frequent enough
	12. In an ideal mobility environment, how would you like to tenual in and around to Vine?
	12. In an ideal mobility environment, how would you like to travel in and around La Vina?
	🗆 Walk
	Drive
	Transit

□ Other

13. How would you like to see transportation improve in La Vina?

Thank you for your input!

Encuesta comunitaria La Vina





- 1. Cuéntenos sobre usted (marque todos los que apliquen):
- 🗖 Vivo en La Vina
- 🗖 No vivo en La Vina
- 🗖 Trabajo / asisto a la escuela en La Vina
- 🗖 Trabajo / voy a la escuela fuera de La Vina

2. En su opinión, ¿cuál es la calidad / facilidad / seguridad de los siguientes modos de transporte en La Vina? 1 = pobre, 5 = excelente

Aparcamiento	1	2	3	4	5
Tráfico	1	2	3	4	5
Peatón	1	2	3	4	5
Bicicleta	1	2	3	4	5
Tránsito	1	2	3	4	5

- 3. ¿Con qué frecuencia conduce al trabajo / escuela?
- 🗖 Menos de 1 día a la semana
- 🔲 1-3 días a la semana
- 3 + días por semana

i - 16

- 4. ¿Con qué frecuencia caminas al trabajo / escuela?
- 🗖 Menos de 1 día a la semana
- 1-3 días a la semana
- 3 + días por semana

5. ¿Con qué frecuencia usted va de bicicleta al trabajo oa la escuela?

Menos de 1 día a la semana

🗖 1-3 días a la semana

3 + días por semana

1

6. ¿Con qué frecuencia toma transporte público al trabajo oa la escuela?

- 🗖 Menos de 1 día a la semana
- 🗖 1-3 días a la semana
- 3 + días por semana

7. ¿Cuáles son los principales problemas de estacionamiento en La Vina?

No hay suficiente estacionamiento fuera de la calle

- No hay suficiente estacionamiento en la calle
- □ No hay problemas de estacionamiento en La Vina.

	8. ¿Cuáles son los principales problemas de tráfico en La Vina? Congestión Señales de tráfico / señalización confusas Falta de señalización / señales de tránsito Conflicto con otros vehículos Conflicto con ciclistas y peatones
	9. ¿Cuáles son los principales temas peatonales en La Vina? La acera no es lo suficientemente ancha No hay aceras Limpieza Conflicto con vehículos
	 10. ¿Cuáles son los principales problemas de la bicicleta en La Vina? No hay suficiente estacionamiento para bicicletas No hay suficientes carriles para bicicletas Conflicto con vehículos Mala conexión con otras zonas de La Vina Mala condición del pavimento
i - 17	 11. ¿Cuáles son los principales problemas de tránsito en La Vina? Demasiados autobuses No hay suficientes autobuses No es confiable No es lo suficientemente frecuente
	12. En un entorno de movilidad ideal, ¿cómo te gustaría viajar en La Vina? Caminar Bicicleta Conducir Tránsito Otros

13. ¿Cómo le gustaría que el transporte mejorara en La Vina?

¡Gracias por su aporte!

What is your preferred design for pedestrian crossings?

¿Cuál es su diseño preferido para los cruces peatonales?

Is lighting at crosswalks an issue in La Vina?

¿La iluminación en los cruces peatonales es un problema en La Vina?

4CREEKS



What is your preferred method for reducing traffic speeds in La Vina? ¿Cuál es su método preferido para reducir la velocidad del vehículo en La Vina?



Reduce road width and provide landscaping Reducir el ancho de la carretera y proporcionar paisajismo



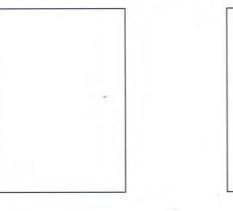
Reduce road width and provide parking Reducir el ancho del camino y proporcionar aparcamiento



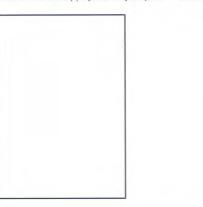
Bulb out/Sidewalk extension Extensión o saliente de la acera

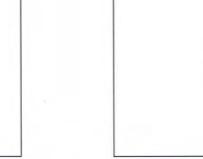


Speed Bump Topes















Madera County Mobility Study

La Vina

What is your preferred method for providing pedestrian and bicycle access to La Vina?

¿Cuál es su método preferido para proporcionar acceso peatonal y de bicicleta a La Vina?



