



FARMERSVILLE

Complete Streets and Multimodal Access Study



DRAFT PLANNING STUDY
January 2023



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PURPOSE AND OBJECTIVE OF STUDY

The Farmersville Complete Streets and Multimodal Access Study (study) has been prepared by 4-Creeks Inc. at the direction of the Tulare County Association of Governments (TCAG) and in coordination with the City of Farmersville, Topograh, and Peters Engineering Group. This study was completed in accordance with tasks identified in the April 13, 2021 proposal, and within the scope of work agreed to by TCAG and 4-Creeks, Inc., the planning and engineering consultant.

The purpose of this study is to identify opportunities to implement complete street improvements throughout the City of Farmersville. Through a collaborative effort with local stakeholders and community members, this study will propose complete street design improvements to address mobility issues that will best serve community needs. The planning team will also evaluate existing conditions, identify funding opportunities, and develop a plan to implement the proposed improvements.

The objectives of this study include:

Improve city-wide circulation and connectivity for pedestrians, cyclists, and motorists

Improve access to City destinations, including schools, recreational spaces, and the City's commercial district

Develop design strategies that enhance pedestrian and bicycle comfort and safety



PROJECT LOCATION

The City of Farmersville is located in the San Joaquin Valley in Tulare County, California with an estimated population of 11,396 residents. The City encompasses approximately 2.2 square miles of land, and is bordered by State Route 198 to the north, Tulare Street to the south, Davis Ditch to the east, and Road 156 to the west.

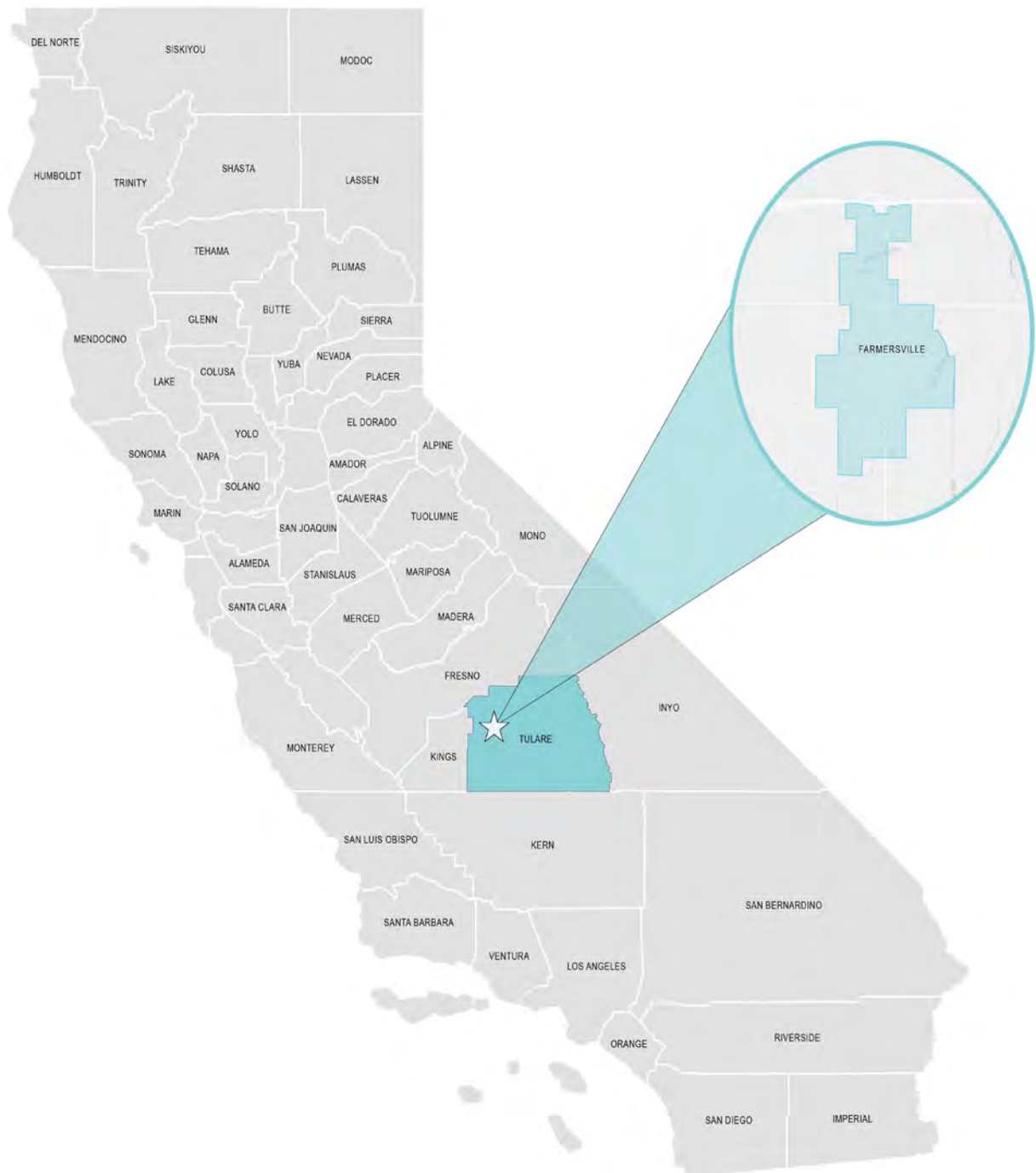


Figure 1.1 Regional Location Map

PHYSICAL/DEMOGRAPHIC CONTEXT

DIVERSITY

Among the total population of 11,396, approximately 88% is Hispanic or Latino, 9% White (non-Hispanic), 0.74% American Indian & Alaska Native, 0.62% Black or African American, and 0.47% Asian (American Community Survey 2019).

AGE

According to the American Community Survey, the median age of all people in Farmersville in 2019 was 29.5. Residents between the ages of 15 and 24 make up 19.4% of the population, 26.9% are between 25 and 44 years, 21.6% are between 45 and 64, and 8.3% are 65 years and older.

ECONOMY

In 2019, the most popular employment sectors were Agriculture, Forestry, Fishing & Hunting, Accommodations & Food Services and Retail Trade. Between 2018 – 2019, employment in Farmersville increased at a rate of 5.49% from 4,240 workers to 4,480 workers.

HOUSING AND HOUSEHOLD INCOME

In 2019, the median property value in Farmersville was \$153,800. The median property value increased by 7.55% from \$143,000 to \$153,800 between 2018 to 2019. Approximately 64.4% of the population are homeowners. Among the 2,910 households in Farmersville, the median household income was \$39,720.

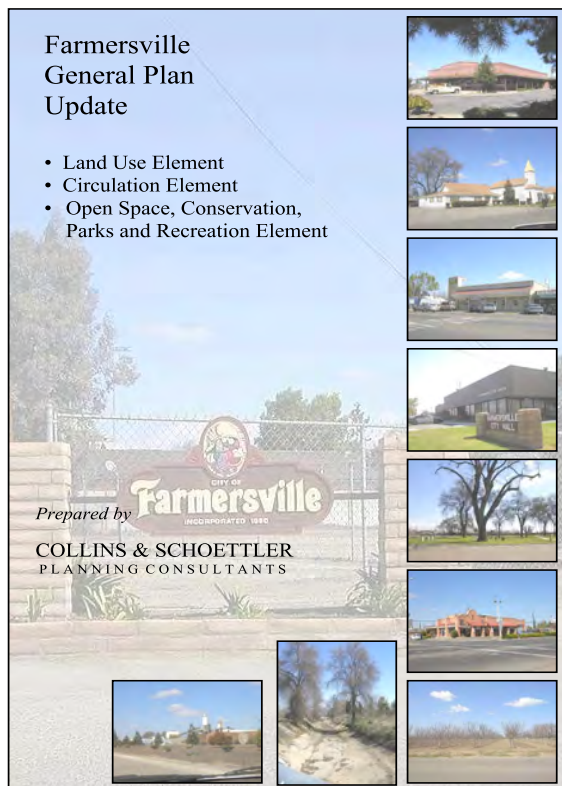
FUTURE GROWTH

The City of Farmersville is projected to grow to more than 17,854 residents by 2025. The City's General Plan identifies a 2.9% growth rate for the City. The rise in population will lead to an increase in traffic volumes in and around the Farmersville. As a result, it will be critical that future transportation infrastructure will be able to efficiently and sustainably accommodate the additional growth.



BACKGROUND DOCUMENTS

FARMERSVILLE GENERAL PLAN



The 2025 General Plan is Farmersville’s policy document to guide growth and development of the City through the year 2025. The General Plan is required by State law to include six elements pertaining to the following issues: Land Use, Circulation, Open Space, Conservation, Housing, Noise, and Safety. Each element typically contains a profile of existing conditions in the community, and then a series of goals, policies and action plans to achieve the City’s objectives during the life of the General Plan.

Circulation Element

The Circulation Element is second only to the Land Use Element in terms of importance to the community. It has a significant impact on the residents of Farmersville because it delineates the routes by which people will travel within and through Farmersville.

Further, the Element identifies the different types of circulation routes in the community, such as roadways, bike paths and railroads. The Farmersville Circulation Element is composed of five sections. They are: Existing conditions, an evaluation of the existing circulation system, Traffic projections and evaluations, Circulation goals, policies and action programs, Roadway cross-section designs, and Circulation map.



CROSS VALLEY CORRIDOR PLAN (MARCH 2018)

The Cross Valley Corridor (CVC) Plan is a County-wide effort to improve connectivity and mobility within the Central San Joaquin Valley. The plan proposes strategies that would improve transit access and connectivity, promote transit-oriented development, and identify opportunities to stimulate economic growth by capitalizing on the proposed California High-Speed Rail (HSR) station. The CVS is approximately 75 miles long, and partially operates the Union Pacific Railroad (UPRR) and Amtrak on several segments. Local and private bus services also operate on the CVC.

Farmersville is considered a key city along the CVC, in addition to Huron, NAS Lemoore, Lemoore, Hanford, Visalia, Exeter, Lindsay, and Porterville. Private automobile has historically been the preferred method of transportation in the Central Valley due to its affordability and convenience, as well as lack of transit

options. As a result, highway networks within the Central Valley may become more and more congested and deteriorate over time. SR 198, which is also Farmersville's northern boundary, may be susceptible to deterioration and longer travel times. The existing railroad track running east/west in Farmersville may be used for future CVC passenger rail services to connect other communities in the Valley.

The Farmersville Complete Streets and Multimodal study will remain consistent with recommendations outlined in the Cross Valley Corridor Plan, which include a set of strategies that involve right-of-way and site protection, land use, multi-modal circulation, public space, urban design, outreach, economic development and financing, sustainability, and Farmersville-specific recommendations.

REGIONAL ACTIVE TRANSPORTATION PLAN (MAY 2016)



The Regional Active Transportation Plan, also known as Walk 'n Bike Tulare County, was prepared by the Tulare County Association of Governments to make walking and biking around the county safer and more accessible. The Regional Active Transportation Plan will serve as pedestrian and bicycle component of the Tulare County Regional Transportation

Plan / Sustainable Communities Strategy (RTP/SCS), which is a long-range plan that guides the development of the county's transportation network.

The plan has also gathered extensive data and information from the eight cities in the County to identify pedestrian and bicycle issues and conditions through a localized lens. The Regional Active Transportation Plan identifies Farmersville Blvd, Ash Street, Linnell Avenue and Visalia Road as potential corridors of concern, based on high numbers of collisions. The pedestrian network was also described as fair; arterial and collector streets have good sidewalk coverage, though some local streets lack sidewalks.

The plan identifies recent expenditures on facilities in each city. In Farmersville, recent projects include:

- Liberty Park pedestrian exercise trail (0.5 miles long)
- Safe Routes to School project on Walnut, west of Farmersville Boulevard
- Exeter to Farmersville non-motorized corridor study (\$30,000)
- Safe Routes to School (\$136,000)
- Widening Visalia Road to include bike lanes
- Improve South Farmersville Boulevard from Oakland Street to the south city limits to include a Class III bike route

The Regional Active Transportation Plan formulated 70 projects that aim to improve overall mobility and connectivity around Tulare County. The Complete Streets and Multimodal study will propose improvements to help advance the priority projects identified in Farmersville:

F-1 E Walnut Ave sidewalks and bike lanes

Location: East Walnut Avenue between Farmersville Boulevard and Freedom Drive,

next to the Farmersville Unified School District's multi-school campus

Description: The proposed project will widen East Walnut Avenue to allow for the installation of sidewalks and bicycle lanes on a major school route in a severely disadvantaged community

Cost: \$2,858,000

F-2 Farmersville citywide bikeway network

Location: Citywide

Description: Implement the proposed short- and medium-term projects for Farmersville in 2010

Tulare County Regional Bicycle Transportation Plan. In addition to the project above, the proposed bikeway projects include trails along Deep Creek, the Tulare Irrigation Canal/Extension Ditch and the San Joaquin Valley Railroad; bike lanes on segments of Farmersville, Oakland, Ventura and Visalia streets; bike route segments on 15 streets; and bicycle-detection technology at six intersections

Cost: \$1,513,000

F-3 Comprehensive Citywide ADA Deficiencies Improvements

Location: Citywide

Description: Construct missing sidewalk, ramps and driveways to connect to existing sidewalk facilities and meet ADA standards

Cost: \$351,000

F-4 Comprehensive Citywide ADA Ramps Upgrade

Location: Citywide

Description: Construct new ramps or modify existing ramps to meet ADA standards

Cost: \$948,000

F-5 Visalia Road Improvements

Location: On Visalia Road between Ventura and Rose Avenues

Description: Construct median island with pedestrian median fencing, high visibility crosswalk, signing and refuge island improvements to reduce the high number of collisions

Cost: \$2,749,000

F-6 Pedestrian Signal at Farmersville Blvd and Citrus Street

Location: Intersection of Farmersville Blvd and Citrus Street

Description: Install HAWK system at the existing crosswalk to provide right-of-way for pedestrian crossing at this intersection

Cost: \$200,000

F-7 Farmersville Blvd Bike Lanes

Location: On Farmersville Blvd between Birch Street and Ashley Street

Description: Install Class II bike lanes on Farmersville Blvd between Birch Street and Ashley Street

Cost: \$70,000

F-8 City of Farmersville Bike/Ped Projects

Location: Farmersville Blvd and Walnut Street

Description: Bicycle and pedestrian improvements that provide access to Veterans Memorial Park and Farmersville High School. Class 4 bikeway on Farmersville Blvd and Class 4 or Class 2 Bikeway on Walnut Street depending on right-of-way available. Sidewalk improvements on both Farmersville Blvd and Walnut Street

Cost: \$200,000

REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The Regional Transportation Plan is a long range plan that every Metropolitan Planning Organization (MPO) is required to complete. The plan is meant to provide a long-range, fiscally constrained guide for the future of Tulare County's transportation system. The long range plan extends to the year 2042 in its scope. The plan accomplishes its goals by forecasting future growth, identifying regional priorities, and planning for infrastructure improvements. This plan is required to include four elements; those elements



include: the policy element, the sustainable community element, the action element and the financial element. These elements have been mandated by law, but do not keep MPOs from including more elements to their plan depending on local characteristics. Tulare

County's 2018 RTP/SCS also includes chapters on goods movement and valley wide characteristics in addition to the required plan

elements. The RTP/SCS is not the only plan in effect dealing with transportation issues, but is the holistic plan that integrates more specific plans into a larger framework for the county.

Sustainable Communities Strategy

As required by the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375), the 2018 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) contains a Sustainable Communities Strategy that considers both land use and transportation together in a single, integrated planning process that accommodates regional housing needs and projected growth. The 2018 RTP/SCS updates the current RTP/SCS adopted by TCAG in June 2014 and continues the planning vision for the Tulare County region laid out by the 2014 plan. As have past Regional Transportation Plans, the 2018 RTP/SCS plans how the region will invest limited transportation funds to maintain, operate and improve an integrated, multi-modal transportation system that facilitates the efficient movement of people and goods.

The updated plan identifies specific strategies, policies and actions, including a list of programmed and planned transportation projects affordable within the region's anticipated reasonably available transportation funding, to achieve regional goals and priorities and meet the current and future needs of the region. The planning horizon of the 2018 RTP/SCS is 2042. The Sustainable Communities Strategy recognizes the fundamental relationship between land use and transportation choices: the two components influence each other and neither component can be understood without reference to the other. The 2018 RTP/SCS meets the requirements of SB 375 and, in particular, demonstrates how the integrated land use and transportation plan achieves the region's mandated greenhouse gas emission targets for passenger vehicles.

TULARE COUNTY LONG RANGE TRANSIT PLAN (SEPTEMBER 2017)

The Tulare County Long Range Transit Plan established an action plan to guide county-wide transit services, policies, and practices. The action plan was broken down into short, medium, and long-term implementation goals in order to better achieve its overarching vision.

FARMERSVILLE WATERWAY/TRAILS MASTER PLAN (2010)

Adopted in 2010, the Farmersville Water Trails Master Plan identified a network of multi-purpose trails and open space corridors adjacent to the waterways that run through the City. The Master Plan proposed paths, landscaping, lighting, benches, drinking fountains and signage to enhance the pedestrian and bicyclist experience. Trails were proposed along the Tulare Irrigation District Main Intake Canal, Cameron Creek, Extension Ditch, Blain Ditch, Deep Creek, and Davis Ditch.



REGULATORY CONTEXT

FEDERAL

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), and will be subject to NEPA under NEPA, and thus is obligated to honestly determine whether or not the project is subject to NEPA. If it is, Tulare 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 Tulare County can make as Lead Agency are as follows:

1. 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 Categorical 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:
 - 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.

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). The Tulare County RMA is the Lead Agency under CEQA, and thus is obligated to honestly determine whether or not the project is subject to CEQA. If it is, Tulare 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 Tulare 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 CEQA review;
2. The implementation project is a Categorical Exempt project pursuant to CEQA Guidelines Section 15354 and 15300-15333, or is a Categorical 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 Environmental documents supported by substantial evidence:
 - a. Negative Declaration (ND) a document finding the project will not result in significant impacts on the environment;
 - b. 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 impacts. Said mitigation measures must be agreed to by applicant prior to public hearing taking action to approve the project, or;

c. 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.



EXISTING CONDITIONS 2

EXISTING FACILITIES INVENTORY

This section provides a comprehensive inventory of the existing and currently proposed pedestrian and bicycle facilities. The inventory summarizes current impediments to walking and bicycling, such as missing infrastructure that are not in compliance with current laws, such as the Americans with Disabilities Act (ADA), and regulations. This section also summarizes the City's preliminary priorities with regards to pedestrian and bicycle impediments.

PRESENT CIRCULATION SYSTEM

The four major roadways in Farmersville include State Highway 198, Farmersville Boulevard, Visalia Road, and Walnut Ave. State Highway 198 has on and off-ramps for traffic onto Farmersville Blvd. Farmersville Blvd is an arterial roadway that runs north/south through the center of the community. The street features two travel lanes and one parking lane in each direction. Perpendicular to Farmersville Boulevard is Visalia Rd and Walnut Ave. Visalia Rd is an east/west arterial that connects Farmersville to Visalia to the west, and Exeter to the east. This road generally features two travel lanes and a parking lane in each direction throughout Farmersville. Walnut Ave (Avenue 288) is an east/west collector road that runs midway between Visalia Rd and State Highway 198. Walnut Ave generally features one travel lane in each direction.

The intersection of Walnut Avenue and N Freedom Drive is an area of particular concern. The community

has expressed significant frustration due to high levels of congestion at the intersection during certain hours (school pick-up and drop-off). In particular, drivers have difficulty turning left onto Walnut Avenue from Freedom Drive due to uncontrolled traffic on Walnut Avenue.

PEDESTRIAN FACILITIES

The Circulation Element indicates that all areas of the City shall have convenient pedestrian access, and connectivity between neighborhoods. Where possible, all street types are planned to include sidewalks for convenient and safe pedestrian access. Figure 2.1 shows existing and missing sidewalks.

BICYCLE FACILITIES

On October 25, 2010, the City of Farmersville adopted the Tulare County Regional Bicycle Transportation Plan for use in the City. Bikeway facilities include the following:

- **Class I Bike Paths** – provides for a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.
- **Class II Bike Lanes** – provides a signed and striped lane for one-way bike travel on a street or highway.
- **Class III Bike Routes** – provides for shared use with pedestrian or motor vehicle traffic. Class III Bike Routes are not striped but are often identified with signage.

Within Farmersville, the adopted plan proposes Class I Bike Paths along the Tulare Irrigation District Main Intake Canal, Extension Ditch, Blain Ditch, Deep Creek, the railroad frontage, and Walnut Ave between Farmersville Blvd and Extension Ditch. Class II Bike Lanes are proposed on Farmersville Blvd, Visalia Rd, Walnut Ave, Oakland St west of Farmersville Blvd and a portion of Ventura Ave south of Visalia Rd. Class III Bicycle Routes are proposed on various local roadways to provide continuity to other bikeway facilities and connect neighborhoods to retail, schools and parks. The City's existing bicycle facilities are shown in Figure 2.2. There are limited bicycle facilities located within Farmersville. Currently, Class II bikeways in Farmersville include the following:

- Farmersville Blvd, from the southern city limits (near Palomar Court Apartments and Roy Park), north to Oakland St, where it transitions to a Class III (share the road) facility.
- Visalia Rd, between Virginia Ave and Farmersville Blvd.

On-street bikeways are most often in the form of bike lanes (also known as Class II bikeways) or bike routes (Class III). Class II bikeways are bike lanes established along streets and are defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel. Bike lanes are one-way facilities, typically striped adjacent to motor traffic traveling in the same direction.

PUBLIC TRANSPORTATION

Public transportation services are provided by the Visalia Transit and operates fixed bus routes which run through Farmersville. The Visalia Transit Route 9A and 9B run from Visalia Transit Center, through Farmersville, then to Exeter and back. Route 9A has 8 stops located throughout Farmersville. Route 9B has 9 stops located throughout Farmersville. Both Route 9A and 9B run from 6:00 AM to 8:00 PM Monday through Friday, and 8:00 AM to 5:30 PM on weekends. Visalia Transit Route 12 also runs from Visalia to Farmersville. Route 12 has 9 total stops and runs from 6:00 AM to 9:30 PM Monday through Friday, and 8:00 AM to 6:30 PM on weekends. Figure 2.3 shows existing transit routes in Farmersville.

ADA COMPLIANCE

Title II of the Americans with Disabilities Act (ADA) of 1990 requires that public entities, including state and local governments, ensure that persons with disabilities have access to the pedestrian routes in the public right of way. Curb ramps allow people with mobility impairments to gain access to the sidewalks and to pass through median islands in streets. Without curb ramps, these individuals would be forced to travel in streets and roadways, where they are in potential conflict with vehicles and/or are prevented from reaching their destination. ADA standards require a curb ramp at every intersection where a street level pedestrian walkway crosses a curb.

Figure 2.1 shows the existing conditions of ADA ramps in Farmersville. There are a significant number of both ADA-compliant and non ADA-compliant ramps. There are also a few sidewalks that have missing ADA ramps.

