Vineyard Drive Corridor Plan

Templeton, CA

County of San Luis Obispo

November 28, 2023

VINEYARD DRIVE CORRIDOR PLAN

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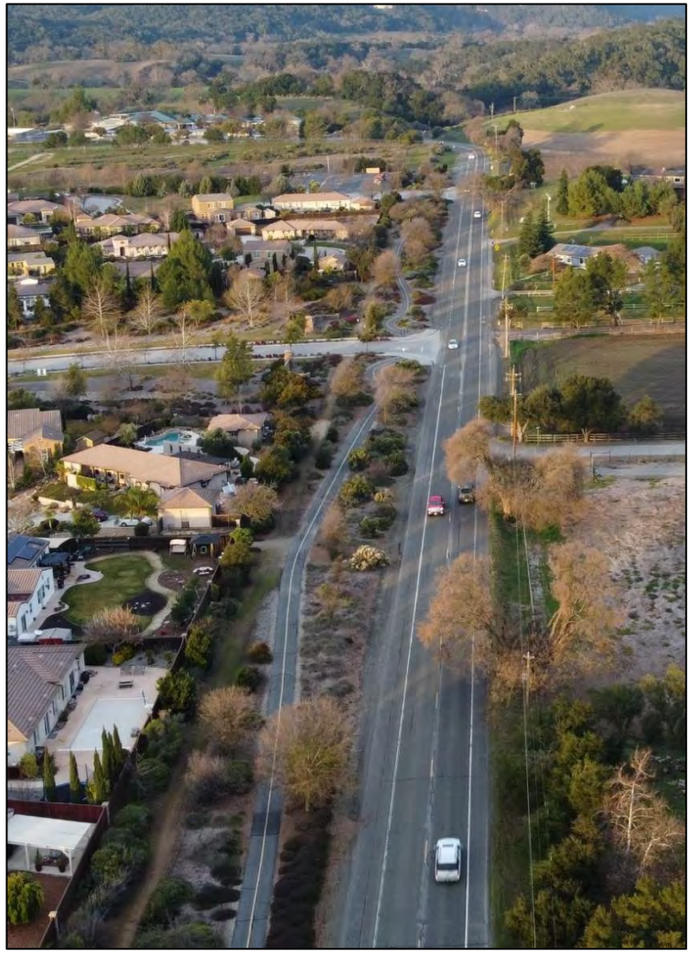

Executive Summary

This Executive Summary provides a brief overview of the following Vineyard Drive Corridor Plan report and highlights the resulting **Preferred Concept**. While this Executive Summary was prepared to convey an overall summary of the report, the study and its appendices should be referenced for additional detail on methodology and findings.

The San Luis Obispo County Association of Governments (SLOCOG), in coordination and cooperation with the County of San Luis Obispo and Caltrans, initiated the preparation of the Plan. The Plan evaluates the portion of Vineyard Drive through the community of Templeton (from State Route 46 West to S. Main St). The objective of the Plan is to develop a Preferred Concept with comprehensive multimodal improvements that address the corridor's long-standing issues, including safety concerns, peak-hour congestion, and multimodal access and mobility. The multimodal improvements must be feasible, equitable, cost-effective, and have community support. The Preferred Concept will serve to guide future Vineyard Corridor programming decisions over a 20-year timeframe based on available funding.

Ultimately, this Preferred Concept proposes new parallel and connecting transportation facilities that have the potential to enhance multimodal connectivity, reduce corridor congestion, improve corridor reliability and livability, and expand access to winery visitor destinations, essential local services, and regional commerce. In addition, the Preferred Concept with associated multimodal improvements highlights the priorities for the Vineyard Corridor while positioning the corridor for funding opportunities which provide the highest return on investment (benefit-cost) of limited regional transportation funding over the next 20 years.

Plan Description

Upon review of past planning and other corridor-related documents (Chapter 1), establishment of evaluation performance metrics, and a thorough assessment of existing conditions (Chapter 2), the community was engaged for their input (Chapter 3). These combined efforts led to the identification and evaluation of a focused group of Corridor Concepts and Alternatives (Chapter 4). Ultimately, a list of multimodal improvements is identified and a Preferred Concept for the Vineyard Drive corridor. Cost estimates were developed for all alternatives, and for Bethel Road at Vineyard Drive intersection, the proposed roundabout and traffic signal options are compared for respective benefits and costs. Funding mechanisms and strategies for phasing and near-term improvements are then identified to implement the preferred concept (Chapter 5).

VINEYARD DRIVE CORRIDOR PLAN

Public Engagement

An effective community engagement program creates confidence in the planning process, promotes broad-based understanding, and reflects the interests and needs of the community. Successful implementation of the improvements recommended in this plan required cooperation between Caltrans, SLOCOG, SLO County, and the community as a whole. The Plan outreach effort was robust in its focus on reaching diverse communities. The input received through these various channels helped inform and select the Plan preferred improvement concept and associated multimodal improvements. The community workshops, their participation, insights, and other outreach efforts are more fully described in the Public Outreach section of this report.

This outreach effort included the following:

- Community Workshop – Farmer's Market pop-up
- Agency Partners
    - SLO County
    - Caltrans District 5
    - San Luis Obispo Council of Governments
    - Templeton School District
    - Templeton Community Service District
    - Templeton Fire Department
    - Sheriff's office
- Online Engagement
    - Interactive Mapping Tool
    - Online Corridor Travel Survey

Technical Analysis

This Corridor Plan evaluates various performance metrics along the corridor comparing existing and forecasted conditions against the plan alternatives. These performance metrics are summarized below and are used to assess alternatives in selecting a preferred plan and prioritization.

- Level of Service (LOS) and queuing analysis for traffic operations
    - Most intersections currently operate at LOS E or F during peak times, especially due to school traffic.
- Bicycle Level of Traffic Stress (LTS)
    - Entire corridor at LTS 4, which is worst ranking, highest stress cycling conditions only suitable for most experienced cyclists.
- Safety and Collision History
    - Most frequent collisions between Main Street and Bennett Way
    - Vineyard Drive at Rossi Road experienced a percentage of injury collisions over the past five years that is higher than the statewide average for similar intersections.
- Vehicle Miles of Travel
    - Constructing multimodal facilities would aim to reduce VMT and greenhouse gas emissions. Intersection improvements would be presumed to have no significant impact on VMT.

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US Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California V FIPS 0405 Feet

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Templeton
San Luis Obispo County
Vineyard Drive Corridor Plan

Project No. 12570229
Revision No. -
Date 5/7/2023

Study Corridor & Study Intersections

FIGURE E.1

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Print date: 07 May 2023 - 11:58

Data source: Roads: TIGER, 2021; Bikeways; Urban Service Line: SLO County Open Data PortalWorld Imagery: Earthstar Geographics. Created by: rsouthern

VINEYARD DRIVE CORRIDOR PLAN

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Chapter 1. Introduction

The Vineyard corridor is one of the main corridors in Templeton that serves as the east-west entry into the area from State Route 46 (SR 46) West and US 101. The vineyard corridor is a highly traveled street in Templeton as it serves several institutions and connections to downtown Templeton. The corridor experiences congestion as a result of high vehicle volumes combined with frequently spaced intersections and driveways, creating unreliable travel conditions that highlight deficiencies in the transportation system.

As the primary link between the historic downtown, schools, US 101, commercial area on the south, residential areas, and agriculture and vineyards, the Vineyard Corridor accommodates a mix of local and regional travel demand needs. For most of the community's children, the segment serves significant roles in the daily walk, bike, or drive to school. The confluence of local and regional traffic in the vicinity of US 101 is known to create traffic delays and congestion at the interchange and overpass. School peak hours result in long queues and restricted mobility.

Vineyard drive also serves as a regional connector between the less developed areas of Vineyard Drive and SR 46 West at a new roundabout in the west. For many visitors, Vineyard Drive is a pleasant rural road winding through bucolic ranches and farmsteads on their way to world-renowned wineries of the greater Paso Robles AVA region, from El Pomar to Adelaida. This corridor plan must remain cognizant of this regional, tourist, and recreational context. For locals and visitors alike, there is a desire to maintain the pastoral qualities of Vineyard Drive that must be balanced with the need to improve multimodal transportation mobility and operations.

Therefore, with these concerns over corridor congestion, active transportation connectivity, and overall mobility, the County of San Luis Obispo, in coordination with the Templeton community, SLOCOG and Caltrans, initiated the preparation of the Vineyard Corridor multimodal Transportation Corridor Plan. Drawing on past plans and studies while expanding the scope beyond the roadway itself, the focus of the Templeton Vineyard Corridor Plan was to address the most pronounced issues in the corridor, included:

- Lack of multimodal connectivity, particularly for bicycle and pedestrian access.
- Safety considerations for the mix between motorists and active transportation users due to high traffic volumes, competing for mobility needs, lack of multimodal options, and the high proportion of driveways and access points along the corridor.
- Lack of easily accessible, continuous parallel routes to support local and regional travel demand.
- Capacity constraints at key intersections cause queuing and delays, extensive bottleneck durations, and unreliable travel times for both motorists and transit.
- Emergency response times, evacuation routes, and incident clearance capabilities.
- Aesthetic continuity, which affects the community feeling and sense of place.

1.1 About the Plan

This plan is organized into chapters. These chapters include:

- Chapter 1 – Introduction: includes a brief study background, study purpose, study approach/objectives, and organization of this Plan document.
  - Planning Guidance and Metrics - examines past planning documents for planning context.
- Chapter 2 – Existing Conditions: documents findings from field observations, technical analyses, and models.
- Chapter 3 - Public Engagement: summarizes outreach process conducted to gather feedback on potential solutions and preferred concepts.

- Chapter 4 – Plan Concepts & Alternatives: provides detailed concepts and alternatives along the corridor to meet the Plan's goals, evaluates forecasted operations with the improvements, and provides a comparative analysis of alternatives with a recommended concept identified.
- Chapter 5 – Funding Strategies & Implementation: identifies various federal, state, regional, and local funding opportunities, and potential opportunities for project phasing.

1.2 Purpose & Need

The purpose of this effort is to consolidate prior planning and engineering into one comprehensive document. This exercise also allows for the opportunity of refining these planning policies and conceptual design efforts with further specificity and accuracy. This study evaluates proven and creative improvement alternative concepts and selects a Preferred Concept with a set of the complimentary roadway and multimodal projects that would have independent utility, correct existing connectivity and congestion problems, and have a consensus of community support.