Green bike lanes to increase cyclist visibility Carriles verdes para bicicletas para aumentar la visibilidad del ciclista



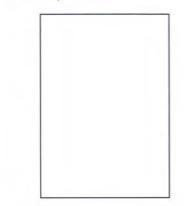
Physically seperated bike lanes Carriles de bicicleta físicamente separadas



Seperate multi-use trail Sendero separado multiusos



Shared Bike Lane Carril bici compartido





4CREEKS

Survey Board 2

Bicycle/Pedestrian Paths



1. In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina?

1=poor, 5=e	xceller	$nt \cap$			
Parking	1	(2)	3	4	5
Traffic	(1)	2	3	4	5
Pedestrian	a	2	3	4	5
Bicycle	(1)	2	3	4	5
Transit	ĩ	2	3	4	5

For Questions 2-5, more than one selection may be made.

2. How do you usually travel to work, school, or to shop? ∑Car □Bicycle □Walk □Public □Transit (Bus)

3. What are the main traffic issues in La Vina?

- Confusing signage/traffic signals
- Missing signage/traffic signals
- 🗹 Conflict with other vehicles
- AConflict with bicyclists and pedestrians
- 4. What are the main pedestrian issues in La Vina?
- □ Sidewalk not wide enough
- 12 No Sidewalks
- A Poor connection to other areas of La Vina
- Z-Cleanliness
- Conflict with vehicles

5. What are the main bicycle issues in La Vina?

- □ Not enough bicycle parking
- 🛛 Not enough bicycle lanes
- Conflict with vehicles
- Poor connection to other areas of La Vina
- Poor pavement condition

6. How would you like to see transportation improve in La Vina?

morove the roads. Stop jus

Potential Traffic Calming Methods



Reduce road width and provide landscaping and pedestrian features



Reduce road width and provide parking



Landscaped Median

Please return survey in enclosed return envelope by August 25





1. In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina?

		-		
1-	poor,	5-0	veal	ant
1-	poor,	2-e	xcel	em

Parking (1	2 2	3	4	5
Traffic (1) 2	3	4	5
Pedestrian (1) 2	3	4	5
Bicycle	2	3	4	5
Transit (1) 2	3	4	5

For Questions 2-5, more than one selection may be made.

2. How do you usually travel to work, school, or to shop? ☆Car □Bicycle □Walk □Public □Transit (Bus)

- 3. What are the main traffic issues in La Vina?
- Confusing signage/traffic signals
- Missing signage/traffic signals
- Conflict with other vehicles
- Conflict with bicyclists and pedestrians

4. What are the main pedestrian issues in La Vina?

- Sidewalk not wide enough
- No Sidewalks
- Poor connection to other areas of La Vina
- Cleanliness
- Conflict with vehicles
- 5. What are the main bicycle issues in La Vina? Not enough bicycle parking Not enough bicycle lanes Conflict with vehicles
- Conflict with vehicles
- Poor connection to other areas of La Vina
- Poor pavement condition

6. How would you like to see transportation improve in La Vina?

I WOMED LIKE TO SEE DEFIGNATED WALKING AREAS AND ROADS WITH NO POTHOLES ALSO, Potential Traffic Calming Methods



Reduce road width and provide landscaping and pedestrian features



Reduce road width and provide parking





SOME LANDSCAPE AND PARKAREAS. I NOULD ALSO UKE TO SEE

MORE STREET UGHTING. Please return survey in enclosed return envelope by August 25



1. In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina?

1=poor, 5=excellent

Parking	D	2	3	4	5
Traffic	D	2	3	4	5
Pedestrian	D	2	3	4	5
Bicycle	1	2	3	4	5
Transit		2	3	4	5

For Questions 2-5, more than one selection may be made.

2. How do you usually travel to work, school, or to shop? ☑ Car ☑ Bicycle ☑ Walk □ Public ☑ Transit (Bus)

3. What are the main traffic issues in La Vina?

- Confusing signage/traffic signals
- Missing signage/traffic signals
- Conflict with other vehicles
- Conflict with bicyclists and pedestrians

4. What are the main pedestrian issues in La Vina?

- Sidewalk not wide enough
- No Sidewalks
- Poor connection to other areas of La Vina
- Cleanliness
- Conflict with vehicles

5. What are the main bicycle issues in La Vina?
Not enough bicycle parking
Not enough bicycle lanes
Conflict with vehicles
Poor connection to other areas of La Vina
Poor pavement condition

6. How would you like to see transportation improve in La Vina?

Potential Traffic Calming Methods



Reduce road width and provide landscaping and pedestrian features



Reduce road width and provide parking



Landscaped Median

down and Childrein present. No farking Signs in designated appriate areas Newly constructed Street. My vehicle Tires are severely damaged, Please return survey in enclosed return envelope by August 25

to slow?