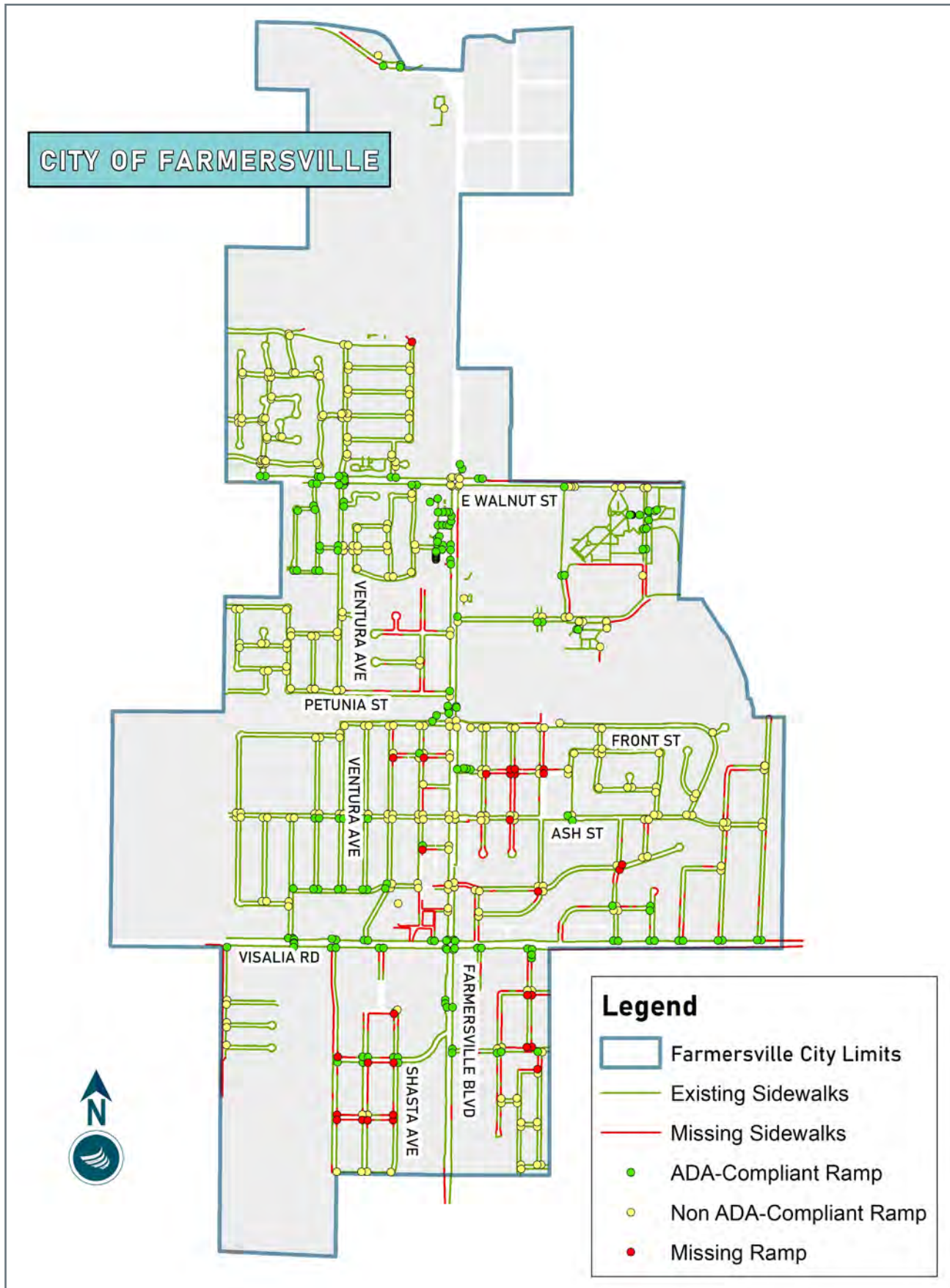


Figure 2.1 Existing/Missing Sidewalks & ADA Ramps

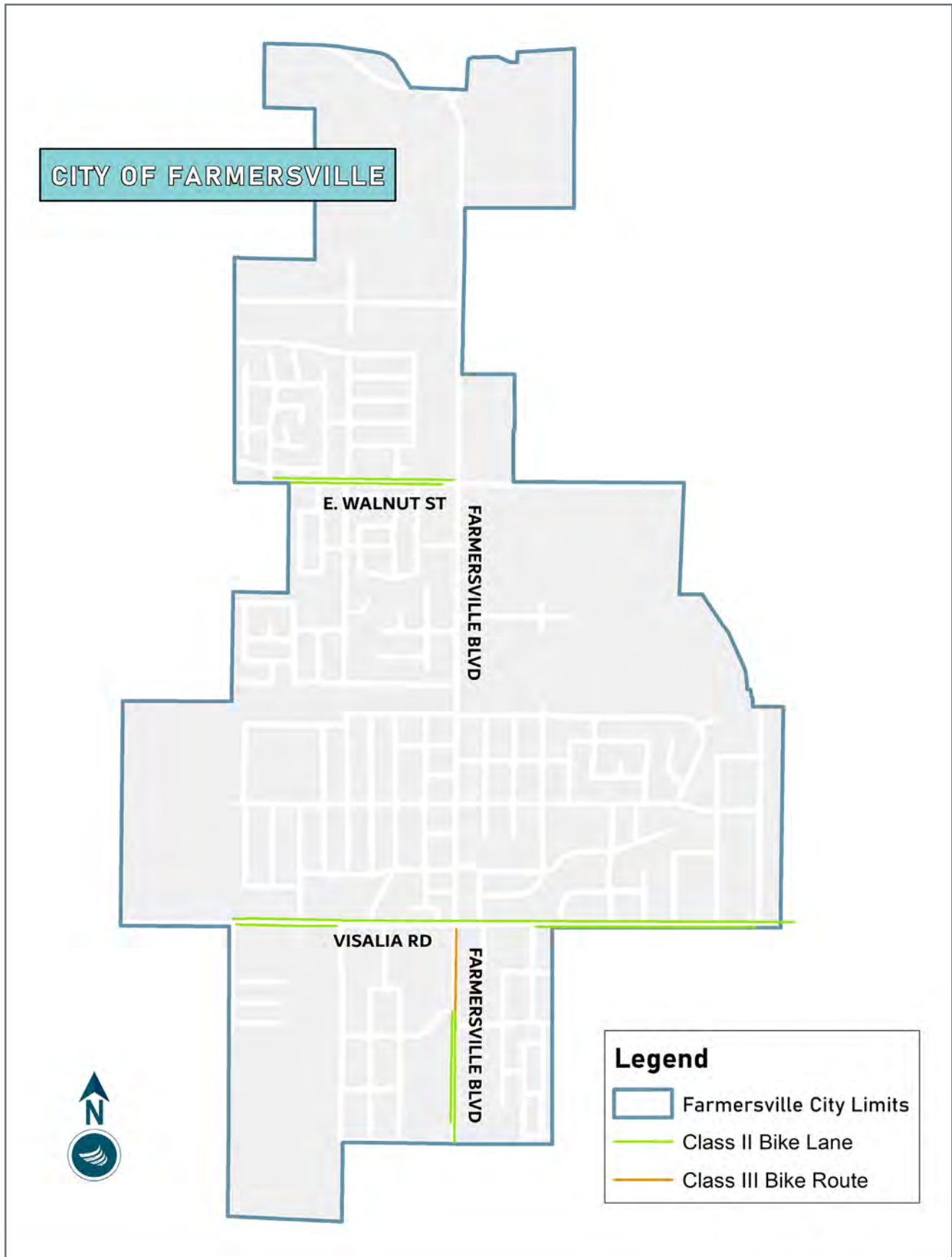


Figure 2.2 Existing Bike Facilities

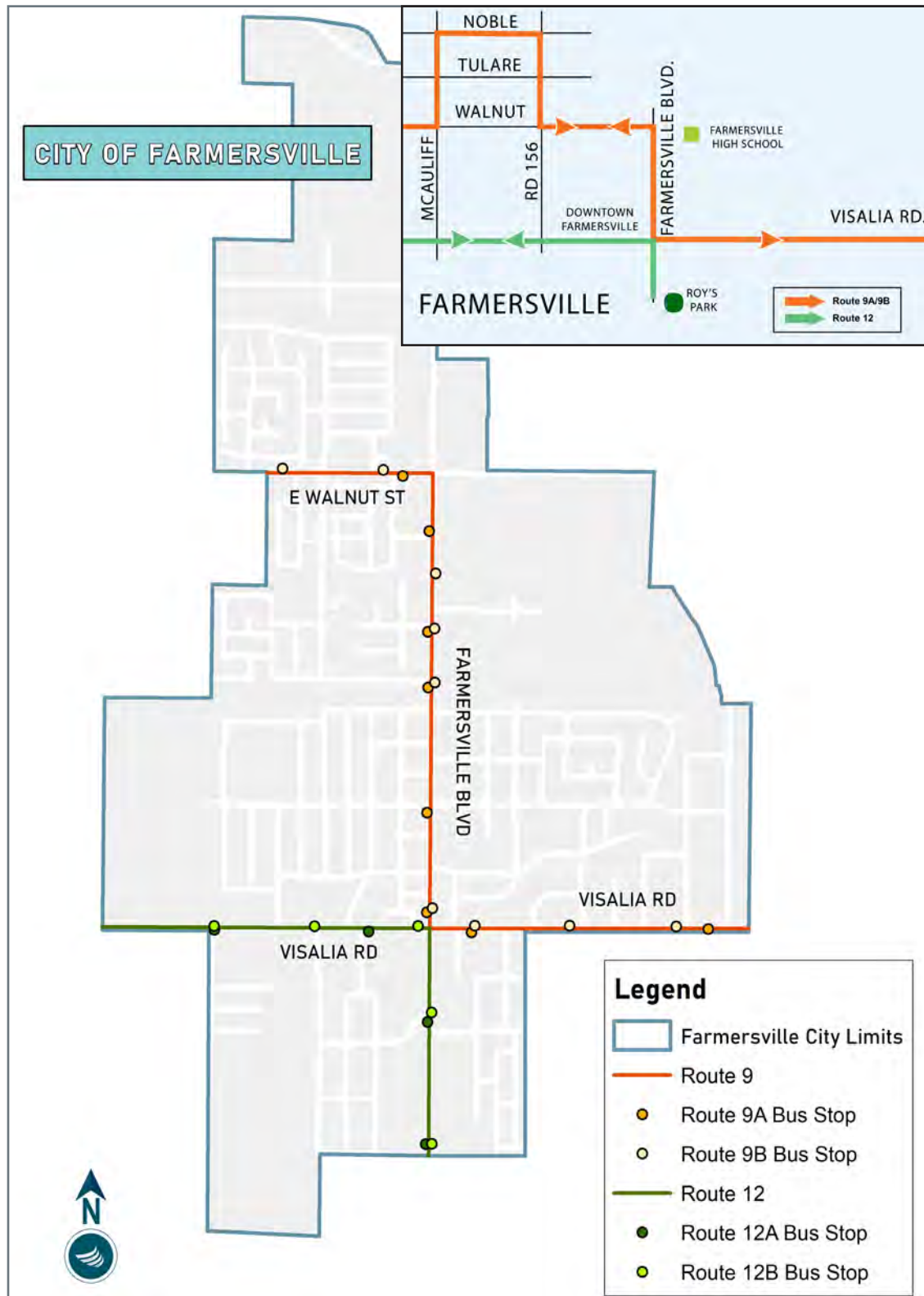


Figure 2.3 Bus Routes

Accident data for Farmersville was provided from the California Highway Patrol. The collision data reports provide the primary and secondary streets where the collision occurred and the primary collision factor. 181 accidents were reported in Farmersville between October 2017 and October 2021. 22 of these accidents occurred at the Farmersville Blvd/Visalia intersection. The primary cause of these collisions included right of way collision, improper turns, and stop signal infraction. Improper turn and right-of-way auto were identified as the most common type of collision.

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TRAFFIC COUNTS

Metro Traffic Data Inc. creates Turning Movement Reports for the Tulare County Association of Governments that includes traffic counts for high traffic roads in Farmersville. Traffic counts were collected on October 14, 2021. The main traffic locations in Farmersville include Farmersville Blvd @ Visalia Rd, Farmersville Blvd @ Walnut Ave, Farmersville Blvd @ Ash St, Farmersville Blvd @ Front St, and Walnut Ave @ Ventura Ave. Figure 2.5 shows these major intersections.

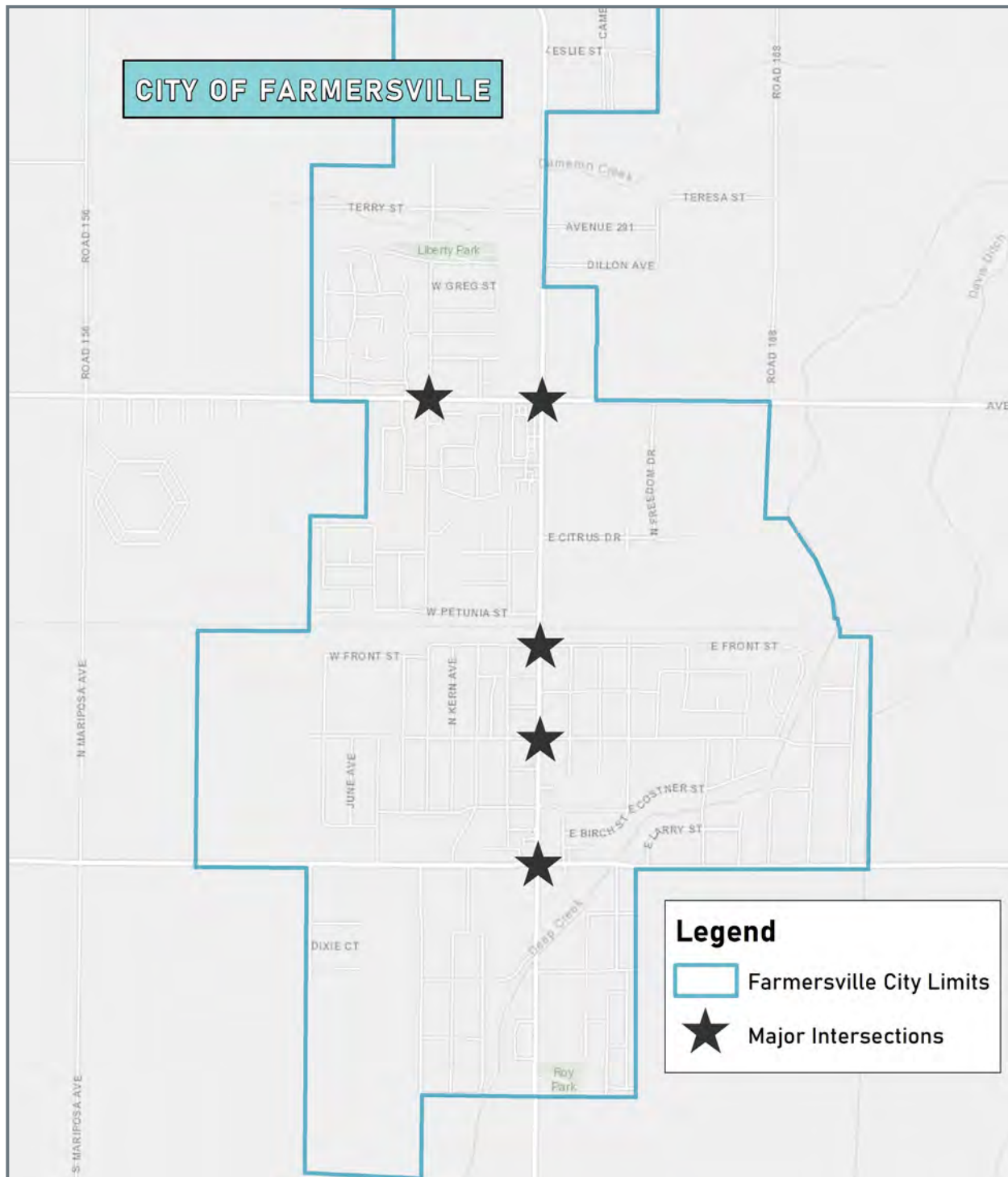


Figure 2.5 Major Intersections

Traffic counts were collected on October 14, 2021. As shown in Figure 2.7, the majority of users traveling through the intersection during the AM are going southbound on Farmersville and westbound on Visalia. In the PM, the majority of users are traveling eastbound and westbound on Visalia. The traffic counts also confirmed that there is very little bicycle or pedestrian traffic at this intersection. Zero cyclists were recorded at the intersection between 7:00 AM and 9:00 AM and five were recorded between 4:00 PM and 6:00 PM. 32 pedestrians were recorded between 7:00 AM and 9:00 AM and 21 were recorded between 4:00 PM and 6:00 PM.

A map of the City of Farmersville, Texas, showing the city limits and surrounding areas. The city limits are outlined in blue. A black star marks the location of the City of Farmersville. The map includes labels for major roads such as Avenue 200, Avenue 201, Avenue 206, Road 188, and various local streets like Terry St, W Greg St, W Petunia St, W Front St, N Karen Ave, June Ave, Dixie Ct, E Citrus Dr, E Birch St, E Cottonwood St, W Larry St, Teresa St, and Camelia Ave. A green area labeled 'Lickity Park' is also visible.

AM Traffic Counts

Mode	Count	PHF
Peds	7	0.757
Bikes	0	92
Veh	0	157
Veh	0	75

Mode	Count	PHF
Peds	5	0.906
Bikes	0	0
Veh	0	245
Veh	60	0.854

PM Traffic Counts

Mode	Count	PHF
Peds	1	0.782
Bikes	0	52
Veh	0	175
Veh	62	0.907

Mode	Count	PHF
Peds	2	0.956
Bikes	0	121
Veh	0	315
Veh	102	0.895

Figure 2.7 AM & PM Traffic Counts

Traffic counts were collected on October 14, 2021. As shown in Figure 2.9, the vast majority of users traveling through the intersection during the AM are going northbound on Farmersville and turning left on to Farmersville from Walnut. In the PM, the majority of users are traveling northbound and southbound on Farmersville. The traffic counts also confirmed that there is very little bicycle or pedestrian traffic at this intersection. Four cyclists were recorded at the intersection between 7:00 AM and 9:00 AM and three were recorded between 4:00 PM and 6:00 PM. 32 pedestrians were recorded between 7:00 AM and 9:00 AM and 11 were recorded between 4:00 PM and 6:00 PM.

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Figure 2.8 Farmersville & Walnut

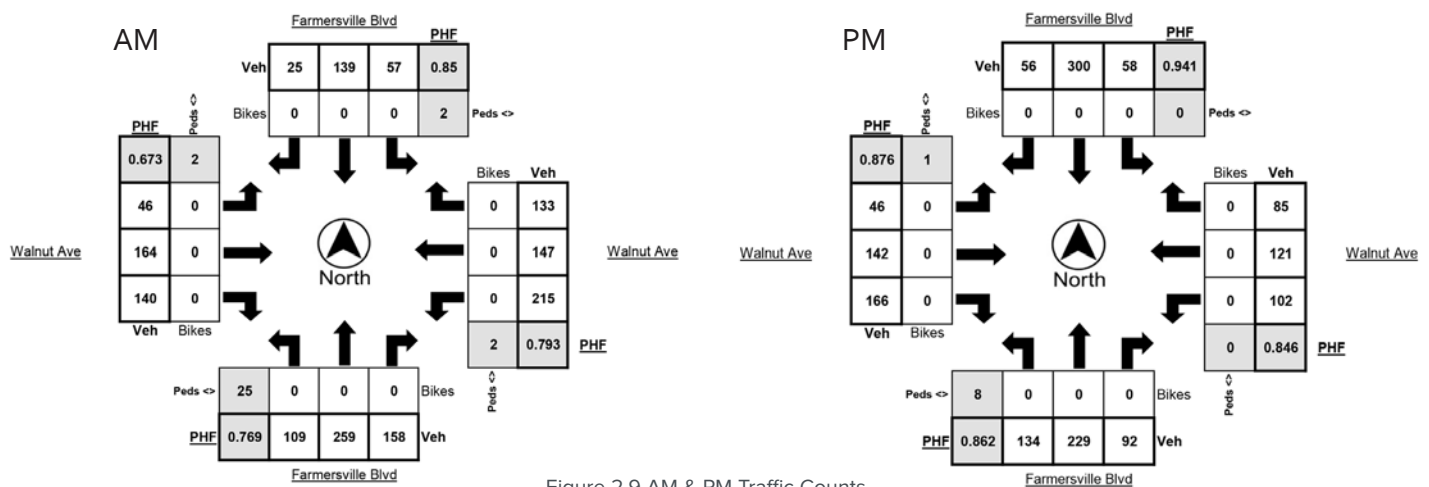


Figure 2.9 AM & PM Traffic Counts

FARMERSVILLE BLVD @ ASH ST

The intersection of Farmersville Blvd and Ash St is located in the center of the City of Farmersville (see Figure 2.10). According to the Farmersville General Plan Circulation Element, Farmersville Blvd is an arterial roadway that runs north/south through the center of the community and Ash St is a major east/west roadway. The existing ROW leading up to the intersection is 95' on the north and south legs.

The intersection is bordered by commercial land uses on all corners. Sidewalks and crosswalks are present along all existing corners of the intersection. There are no existing bike facilities along the intersection. Farmersville and Ash are located in the center of the downtown area.

Traffic counts were collected on October 14, 2021. As shown in Figure 2.11, the vast majority of users traveling through the intersection during the AM and PM are traveling north and southbound on Farmersville. Five cyclists were recorded at the intersection between 7:00 AM and 9:00 AM and nine were recorded between 4:00 PM and 6:00 PM. 48 pedestrians were recorded between 7:00 AM and 9:00 AM and 54 were recorded between 4:00 PM and 6:00 PM.

9 collisions occurred between October 2017 and October 2021 at the intersection of Farmersville and Ash Street. The main factors involved stop sign/signal collisions.

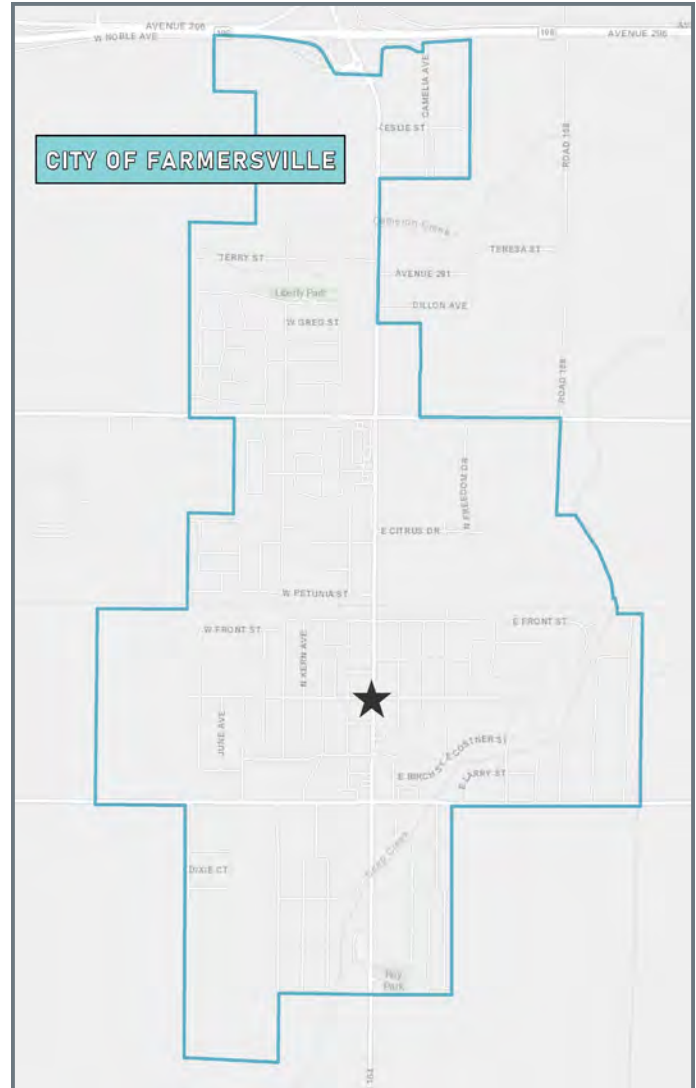


Figure 2.10 Farmersville & Ash

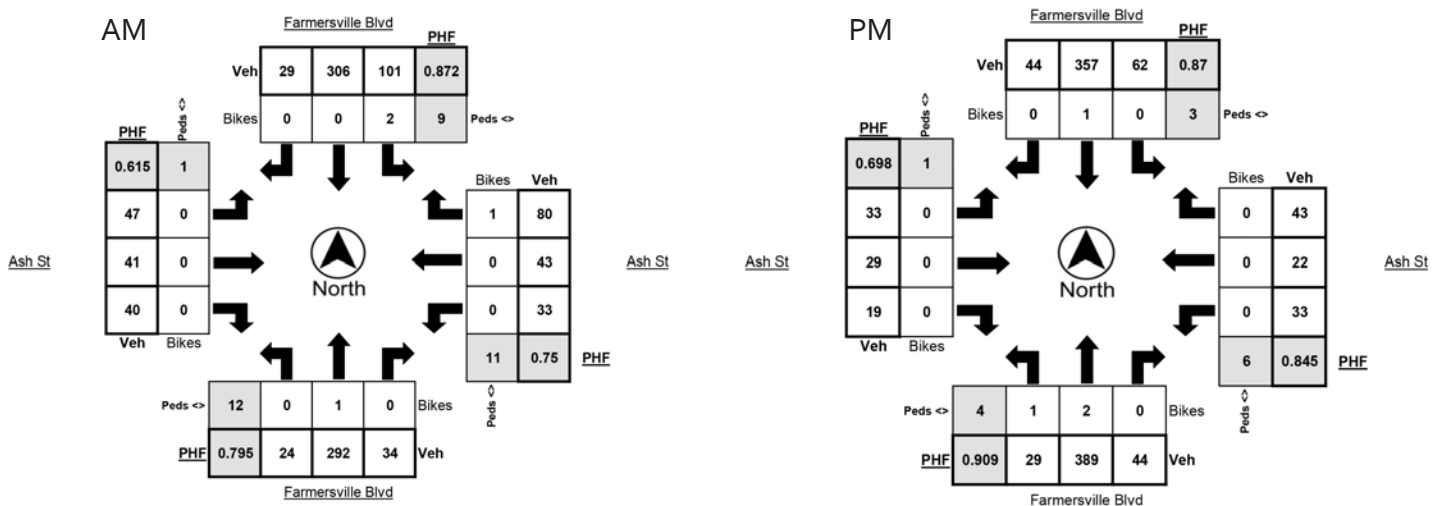


Figure 2.11 AM & PM Traffic Counts

FARMERSVILLE BLVD @ FRONT ST

The intersection of Farmersville Blvd and Front St is a busy intersection located in the center of the City of Farmersville (see Figure 2.12). According to the Farmersville General Plan Circulation Element, Farmersville Blvd is an arterial roadway that runs north/south through the center of the community and Front St is a major east/west roadway. The existing ROW leading up to the intersection is 95' on the south leg and 70' on the north leg. The intersection is bordered by commercial land uses on the northeast, southeast, and southwest corners. There is a church located on the northwest corner. Sidewalks and crosswalks are present along all existing corners of the intersection except the northern edge. There are no existing bike facilities along the intersection.