The Vineyard Drive Corridor Plan will provide a conceptual multi-modal planning foundation. This plan will aid the County in coordinating development and capital projects along the Vineyard Drive corridor. The County will serve as the Lead Agency, in cooperation with SLOCOG, and the California Department of Transportation (Caltrans) on implementation of this plan.

1.3 Goals & Objectives

- Balance the diverse travel needs of the corridor and coordinate prior planning efforts.
- Enhance and introduce efficient, connected, and comfortable multimodal mobility choices for all ages and abilities.
- Improve economic resiliency and environmental sustainability through good design.
- Bridge gaps in the multimodal infrastructure for local destinations and connect to existing and planned facilities.

The objective of the Vineyard Drive Corridor Plan is to create the buildout vision of the corridor.

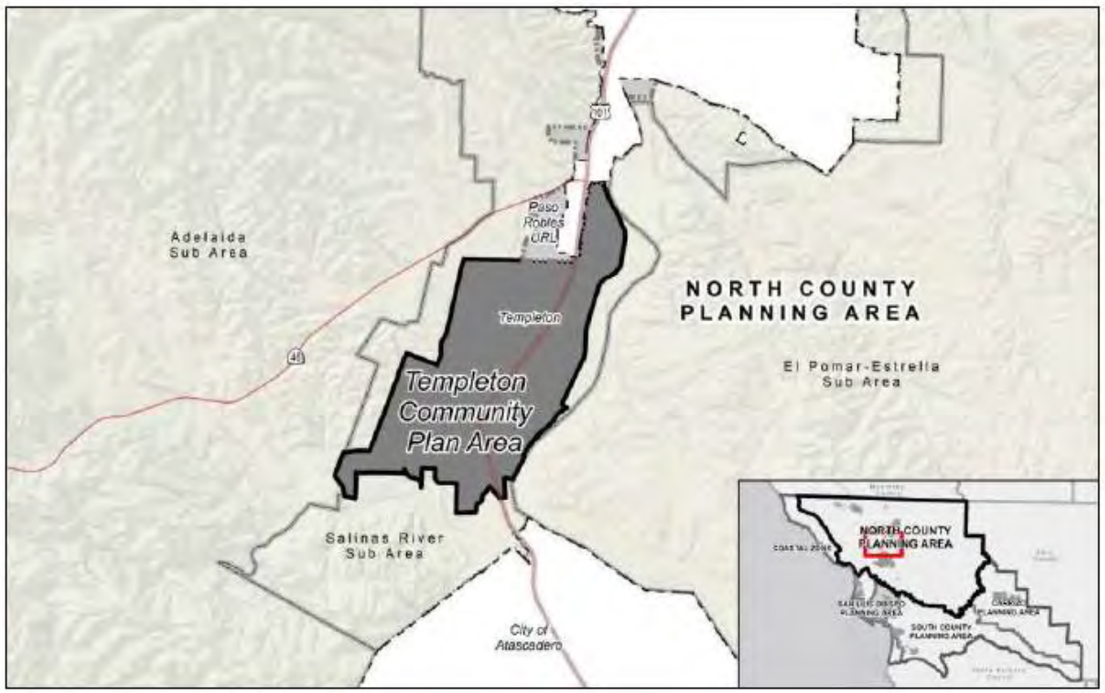
1.4 Relationship to County Programs, Plans, & Projects

In providing an overall framework and planning guidance for the preparation of this Vineyard Drive Corridor Plan, an understanding of all past transportation related planning studies needed to be understood, as well as the performance criteria for establishing a Multimodal Corridor Plan that meets mobility needs, is fundable and implementable. This planning effort is consistent with the County General Plan, Templeton Area Community Plan, and County Bikeways Plan.

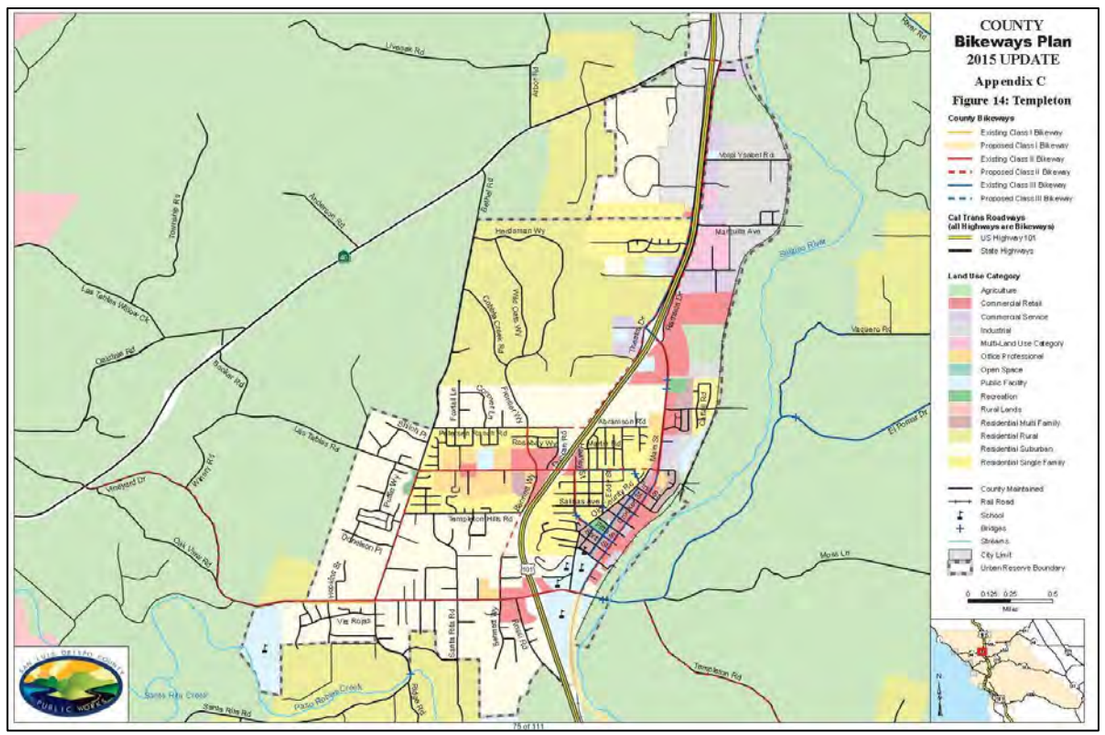
1.4.1 County General Plan

With the adoption of the County of San Luis Obispo General Plan Update, the County established a roadmap for the long-term physical, social and economic future of Templeton. It provided goals, policies and programs to direct land use and development decisions, manage resources, deliver public services, and provide infrastructure to unincorporated areas of the County, including Templeton.

1.4.2 Templeton Area Community Plan



The Templeton Area Community Plan (TACP) guides land use and transportation for the Templeton community over the next 20 years. The TACP addresses special conditions in neighborhoods and helps implement the goals and policies of the North County Area Plan. These standards address land use, public services, circulation, sensitive resources, and natural hazards.



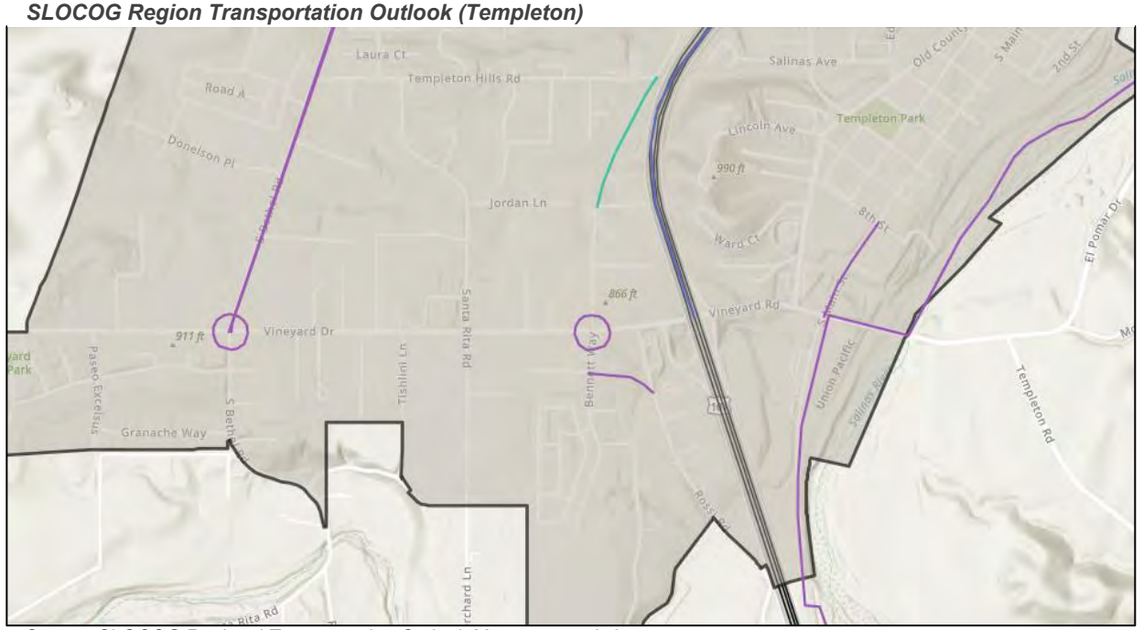
1.4.3 County Bikeways Plan

The purpose of the County Bikeways Plan is to identify and prioritize bikeway facilities throughout the county's unincorporated area, including bikeways, parking, connections with public transportation, educational programs, and funding. The plan sets priorities for the completion of Class I and II bikeways that commuters can travel from their home neighborhoods to work (or school) and back. Vineyard Drive class II bike lanes were constructed to complete a connection between Vineyard Elementary and Main Street. This project was one of the top projects in the 2010 County Bikeways Plan.

1.4.4 Short Range Transit Plan

The San Luis Obispo Regional Transit Agency (RTA) maintains a fixed-route regional bus that serves Templeton currently (Route 9) with stops at the Park & Ride lot and Twin Cities Community Hospital located on Las Tablas Road. Route 9 provides service between San Miguel and San Luis Obispo. The 2016 RTA Short Range Transit Plan[1] identifies enhancing weekday service for Route 9 by adding mid-day limited stop express service, including at the Lab Tablas Park & Ride, and extending evening service.