My Vehicle suspension is being affected.

Suggesting



 In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina?

1=poor, 5=exce	llent
----------------	-------

Parking	\bigcirc	2	3	4	5
Traffic	1	2	3	4	5
Pedestrian	1	2	3	4	5
Bicycle	1	(2)	3	4	5
Transit	1	2	3	4	5

For Questions 2-5, more than one selection may be made.

- 3. What are the main traffic issues in La Vina?
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- Missing signage/traffic signals
- Conflict with other vehicles
- Conflict with bicyclists and pedestrians
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6. How would you like to see transportation improve in La Vina?

Potential Traffic Calming Methods



Reduce road width and provide landscaping and pedestrian features



Reduce road width and provide parking



Landscaped Median and they are just Please return survey in enclosed return envelope by August 25



1. In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina?

1=poor, 5=excellent

Parking	1	2	3	4	5
Traffic	1	2	3	4	5
Pedestrian	0	2	3	4	5
Bicycle	$(\mathbf{\hat{n}})$	2	3	4	5
Transit	T	2	3	4	5

For Questions 2-5, more than one selection may be made.

2. How do you usually travel to work, school, or to shop? □Walk □Public □Transit (Bus) Bicycle Car

3. What are the main traffic issues in La Vina?

- Confusing signage/traffic signals
- □ Missing signage/traffic signals
- EConflict with other vehicles Cars cirice like there on som
- Conflict with bicyclists and pedestrians

4. What are the main pedestrian issues in La Vina?

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- □ No Sidewalks
- Poor connection to other areas of La Vina
- Cleanliness
- Conflict with vehicles

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- □ Not enough bicycle parking
- □ Not enough bicycle lanes

Conflict with vehicles

- Poor connection to other areas of La Vina
- Poor pavement condition

6. How would you like to see transportation improve in La Vina?

Deed RUMPS Adding the compart our neiburghood road due to cars going to kids play Dutside and itis

Potential Traffic Calming Methods



Reduce road width and provide landscaping and pedestrian features



Reduce road width and provide parking



Landscaped Median

Cars are always driving fasts Rand the nerburghood



1. In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina?

1	=poor.	5=excel	lent
	0001,	O OACOI	10m

Parking	$(\tilde{1})$	2	3	4	5
Traffic	D	2	3	4	5
Pedestrian	(1)	2	3	4	5
Bicycle	D	2	3	4	5
Transit	m	2	3	4	5

For Questions 2-5, more than one selection may be made.

2. How do you usually travel to work, school, or to shop? □ Car □ Bicycle □ Walk □ Public □ Transit (Bus)

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Missing signage/traffic signals
Conflict with other vehicles
Conflict with bicyclists and pedestrians

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5. What are the main bicycle issues in La Vina?
Not enough bicycle parking
Not enough bicycle lanes
Conflict with vehicles
Poor connection to other areas of La Vina
Poor pavement condition

6. How would you like to see transportation improve in La Vina?

S SId 1414, there is IONPS. MURRA nd changes must made

Potential Traffic Calming Methods



Reduce road width and provide landscaping and pedestrian features



Reduce road width and provide parking



Landscaped Median

Please return survey in enclosed return envelope by August 25



1. In your opinion, what is the quality/ease/safety of the following transportation modes in La Vina?

1=poor, 5=excellent

Parking	Q	2	3	4	5
Traffic	02	2	3	4	5
Pedestrian	Q	2	3	4	5
Bicycle	Q	2	3	4	5
Transit	(1)	2	3	4	5

For Questions 2-5, more than one selection may be made.

2. How do you usually travel to work, school, or to shop? ☑ Car □Bicycle ☑ Walk □ Public ☑ Transit (Bus)

3. What are the main traffic issues in La Vina?
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Conflict with bicyclists and pedestrians

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Potential Traffic Calming Methods



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Landscaped Median

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1=poor, 5=excellent

Parking (1	2	3	4	5
Traffic (1	2	3	4	5
Pedestrian (1	2	3	4	5
Bicycle (1	2	3	4	5
Transit (1) 2	3	4	5

For Questions 2-5, more than one selection may be made.

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would like the stree clocen re-annon Jedestrian / Bicurcle 150 hours nunero fined nous a Out of setainice can partied nous a Out of setainice can partied n'the Street. Please return survey in enclosed return envelope by August 25

Potential Traffic Calming Methods



Reduce road width and provide landscaping and pedestrian features



Reduce road width and provide parking



Landscaped Median