Traffic counts were collected on October 14, 2021. As shown in Figure 2.13, the vast majority of users traveling through the intersection during the AM and PM are going north and southbound on Farmersville. The traffic counts also confirmed that there is very little bicycle traffic at this intersection. Four cyclists were recorded at the intersection between 7:00 AM and 9:00 AM and six were recorded between 4:00 PM and 6:00 PM. 32 pedestrians were recorded between 7:00 AM and 9:00 AM and 11 were recorded between 4:00 PM and 6:00 PM.

11 collisions occurred between October 2017 and October 2021 at the intersection of Farmersville and Front Street. The main collision factors ROW Auto, Stop Sign/Signal, and 'too close'.

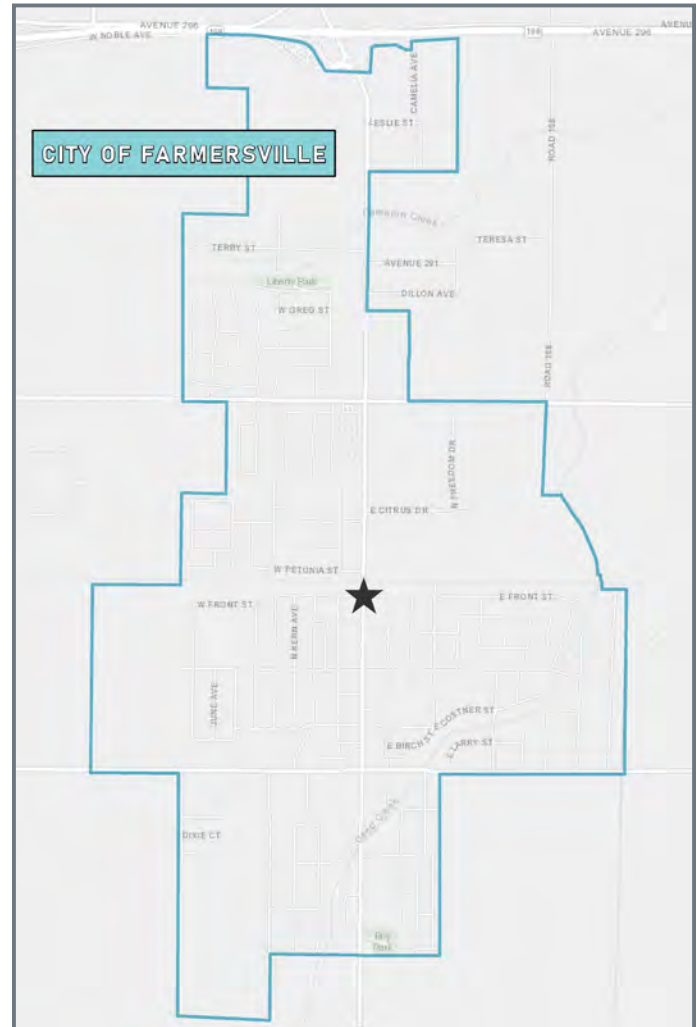


Figure 2.12 Farmersville & Front

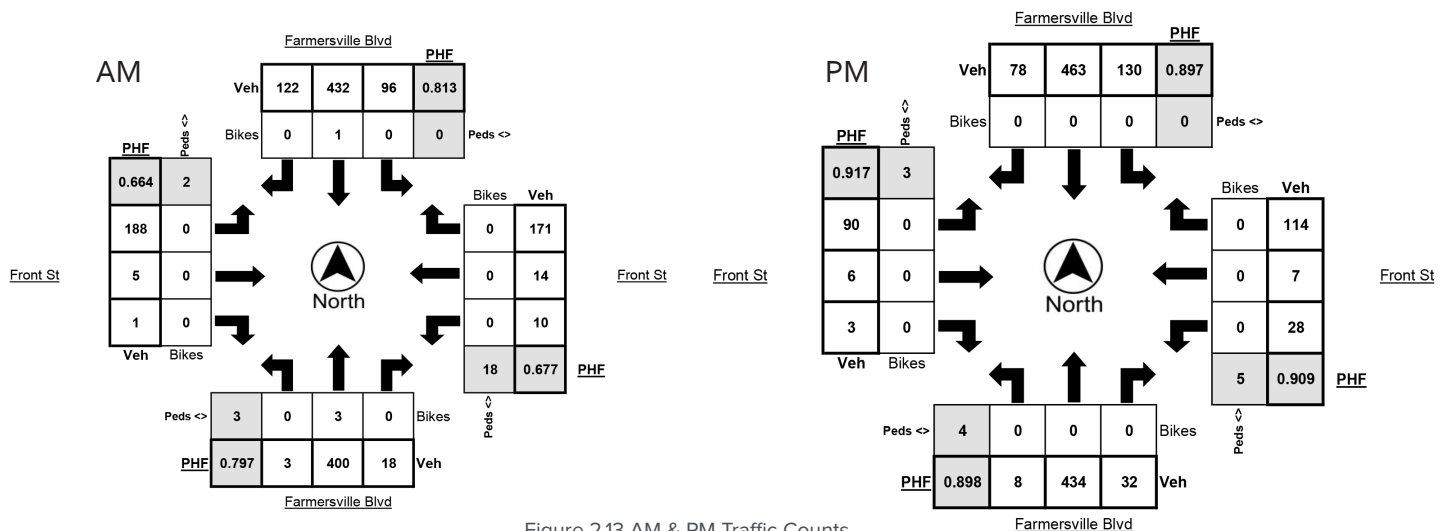


Figure 2.13 AM & PM Traffic Counts

WALNUT AVE @ VENTURA AVE

The intersection of Walnut Ave and Ventura Ave is located at the northwest edge of the City of Farmersville (see Figure 2.14). According to the Farmersville General Plan Circulation Element, Walnut Ave is an east/west collector road and Ventura Ave is a mostly residential roadway. The existing ROW leading up to the intersection is 72' on the west leg and 84' on the east leg.

The intersection is bordered by residential land uses on all corners. Sidewalks are present along all existing corners of the intersection. Crosswalks are located on the north, east, and south edges of the intersection. Class II Bike Lanes are located along Walnut Ave.

Traffic counts were collected on October 14, 2021. As shown in Figure 2.15, the vast majority of users traveling through the intersection during the AM and PM are going east and westbound on Walnut Ave. The traffic counts also confirmed that there is very little bicycle or pedestrian traffic at this intersection. A single cyclist was recorded at the intersection between 7:00 AM and 9:00 AM and a single cyclist was recorded between 4:00 PM and 6:00 PM. 30 pedestrians were recorded between 7:00 AM and 9:00 AM and three were recorded between 4:00 PM and 6:00 PM.

Three collisions occurred between October 2017 and October 2021 at the intersection of Walnut Avenue and Ventura Avenue. The main collision factor was pedestrian violation.

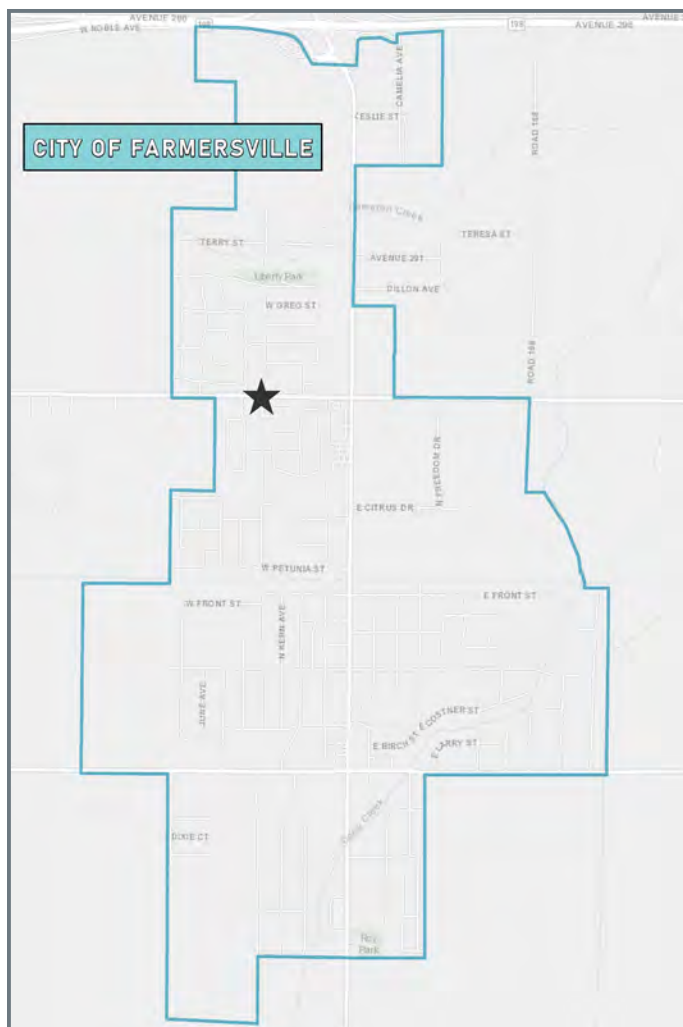


Figure 2.14 Walnut & Ventura

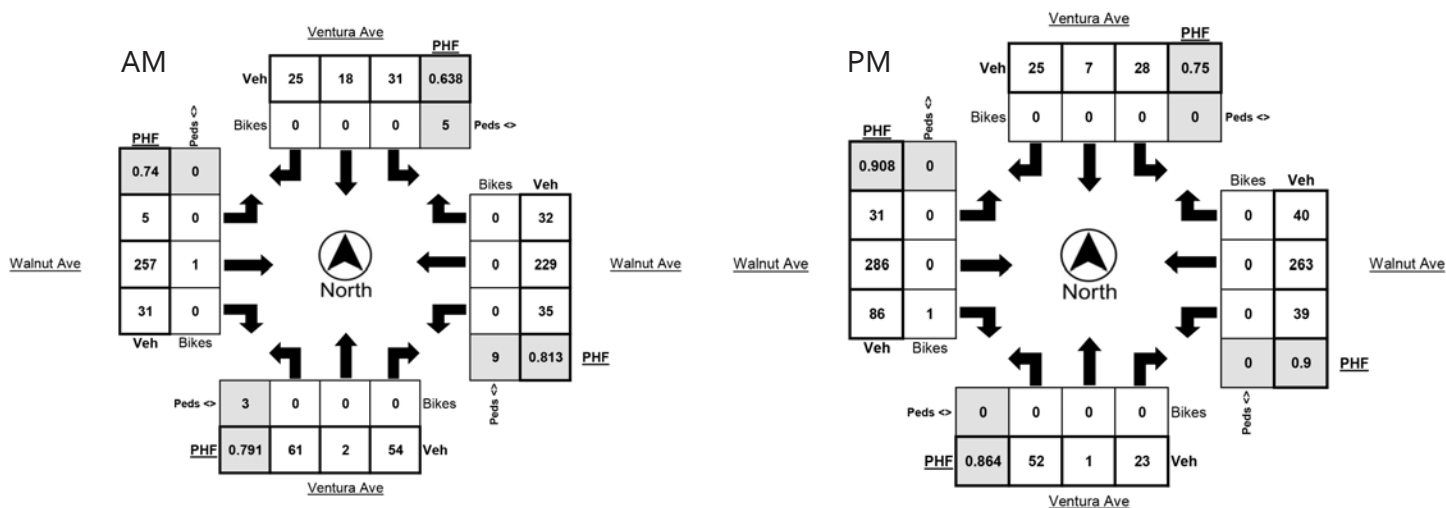


Figure 2.15 AM & PM Traffic Counts

COMMUNITY OUTREACH 3



ABOUT COMMUNITY OUTREACH

Public involvement is essential when identifying useful and appropriate design concepts to meet the needs of a specific community. The 4-Creeks Planning team conducted community outreach efforts to better understand the needs of the community identify and identify current impediments to bicycle and pedestrian travel. This section will discuss the process and results of these community outreach efforts.

COMMUNITY OUTREACH EVENT #1: FARMERSVILLE FALL FESTIVAL

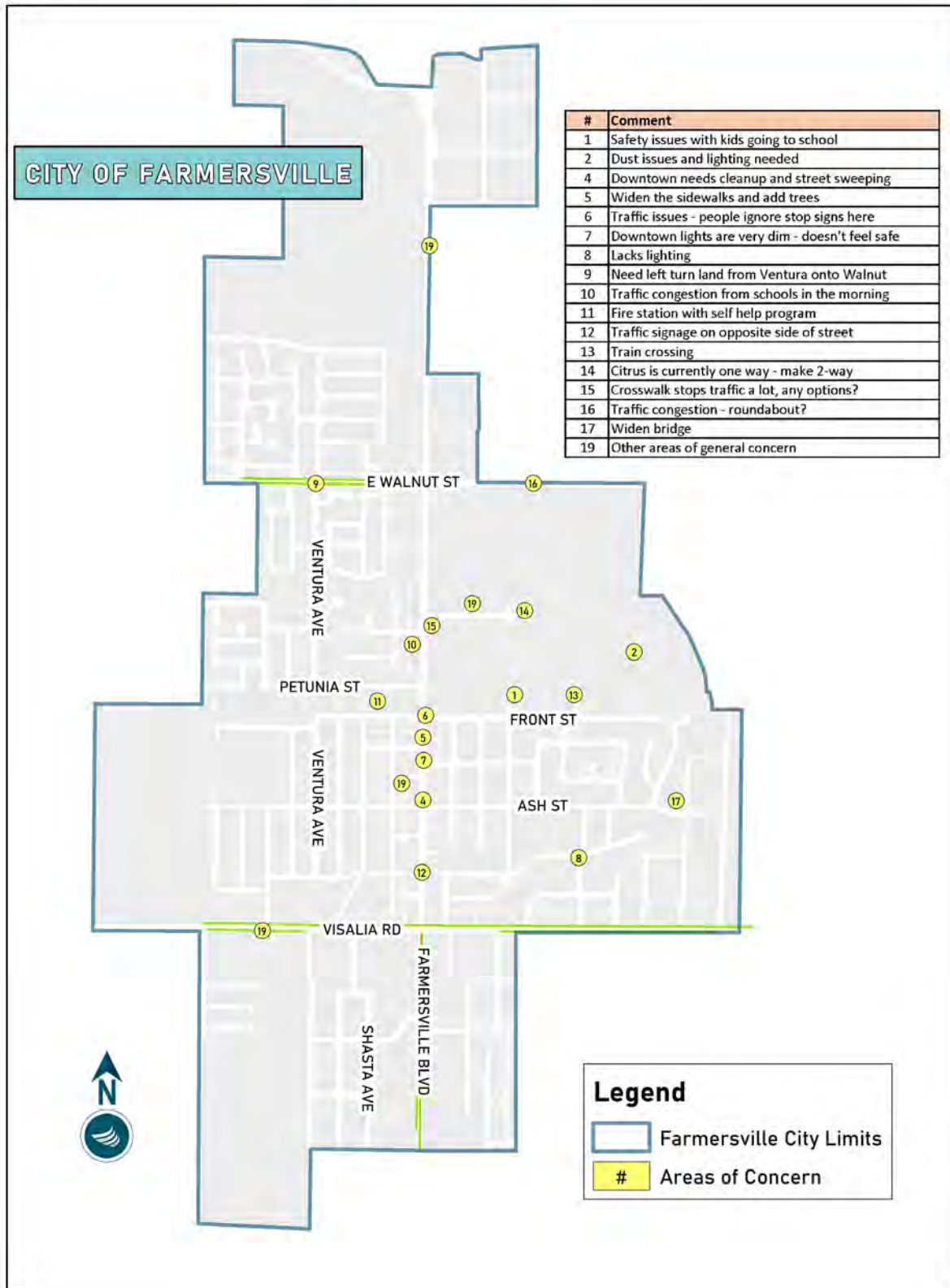
The first community outreach event was held at the Farmersville Fall Festival on October 2nd, 2021 from 9am to 12pm. There were four individuals from 4Creeks Inc. that attended the booth at the event. The purpose of this event was to introduce the project to community members and to gain an initial understanding of areas of concern in Farmersville. This meeting included a map-based workshop and an opportunity for community members to become involved with the project with a sign-up sheet.

MAP BASED WORKSHOP

A map-based workshop was conducted at Community Outreach Event #1 to gain location-specific information on problems and opportunities in the City of Farmersville. For this exercise, a large-form 40" x 60" map of the City of Farmersville was put on an easel and yellow stickers were available for participants to identify problem areas and highlight project ideas for the community. Participants were then able to number their yellow sticker and write on a notepad their corresponding sticker number and the details of their concerns.

The main concerns gathered from the community surrounded the location where the Elementary school is located in Farmersville. Many residents stated that Farmersville and Citrus create a lot of congestion during pick up and drop off time. Additionally, residents noted that the crosswalks in that same area are unsafe.





COMMUNITY SURVEY

Additional input was gathered from the community via a community survey hosted on Typeform. The survey included 15 questions and was distributed via text and social media. Community members were also invited to take the survey through a QR code at the first community outreach event. Surveys were available in both English and Spanish to encourage non-English-speaking community members to engage in the planning process. The survey received 194 total responses. A report containing the survey and responses are available in Appendix C.

Question 1 asked respondents to identify their role within the City of Farmersville out of the following choices listed below. Respondents were directed to select all options that applied. The responses to this question are shown in provided in Figure 3.1.

- Homeowner
- Employee
- Local Government Employee
- Renter
- Business Owner
- Homeless/Unhoused
- Other

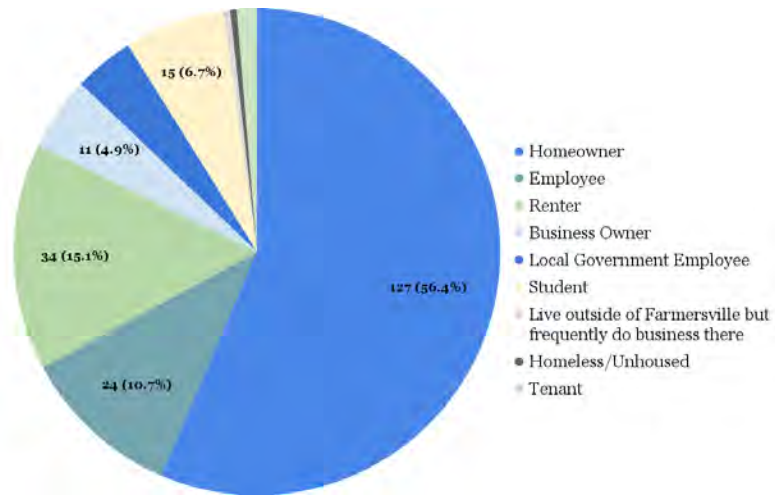


Figure 3.1 Question 1 - What describes your role within the city?

Questions 2-6 were developed to gather information about walking and pedestrian facilities in Farmersville.

Question 2 asked respondents to identify how often they walk to destinations (parks, schools, work, shopping) in Farmersville. Out of 190 participants, the majority (103 participants) stated that they rarely walk to destinations in Farmersville. Figure 3.2 shows the responses to Question 2.

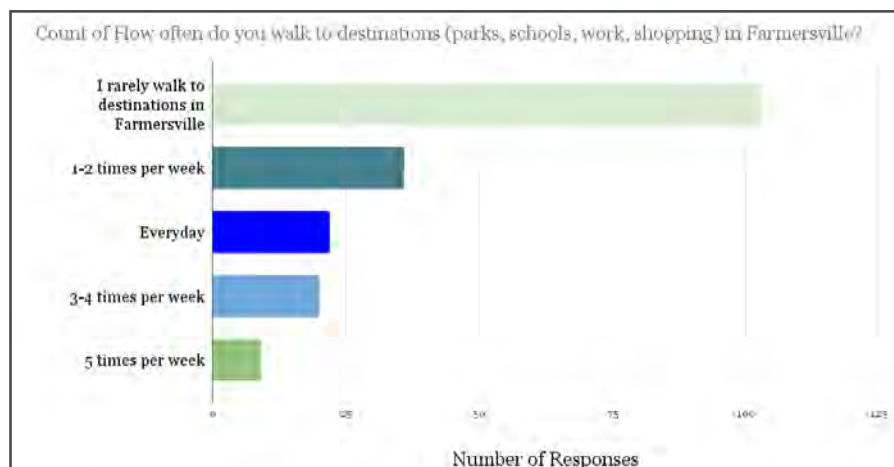


Figure 3.2 Question 2 - How often residents walk

Question 3 (Figure 3.3) asked respondents about the primary factor that dictates the route chosen for walking. The majority of answers were split between "sidewalks" and "I rarely walk to destinations in Farmersville." As a follow-up to question 3, question 4 (Figure 3.4) asked about the reason why respondents do not walk often in Farmersville. The Majority of responses said that personal safety was their main concern when walking.