SLOCOG Region Transportation Outlook (Templeton)



Source: SLOCOG Regional Transportation Outlook Map accessed via **https://experience.arcgis.com/experience/0f598d7b59804be494d2f3a51c3f7ff7/** on June 5, 2023.

1.4.5 SLOCOG Regional Transportation Plan / Sustainable Communities Strategy (RPT/SCS)

The 2023 RTP/SCS is a collective effort to plan (out to 2045) for the region's future growth and transportation needs within San Luis Obispo County and the incorporated cities. The Plan makes it possible for the region to receive and spend Federal and State funding for local transportation projects and programs. The RTP/SCS presents several projects along the Vineyard Drive corridor in Templeton, as shown in the image on the left. Improvements identified in the RTP/SCS include intersection improvements at Bethel/Vineyard and at Bennett/Vineyard, bike lanes along Bethel Road, and sidewalks on Main Street connecting to Vineyard Drive. Additionally, a Class I bike path is proposed parallel to the Salinas River which is part of the Juan Bautista de Anza Trail corridor (also see the Salinas River Trail Master Plan, 2014), that will connect Atascadero to Templeton, and new roadway connections between Bennett Way and Rossi Road and the Bennett Way extension north to Templeton Hills Road. This Corridor Plan will consider these projects and aim to improve the livability of the corridor by planning for and providing connecting facilities to these improvements.

1.4.6 SLOCOG Regional Active Transportation Plan

The 2021 Regional Active Transportation Plan (ATP) is a compilation of active transportation corridor planning studies and technical reports addressing the San Luis Obispo County and seven cities. For Templeton, the SLOCOG ATP identifies the Atascadero-to-Templeton Connector (as identified in the RTP/SCS), Class II bike lanes along Bennett Way north of Vineyard Drive, and Class II Bike Lanes along Vineyard Drive west of the Elementary School.

[1] **http://www.slorta.org/wordpress/wp-content/uploads/SLO_RTA_SRTP_FinalReport.pdf**

Chapter 2. Existing Conditions & Performance Metrics

2.1 Regional Context

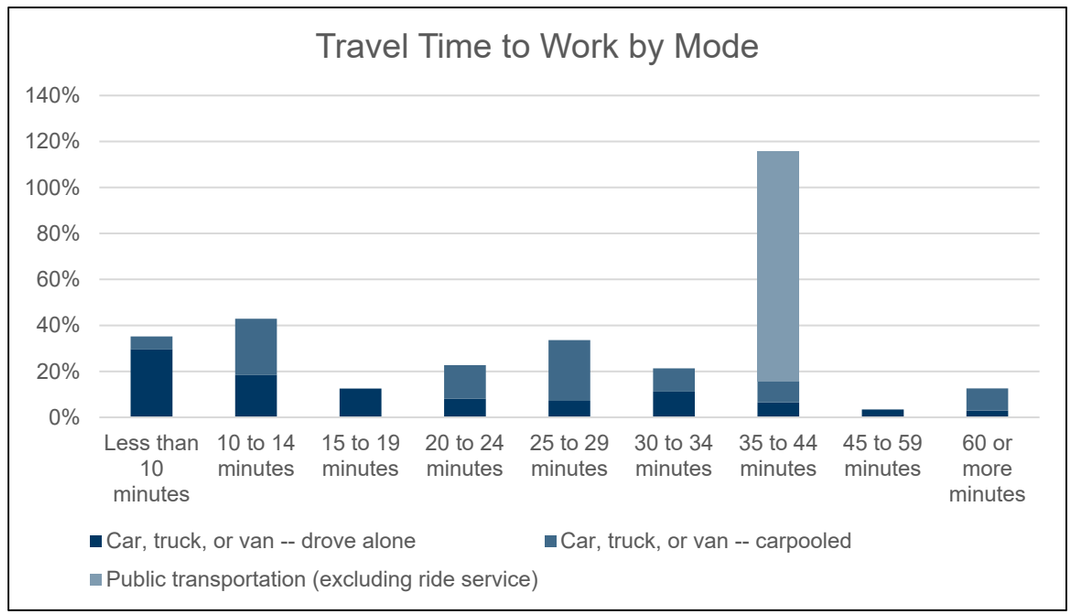
US 101 is a key highway route within the central coast of California that also serves as the primary connection to the community of Templeton. The Vineyard Corridor is an essential east-west connection within the community of Templeton, serving as the primary route for both local and regional trips, as Vineyard Drive is the only connection between US 101 and SR 46 West. For many visitors, Vineyard Drive is a pleasant rural road winding through bucolic ranches and farmsteads on their way to world-renowned wineries of the greater Paso Robles AVA region, from El Pomar to Adelaide. For locals and visitors alike, there is a desire to maintain the pastoral qualities of Vineyard Drive that must be balanced with the need to improve active transportation mobility options and overall operations. Although Vineyard Drive continues west as a rural road passing various vineyards, this Plan focuses on Vineyard Drive between Main Street and SR 46 West serving the local community of Templeton.

2.2 Local Context

The community of Templeton is bisected by US 101 and is accessed via several arterial roadways connecting to US 101. The community's downtown and historic area are located along S Main Street from 8th Street to Gibson Road, on the east end of Vineyard Drive. Medical services including the Twin Cities Hospital are situated in the center along Las Tablas Road. Vineyard Drive is a rural arterial road that serves important community transportation needs as it connects the community to Vineyard Elementary, Templeton Elementary School, Templeton Middle school, and Templeton High School. This segment also includes popular stores, including Trader Joe's on Rossi Road, restaurants, shops, and parks which draw traffic onto Vineyard Drive from US 101 and SR 46 West. The corridor west of Bethel Road serves as a regional connector between the less developed areas of Vineyard Drive and SR 46 West. For most of the community's children, the segment serves significant roles in daily walks, bikes, or drives to school. The confluence of local and regional traffic in the vicinity of US 101 is known to create traffic delays and congestion at the interchange. School traffic results in congestion, cut-through traffic, and affects multimodal access.

2.3 Existing Transportation Patterns and Public Health

Based on ACS 5-year estimates, for Means of Transportation to Work in Templeton in 2021, 79% of workers drove alone and 13% carpooled. The remainder either take public transportation, ride hailing services, or walk or bike. The below chart shows the average travel time to work for Templeton in 2021 by mode. Based on the data, 60% of commuters who drove alone spend less than 20 minutes commuting with most single-occupancy commuters driving less than 10 minutes to work. Most people who carpooled either spend 10-14 minutes (25%) or 25 to 29 minutes (26%) commuting to work. All commuters using public transportation had an average travel time to work of 34 to 44 minutes.



Source: Means of Transportation to Work by Selected Characteristics, Templeton CSD, CA. Table S0802. American Community Survey 5-year Estimates Subject Tables. US Census Bureau. 2021.

Based on California Healthy Places Index, the Templeton Community is healthier than 70.5% of other California areas (70th percentile), but below the countywide average of 78.6%.

Caltrans has conducted a Climate Change Vulnerability Assessment, finalized in 2020 that evaluates the climate change effects on the State Highway System. Based on this analysis, the areas around Vineyard Drive are projected to have an average maximum temperature change (7-day) of 4.91 – 5.06 degrees Fahrenheit by 2055, and a 7.8% - 8.5% change in 100-year precipitation depth by 2055.

2.4 Performance Metrics Methodology

2.4.1 Vehicles Miles Traveled (VMT)

SB 743 was signed into law in 2013, with the intent to better align CEQA practices with statewide sustainability goals related to infill development, active transportation, and greenhouse gas (GHG) emissions. SB 743 required the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. Among the changes to the State CEQA Guidelines was removal of vehicle delay and Level of Service (LOS) from consideration as environmental impacts under CEQA. For land use projects, OPR identified Vehicle Miles Traveled (VMT) as the new metric for transportation impact analysis under CEQA. Lead agencies have discretion, consistent with CEQA and planning requirements, to choose which methodology and threshold criteria to use to evaluate transportation impacts. The County of San Luis Obispo has established VMT Policy in their Traffic Impact Study Guidelines.

2.4.2 Level of Service Methodologies

Although VMT is the metric for identifying CEQA impacts, the County has retained quantifying traffic operations through the determination of "Level of Service" (LOS) within their General Plan (local policy) outside of CEQA. LOS is a qualitative measure of traffic operating conditions, whereby a letter grade "A" through "F" is assigned to an intersection, or roadway segment, representing progressively worsening traffic conditions. LOS "A" represents free-flow operating conditions and LOS "F" represents over-capacity conditions. Levels of Service will be calculated for all intersection control types using the methods documented in the Transportation Research Board publication Highway Capacity Manual, Sixth Edition, A Guide for Multimodal Mobility Analysis, 2016 (HCM 6).

2.4.3 Intersection Operations

The Synchro 11 (Trafficware) software program will be used to implement the HCM 6 analysis methodologies. Synchro 11 has the capability to produce results based on HCM 2000, HCM 2010, HCM 6, or Synchro methodologies, and takes into account intersection signal timings, peak hour factors, heavy vehicle factors, and queuing constraints when calculating delay. Intersection Level of Service (LOS) was calculated for all control types using the methods documented in HCM 6. For signalized or all-way stop-controlled (AWSC) intersections, a LOS determination is based on the calculated averaged delay for all approaches and movements. For two-way or side-street stop-controlled (TWSC) intersections, a LOS determination is based upon the worst control delay of each minor-street movement (or shared movement) or major-street left turn. The vehicular-based LOS criteria for different types of intersection controls are presented in Table 2.1.

Table 2.1 Level of Service (LOS) Criteria for Intersections

Level of Service	Type of Flow	Delay	Maneuverability	Stopped Delay per Vehicle	
				Signalized	Un-signalized
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤10.0	≤10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10.0 and ≤20.0	>10.0 and ≤15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20.0 and ≤35.0	>15.0 and ≤25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35.0 and ≤55.0	>25.0 and ≤35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55.0 and ≤80.0	>35.0 and ≤50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	>80.0	>50.0

2.4.4 Technical Analysis Parameters

This traffic study focuses on a “planning level” evaluation of traffic operating conditions. The planning level evaluation incorporates appropriate heavy vehicle adjustment factors, peak hour factors, and signal lost time factors and reports the resulting operational analysis as estimated using the HCM 6-based analysis methodologies. Additionally, a queuing analysis on intersection lane groups is included in this study to identify stacking length requirements.