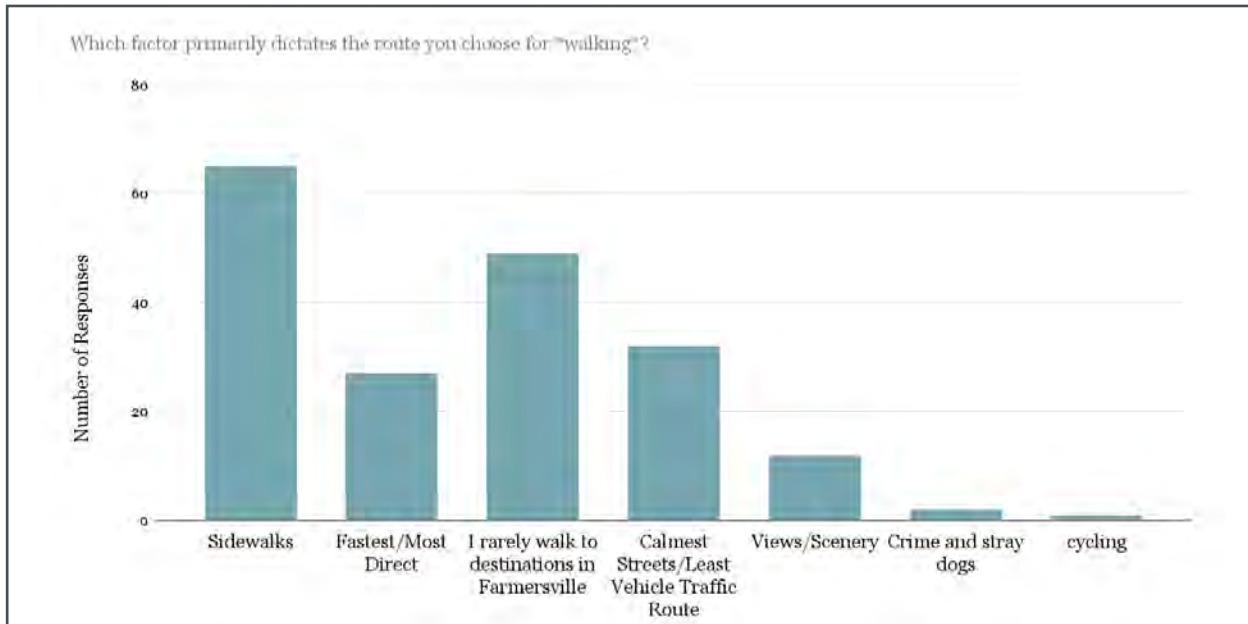


Figure 3.3 Question 3 - What describes your role within the city?

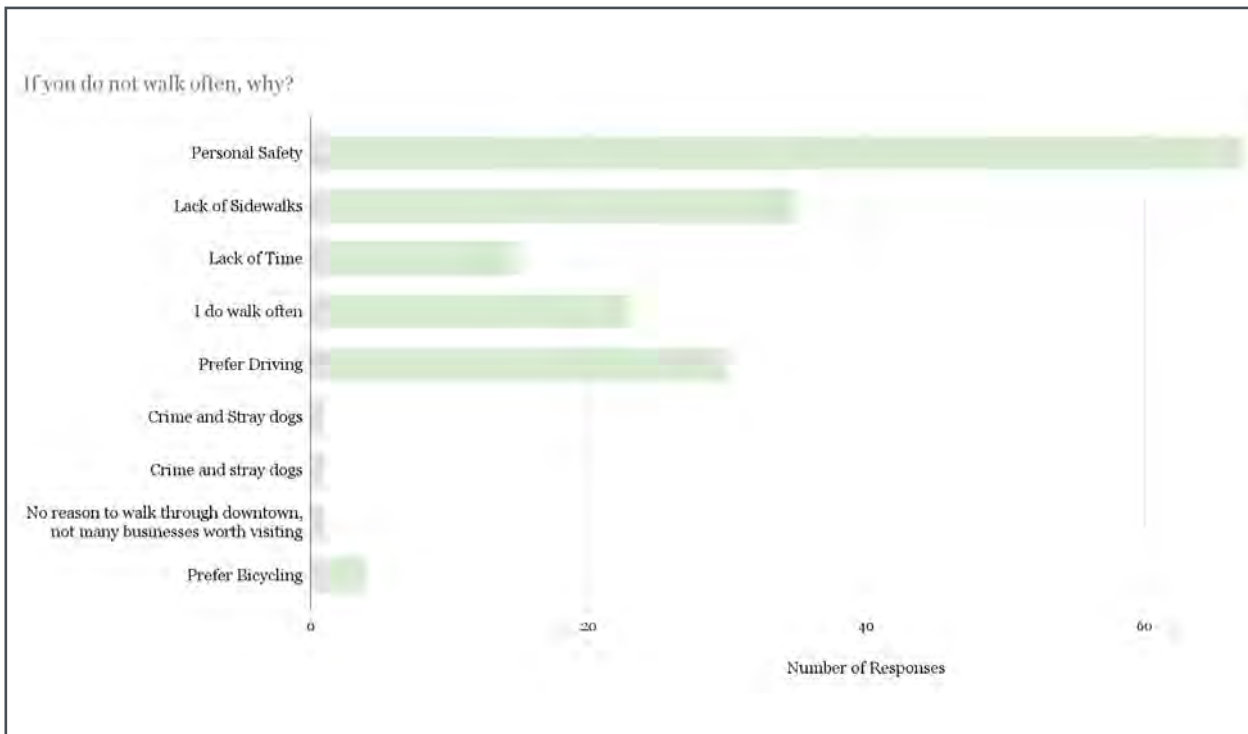


Figure 3.4 Question 4 - Reason for not walking

Question 5 asked respondents to select the top four concerns for pedestrian-related issues in the City of Farmersville. The majority of participants answered that speeding vehicles, unsafe driving, and lack of street lighting were their main pedestrian-related concerns.

Question 6 asked respondents to respond with what would encourage them to walk more in Farmersville. The majority of respondents selected their reasons for walking more would include more attractive streets and enhanced perception of personal safety.

Question 7 (Figure 3.5) asked respondents who have children to identify how their children get to and from school in the City of Farmersville. The majority of respondents answered that they do not have children that go to school in the City of Farmersville. Out of respondents who have children that go to school in Farmersville, the majority answered that their children is driven to and from school or they walk to and from school.

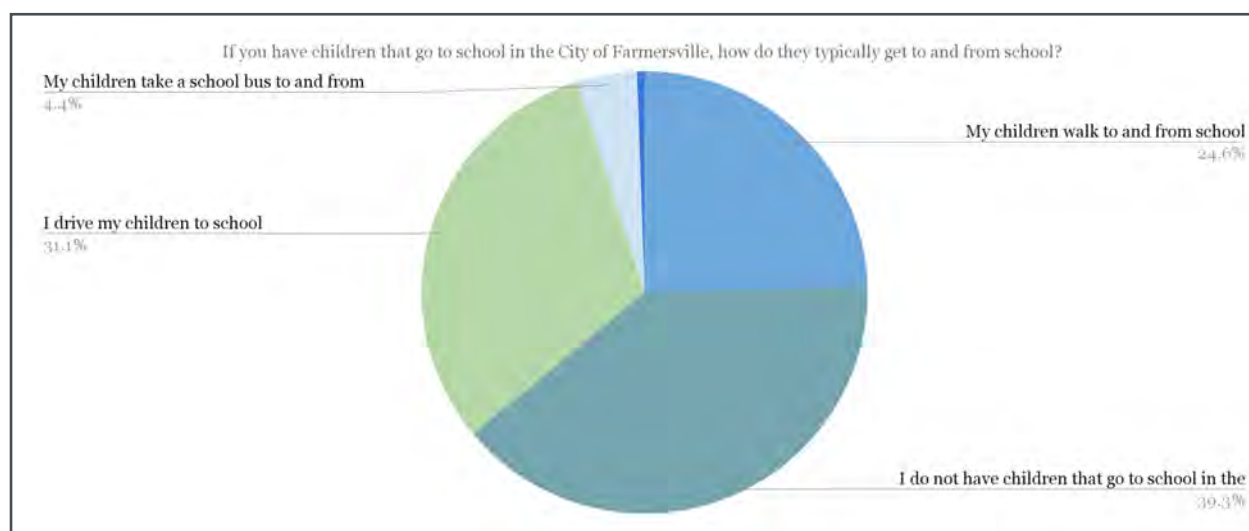


Figure 3.5 Question 7 - Children's route to school

Questions 8-12 asked respondents to answer various questions about their experiences biking in Farmersville. Question 8 (Figure 3.6) asked how often respondents ride their bikes in Farmersville. The majority of respondents selected that they do not bike and the next most answered selection being that they occasionally bike.

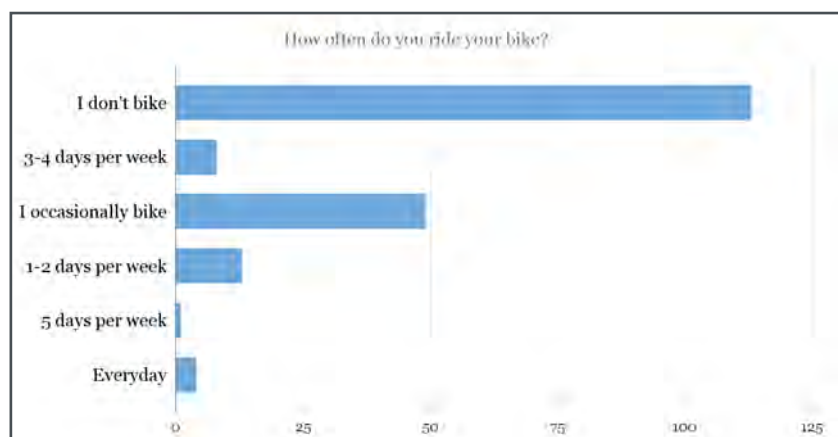


Figure 3.6 Question 8 - Biking frequency

Question 9 (Figure 3.7) asked respondents to identify their primary factor that dictates their route for biking. The majority of respondents answered that they rarely bike in Farmersville, with the next most selected answer being "calmest street/least vehicle traffic route." Question 10 asked respondents to identify what type of bicyclist they consider themselves. The majority of respondents selected that they are recreational bikers for fun, fitness, and adventure. Figure 3.8 displays the responses from Question 10.

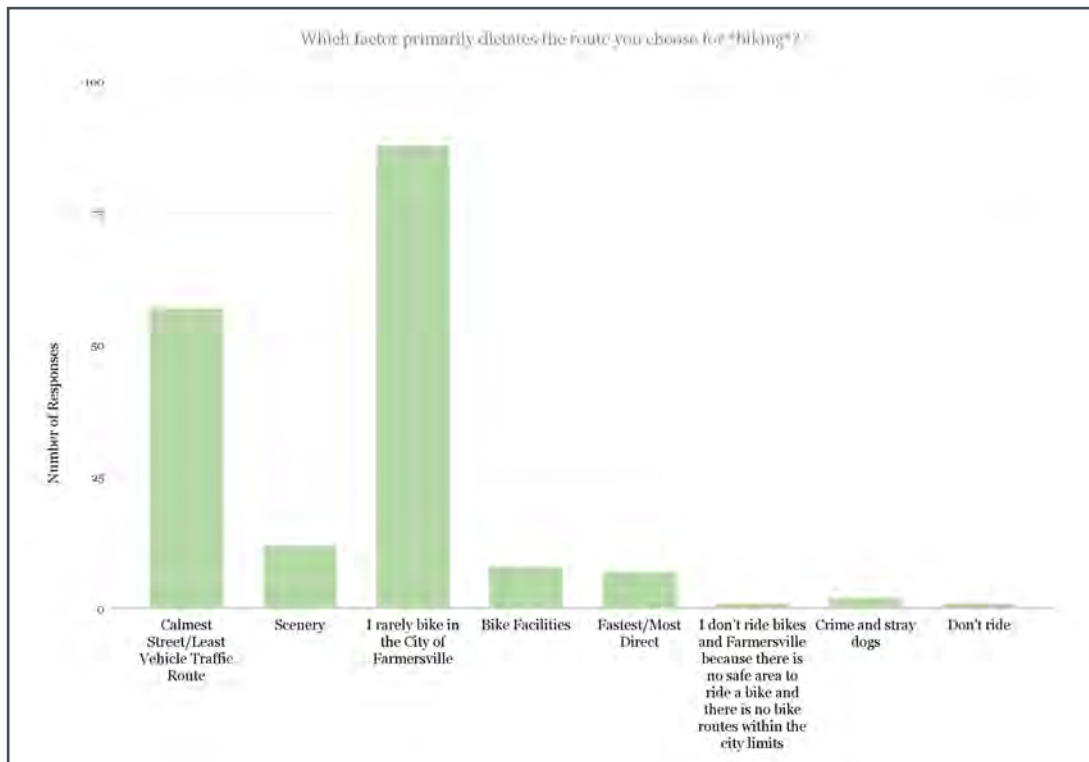


Figure 3.7 Question 9 - Decision for primary biking route

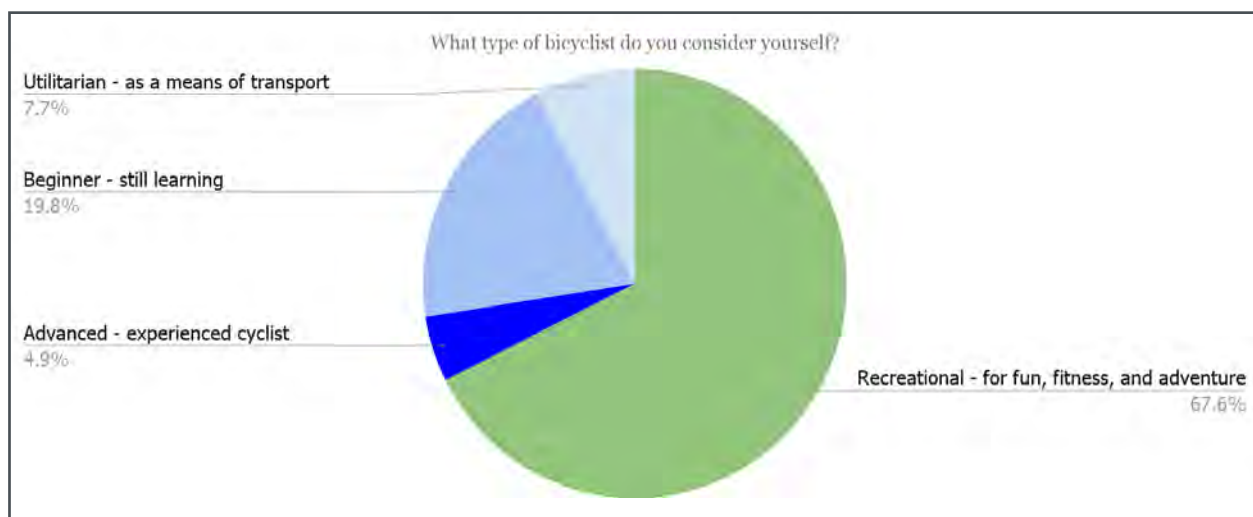


Figure 3.8 Question 10 - Types of bicyclists

Question 11 asked respondents to identify their biggest problems or concerns when biking in Farmersville. The top answers for this question included reasons such as poor pavement conditions, high vehicle speeds, no bicycle facilities, lack of connectivity, and lack of bicycle parking.

Question 12 intended to gauge what sort of solutions related to biking related problems would be most beneficial to Farmersville residents. Most of respondents selected that they would prefer to have better pavement conditions and improved bicycle access.

Question 13 asked respondents to choose what they consider as the most significant problems related to public transportation in Farmersville. The majority of respondents selected that they do not know how to use the service in Farmersville. Figure 3.9 displays the responses from Question 13.

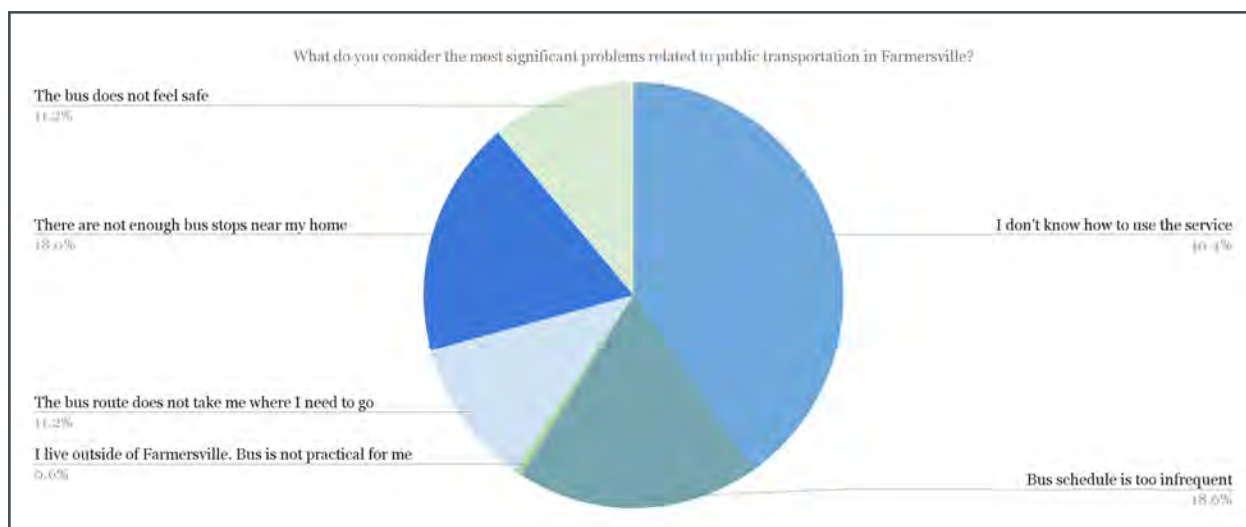


Figure 3.9 Question 13 - Significant public transportation issues

Questions 14 and 15 were developed to give respondents the opportunity to answer open ended questions related to the future of Farmersville. Question 14 asked respondents to type in what they like about the City of Farmersville pedestrian, bicycle, and vehicle network while Question 15 asked respondents to identify what changed they would like to see in the Farmersville Community. Some of the most common responses for Question 14 included that residents like the ability to get around the community easily and the small-town feel. Many residents expressed concern with the pedestrian, bicycle, and vehicle network in Farmersville, stating that there is not anything that they currently like about the network, with the main concern surrounding high vehicle speeds in the area. The main responses for Question 15 included comments on wanting more transit in the area, better road conditions, less speeding, and more lighting.

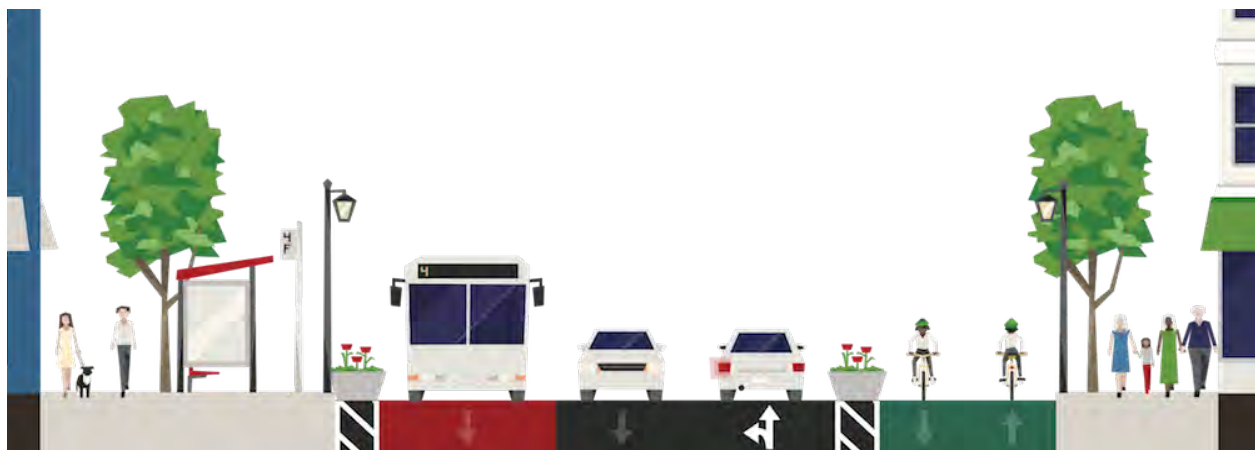
COMPLETE STREETS DESIGN PRINCIPLES 4

WHAT ARE COMPLETE STREETS?

The U.S. Department of Transportation defines complete streets as streets that are designed and operated to enable safe use and support mobility for all road users. This includes people of all ages and abilities, regardless of whether they are traveling as drivers, pedestrians, bicyclists, or public transportation riders. Whereas traditional street design prioritizes safety and efficiency for only vehicles, a Complete Streets approach balances the needs of bicyclists, pedestrians, and drivers to enable safe, convenient and comfortable travel for all road users.



Figure 4.1 Illustration of Complete Streets



CO-BENEFITS OF COMPLETE STREET DESIGN

According to the Caltrans Complete Streets Implementation Action Plan, implementation of complete streets provides the following community benefits:

- **Increased Transportation Choices:** Streets that provide travel choices can give people the option to avoid traffic congestion, and increase the overall capacity of the transportation network.
- **Economic Revitalization:** Complete streets can reduce transportation costs and travel time while increasing property values and job growth in communities.
- **Improved Return on Infrastructure Investments:** Integrating sidewalks, bike lanes, transit amenities, and safe crossings into the initial design of a project spares the expense of retrofits later.
- **Quality of Place:** Increased bicycling and walking are indicative of vibrant and livable communities.
- **Improved Safety:** Design and accommodation for bicyclists and pedestrians reduces the incidence of crashes.
- **More Walking and Bicycling:** Public health experts are encouraging walking and bicycling as a response to the obesity epidemic. Streets that provide room for bicycling and walking help children get physical activity and gain independence



Complete Streets in California: The Complete Streets Act

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.

ROAD USERS TO CONSIDER IN THE DESIGN PROCESS

Although it may seem like the principles of complete streets are focused solely on non-motorized travel, in reality, the goal of complete streets is to create a safe, efficient transportation network for pedestrians, cyclists, and drivers. Planners must consider the needs and preferences of all road users in the design of a complete street. Because the needs of some road users conflict with the needs of other road users, the planner must maintain awareness of how different design concepts will impact various road users and identify design concepts that increase access and comfort for non-vehicular travelers while maintaining adequate level of service for drivers.

CYCLISTS



PEDESTRIANS



PUBLIC TRANSPORTATION



CARS



BICYCLE FACILITIES

USER CHARACTERISTICS

Great consideration should be placed on the typical user in the development of design concepts for bicycle facilities. Different types of users vary in terms of their level of comfort in different types of situations and facilities, their awareness of surrounding conditions, and their knowledge of traffic laws pertaining to bicyclists and pedestrians.

The AASHTO Guide for the Development of Bicycle Facilities organizes adult bicycles into two categories based on level of user skill and comfort:

Experienced/Confident Riders: Experienced/ Confident Riders are comfortable riding with vehicles on streets and are knowledgeable regarding traffic laws pertaining to cyclists. These riders avoid riding on sidewalks, however they may prefer on-street bike lanes, paved shoulders, or shared use paths when available. Compared to casual/less confident riders, experienced/ confident riders have less need for separation from vehicular traffic but greater need for separation from pedestrians. Approximately 10% of adults are included in this group, which includes commuters, racers, long-distance road bicyclists, and individuals who participate in group rides organized by bicycle clubs.



Casual/Less Confident Riders: Approximately 60% of adults are included in the casual/less confident rider group. These riders are uncomfortable riding with traffic on busy streets and prefer shared use paths, bicycle boulevards, or bike lanes along low-volume, low speed streets. Casual/less confident riders may have difficulty gauging traffic and may be unfamiliar with the traffic laws pertaining to bicyclists.

According to the survey given to Farmersville community members, the majority of participants (67.4%) stated that they bike as a recreational activity, 19.9% stated that they are a beginner cyclist, 7.7% use cycling as a means of transport, and 5% are experienced cyclists.

BIKEWAY CLASSIFICATIONS

There are four primary types of bikeways recognized by Caltrans. All bikeways are intended to accommodate bicycle travel, however the classifications vary in the level of separation and comfort they provide to their users.

Class I

Class 1 Bikeways are shared use paths that offer the greatest level of protection from vehicular traffic. Class 1 Bikeways have a minimum travel width of 8 feet and are usually used in areas not served by streets or highways. Class I bikeways are the only bikeway facilities that also accommodate pedestrian travel.



Figure 4.2 Class I Shared Use Path

Class II

Class II Bikeways are bike lanes located adjacent to vehicular travel lanes. These facilities designate space for bicycle travel but do not provide a physical barrier between cyclists and motorists. Class II Bikeways are marked using standard bike lane markings and separated from vehicular traffic by a solid white line.



Figure 4.3 Class II Bike Lane

Class III

Class III Bikeways are shared facilities that provide signage and markings to calm vehicular traffic. Signage and markings used to designate a Class III facility include sharrows, and “Share the Road” signs. Class III facilities do not physically separate cyclists from vehicular traffic, however signage can increase awareness of non-motorist road users.



Figure 4.4 Class III Bike Route

Class IV

Class IV Bikeways are protected bike lanes. They are very similar to Class II facilities in that they are located directly adjacent to vehicular travel lanes. However, Class IV Bikeways provide additional protection from motorists through the use of buffers and physical barriers.



Figure 4.5 Class IV Protected Bike Lane

BIKEWAY SIGNAGE AND MARKINGS

Signage and pavement markings are a critical component of bikeway infrastructure. Signage and pavement markings are useful tools to educate the public and can be used to direct road users in where different modes of travel can occur, where passing is allowed, etc. Strategic use of signage and markings is instrumental in educating users in the appropriate use of the bikeway facility. Chapter 9 of the California MUTCD provides standards for pavement markings and signage for bicycle facilities within the State of California. All proposed signage and pavement markings involved in the implementation of the proposed design concepts must be consistent with these standards.

Class 1 Shared Use Path

Signage for Class I shared use paths can be used to prohibit motorized vehicles from entering the path and to regulate types of non-motorized modes of travel allowed on the path. As shown in Figures 4.7 and 4.8, signage can be used to encourage or discourage different modes of travel and prevent public confusion regarding which modes of travel are allowed on the path. As shown in Figure 4.6, pavement markings on shared use paths can be used to delineate travel space for different modes of travel, specify the direction of travel, and to indicate where passing is allowed.

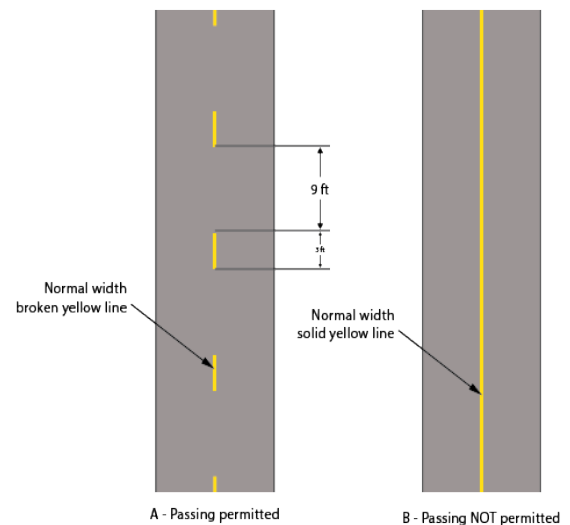


Figure 4.6 Pavement markings for Class I shared use path for areas with and without allowed passing



Figure 4.7 Mode-specific signage for Class I shared use path



Figure 4.8 No Motor Vehicle Signage

Class 2 Bike lanes

Class II Bike Lanes are created primarily through the use of pavement markings that inform all road users of the restricted nature of the bike lane. Bike lanes are defined using white longitudinal pavement markings. As shown in Figure 4.9, wording, arrows, or symbols may also be used. These should be placed at the beginning of a bike lane and at periodic intervals along the bike lane based on engineering judgment.

Class II bike lanes can be painted green to improve visibility by motorists. Additionally, buffer zones, as shown in Figure 4.10, can be implemented between bicycle lanes and vehicle lanes to increase the distance between cars and motorists.

Signage for Class II bike lanes is intended to prevent motorists from parking in the bike lane and to supplement information conveyed in pavement markings. The 'No Parking' sign shown in Figure 4.12 should be placed as needed, and the 'Bike Lane' sign shown in Figure 4.12 must be placed at the beginning of the bike lane and along the bike lane at all major changes in direction. Specific striping, pavement markings, and signage locations are to be identified during engineering drawing stages.

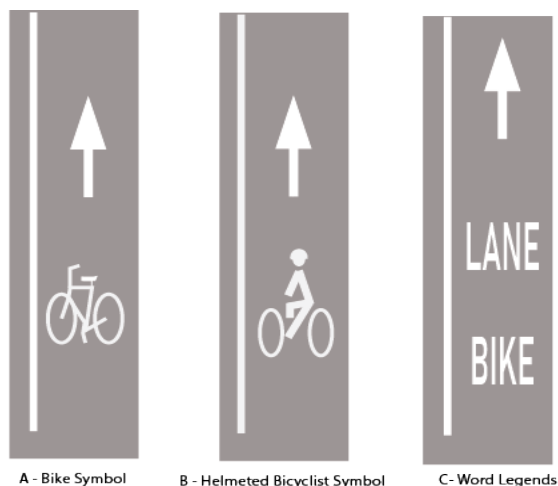


Figure 4.9 Class II Bike Lane pavement markings

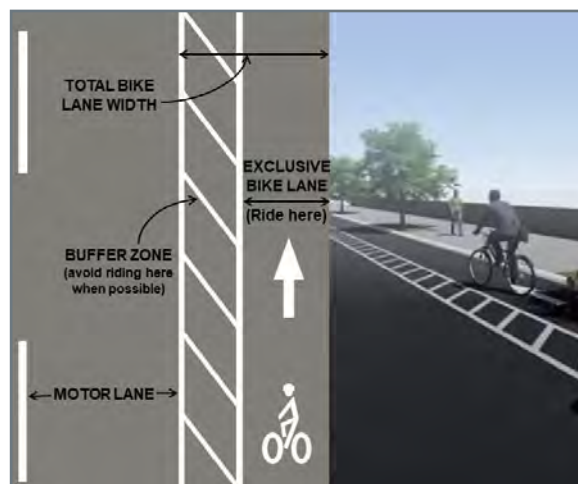


Figure 4.10 Class II Bike Lane buffer pavement markings



Figure 4.11 Class II bike lane and bike box



Figure 4.12 Class II bike lane signage.

Class 3 Bike routes

Signage and pavement markings for Class III Bike Routes are intended to educate motorists of bicycle presence on the road. Although the use of signage and pavement markings on Class III bike routes is optional, it can significantly increase public awareness of cyclists and encourage more cyclists to use the route.

The most common form of pavement marking for Class III facilities are shared lane markings, commonly referred to as “sharrows,” shown in Figure 4.13. According to the MUTCD, sharrows may be used to:

- Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist’s impacting the open door of a parked vehicle,
- Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane,
- Alert road users of the lateral location bicyclists are likely to occupy within the traveled way,
- Encourage safe passing of bicyclists by motorists, and
- Reduce the incidence of wrong-way bicycling.



Figure 4.13 Class III pavement marking

Signage, such as the “Share the Road” sign shown in Figure 4.14, is often used to reinforce a cyclists right to travel within vehicular travel lanes and to warn motorists to watch out for cyclists. The “Bicycles May Use Full Lane” sign (see Figure 4.15) may be used on roadways without adjacent shoulders and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side.



Figure 4.14 Class III Share the road signage



Figure 4.15 Class III signage

Class 4 Bike routes

A Class IV protected bike lane is distinguished from a Class II bike lane by the presence of a vertical feature that physically separates it from the vehicular travel lanes. Vertical features can include curbs, landscaping, flexible posts, inflexible barriers, or on-street parking. By providing physical separation from motor traffic, Class IV bikeways offer improved comfort and safety for cyclists and can encourage less confident cyclists to use biking as a form of transportation.



Figure 4.16 Class IV Bike Lane Protected by Flexible Bollards



Figure 4.17 Class IV Bike Lane Protected by on-street parking

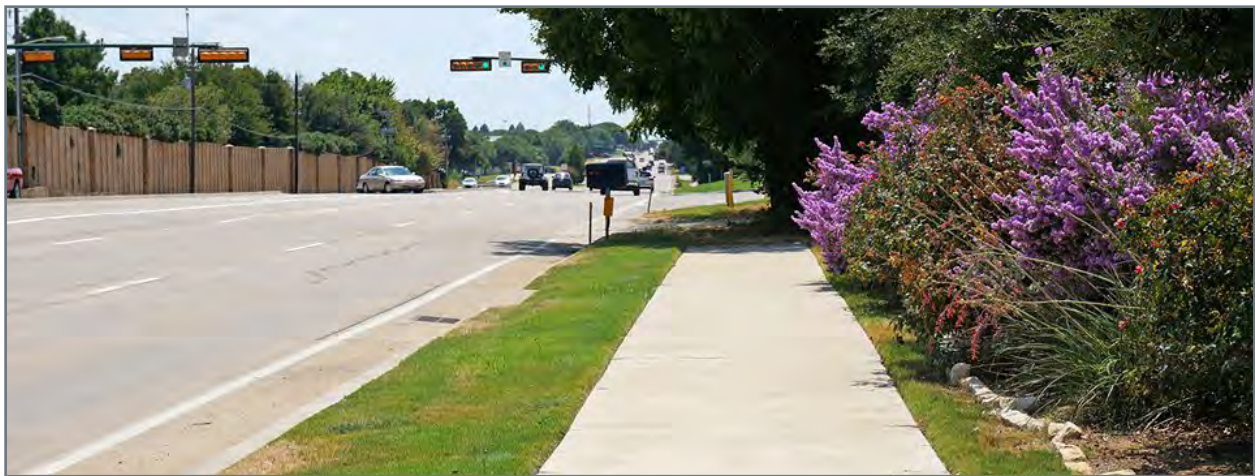


Figure 4.18 Class IV Bike Lane Protected by Curb and Landscaping

PEDESTRIAN FACILITIES

SIDEWALKS

Sidewalks provide a safe, designated space for pedestrians to travel that is separate from roadway traffic within the public ROW. Sidewalks accommodate users of all ages and provide a space to walk, run, skate, ride bikes and play. They should be provided on both sides of a street and designed with a minimum width of 5 ft to allow two people to comfortably pass or walk side-by-side. However, wider sidewalks should be installed where there are high concentrations of pedestrians, such as near schools, transit stops, or downtown areas. In addition, they should be designed to be accessible for people of all abilities as required by the ADA Act.



CROSSWALKS

Crosswalks indicate designated areas for pedestrians or bicyclists to cross the roadway with crosswalk marking patterns. Signage or signals at the intersections indicate to drivers that they must yield to the pedestrian. Design strategies to create safer crosswalks include lighting and signage to improve pedestrian visibility and curb bulbs or medians to shorten the length of crosswalk exposed to oncoming traffic.



Figure 4.19 Pedestrian crossing signage

TRAFFIC CALMING AND CONTROL DEVICES

Traffic calming techniques help to decrease vehicle speeds and minimize the potential for vehicle accidents with pedestrians or bicyclists. When paired with trees and landscaping, traffic calming measures create safer, more aesthetically enjoyable neighborhoods. Design strategies should be selected based on site-specific conditions and use patterns. Strategies include narrowed streets, streets lined with trees, traffic circles, curb bulbs, neck downs, chicanes, and medians.



Figure 4.20 Neck down street



Figure 4.21 Corner curb bulb

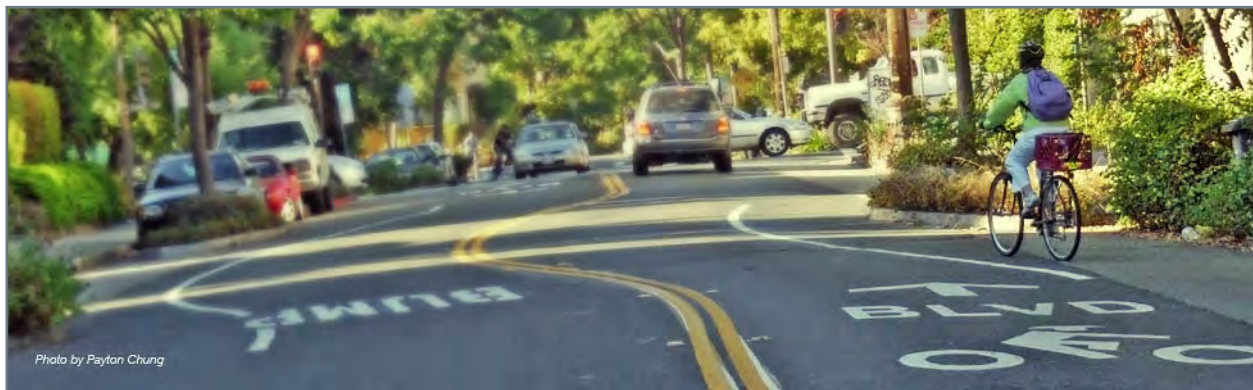


Figure 4.22 Chicanes street



Figure 4.23 Traffic Circle



Figure 4.24 Speed Bump

ACCESSIBILITY

The Americans with Disabilities Act (ADA) ensures that users of all abilities have the same basic rights of access to services and facilities. Pedestrian facilities, including sidewalks, curbs, and related facilities, are required to be designed for full accessibility in compliance with ADA federal requirements. Design strategies focus on removing any obstacles or abrupt changes in elevation that may create barriers for pedestrians with varying abilities. Curbs, steps, and stairways are primary barriers for people with disabilities and should be designed with ramps or elevators.



Figure 4.25 Curb Ramp

Curb ramps provide access from the sidewalk onto the street for people traveling on or with a wheeled device including wheelchairs, strollers, walkers, bicycles, or pedestrians with mobility impairment. Separate curb ramps should be provided for each crosswalk at an intersection versus one curb ramp at a corner for both crosswalks. Ramps should have texture patterns to inform blind pedestrians of the sidewalks edge.

TREES AND LANDSCAPING

Street trees and landscaping create a human scale and transition/soften the surrounding hard edges of buildings and parking lots. They also create a more comfortable outdoor environment and minimize the urban heat island effect by providing shade and evapotranspiration. In addition, trees and landscape provide habitat and food sources for wildlife living in urban and residential areas.

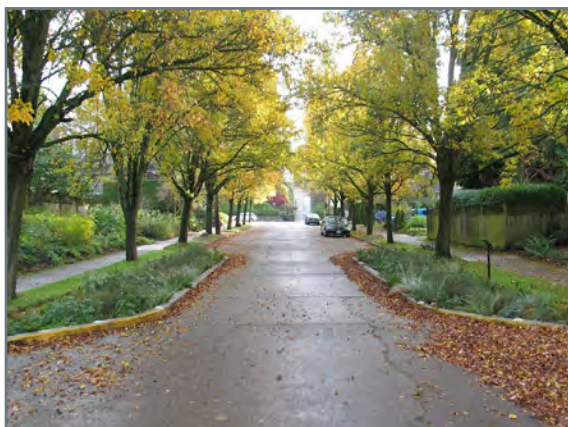


Figure 4.26 street Trees



Figure 4.27 Public landscaping

LIGHTING AND STREET FURNITURE

Thoughtfully located lighting can increase safety and comfort for pedestrians/bicyclists during the evening or night. It also increases pedestrian visibility for vehicles. In urban and commercial environments, street furniture can be provided to improve pedestrian comfort, including benches, bus shelters, bicycle racks, trash receptacles and water fountains. They should be located as to not impede or block the pedestrian walkway. Street furniture will need to be properly maintained.



Figure 4.28 Street furniture

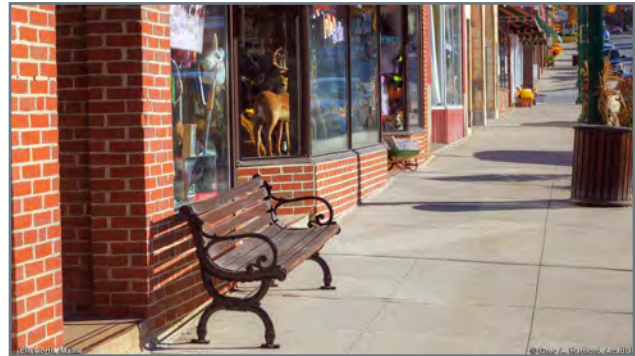


Figure 4.29 Public Bench



Figure 4.30 Street Lighting

PROPOSED PROJECTS 5



PROPOSED PROJECTS

The purpose of this chapter is to identify projects that will improve multi-modal mobility within the City of Farmersville. The projects described in this chapter were informed by the Community Outreach process and selected based on their feasibility and ability to improve access and safety for all road users. Following a thorough review of local and regional background documents, regulatory context, existing conditions, community outreach results, and complete streets design strategies, the Planning team identified the following projects to facilitate complete streets within the City of Farmersville:

- Farmersville Boulevard Enhancement Plan
- Safe Routes to School Loop
- Pedestrian Railroad Crossings
- Citrus & Farmersville Intersection Improvements
- Walnut Avenue & Freedom Drive Intersection Improvements
- Fill Gaps in Basic Pedestrian Infrastructure



FARMERSVILLE BOULEVARD ENHANCEMENT PLAN

Farmersville Boulevard is the City's primary arterial roadway and runs north/south through the center of the community. Farmersville Blvd is the only road that offers a railroad crossing within the City, and is thus the only north/south thoroughfare and is a widely used corridor for all Farmersville residents. The following goals to improve Farmersville Blvd were identified during the community outreach process:

- Improve pedestrian and cyclist access and comfort
- Enhance pedestrian's ability to Cross Farmersville Blvd more easily
- Make downtown Farmersville (Farmersville Blvd. from Front Street to Costner Street) more welcoming for pedestrians and cyclists.

The Planning Team identified three design concepts to implement complete streets and meet community-identified goals for Farmersville Blvd. Each of these design concepts seeks to improve safety, access and mobility for cyclists and pedestrians. The community should be engaged in the decision making process in determining which of the three design options would best meet community needs.

All three design options propose roundabouts at the Ash Street and Costner Street intersections. Urban roundabouts at these intersections will serve to calm vehicular traffic and provide safer crossing opportunities for cyclists and pedestrians.



Figure5.1 Proposed roundabout concept for Farmersville & Ash Street/Costner Street Intersections.

For each design concept, the planning separated Farmersville Blvd. into two general design areas. The "downtown" segment runs from Front Street to Costner Street and available ROW is approximately 95 feet. Segments outside of the downtown area generally have 80' of ROW availability. While ROW in these areas is varied, a typical 80' ROW was used for design purposes.

FARMERSVILLE BLVD OPTION 1

The first design concept for Farmersville Blvd proposes a Class 1, two-way bike path along the length of Farmersville Blvd from Walnut Street to the Southern City Limits. This option proposes one vehicular lane in each direction and a center turn lane to accommodate vehicular turns. 5' landscaped buffers are proposed to buffer vehicle, bicycle, and pedestrian travel areas.

In downtown areas (from Front Street to Costner Street) this concept proposes parallel parking on both sides to provide vehicular access to downtown commercial uses. Spacious 9' sidewalks are also proposed to create a welcoming environment for pedestrians. In non-downtown areas, this concept proposes comfortable 6' sidewalks on both sides of the street. Parallel parking is proposed on only the west side of Farmersville Blvd in these areas.



Figure 5.2 Farmersville Blvd Option 1 - Conceptual Plan (downtown area)

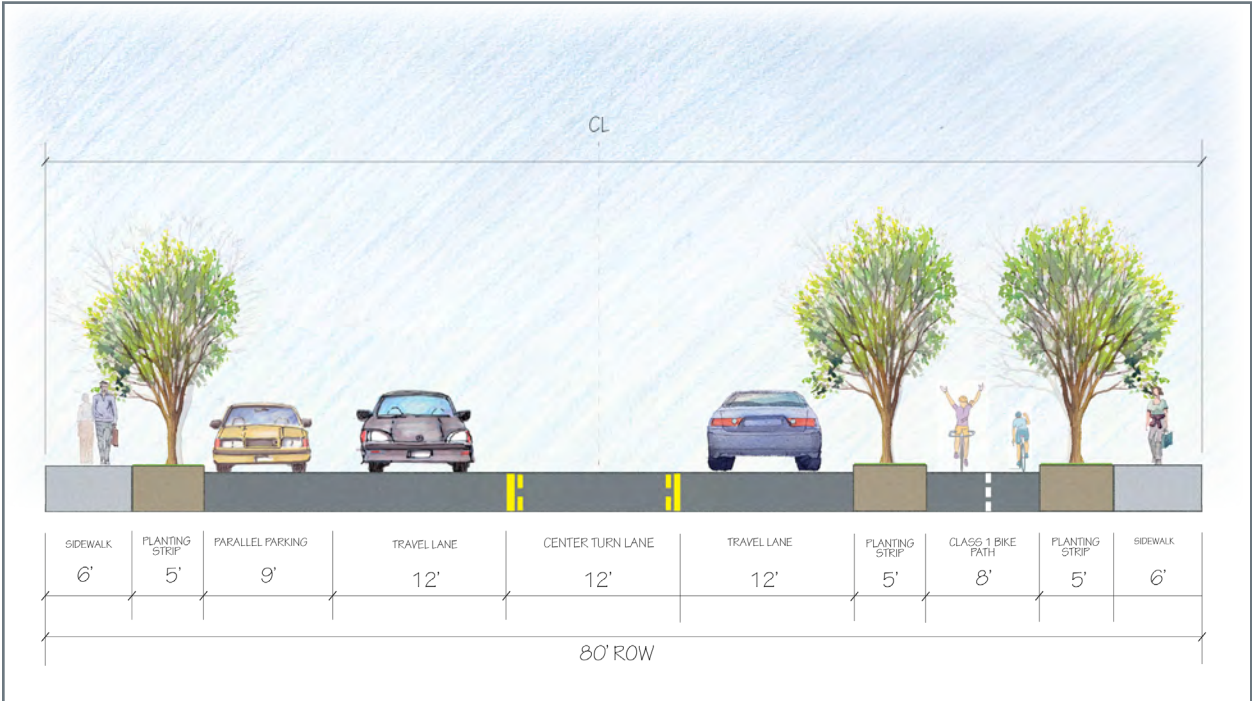


Figure 5.3 Farmersville Blvd Option 1 - Cross Section (typical)

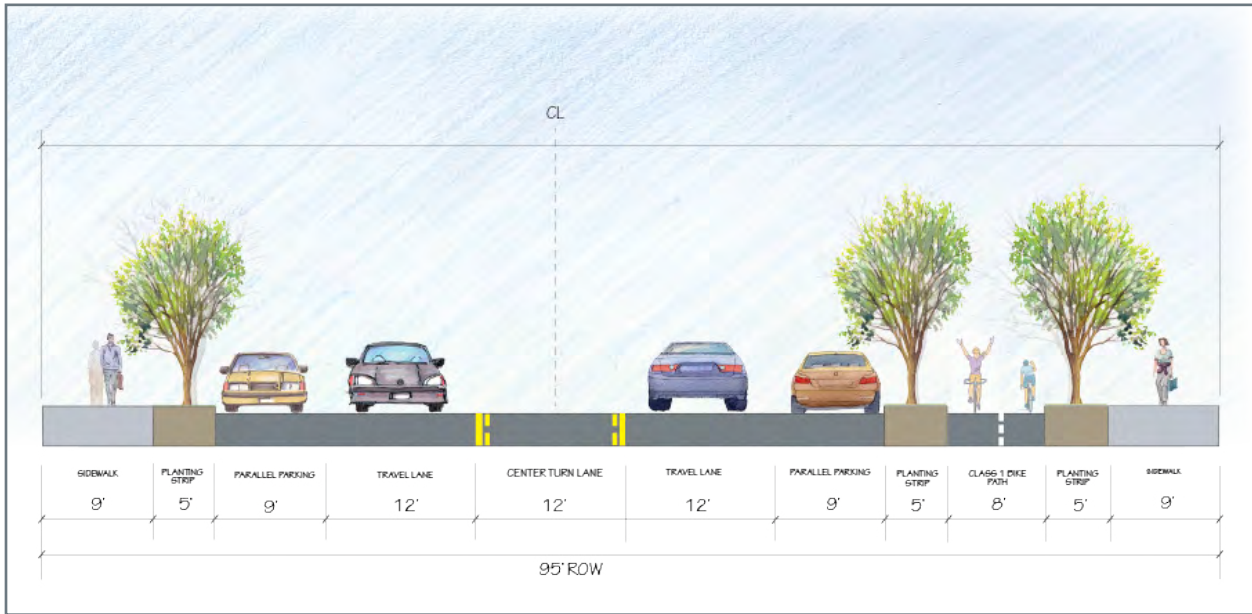


Figure 5.4 Farmersville Blvd Option 1 - Cross Section (downtown area)

FARMERSVILLE BLVD OPTION 2

The second design concept for Farmersville Blvd proposes Class 2/Class 4 bike lanes along the length of Farmersville Blvd from Walnut Street to the Southern City Limits. This option proposes one vehicular lane in each direction and a center turn lane to accommodate vehicular turns. This option proposes a minimum 5' sidewalk and 5' landscaped buffers, although these features may be widened where increased ROW is available.