Table 2.2 presents the technical parameters that will be utilized for the evaluation of the study intersections and ramp segments for the analysis scenarios. All parameters not listed should be assumed as default values or calculated based on the parameters listed.

Table 2.2 Technical Parameter Assumptions

	Technical Parameter	Assumption
1	Intersection Peak Hour Factor	Based on counts, intersection overall
2	Intersection Heavy Vehicle Percent	Based on counts, intersection overall (minimum of 2%)
3	Intersection Peak Hour Factor	Existing scenarios: based on counts

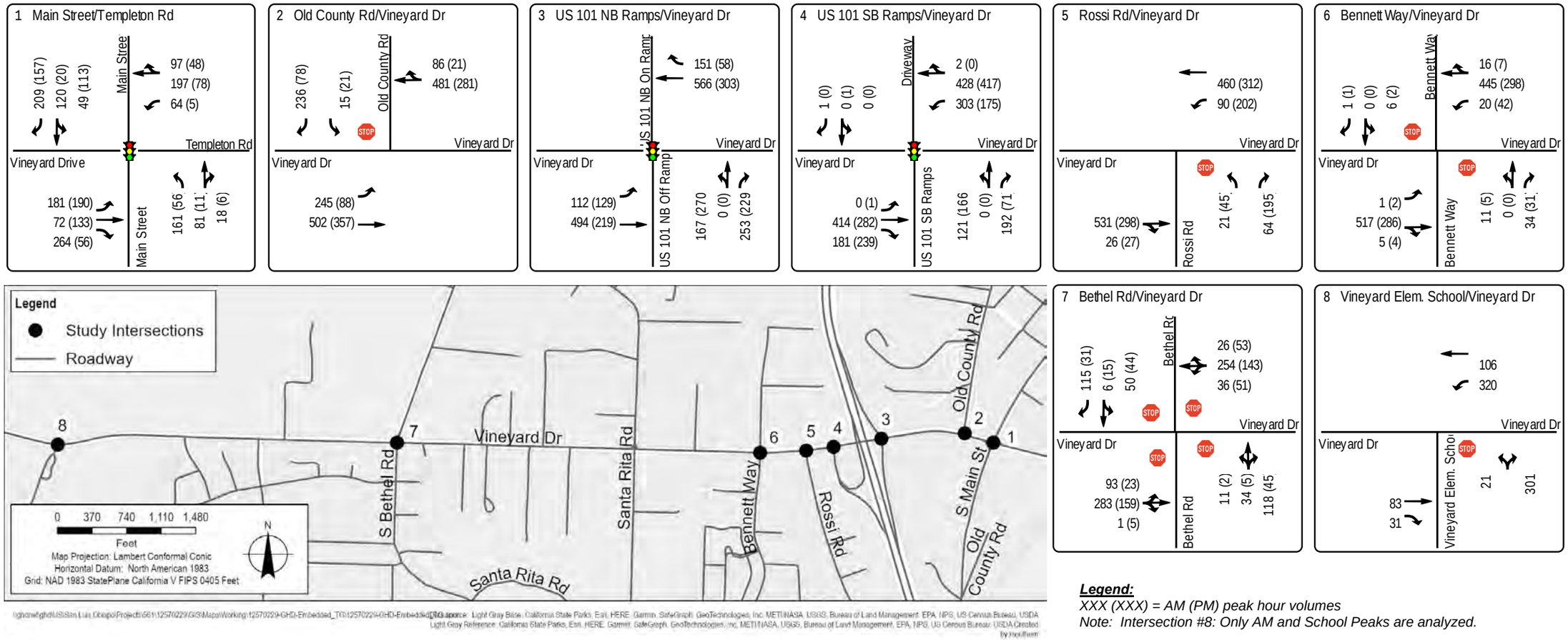
2.5 Existing Operations

The Vineyard Corridor study area extends from SR 46 West and ends at S Main Street. Vineyard's corridor is two lanes major collector roads with limited left turn lane. Lane width is generally 12-feet wide lane, with one lane of travel in both directions. On-street parking is prohibited along Vineyard, except in some locations—primarily between Bennett Way and Rossi Road. Class II bike facility is available along the Vineyard corridor in both directions.

2.5.1 Existing Traffic Volumes

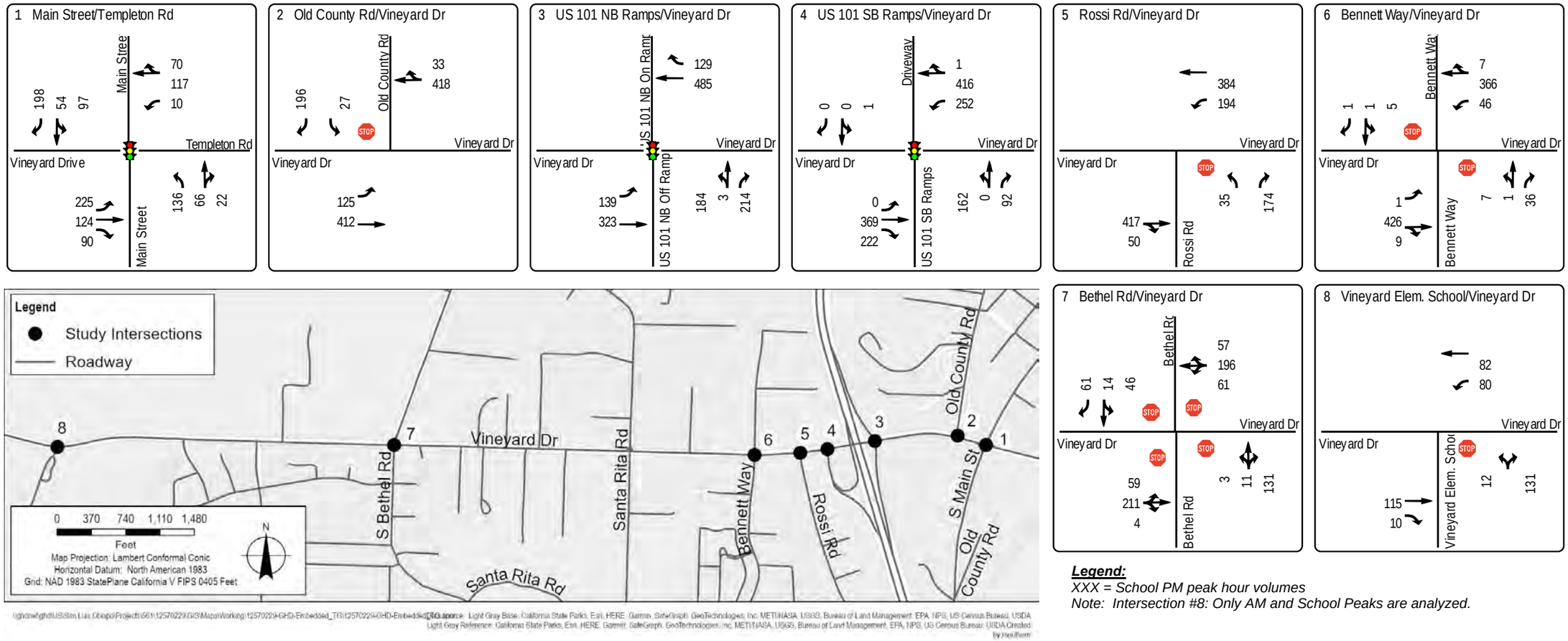
For this corridor plan, eight intersections have been identified to be evaluated for average weekday AM, School, and PM peak hour traffic operations. The AM peak hour is defined as the one-hour of peak traffic flow (which is the highest total volume count over four consecutive 15-minute count periods) counted between 7:00 am and 9:00 am on a typical weekday. The school peak hour is defined as the one hour of peak traffic flow counted between 2:00 pm and 4:00 pm on a typical weekday. The PM peak hour is defined as the one hour of peak traffic flow counted between 4:00 pm and 6:00 pm on a typical weekday. Peak hour turning movement counts were collected at these intersections on Tuesdays and Thursdays when local schools were in session between the week of August 30th and September 15th, 2022. The study intersections, existing peak hour turning movement volumes, lane geometry, and intersection controls are shown in the following Figures.

VINEYARD DRIVE CORRIDOR PLAN



Legend:
XXX (XXX) = AM (PM) peak hour volumes
Note: Intersection #8: Only AM and School Peaks are analyzed.

Figure 2.1 ***Existing AM and PM Peak Hour Intersection Volumes***



Legend:
XXX = School PM peak hour volumes
Note: Intersection #8: Only AM and School Peaks are analyzed.

Figure 2.2 ***Existing School Peak Hour Intersection Volumes***

2.5.2 Existing Level of Service (LOS)

Count data were collected for peak hour periods in the AM (7:00 to 9:00 AM), School (2:00-4:00 PM), and PM (4:00 to 6:00 PM) for eight key intersections on the Vineyard Corridor. Existing conditions for weekday AM, School, and PM peak hour intersection operations were quantified utilizing the existing traffic volumes and intersection lane geometrics and control. Table 2.3 provides the delay (in sec/veh) and resulting LOS for the study intersections under Existing conditions. The Synchro outputs are provided in **Appendix C**. The signal warrant analysis is provided in **Appendix D**. As shown in Table 2.3, the majority of study intersections operate below the target LOS during the Existing conditions AM and School peak hours while operating at or above the target LOS during the existing PM condition. The US 101 Southbound Ramps is currently operating at LOS E in the AM peak hour due to high vehicle volume on Vineyard Drive eastbound.

Table 2.3 Existing Conditions Intersection Operations

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour			School PM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]
1	Vineyard Dr & S. Main St	Signal	D	26.8	C	-	23.6	C	-	21.2	C	-
2	**Vineyard Dr & Old County Road**	**TWSC**	**D**	**100.1**	**F**	Yes	32.4	D	-	18.8	C	-
3	Vineyard Dr & US 101 Northbound Ramps	Signal	C	31.4	C	-	25.2	C	-	29.4	C	-
4	**Vineyard Dr & US 101 Southbound Ramps**	**Signal**	**C**	**75.5**	**E**	-	**52.2**	**D**	-	25.6	C	-
5	**Vineyard Dr & Rossi Road**	**TWSC**	**D**	**40.4**	**E**	No	**52.2**	**F**	**Yes**	33.9	D	-
6	**Vineyard Dr & Bennett Way**	**TWSC**	**D**	**38.6**	**E**	No	29.1	D	-	18.5	C	-
7	**Vineyard Dr & Bethel Road**	**AWSC**	**D**	**50.8**	**F**	**Yes**	16.8	C	-	9.8	A	-
8	**Vineyard Dr & Vineyard Elem. School**	**TWSC**	**D**	**44.4**	**E**	**Yes**	12.4	B	-	N/A	-	-

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC, Signal, RNDBT
3. Warrant = Based on California MUTCD Warrant 3
4. **Bold** = Unacceptable Conditions
5. OVR = Delay over 300 seconds

2.5.3 Existing Peak Queues

The queues during the peak hours were observed in the field, and the maximum queues were documented. The queues were also simulated via a microsimulation software (SimTraffic) to approximate the maximum and 95th percentile queues at the study intersections. The table showing the observed queues, simulated maximum, and simulated 95th percentile queues are in **Table A.2** in the **Appendix**.