For the majority of Farmersville Blvd (non downtown areas) 5' Class 2 bike lanes are proposed on both sides. Painted 2' buffers are proposed between the bicycle and vehicle lanes to improve cyclist visibility, provide greater definition between cyclist and vehicle travel areas, and to provide additional space between cyclists and vehicular traffic. This concept does not propose any on-street parking along Farmersville Blvd in non downtown areas.

In downtown areas (from Front Street to Costner Street) this concept proposes diagonal parking on the west side. To reduce the potential for conflict between cyclists and parking vehicles, the northbound bike lane transitions to a Class 4 protected bike lane in downtown areas. The Class 4 bike lane will run behind the diagonal parking. Landscaping is proposed on either side of the Class 4 bike lane to provide a buffer between pedestrian, bicycle, and vehicle travel areas.



Figure 5.5 Farmersville Blvd Option2 - Conceptual Plan (typical)



Figure 5.6 Farmersville Blvd Option 2 - Conceptual Plan (downtown area)

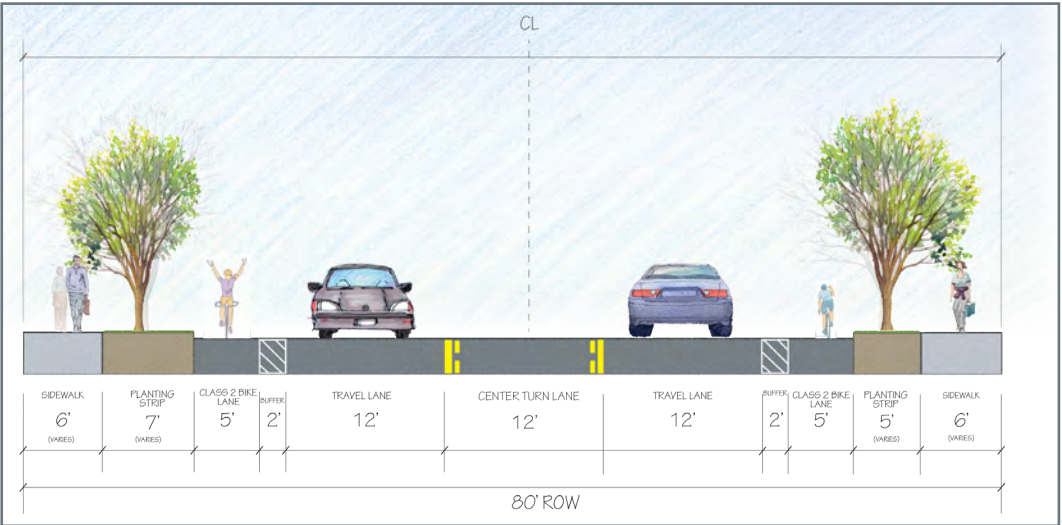


Figure 5.7 Farmersville Blvd Option 2 - Cross Section (typical)

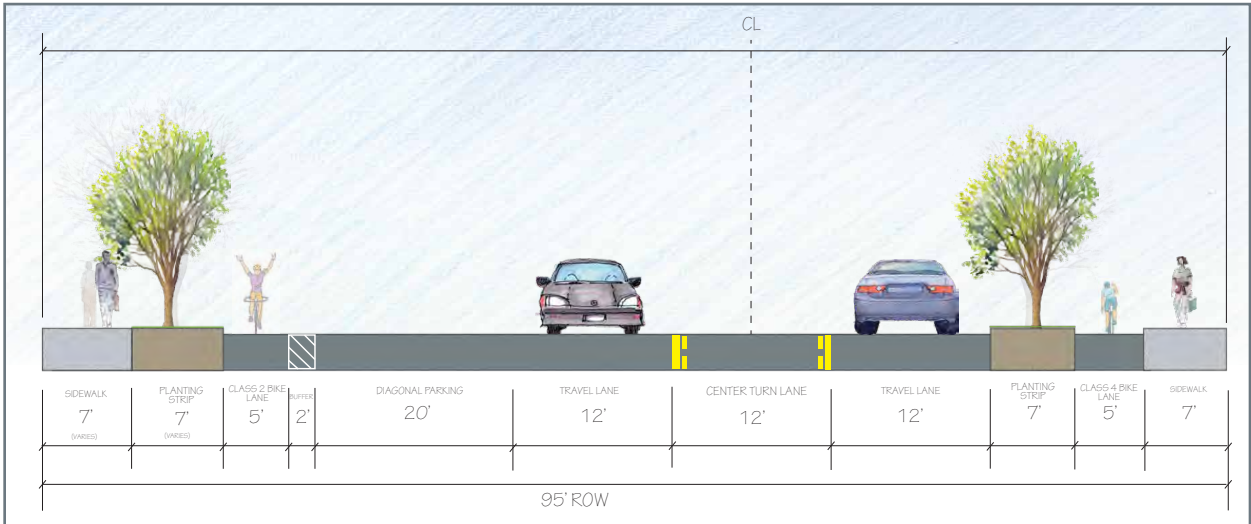


Figure 5.8 Farmersville Blvd Option 1 - Cross Section (downtown area)

FARMERSVILLE BLVD OPTION 3

The third design concept for Farmersville Blvd proposes protected Class 4 bike lanes on both sides of Farmersville Blvd from Walnut Street to the Southern City Limits. The proposed bike lanes are 6' wide and include landscaping on one side to buffer between cyclists and vehicles. Like the first two design concepts, this option proposes one vehicular lane in each direction and a center turn lane to accommodate vehicular turns.

In downtown areas, this concept proposes parallel parking on the east side of Farmersville Blvd from Front Street to Ash Street, and on both sides of Farmersville Blvd from Ash Street to Costner Street. From Front Street to Ash Street, 6' sidewalks are proposed on the west side and 12' sidewalks are proposed on the east side to provide enhanced comfort for pedestrians. From Ash Street to Costner Street, sidewalks are a minimum of 10' to accommodate parallel parking on both sides.

In non-downtown areas, this concept proposes comfortable 11' sidewalks on both sides of the street. This concept does not propose any on-street parking along Farmersville Blvd in non downtown areas.



Figure 5.9 Farmersville Blvd Option 3 - Conceptual Plan (downtown area - Front Street to Ash Street)

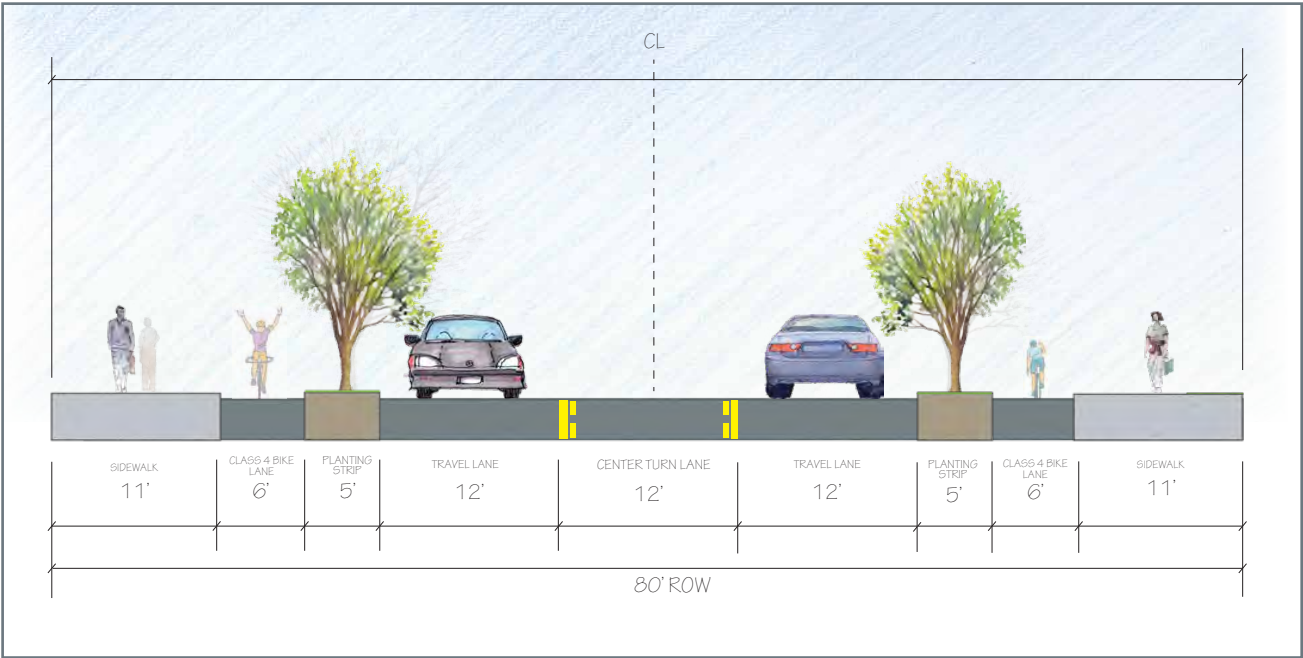


Figure 5.10 Farmersville Blvd Option 3 - Cross Section (typical)

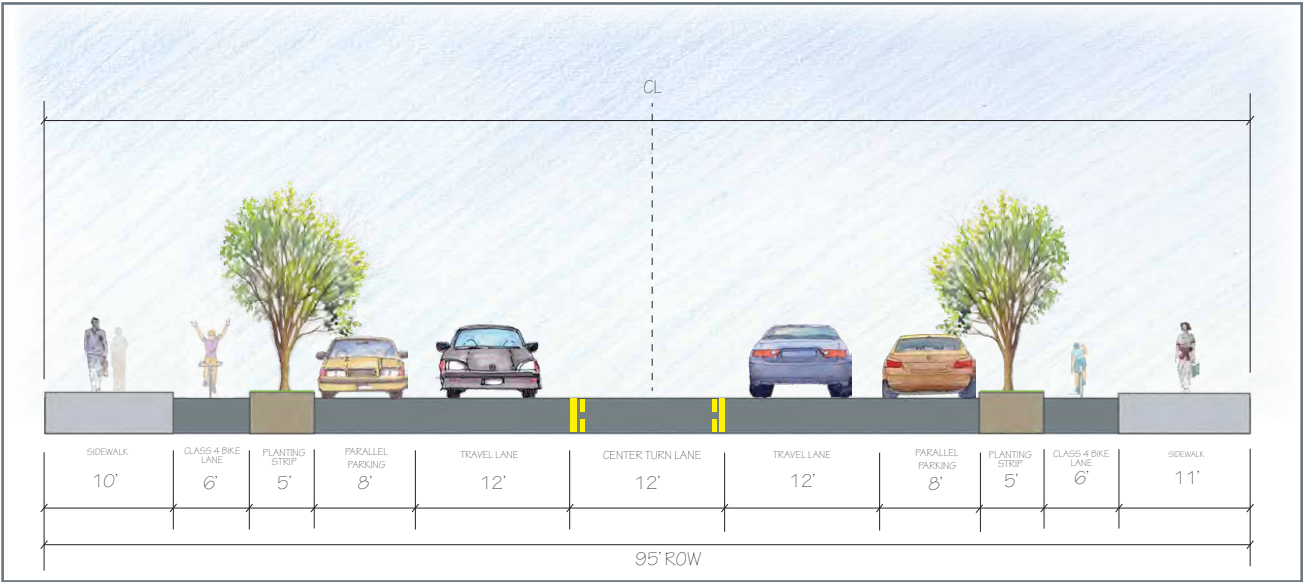


Figure 5.11 Farmersville Blvd Option 3- Cross Section (downtown area - Ash Street to Costner Street)

FARMERSVILLE BLVD OPTION 3 - PLAN VIEW






FARMERSVILLE BLVD OPTION 3 - PLAN VIEW



FARMERSVILLE OPTIONS SUMMARY

Table 5.1 Summary of Farmersville Blvd Design Options and Downtown Renderings

	Road Segment	Pedestrian Features	Bicycle Features	Parking	
Option 1	Downtown	9' Sidewalks, both sides	Class 1 Path adjacent to buffered median	Parallel Parking, both sides	
	Non Downtown	6' Sidewalks, both sides	Class 1 Path adjacent to buffered median	Parallel Parking, west side	
Option 2	Downtown	5'-7' Sidewalks, both sides	Class 2 bike lane with 2' buffer, west side. Class 4 protected bike lane, east side.	Diagonal Parking, east side	
	Non Downtown	6'-10' sidewalks, both sides	Class 2 lane with 2' buffer, both sides	No on-street parking	
Option 3	Downtown	10-12' sidewalks, both sides	Protected Class 4 bike lanes, both sides	Parallel parking, east side, front street to Ash Street. Parallel Parking, both sides, Ash street to Costner Street.	
	Non Downtown	11' sidewalks, both sides	Protected Class 4 bike lanes, both sides	No on-street parking	

SAFE ROUTES TO SCHOOL LOOP

Providing safe, non-vehicular routes to schools within Farmersville is a key objective to achieving a complete streets network. This project proposes improvements in key areas to facilitate safe and efficient bicycle and pedestrian connections between Farmersville High School, Farmersville Junior High School, Freedom Elementary School, and JE Hester Elementary School. While the primary purpose of this project is to provide safe and direct routes for students to commute to school, this project offers the auxiliary benefit of creating several "loops" which can be used for recreational purposes.

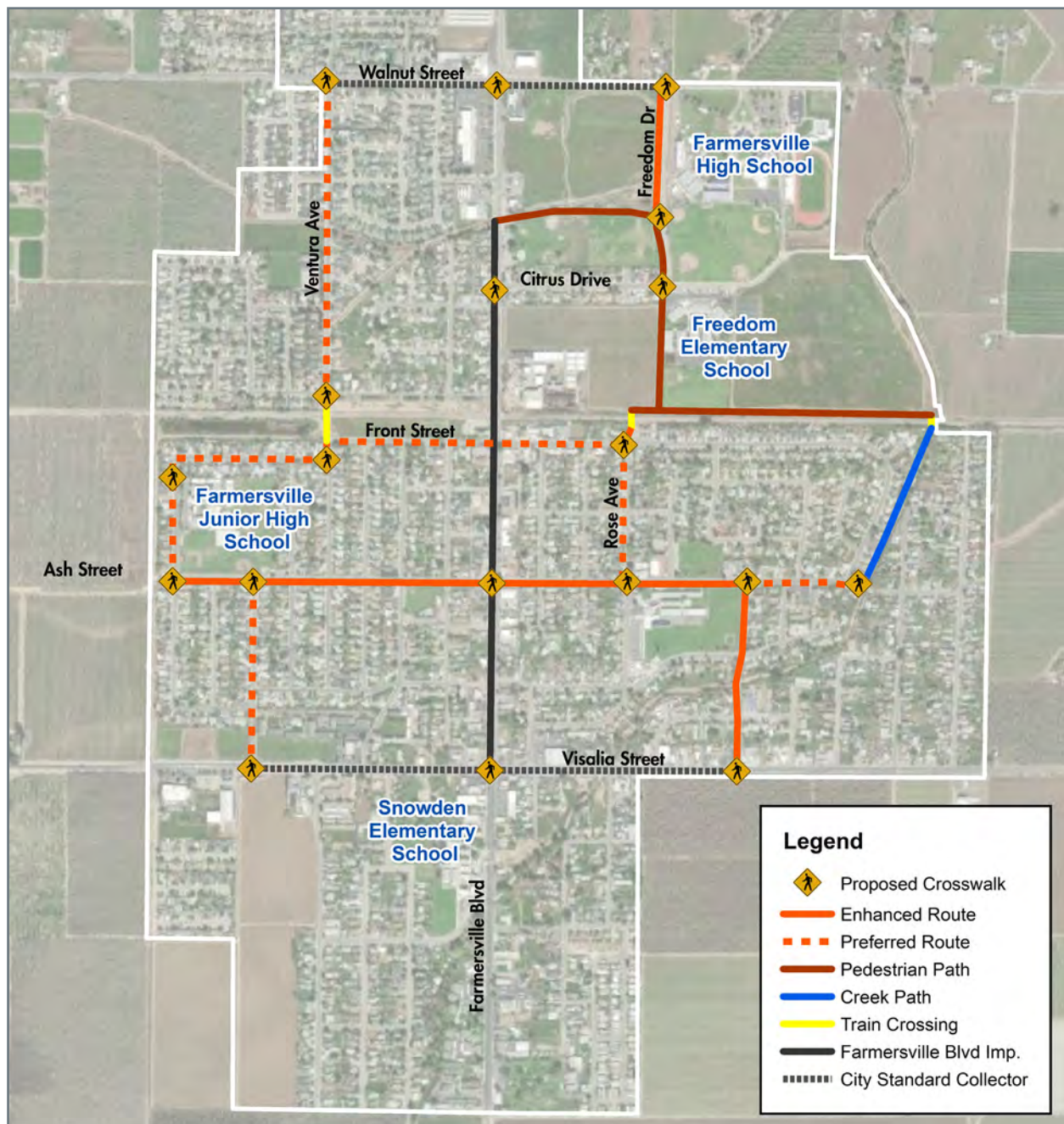


Figure 5.12 Safe Routes to School Overview Map

CREEK PATH

A pedestrian path is proposed along Deep Creek from the train tracks to Ash street to support connectivity for residents who live east of Deep Creek. The proposed path would be comprised of an 8' mixed use trail on one side of the ditch with the other side maintained as a ditch maintenance road. Low level, shielded bollard lights are proposed along the trail to improve trail visibility and safety while limiting impacts to nearby residents.



Figure 5.13 Creek Path Cross Section



Figure 5.14 Creek Path Overview Map



Figure 5.15 Proposed creek path lighting concept

PEDESTRIAN PATH

A pedestrian path is proposed to improve connectivity to Freedom Elementary School and Farmersville High School. The 10' path is proposed along the north side of the train tracks and along Freedom Drive, and would connect to an existing path that runs through Farmersville Sports Complex.

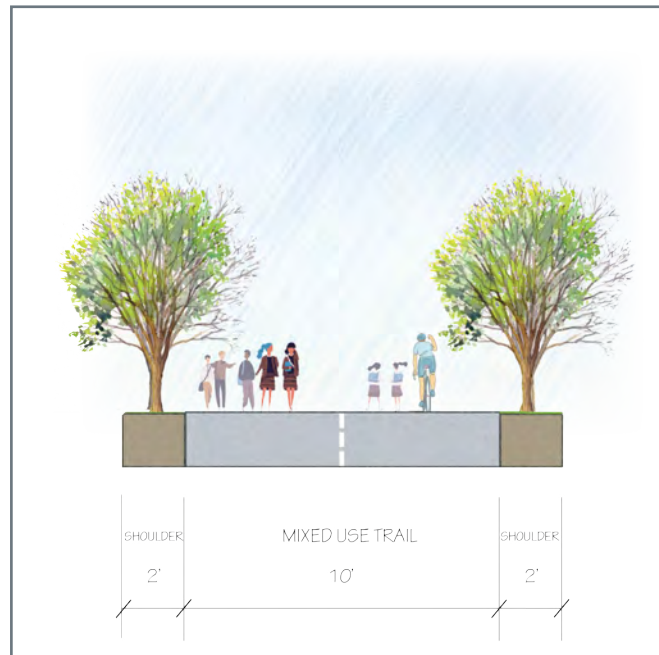


Figure 5.15 Pedestrian Path Cross Section

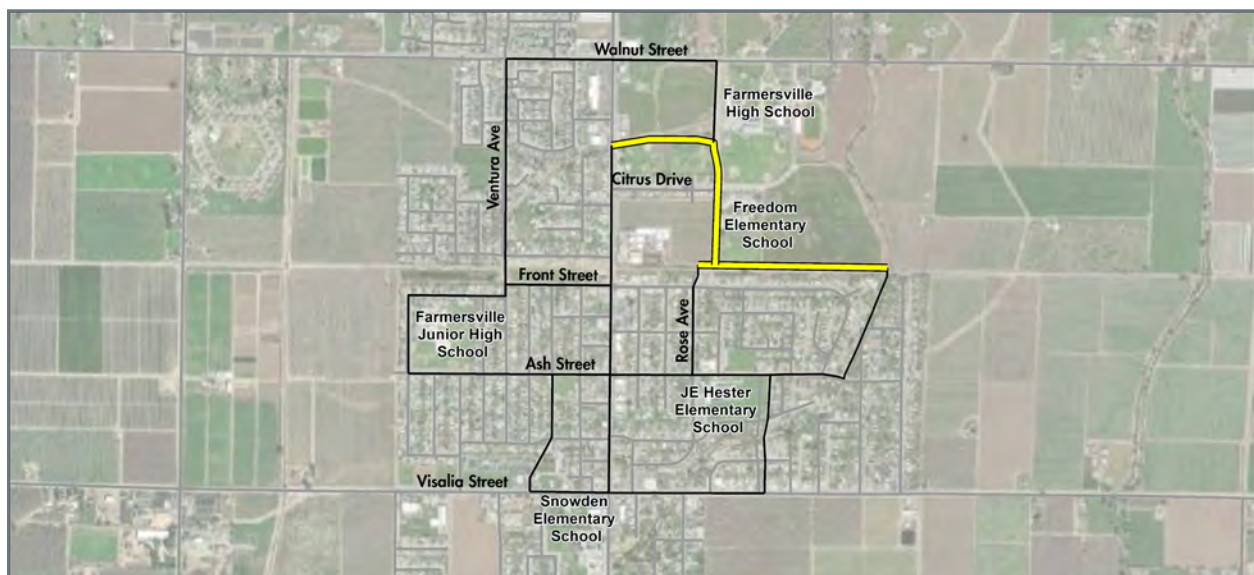


Figure 5.16 Pedestrian Path Overview Map

ENHANCED ROUTE

Expanded bicycle and pedestrian facilities are proposed along Freedom Drive, Ash Street and Hester Avenue to provide safe and comfortable connectivity between pedestrian/bicycle routes within the Safe Routes to School Loop system. The enhanced facilities include wide 7' sidewalks to accommodate groups of students and buffered Class IV bike lanes.