During the AM Peak hour, the highest vehicle queues were observed along Vineyard Drive at S Main Street and at Bethel Road. During the School peak hour, the highest observed vehicle queue was along S Main Street going northbound and southbound, along Old County Road going southbound, and on Vineyard Drive going westbound at the US 101 NB off-ramp intersections. For the PM peak hour, the highest observed vehicle queues were along Vineyard Drive going eastbound at S Main Street and at NB US 101 northbound off ramps. PM peak hour queuing at Vineyard Drive and Bethel Road is roughly similar during the School peak hour.

Figure 2.3 Queue Lengths – AM Peak Hour (East)

VINEYARD DRIVE CORRIDOR PLAN

Figure 2.4 *Queue Lengths – AM Peak Hour (Central)*

Figure 2.5 Queue Lengths – School Peak Hour (East)

VINEYARD DRIVE CORRIDOR PLAN

Figure 2.6 Queue Lengths – School Peak Hour (Central)

Figure 2.7 *Queue Lengths – PM Peak Hour (East)*

2.6 Forecasted Operations

2.6.1 Forecasted Traffic Volumes

Forecasted traffic volumes were derived based on the growth presented in both the Templeton local travel demand model (dated 2017) and the SLOCOG regional travel demand model (dated 2019) along the Vineyard Drive corridor. A linear growth rate of 1.0% per year was determined appropriate for developing the forecasts over the next approximate 20 years, out to 2042. Additionally, forecasts in the vicinity of the US 101 interchange were further developed for anticipated growth based on the General Plan land uses (Commercial Retail as shown in Figure 2.8) in the adjacent vacant parcels which will likely be highway-serving uses and local shopping and restaurants. These developments are not anticipated to be big-box retailers that would generate regional trips at this time. The study intersections forecasted peak hour turning movement volumes, lane geometry, and intersection controls are shown in the following Figures.

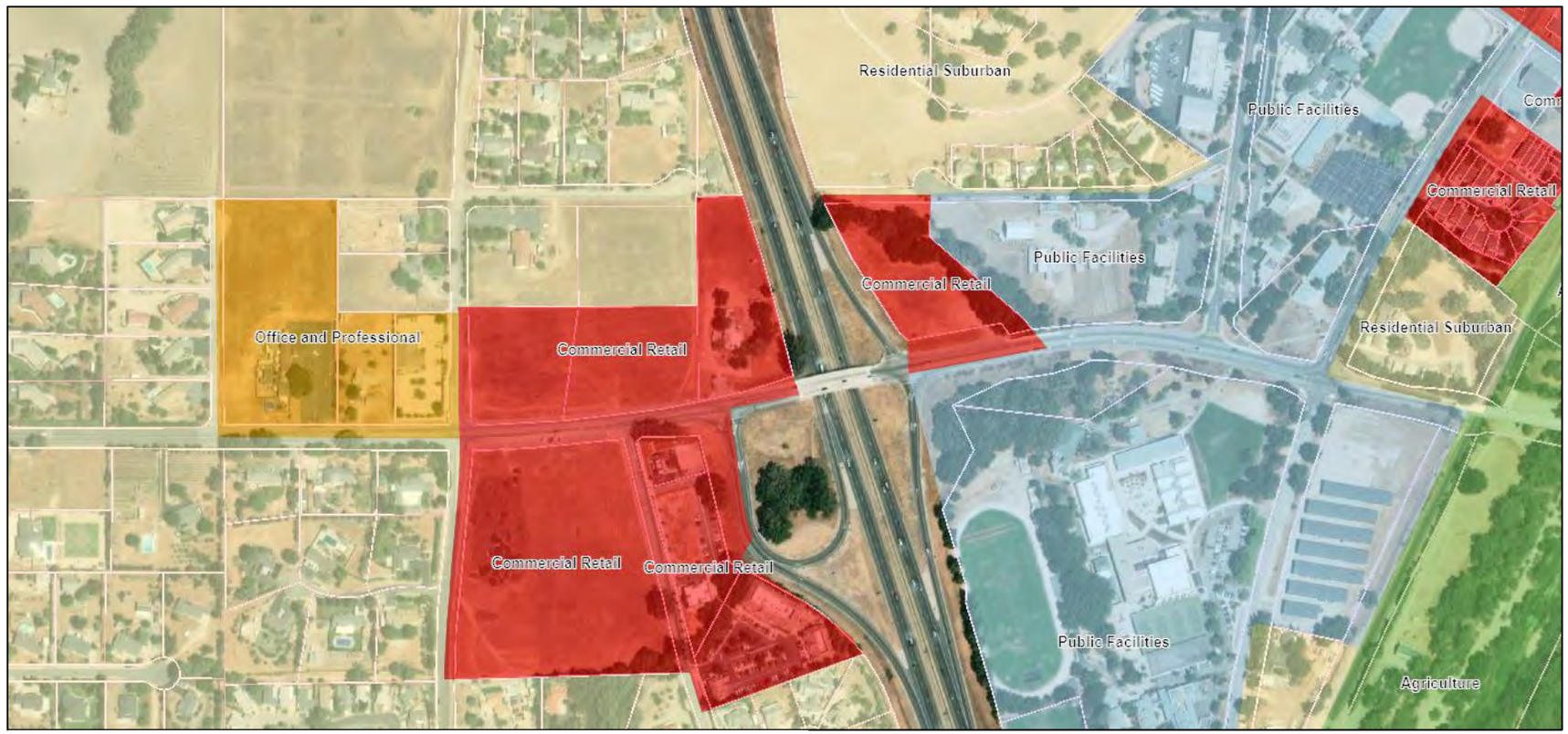
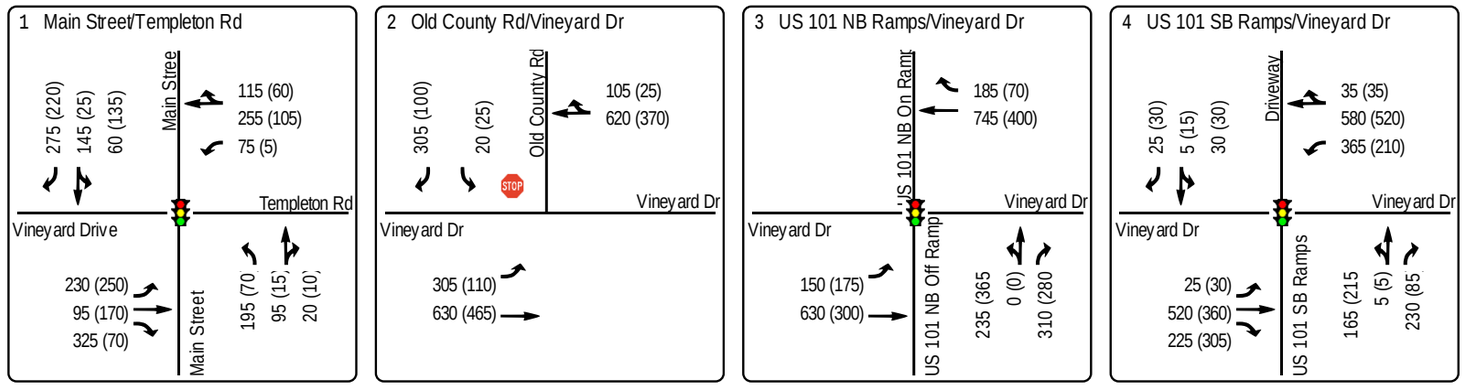


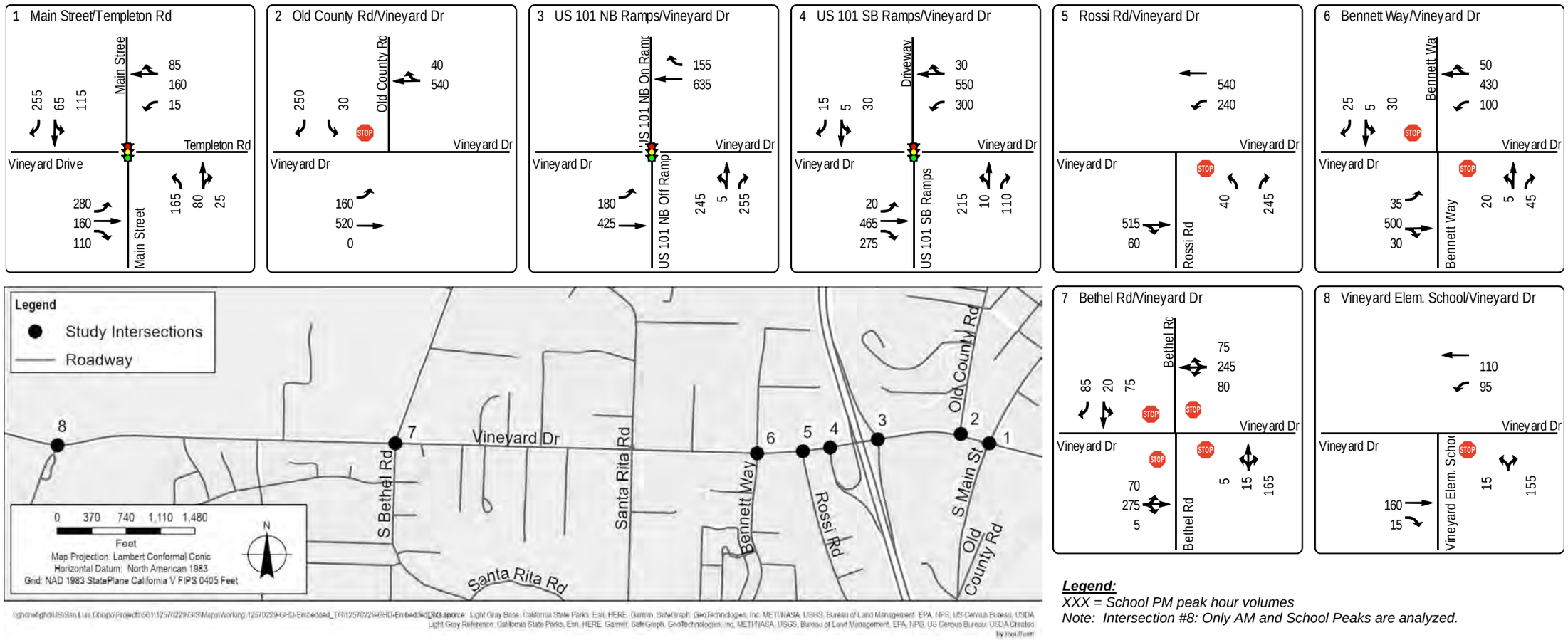
Figure 2.8 General Plan Land Uses (Vineyard Drive at US 101)



Legend:
XXX (XXX) = AM (PM) peak hour volumes
Note: Intersection #8: Only AM and School Peaks are analyzed.

Figure 2.9 ***Forecasted AM and PM Peak Hour Intersection Volumes***

VINEYARD DRIVE CORRIDOR PLAN



Legend:
XXX = School PM peak hour volumes
Note: Intersection #8: Only AM and School Peaks are analyzed.

Figure 2.10 Forecasted School Peak Hour Intersection Volumes

2.6.2 Forecasted Level of Service

Cumulative conditions for weekday AM, School, and PM peak hour intersection operations were quantified utilizing the forecasted traffic volumes and existing intersection lane geometrics and controls. The two traffic signals at the US 101 ramps were assumed to have optimized timings in the future. Table 2.4 provides the delay (in sec/veh) and resulting LOS for the study intersections under forecasted conditions. The Synchro outputs are provided in **Appendix C**. The signal warrant analysis is provided in **Appendix D**. As shown in Table 2.4, all study intersections apart from Main Street and the US 101 ramp termini (all signals) are projected to operate at LOS F during the AM peak hour, a few intersections operate at LOS F during the School and PM peak hours, and other locations generally operate at LOS C/D during the School peak and PM peak hours, under forecasted conditions.

Table 2.4 Forecasted Conditions Intersection Operations

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour			School PM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]
1	Vineyard Dr & S. Main St	Signal	D	34.7	C	-	26.0	C	-	21.2	C	-
2	**Vineyard Dr & Old County Road**	**TWSC**	**D**	**>300**	**F**	**Yes**	**62.7**	**F**	-	26.1	D	-
3	Vineyard Dr & US 101 Northbound Ramps	Signal	C	25.2	C	-	26.6	C	-	27.0	C	-
4	Vineyard Dr & US 101 Southbound Ramps	Signal	C	29.0	C	-	27.2	C	-	24.0	C	-
5	**Vineyard Dr & Rossi Road**	**TWSC**	**D**	**115.5**	**F**	**Yes**	**163.5**	**F**	**Yes**	**96.9**	**F**	**Yes**
6	**Vineyard Dr & Bennett Way**	**TWSC**	**D**	**>300**	**F**	**Yes**	**>300**	**F**	**Yes**	**132.1**	**F**	**Yes**
7	**Vineyard Dr & Bethel Road**	**AWSC**	**D**	**83.9**	**F**	**Yes**	20.5	C	-	11.5	B	-
8	**Vineyard Dr & Vineyard Elem. School**	**TWSC**	**D**	**293.8**	**F**	**Yes**	13.8	B	-	N/A	-	-

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC, Signal, RNDBT
3. Warrant = Based on California MUTCD Warrant 3
4. **Bold** = Unacceptable Conditions
5. OVR = Delay over 300 seconds

2.6.3 Forecasted Peak Queues

Table A.2 in the **Appendix** presents the maximum and 95th percentile simulated queueing results for the eight study intersections. During the AM Peak hours, the highest vehicle queues were estimated to be along Vineyard Drive at S Main Street and at Bethel Road. During the School peak hours, the highest vehicle queues were estimated to be along S Main Street going northbound and southbound, on Old County Road going southbound, and on Vineyard Drive going westbound at the US 101 northbound off-ramp intersections. For the PM peak hour, the highest vehicle queues were estimated to be along Vineyard Drive going eastbound at S. Main Street and at US 101 NB off ramps. PM peak hour queuing at Vineyard Drive and Bethel Road is roughly similar during the School peak hour.

2.7 Existing Multimodal Conditions

2.7.1 Existing Pedestrian & Bicycle Facilities and Access Constraints

Along the corridor, gaps in the multimodal network exist, including a large portion of the segments without sidewalks and intersections without marked crosswalks. In addition, some existing sidewalks do not sufficiently accommodate pedestrian demand and need to be replaced. Other potential challenges for pedestrians include signs that obstruct clear paths (e.g., a pole in the middle of a path), sight-line obstructions/restrictions (e.g., vegetation growing across or overhanging path), and lack of curb ramps. **Figure 2.12** presents the existing pedestrian and bicycle facilities.

2.7.2 Existing Bicycle Level of Traffic Stress (LTS)

Level of Traffic Stress (LTS) are calculated for roadway segments and intersections using the methods documented in the paper, Low Stress Bicycling and Network Connectivity, Mineta Transportation Institute, Report 11-19, May 2012. Bicycle LTS quantifies the stress level of a given roadway segment by considering a variety of criteria, including street width (number of lanes), speed limit or prevailing speed, presence and width of bike lanes, and the presence and width of parking lanes. Bicycle LTS is a suitability rating system of the safety, comfort, and convenience of transportation facilities from the perspective of the user. Moreover, the methodology allows planning practitioners to assess gaps in connectivity that may discourage active users from traversing roadways.

Bicycle LTS scores roadway facilities into one of four classifications or ratings for measuring the effects of traffic-based stress on bicycle riders, with 1 being the lowest stress or most comfortable, and 4 being the highest stress or least comfortable. The four Bicycle LTS scoring categories are defined in **Figure 2.11**. Generally, LTS score of 1 indicates the facility provides a traffic stress tolerable by most children and less experienced riders, such as multi-use paths that are separated from motorized traffic. An LTS score of 4 indicates a stress level tolerable by only the most experienced cyclists who are comfortable with high-volume and high-speed, mixed traffic environments. LTS 3 and 4 represent high stress conditions for bicyclists and reflect the need for visibility and safety improvements.

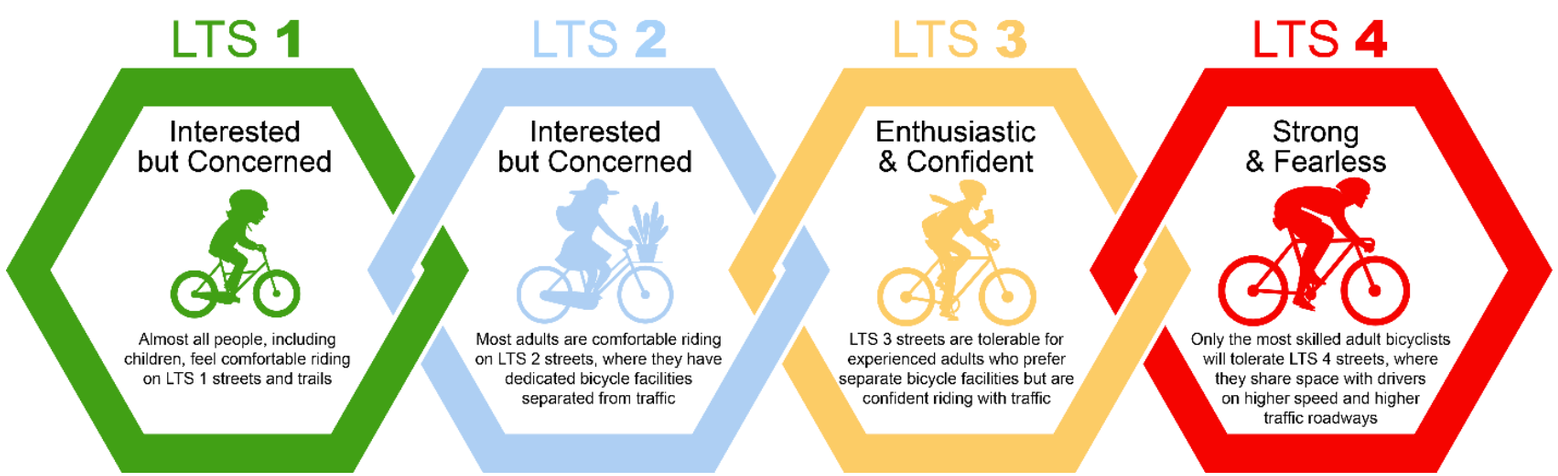
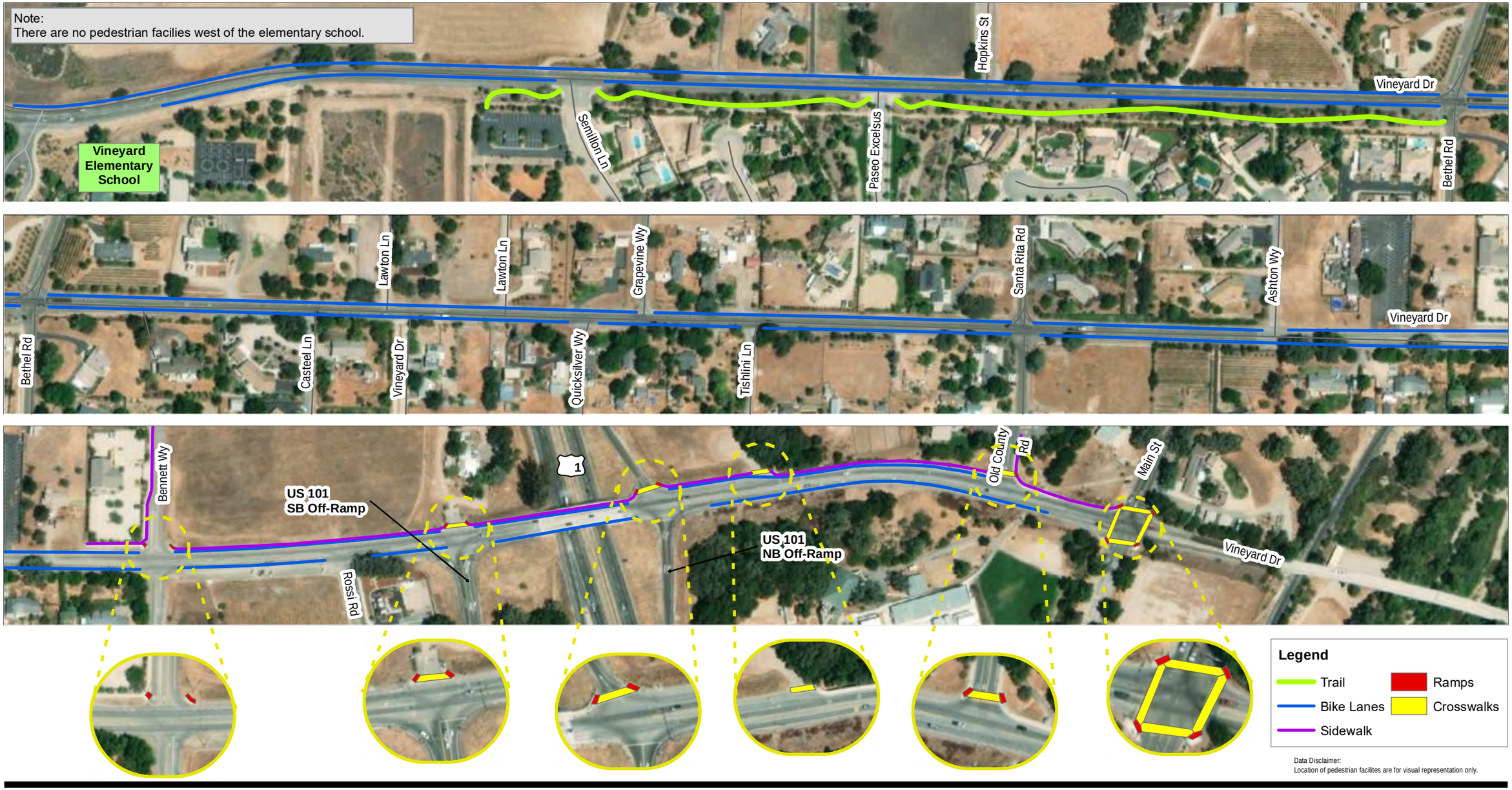