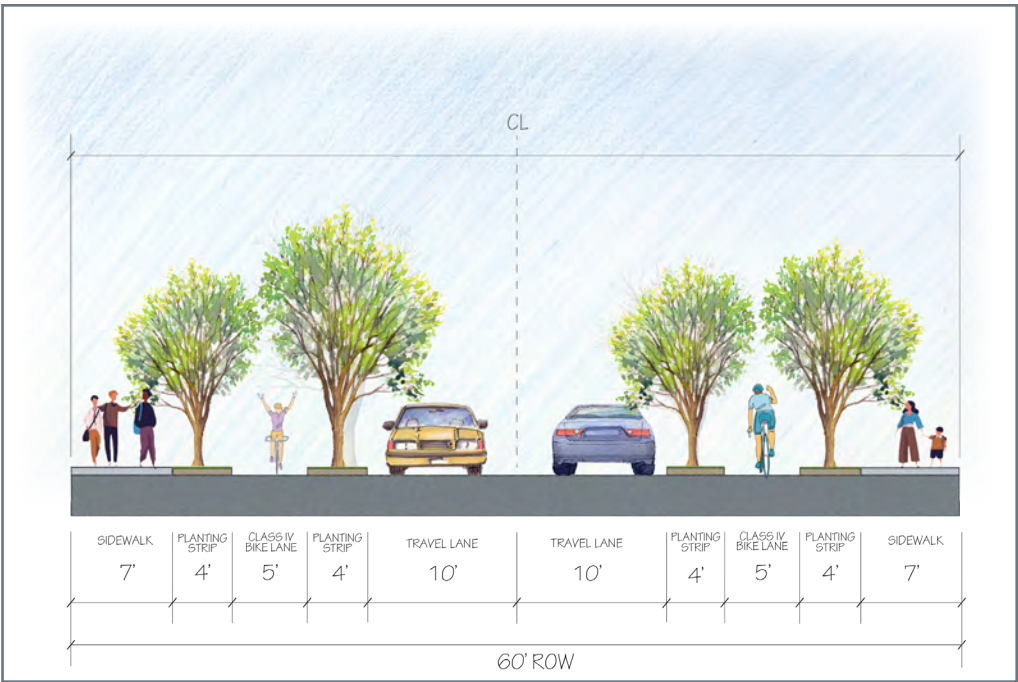


Figure 5.17 Enhanced Route Cross Section



Figure 5.18 Enhanced Route Overview Path

PREFERRED ROUTE

"Preferred Route" improvements are proposed along Ventura Avenue, Front Street, Virginia Avenue, Shasta Avenue, and Rose Avenue to close the remaining gaps in the Safe Routes to School Loop system. Improvements along Preferred routes include 7' sidewalks and Class 3 bikeways. Signage and pavement markings should be provided to remind drivers to share the road and alert them to the presence of bicyclists and pedestrians.

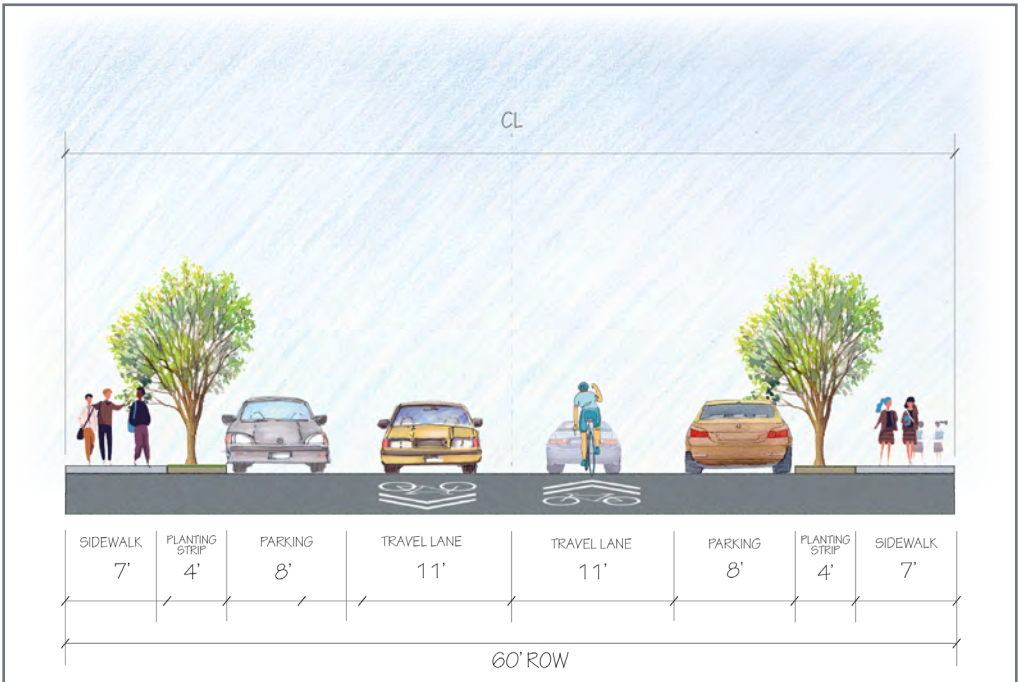


Figure 5.19 Preferred Route Cross Section



Figure 5.20 Preferred Route Overview Map

TRAIN CROSSINGS

The Union Pacific Railroad (UPRR) line crosses through central Farmersville along an east-west corridor approximately 200 feet north of Front Street and 200 feet south of West Petunia Avenue. This railroad divides the City and creates a major obstacle for circulation and connectivity. There is only one crossing location within the Farmersville City limits. This crossing is located on Farmersville Blvd and consists of a four-lane collector road with at-grade pedestrian crossings on both sides. When a train is passing through the City, any north-south movements are queued until the crossing is cleared. This can cause significant traffic to the north and south of the Farmersville Boulevard crossing. While there is another railroad crossing located at Mariposa Avenue, it is approximately one-half mile west of the City limits and it not a convenient crossing point (Quad Knopf, 2012). The City of Farmersville Comprehensive Infrastructure Master Plan (2012) identified two locations for new north-south collectors: 1. West of the existing residential neighborhoods along Virginia Avenue; and 2. East of Brundage Avenue. Currently, these two proposed north-south collectors are conceptual and have not been implemented.

In addition to the one existing railroad crossing within City limits, there are numerous informal pedestrian crossings located to the east and west of the Farmersville Boulevard. Several of these connect the local schools to residential neighborhoods located across the railroad. These informal crossings pose a significant safety risk for pedestrians and bicyclists of all ages, especially young students. To address existing safety concerns, it is recommended that additional pedestrian railroad crossings are developed, by bridge or tunnel, at North Ventura Avenue (Site A) or North Rose Avenue (Site B). For proposed pedestrian railroad crossing sites, see Figure 5.21 below.

While at-grade crossings are preferable due to ease of use and cost, the Rail Crossings and Engineering Branch (RCEB) of CPUC does not support opening of new at-grade crossings. This is consistent with CPUC General Order No. 75-D, Section 2, which states: “As part of its mission to reduce hazards associated with at-grade crossings, and in support of the national goal of the Federal Railroad Administration (FRA), the Commission’s policy is to reduce the number of at-grade crossings on freight or passenger railroad mainlines in California.” Bridges and tunnels are other strategies that are preferred and feasible.



Figure 5.21 Proposed Train Crossing Locations

Pedestrian and Bicycle Bridges and Tunnels

Pedestrian and bicycle bridges and tunnels create a safe way for users to cross railroad lines, freeways or other high-speed, high-volume arterial streets. However, the effectiveness of the bridge/tunnel depend on the location, ease of use, and perceived safety benefits of taking the additional time to use the bridge/tunnel. Safe Routes to School (SRTS) determined that bridges and tunnels can reduce pedestrian-related crashes by 91%; however, if the walking time required to use a bridge/tunnel is 50% longer than an at-grade crossing, then the bridge/tunnel will not be used. If the bridge/tunnel location does not provide a direct and convenient path, users are unlikely to use it.

Pedestrian bridges greatly increase pedestrian trip length and difficulty by requiring pedestrians to walk upstairs. This, in turn, makes them less likely to be used than pedestrian tunnels. Additionally, implementation of pedestrian bridges requires a significant amount of space on either side of the train tracks to accommodate the rise and tread of standard stairways. Due to these factors, pedestrian tunnels are recommended over pedestrian bridges at the proposed crossing locations.

While pedestrian tunnels pose some challenges, including security issues, lighting, graffiti, loitering etc., these can be overcome through intentional design. The tunnel should incorporate vandal resistant lighting and security cameras to discourage vandalism and illegal activity. It is also recommended that the tunnel remain as open as possible to increase visibility and limit the amount of cover the tunnel would provide (see figure 5.23, far right, below). Additionally, defensive architecture elements, such as boulders, sloped walls or spikes may be implemented to deter loitering.



Figure 5.22 Examples of above-grade pedestrian crossings.



Figure 5.23 Examples of below-grade pedestrian crossings.

CROSSWALKS AND INTERSECTION IMPROVEMENTS

As shown in Figure 5-24, crosswalks are proposed at various locations throughout the Safe Routes to School Loop system. The locations and types of pedestrian crossings were selected based on existing and proposed infrastructure, available right-of-way, and anticipated rate of use.

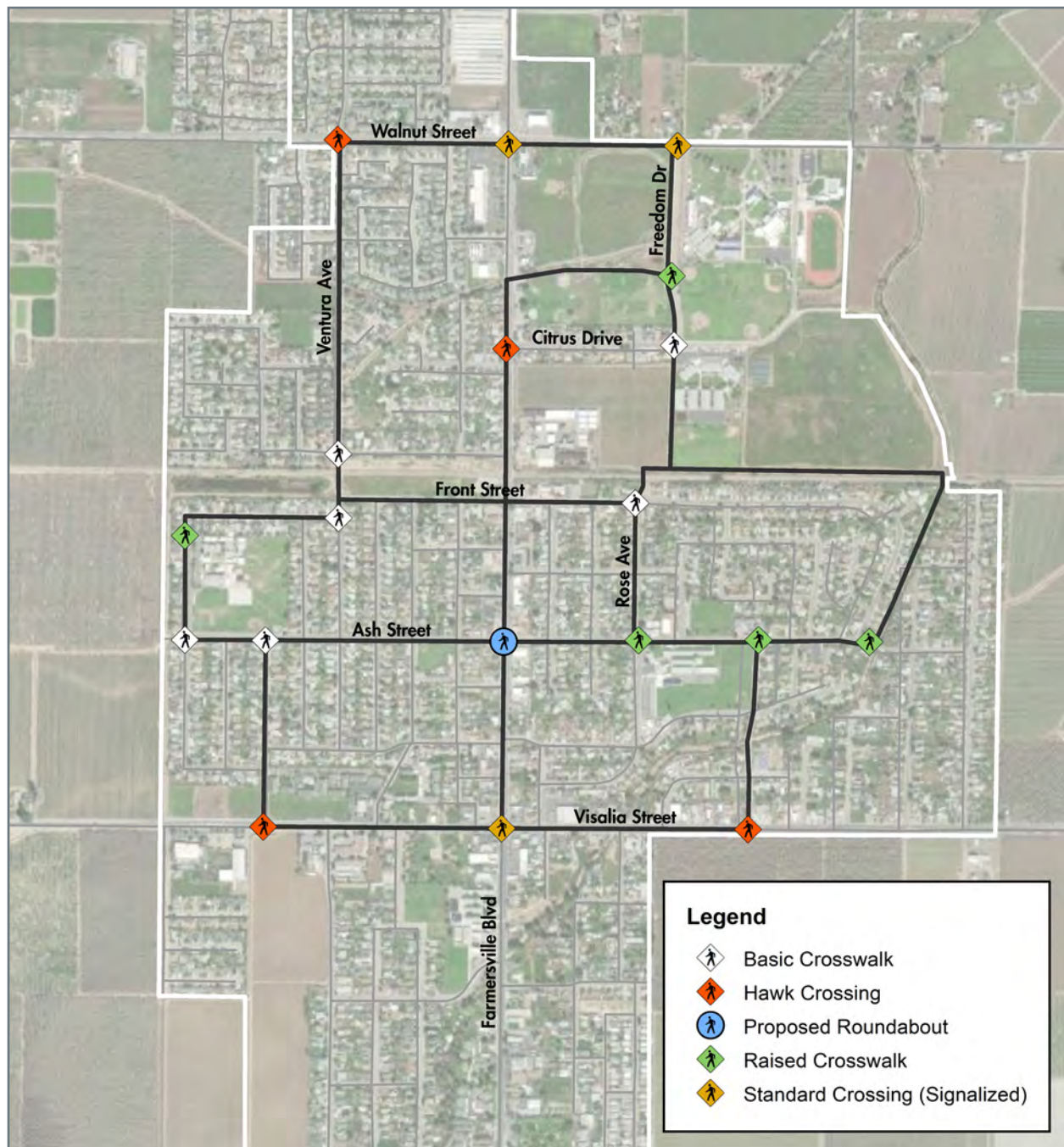


Figure 5.24 Proposed Crosswalk Locations

Standard Crossing (Signalized)

Controlled Crosswalks are proposed at signalized intersections located at Walnut Street & Farmersville Blvd, Farmersville Blvd & Visalia Street, and Walnut Street & Freedom Drive. Of these three intersections, Walnut Street & Freedom Drive is the only intersection that is not currently signalized. Signalization is proposed at this intersection to alleviate traffic congestion on Freedom Drive during peak hours and to provide more reliable crossing opportunities for cyclists, pedestrians, and motorists.

Crosswalks at signalized intersections should incorporate high visibility pavement markings, ADA compliant curb ramps, and accessible crossing signals/buttons. Crosswalks at signalized intersections should also incorporate bicycle pavement markings (such as bike boxes) and raised channelizing islands where feasible and appropriate.



Figure 5.25 Signalized intersection with complete streets concepts incorporated.



Figure 5.26 Accessible Pedestrian push button.



Figure 5.27 Signalized intersection with bike box.

HAWK Pedestrian Crossings

A HAWK (High-Intensity Activated crossWalk) pedestrian beacon is a traffic control device used to stop road traffic and allow pedestrians to cross safely. HAWK beacons are proposed at the intersections of Walnut Street & Ventura Avenue, Visalia Street & North Steven Avenue, Visalia Street & Hester Street, and Farmersville Blvd & Citrus Drive.

Of these four intersections, the Farmersville Blvd & Citrus Drive is the greatest priority as it is heavily used by pedestrians going to/from Farmersville High School and Freedom Elementary School. Additionally, the community indicated during community outreach that J-walking and crossing difficulties occur at this location.



Figure 5.28 HAWK pedestrian beacon.

Raised Crosswalks

Raised Crosswalks are proposed for crosswalks located near schools and crosswalks with a relatively high frequency of use. Raised crosswalks offer better visibility for pedestrians and slow traffic by acting as a speed table. Raised crosswalks should be equipped with crossing lights, advance yield markings, and signage. Raised crosswalks may also incorporate refuge medians, bulb-outs and channelizing islands where feasible and appropriate.



Figure 5.29 Example of intersection with raised pedestrian crossings, pedestrian refuge islands and pedestrian signage.

Marked Crosswalks

Standard marked crosswalks are proposed in areas with relatively low vehicular traffic. Standard marked crosswalks increase pedestrian visibility and alert drivers to pedestrians that may be trying to cross. Crosswalks should be well lit and include pedestrian signage.



Figure 5.30 Marked Pedestrian Crossing.

FILL GAPS IN PEDESTRIAN INFRASTRUCTURE

The foundation of creating a pedestrian-friendly community is creating safe and accessible sidewalks that allow residents to reach destinations without needing a vehicle. Being a relatively small city by size, Farmersville residents should be allowed the opportunity to walk to destinations across the city. Unfortunately, many portions of the city are not walkable due to insufficient sidewalks. The sidewalks gap fill-in project would connect missing sidewalks, mainly in the eastern and southern portions of the city, to make the city more accessible for pedestrians. This would connect Farmersville citizens to there they work, shop, play, and go to school.

Additionally, a bridge located on East Ash Street over Deep Creek, between Oakview Avenue and Dwight Avenue was identified as a potential pedestrian issue. The bridge contains a sidewalk that is significantly more narrow than surrounding sidewalks, making the bridge a pedestrian hazard and non-ADA compliant. The sidewalk on the bridge is about three feet wide, narrower than the standard of five feet sidewalk.

PROPOSED SIDEWALK INSTALLATION

As shown in figures 5.31-5.34, there are many sidewalks throughout Farmersville that contain gaps, creating inconveniences for pedestrians. Figures 5.31-5.34 show the proposed sidewalk gaps to be filled in based on their priority level.

- Priority 1, in Red, are gaps on main roads frequently used by pedestrians.
- Priority 2, shown in orange, are gaps in minor roads that are used less frequently by pedestrians.

Table 5-2 shows the length of sidewalks to be installed for both priority 1 and 2 as well as the number of ramps to be installed throughout Farmersville.

Table 5.2 Proposed Sidewalks

	Length of Sidewalks to be Installed (ft)
Priority 1 Sidewalks	6,300
Priority 2 Sidewalks	26,840
Total Sidewalk Installation	33,140

PROPOSED RAMP INSTALLATION

Title II of the Americans with Disabilities Act (ADA) requires that public entities, including state and local governments, ensure that persons with disabilities have access to the pedestrian routes in the public right of way. Curb ramps allow people with mobility impairments to gain access to the sidewalks and to pass through median islands in streets. ADA standards require a curb ramp at every intersection where a street level pedestrian walkway crosses a curb. As displayed in Figure 5.34, many intersections in Farmersville have missing ramps or have existing ramps that are not ADA compliant. Table 5.3 shows the proposed ramps to be replaced for ADA compliance and proposed ramps to be installed where missing.

Table 5.3 Proposed Ramps

	Number of Ramps
Ramps to be Replaced	312
Ramps to be Installed	30
Total Ramp Installation	342

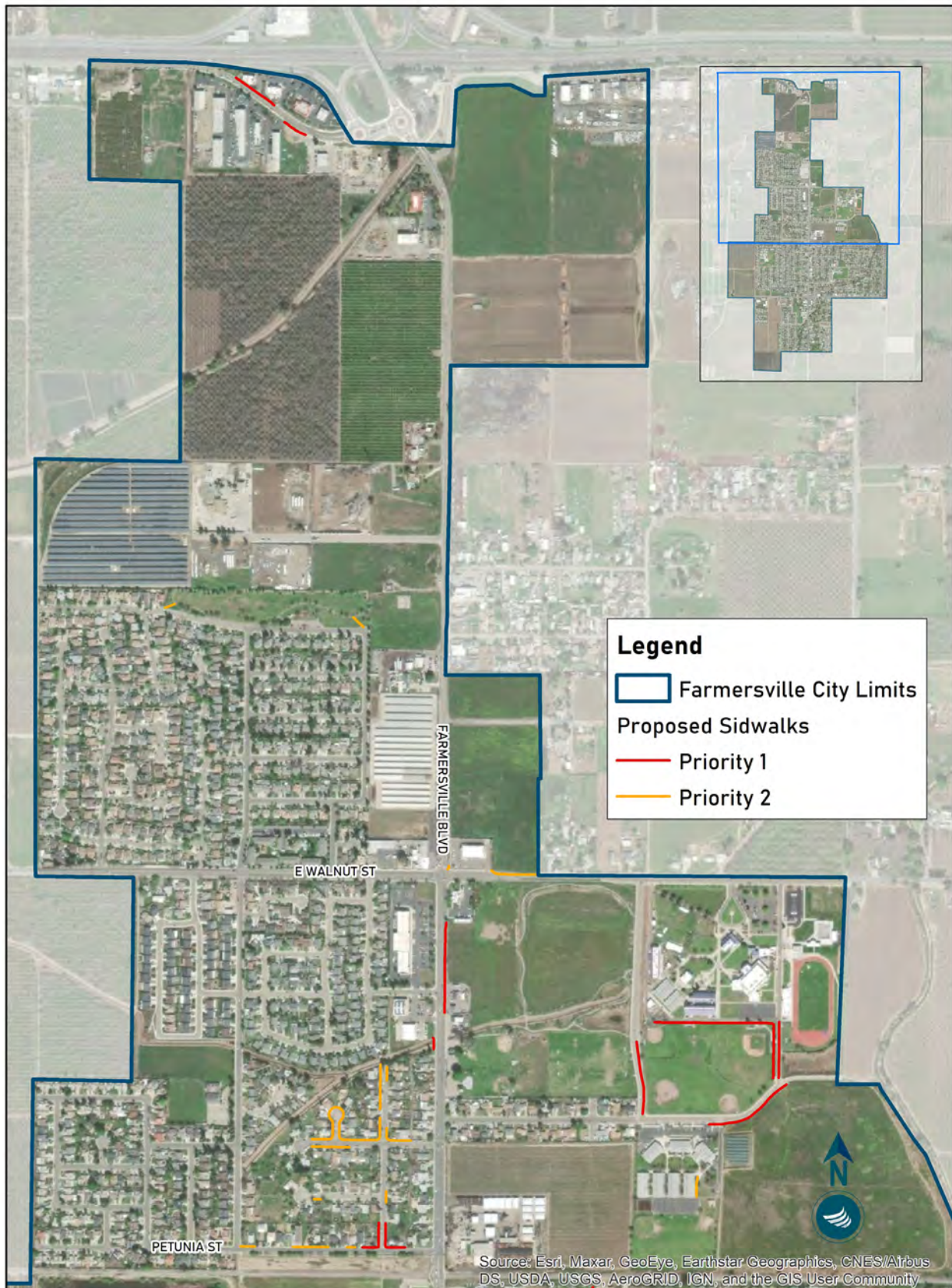


Figure 5.31 Proposed Sidewalks - north half



Figure 5.32 Proposed Sidewalks - southwest quarter



Figure 5.33 Proposed Sidewalks - southeast quarter

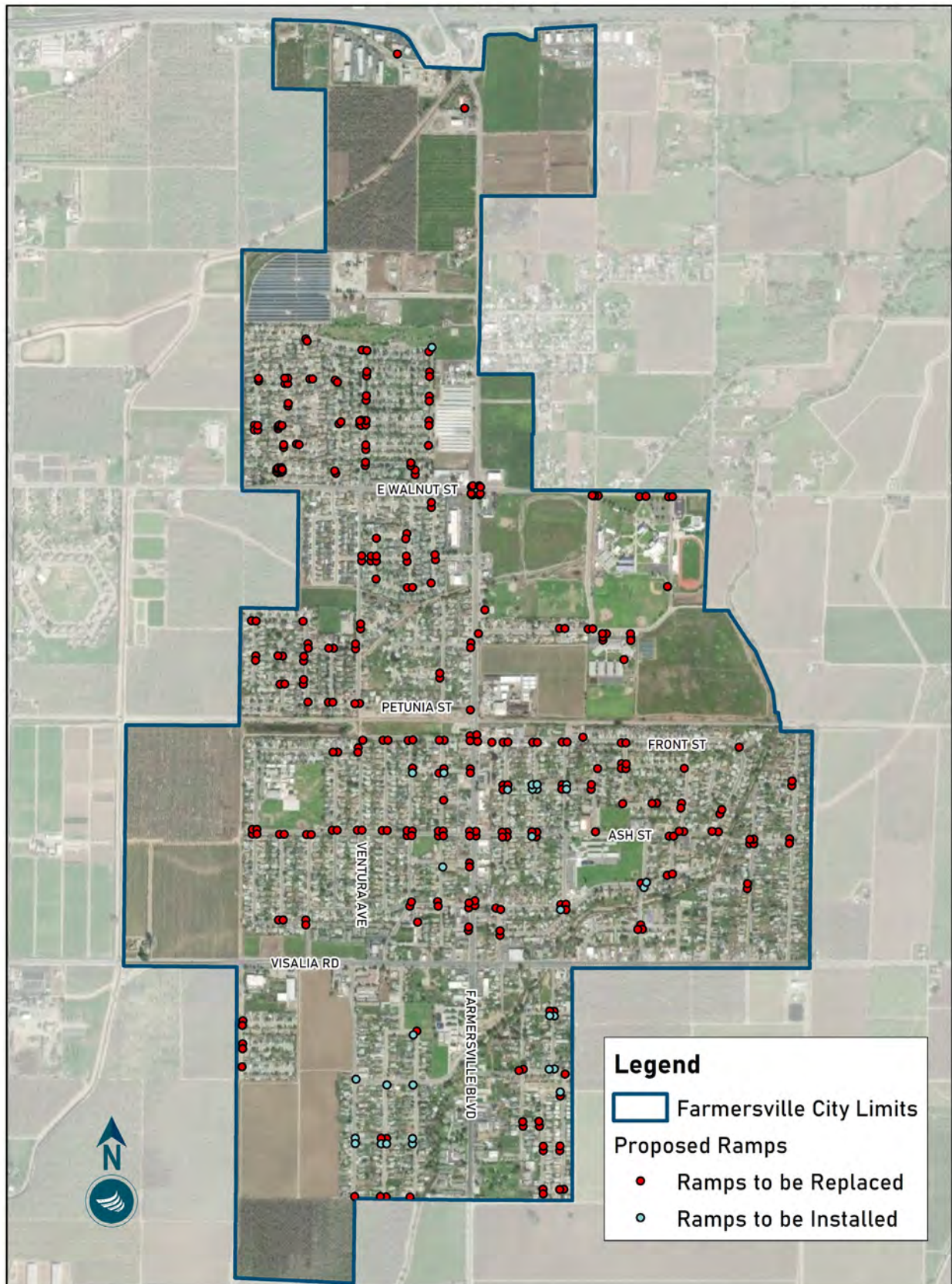


Figure 5.34 Proposed Ramps

HIGH SCHOOL AREA

The area around Farmersville High School and Freedom Elementary school is one of the most pedestrian heavy areas in Farmersville. The highest priority area around the High School is a 350-foot stretch from E Citrus Ave to the back Entrance of the High School, where there are no sidewalks or bike lanes. There is space to the side of the street, but it is currently grass and dirt, making it difficult for pedestrians and bikers. This is the most ideal route to the High School by students walking to school. The road is heavily used by vehicles dropping off students at the Elementary and High School. There are other portions of missing sidewalks in the area, although the sidewalk is only missing on one side of the street.