Figure 2.11 Bicycle Level of Traffic Stress (LTS) Definitions

Corridor segments, intersection approaches, and intersection crossings along the corridor were evaluated for LTS. **Figure 2.13** displays the existing conditions bicycle LTS results for the study corridor. Most of the Vineyard Corridor and crossings of and approaches to the Vineyard Corridor are high stress due to the traffic volume and speed of the roadway. The main barriers to low stress connectivity for bicyclists within the Vineyard study corridor are the high traffic volumes, vehicular speeds greater than or equal to 45 miles per hour, and a lack of protected bicycle infrastructure. These high stress facilities serve to discourage access to and bicycling on the Vineyard Corridor. The Bicycle LTS results also relate to pedestrian comfort along the corridor and crossing the corridor, where sidewalks and crossings do not exist.



Data Disclaimer:
Location of pedestrian facilites are for visual representation only.

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California V FIPS 0405 Feet

N

GHD

Templeton
San Luis Obispo County
Vineyard Drive Corridor Plan

Existing Pedestrian and Bicycle Facilities

Project No. 12570229
Revision No. -
Date Feb. 2023

FIGURE 2.12

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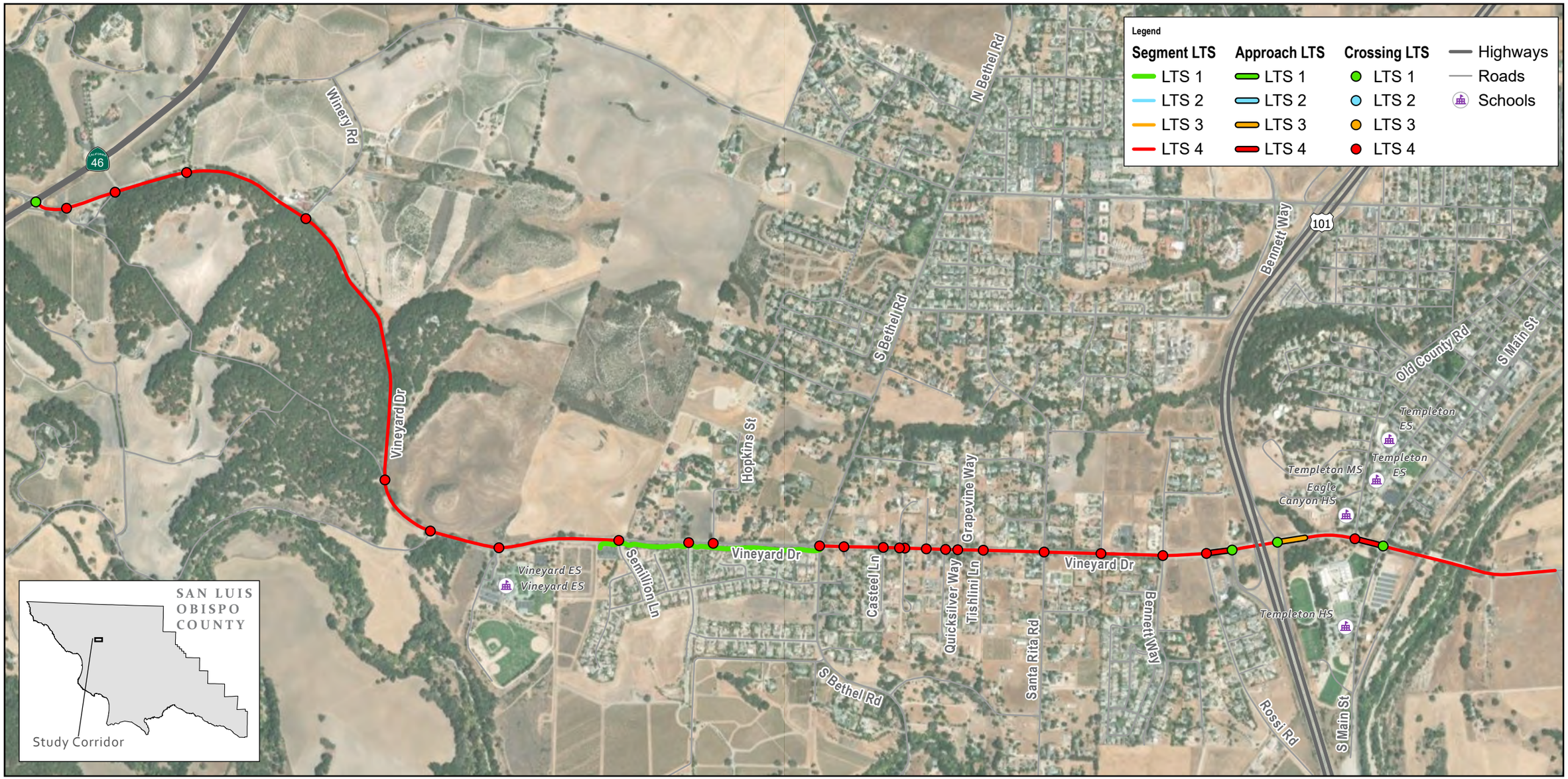
Print date: 10 Feb 2023 - 11:37

Data source: GIS TigerLine Shape Files (2018), CA State Geoportal, SWITRS/TIMS Collision data Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community. Created by: jramirez2



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GHD

Templeton
San Luis Obispo County
Vineyard Drive Corridor Plan

Existing Bicycle Level of Traffic Stress (LTS)

Project No. **12570229**
Revision No. **-**
Date **7/25/2023**

FIGURE 2.13

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Print date: 25 Jul 2023 - 21:56

Data source: Roads: TIGER, 2021; Bikeways; Urban Service Line: SLO County Open Data Portal\World Imagery: Maxar. Created by: rsouthern

2.8 Existing Collision Analysis

Collision data along Vineyard Drive for the past five latest available years (2017-2021) were obtained and processed from California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS) database. During the 5-year analysis period, there were 34 total crashes along Vineyard corridor, including 9 injury crashes. It should be noted that the overall collision chart below does not represent all collisions that may have occurred in the corridor—rather all reported collisions where a collision report is generated. Many collisions may be either unreported by the involved parties or reported by the parties without an officer investigation. Injury collisions are the most accurate representation of overall collision trends because these types of collisions are most consistently reported and investigated. Figure 2.14 presents the collisions by year and severity. Figure 2.15 presents the primary collision factor by collision type.

Collision rates were calculated at intersections which had 3 or more collisions in terms of "accidents per million vehicles entering". The calculated collision rates were then compared with statewide average rates compiled by Caltrans as published in their most recent *2020 Collision Data on California State Highways* document. The document provides basic average accident rates for various types of roadways and intersections categorized by number of lanes, travel speed, terrain, control type, area type, and are derived from the SWITRS data statewide. Collision rates at Vineyard Drive intersections were significantly lower than the statewide basic average rate for similar facilities. Fatality and injury (F+I) rates were also calculated as a percentage of total recorded collisions; Rossi Road F+I rate was higher than the statewide average. Collisions were mapped to identify if specific locations have similar collisions, including evaluation of pedestrian- and bicycle-related collisions.