Figure 5.35. Missing Sidewalk near Farmersville High School

NORTH OF RAILROAD TRACKS

North of the railroad track, most streets have existing sidewalks. The primary area of concern is where Farmersville Blvd crosses the canal. There is a gap in the sidewalk on the west side of Farmersville Blvd at this location, making it inaccessible for some members of the community. While a sidewalk exists on the east side of the street at this location, there are no nearby crosswalks to enable pedestrians to cross.

Additionally, there is a 400' gap in sidewalks on the east side of Farmersville Blvd.

In addition to gaps in sidewalks on Farmersville Blvd, several neighborhoods located north of the railroad tracks lack sidewalks. The residents in these neighborhoods would benefit from sidewalks, which would allow them to more easily access other areas of the city by walking.



Figure 5.36. Farmersville Blvd. North of the Railroad



Figure 5.37. Farmersville Blvd. North of the Railroad

EAST OF FARMERSVILLE RD, NORTH OF VISALIA RD

In this highly residential area, a connected sidewalk network would benefit residents that would enjoy walking or biking. The highest priority segments of this section are the collector streets leading into the residential areas from Farmersville Road and Visalia Road. Costner Street from Farmersville Blvd to Magnolia Avenue, segments of Magnolia Avenue, and segments of Larry Street have

missing sidewalks on either side of the road. Other collector streets have one sidewalk. The North side sidewalk of Visalia Road ends at Brundage Avenue and becomes dirt path, but there are few homes, and no commercial uses past Brundage Avenue. Many of the residential areas have gaps in the sidewalks. Although they may be small, they can create an inconvenience for pedestrians that would need to cross a potentially busy road to access the other sidewalk. Sidewalk gaps in residential areas can create access and safety issues for pedestrians in Farmersville.



Figure 5.38. Farmersville & Costner

SOUTH OF VISALIA ROAD

The Southern portion of Farmersville Blvd is mostly equipped with sidewalks, besides a small portion in front of commercial uses where a parking lot forms that could cause potential safety hazards to pedestrians. The two main collector streets that connect the residential areas to Farmersville Boulevard are West and East Oakland Street. West Oakland Street borders an Elementary school and contains sidewalks on both sides. However, East Oakland Street contains large gaps in the sidewalks, making it difficult for some pedestrians. A long stretch of East Visalia Road is missing sidewalk on the south side. However, the land along the south side is currently farmland and is not typically used by pedestrians.

The four main collector streets onto Visalia

Road are S Virginia Avenue, S Ventura Avenue, S Dode Avenue, and S Rose Avenue. S Virginia Avenue contains sidewalks on the East side of the road, where Farmersville City hall and several homes are located. There is no sidewalk on the West side of Virginia Avenue, although that side contains only farmland.

Like Virginia Avenue, South Ventura Avenue only has sidewalks on the East Side but is bordered on the west by agricultural uses. S Dode Avenue, South Rose Avenue, and most of the residential areas have sidewalk gaps on both sides of the street. In this area, the highest priority streets for improvement are W Fresno Street, South Avery Avenue, Grove Street, and South Camelia Avenue.



Figure 5.39. Oakview Missing Sidewalks

DESIGN

Farmersville design standards establish a 5' Parkway, a 5' Sidewalk, and a 4' Landscape for Farmersville Blvd, North of Front Street and South of Visalia Road. Between Visalia Road and Front Street, Farmersville Boulevard has sidewalks of 7-8'.

The design standard for Visalia Road establishes a 5' Parkway, 5' Sidewalk, and 4' Landscape.

The design standards for local streets are a 7' parkway and a 5' sidewalk, although a small block under 600 feet could potentially

have smaller dimensions. Many sidewalks do not follow these standards in Farmersville. New proposed sidewalks would follow these guidelines as a minimum.

EAST ASH STREET BRIDGE

The bridge located on East Ash Street that crosses Deep Creek is not designed to adequately serve pedestrians. While the bridge does contain sidewalks, they are only 3' wide, which is much less than the city standard 5' and is not ADA compliant.

While bridge widening may be infeasible due to lack of available ROW, the sidewalks may be widened to 5' by reducing the vehicle travel lanes to 11'. Alternatively, the bridge could limit vehicle travel to one lane with stop signs on both sides. This would allow the bridge to accommodate 5' sidewalks and Class II bike lanes on both sides. Additionally, reducing the bridge to one travel lane would slow down automobile traffic and make a very pedestrian friendly environment on the bridge.

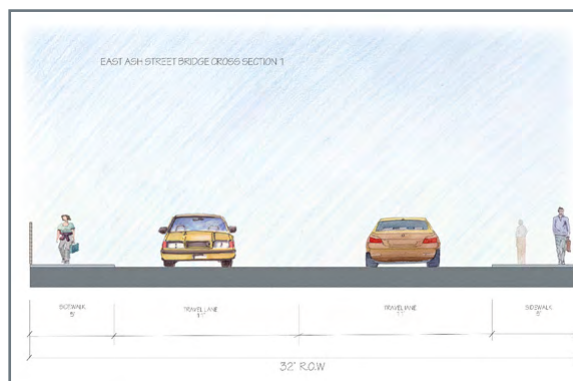


Figure 5.40 Ash Street Bridge Option 1



Figure 5.41 Ash Street Bridge Option 2



Figure 5.40 Ash Street Bridge, existing.



ACTION PLAN AND IMPLEMENTATION 6

ACTION PLAN AND IMPLEMENTATION

This Complete Streets and Multimodal Access study was developed to identify opportunities to implement complete street improvements throughout the City of Farmersville. It is intended to serve as a planning-level study to guide multi-modal improvements within the study area. Implementation of this plan is based on the following assumptions:

- All improvements within the City of Farmersville will be consistent with the City of Farmersville General Plan, as well as all other applicable agency standards.
- Implementation of the proposed design concepts identified in this feasibility study 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 locally or through State and Federal funding sources.

Based on these assumptions, the proposed Complete Streets projects are considered to be feasible solutions to improve pedestrian and cyclist mobility within the City of Farmersville.

CONSISTENCY WITH THE DOWNTOWN SPECIFIC PLAN

The Farmersville Complete Streets and Multimodal Access Study is a modern plan that envisions downtown revitalization, improved sense of place, as well as access and safety for active transportation in the community. Concurrently, The City of Farmersville is developing a Downtown Specific Plan which includes overlap in planning for South Farmersville Blvd. The plans are consistent, although there are significant differences regarding roundabouts, road diet limits, parking, and bike facilities. City Council has requested that the road diet be evaluated further.

It is anticipated that the final version of the Downtown Specific Plan will settle these questions over the coming year (2023) and TCAG intends to update the Farmersville Complete Streets and Multimodal Access Study thereafter to maintain consistency following the Council's direction on the matter.

ENVIRONMENTAL REVIEW AND COMPLIANCE PROCESS

The proposed multi-modal improvements will be reviewed by the City of Farmersville 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.

IMPLEMENTATION STRATEGIES

A combination of strategies will be utilized in the implementation of the proposed projects described in Section 5. The strategies summarized below were identified as a means to actualize the proposed design concepts in the context of the site's existing conditions and restraints.

ROAD WIDENING

The existing streetscape may need to be widened in some areas to accommodate proposed improvements. Reconfiguration of the existing centerline may be used to reduce costs associated with road widening. In areas where one side of the road may be widened more easily than the other, widening may occur on less onerous side and the centerline may be reconfigured accordingly.

ROAD DIET

A classic road diet involves converting an existing four-lane undivided roadway segment into a three-lane segment consisting of two through lanes and a center, two-way left-turn lane. This type of roadway reconfiguration is proposed along Farmersville Avenue, from Walnut Street to the southern city limits.

RAILROAD CROSSINGS

The railroad was identified as a primary obstacle to bicycle and pedestrian mobility in this Complete Streets and Multimodal access study. Additional railroad crossings will be needed to fully actualize the improvements to bicycle and pedestrian mobility proposed by this study. Construction of new pedestrian crossings will require coordination with the Rail Crossings & Engineering Branch of the California Public Utilities Commission.

RIGHT OF WAY ACQUISITIONS

Right of Way (ROW) acquisitions occur when necessary improvements cannot be completed within the existing ROW and involve the purchase of private property by a public entity. Right of Way Acquisition may be required to develop some of the proposed projects.

COST ESTIMATES

Detailed cost estimates are provided for Farmersville Blvd Option 3 (preferred option), the Safe Routes to School loop system, and the proposed sidewalk/ramp in-fill improvement project. 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.

FARMERSVILLE BLVD IMPROVEMENTS (OPTION 3)

Item No.	Description of Work	Quantity	Unit	Unit Price (\$)	Total (\$)
Base Bid Items:					
1	Mobilization & Demobilization	1	LS	350,000.00	350,000.00
2	Clearing & Grubbing	1	LS	187,500.00	187,500.00
3	Worker Protection	1	LS	12,500.00	12,500.00
4	Water Pollution Prevention	1	LS	43,750.00	43,750.00
5	Dust Control	1	LS	25,000.00	25,000.00
6	Traffic Control	1	LS	187,500.00	187,500.00
7	Portable Changeable Message Signs (PCMS)	1	LS	12,500.00	12,500.00
8	Construction Notification Signs	16	EA	2,000.00	32,000.00
9	Sawcut & Remove Existing Asphalt Pavement (F)	601,920	SF	1.50	902,880.00
10	Sawcut & Remove Existing Concrete (F)	120,384	SF	4.00	481,536.00
11	Remove Existing Curb & Gutter (F)	20,064	LF	15.00	300,960.00
12	Remove Existing Median Curb (F)	300	LF	20.00	6,000.00
13	Earthwork (F)	51,725	CY	10.00	517,250.00
14	Adjust Manhole (Storm Drain & Sanitary Sewer)	40	EA	2,000.00	80,000.00
15	Barrier Curb & Gutter	40,128	LF	45.00	1,805,760.00
16	Valley Gutter (4')	1,660	LF	60.00	99,600.00
17	Barrier Curb [Landscape Islands & Roundabouts]	20,850	LF	30.00	625,500.00
18	Concrete Sidewalk	110,352	SF	10.00	1,103,520.00
19	City Standard Drive Approach	101	EA	9,500.00	959,500.00
20	Stamped Median Concrete / Median Concrete	1,624	SF	15.00	24,360.00
21	Concrete Median Curb	1,012	LF	40.00	40,480.00
22	Structural Concrete [Roundabout Aprons]	4,047	SF	22.00	89,034.00
23	Class 2 AB (F) - 15" Thick	43,600	TN	35.00	1,526,000.00
24	Hot Mix Asphalt (Type A, 3/4") - 7" Thick	20,500	TN	120.00	2,460,000.00
25	Signing, Striping & Marking Pavement	1	LS	85,000.00	85,000.00
26	Fiber Optic & Equipment	10,032	LF	45.00	451,440.00
27	Landscape, Irrigation, & Planting	105,240	SF	5.50	578,820.00

Construction Subtotal					12,988,390.00
Contingency (15%)					1,948,258.50
BASE BID TOTAL (\$) =					14,936,648.50
Soft Cost Items:					
28	Design Services (6.5%)	6.5%	LS	12,988,390.00	844,245.35
29	Inspection & Material Testing (5%)	5.0%	LS	12,988,390.00	649,419.50
30	Project Management (5%)	5.0%	LS	12,988,390.00	649,419.50
31	Construction Management (5%)	5.0%	LS	12,988,390.00	649,419.50
SOFT COST TOTAL (\$) =					2,792,503.85
PROJECT TOTAL =					17,729,152.35

SAFE ROUTES TO SCHOOL LOOP

Cost estimates for the Safe Routes to School Loop project include full removal and replacement of concrete sidewalk and drive approaches within the project limits. It is anticipated that the City can reduce costs by utilizing existing infrastructure, where feasible.

Item No.	Description of Work	Quantity	Unit	Unit Price (\$)	Total (\$)
Base Bid Items:					
1	Mobilization & Demobilization	1	LS	235,000.00	235,000.00
2	Clearing & Grubbing	1	LS	125,000.00	125,000.00
3	Worker Protection	1	LS	8,500.00	8,500.00
4	Water Pollution Prevention	1	LS	25,000.00	25,000.00
5	Dust Control	1	LS	16,750.00	16,750.00
6	Traffic Control	1	LS	125,000.00	125,000.00
7	Portable Changeable Message Signs (PCMS)	1	LS	8,500.00	8,500.00
8	Construction Notification Signs	10	EA	2,000.00	20,000.00
9	Sawcut & Remove Existing Asphalt Pavement (F) - Enhanced Route	126,000	SF	1.50	189,000.00
10	Sawcut & Remove Existing Concrete (F) - Enhanced Route	98,000	SF	4.00	392,000.00
11	Sawcut & Remove Existing Concrete (F) - Preferred Route	154,000	SF	4.00	616,000.00
12	Earthwork (F) - Enhanced Route	10,370	CY	10.00	103,703.70
13	Earthwork (F) - Preferred Route	5,704	CY	10.00	57,037.04
14	Earthwork (F) - 10-ft Pedestrian Path	50,000	CY	10.00	500,000.00
15	Earthwork (F) - 8-ft Creek Path	10,400	CY	10.00	104,000.00
16	Barrier Curb & Gutter - Enhanced Route	14,000	LF	45.00	630,000.00

17	Barrier Curb [Landscape Islands] - Enhanced Route	14,000	LF	30.00	420,000.00
18	Concrete Sidewalk - Enhanced Route	98,000	SF	10.00	980,000.00
19	Concrete Sidewalk - Preferred Route	154,000	SF	10.00	1,540,000.00
20	City Standard Drive Approach - Enhanced Route	37	EA	9,500.00	351,500.00
21	City Standard Drive Approach - Preferred Route	170	EA	9,500.00	1,615,000.00
22	Class 2 AB (F) - 4" Thick - Enhanced Route	1,960	TN	35.00	68,600.00
23	Class 2 AB (F) - 4" Thick - 10-ft Pedestrian Path	1,400	TN	35.00	49,000.00
24	Class 2 AB (F) - 4" Thick - 8-ft Creek Path	291	TN	35.00	10,185.00
25	Hot Mix Asphalt (Type A, 3/4") - 2" Thick - Enhanced Route	980	TN	120.00	117,600.00
26	Hot Mix Asphalt (Type A, 3/4") - 2" Thick - 10-ft Pedestrian Path	700	TN	120.00	84,000.00
27	Hot Mix Asphalt (Type A, 3/4") - 2" Thick - 8-ft Creek Path	146	TN	120.00	17,520.00
28	Signing, Striping & Marking Pavement - Enhanced Route	1	LS	59,500.00	59,500.00
29	Signing, Striping & Marking Pavement - Preferred Route	1	LS	93,500.00	93,500.00
30	Signing, Striping & Marking Pavement - 10-ft Pedestrian Path	1	LS	42,500.00	42,500.00
31	Signing, Striping & Marking Pavement - 8-ft Creek Path	1	LS	11,050.00	11,050.00
32	Landscape, Irrigation, & Planting - Enhanced Route	112,000	SF	5.50	616,000.00
33	Landscape, Irrigation, & Planting - Preferred Route	88,000	SF	5.50	484,000.00
34	Landscape, Irrigation, & Planting - 10-ft Pedestrian Path	20,000	SF	5.50	110,000.00
35	Landscape, Irrigation, & Planting - 8-ft Creek Path	5,200	SF	5.50	28,600.00
36	Raised Crosswalks - Structural Concrete	2,280	SF	60.00	136,800.00
37	Raised Crosswalks - Signage	1	LS	7,500.00	7,500.00
38	Raised Crosswalks - Lighting & Equipment	1	LS	47,500.00	47,500.00
39	HAWK Pedestrian Crossing Beacons	4	EA	150,000.00	600,000.00
40	Traffic Signal & Equipment at Freedom Dr. & Walnut St.	1	LS	415,450.00	415,450.00
41	Standard Crosswalks [12-in limit line, 24-in ladders]	2,280	SF	2.50	5,700.00
42	Pedestrian Underpass Structure [Railroad Crossings, includes ROW acquisition]	1	EA	750,000.00	750,000.00
Construction Subtotal					11,816,995.74
Contingency (15%)					1,772,549.36

BASE BID TOTAL (\$) =					13,589,545.10
Soft Cost Items:					
43	Design Services (6.5%)	6.5%	LS	1,816,995.74	768,104.72
44	Inspection & Material Testing (5%)	5.0%	LS	1,816,995.74	590,849.79
45	Project Management (5%)	5.0%	LS	1,816,995.74	590,849.79
46	Construction Management (5%)	5.0%	LS	1,816,995.74	590,849.79
SOFT COST TOTAL (\$) =					2,540,654.08
PROJECT TOTAL =					16,130,199.19

FILL GAPS IN PEDESTRIAN INFRASTRUCTURE

Item No.	Description of Work	Quantity	Unit	Unit Price (\$)	Total (\$)
Base Bid Items:					
1	Mobilization & Demobilization	1	LS	114,000.00	114,000.00
2	Clearing & Grubbing	1	LS	62,500.00	62,500.00
3	Worker Protection	1	LS	4,250.00	4,250.00
4	Water Pollution Prevention	1	LS	21,875.00	21,875.00
5	Dust Control	1	LS	8,500.00	8,500.00
6	Traffic Control	1	LS	20,500.00	20,500.00
7	Portable Changeable Message Signs (PCMS)	1	LS	4,250.00	4,250.00
8	Construction Notification Signs	4	EA	2,000.00	8,000.00
9	Sawcut & Remove Existing Asphalt Pavement (F)	7,560	CY	12.00	90,720.00
10	Sawcut & Remove Existing Concrete (F)	10,260	LF	45.00	461,700.00
11	Remove Existing Curb & Gutter (F)	123,770	SF	10.00	1,237,700.00
12	Remove Existing Median Curb (F)	342	EA	750.00	256,500.00
Construction Subtotal					2,290,495.00
Contingency (15%)					343,574.25
BASE BID TOTAL (\$) =					2,634,069.25
Soft Cost Items:					
28	Design Services (6.5%)	6.5%	LS	2,290,495.00	148,882.18
29	Inspection & Material Testing (5%)	5.0%	LS	2,290,495.00	114,524.75
30	Project Management (5%)	5.0%	LS	2,290,495.00	114,524.75
31	Construction Management (5%)	5.0%	LS	2,290,495.00	114,524.75
SOFT COST TOTAL (\$) =					492,456.43
PROJECT TOTAL =					3,126,525.68

POTENTIAL FUNDING SOURCES

Successful implementation of the design concepts proposed by this Feasibility Study will require acquisition of reliable funding. Funding for design concept implementation may be obtained locally or through State and Federal Grant programs. Although local funding sources are often more reliable, State and Federal grants should be pursued to supplement project implementation.

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 any design concepts proposed by this feasibility. The City of Farmersville will be responsible for developing individual applications in response to grant program 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.
- **Transportation Enhancements (TE):** 50% of TE funds received by Tulare County have been dedicated to Measure R projects in Tulare County. The approximate \$500,000 annually serve as an offset of Measure R funded bicycle projects. TE funds require approximately a 12% match by the applicant and are usually programmed in coordination with the Federal Transportation Improvement Program (FTIP). These funds can be used for facilities for pedestrians and bicycles that enhance transportation corridors (\$60M/yr statewide, 75% programmed by RTPAs; 25% by Caltrans).
- **Transportation, Community, and System Preservation Program (TCSP):** TCSP is intended to address the relationships among transportation, community, and system preservation plans and practices and identify private sector-based initiatives to improve those relationships. State and local governments, metropolitan planning organizations (MPOs), and tribal governments are eligible for discretionary grants, authorized at \$270 million through 2009, to carry out eligible projects to integrate transportation, community, and system preservation plans and practices.

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.

- **Transportation Development Act (TDA) Article 3 (SB 821):** TDA Article 3 funds, also known as the Local Transportation Fund (LTF), are used by cities for the planning and construction of bicycle and pedestrian facilities. Up to two percent (2%) of the funds can be made available to counties and cities for facilities provided for the exclusive use of pedestrians and bicyclists.
- **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.
- **Active Transportation Program (ATP):** The ATP is the only primary source of funds dedicated to increasing bicycling and walking in California. At \$120 million per year, it represents approximately 1% percent of the state's annual transportation budget. The ATP funds bike and pedestrian infrastructure projects, educational and promotional efforts, safe routes to school projects, and active transportation planning. The state awards half of the funds through a competitive grants process. 40% goes to metropolitan agencies to distribute and 10% goes to rural areas. At least 25% of all funds must benefit residents in disadvantaged communities.
- **Per Capita Grant Program:** The Per Capita Grant Program is intended to maintain a high quality of life for California's growing population by providing a continuing investment in parks and recreational facilities. Specifically, it is for the acquisition and development of neighborhood, community, and regional parks and recreation lands and facilities in urban and rural areas. Per Capita grant funds can only be used for capital outlay and may be used for bike paths and trails.
- **Roberti-Z'berg-Harris (RZH) Grant Program Proposition 40:** Funds for this grant program are to be allocated for projects pursuant to the RZH Urban Open Space and Recreational Grant Program for a variety of uses related to parks and recreation needs. Bike paths and recreational trails are eligible uses of this grant program.

Local Funding Sources

- **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.
- **Measure R ½ Cent Sales Tax:** A 30 year ½ cent sales tax increase was passed by Tulare County voters in November of 2006. The Expenditure Plan for the sales tax measure dedicates \$91.3 million or 14% of the funds to transit/bikes/environmental mitigation. The funding program requires matching funds from CMAW and TE. The Bike/Pedestrian projects funded by Measure R are listed in the 2006 ½ Cent Transportation Sales Tax Measure Expenditure Plan. An incentive will be provided to agencies who receive outside funds to pay for projects listed in the Expenditure Plan, with a 50% match from TCAG (all matches are eligible with the exception of CMAQ and TE). A Bike Fund Program was established in an amendment to the Expenditure Plan to include a match to grants received by member agencies for a maximum of \$2,000,000 over 30 years.
- **Impact Fees:** A potential local source of funding are developer impact fees. These fees are generally tied to trip generation rates and traffic impacts produced by a proposed project. A developer may reduce the number of trips by paying for an on or off-site bikeway

improvements which will encourage residents to bicycle rather than drive. In-lieu, parking fees may be used to help construct new or improved bicycle parking. Establishing a clear nexus or connection between the impact fees and the project's impacts is critical in avoiding potential lawsuits.

Other local funding options may be reviewed and deemed appropriate including Benefit Assessment Districts, Property Taxes and Bonds, User Fees, Adopt-a-Path Programs, or General Funds. These alternatives among the State and Federal funding sources will be more thoroughly reviewed following the initiation of the Farmersville Complete Streets and Multimodal Access Study improvement projects.