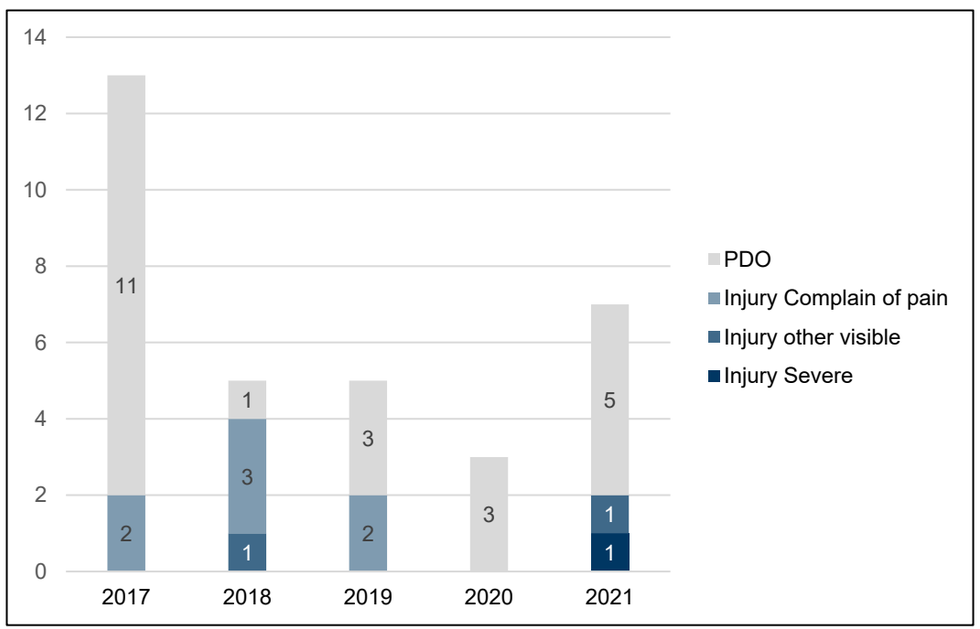


Figure 2.14 Collisions by Year and Severity

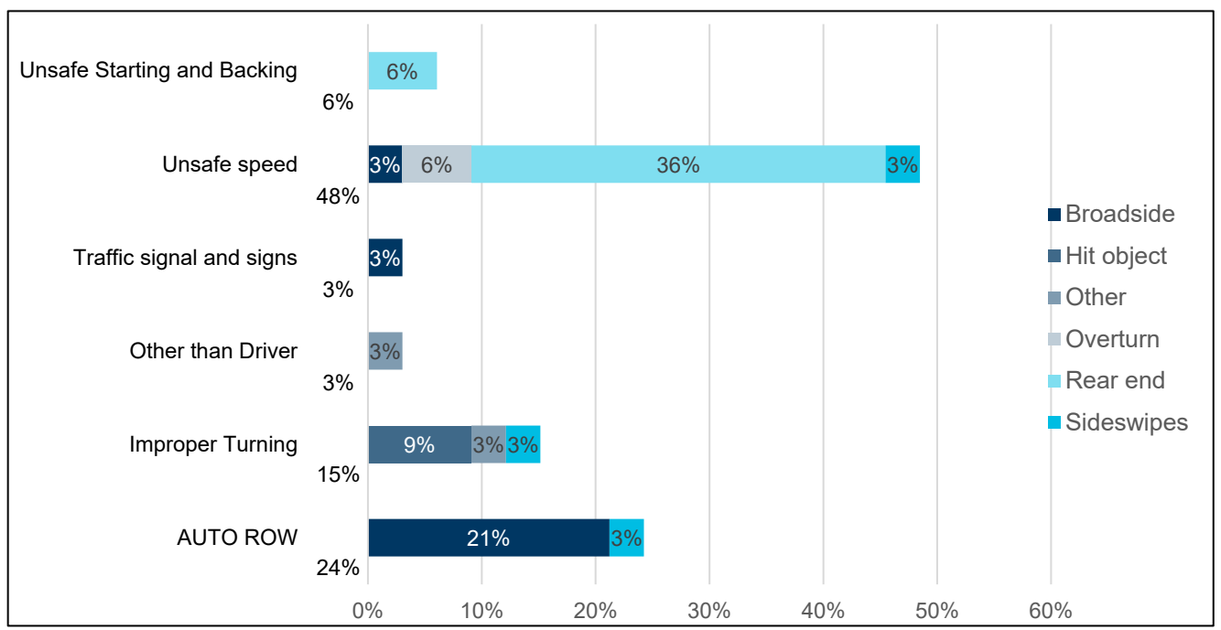


Figure 2.15 Collisions by Primary Collision Factor and by Collision Type

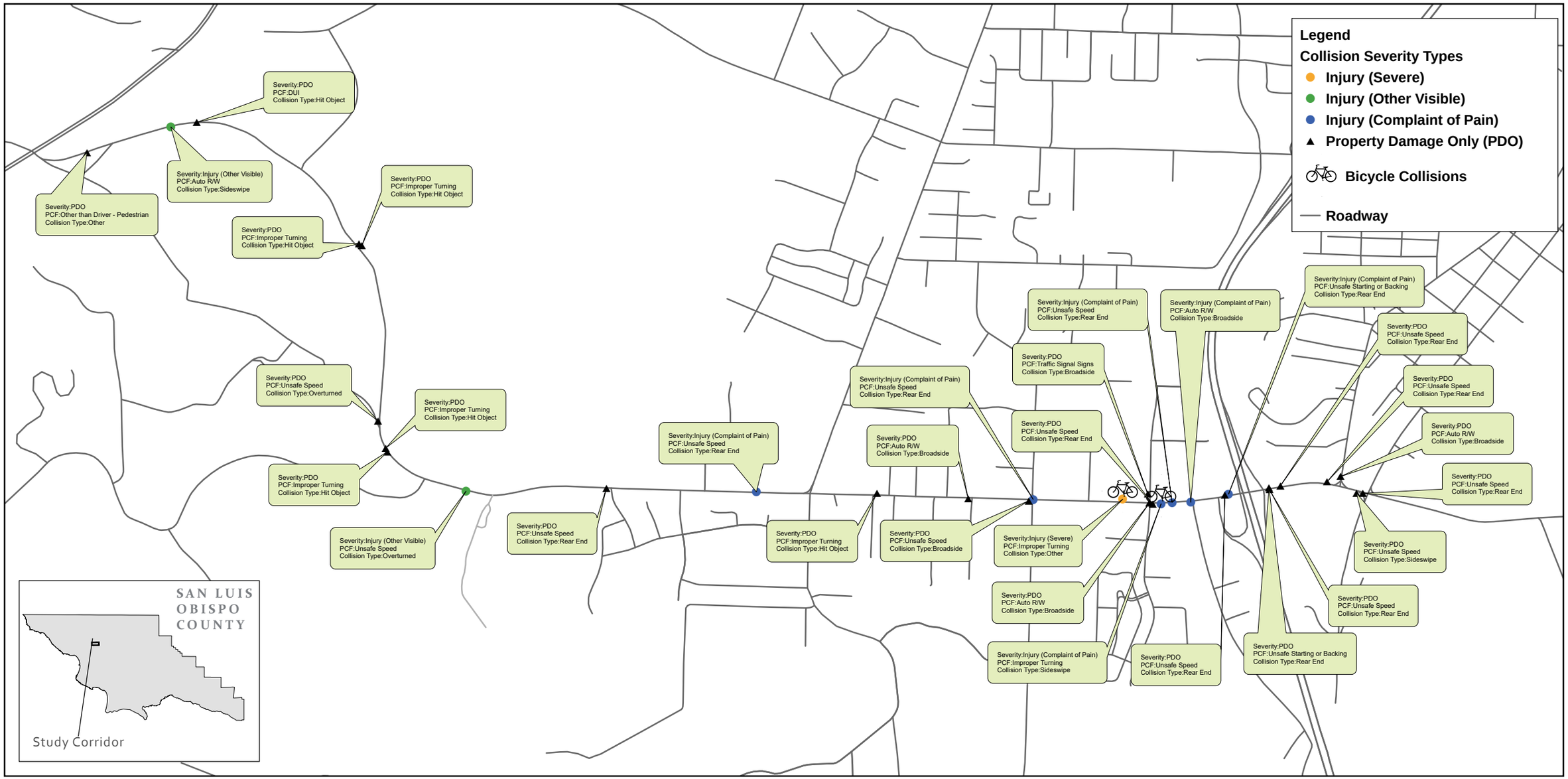
2.8.1 Vineyard Drive Collision Trends

As shown in Figure 2.14, the majority of collisions along Vineyard Drive resulted from unsafe driving speed (48%) or automobile right-of-way (24%). One of the most effective ways to reduce collisions along the corridor is to identify the highest incident locations, analyze the collision patterns at those locations, develop targeted countermeasures to those patterns, then prioritize and implement the measures regularly and systematically. Although, this is typically done over a larger area (i.e., community-wide), this type of “hot-spot” analysis can be evaluated along the Vineyard Drive corridor.

Figure 2.16 presents the collision details including severity, the primary collision factor, and collision type. The highest concentration of collisions in the area is along Vineyard Drive between Bennet Way and Main Street, near the interchange with US 101. Collisions along Vineyard Drive between Bennett Way and Vineyard Elementary School mostly occurred at intersections and the primary collision factor was unsafe speed. Collisions along Vineyard Drive west of the Elementary School (west segment) were along curves and the majority involved improper turning.

As shown in Figure 2.15 and Figure 2.16, rear end, broadside, and hit object were the most common types of collisions reported in 2017-2021, representing 80% of the total recorded incidents. Rear-end and broadside collisions were the most prominent, with unsafe speed and auto right-of-way violations as the leading contributing factors. Broadsides collisions, typically occur at intersections and often at higher speeds. These types of collisions can be largely eliminated with a roundabout intersection configuration.

Bicycle collisions have remained relatively minimal since 2017. There were 2 bicycle collision reported on record between the year 2017-2021. Because of the bicycle vulnerable nature compared to motor vehicles, bicycle collisions typically have a higher number of injuries, serious injuries, and fatalities.



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US Feet

Map Projection: Lambert Conformal Conic
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Grid: NAD 1983 StatePlane California V FIPS 0405 Feet

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GHD

Templeton
San Luis Obispo County
Vineyard Drive Corridor Plan

Collision Severity, Primary Collision Factor (PCF) & Collision Type

Project No. 12570229
Revision No. -
Date 5/2/2023

FIGURE 2.16

\\ghdnet\ghd\US\San Luis Obispo\Projects\561\12570229\GIS\Maps\Deliverables\12570229-CollisionDensity\12570229-CollisionDensity.aprx
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Data source: Roads: TIGER, 2021; Bikeways; Urban Service Line: SLO County Open Data Portal. Created by: rsouthern

Chapter 3. Public Engagement

The County of San Luis Obispo, the San Luis Obispo County of Governments (SLOCOG), and Caltrans collaborated on this plan to identify projects that will be competitive to receive funding and can ultimately be constructed. The public outreach team for the project assisted with presentations to community, civic, business, and non-profit groups to provide information on the plan and to provide opportunities for input. The Plan's outreach effort focused on informing and engaging the public in the corridor concept alternative evaluation process and ultimate selection of the Preferred Concept. Project information, including event schedules, links to relevant documents, as well as a comment page, were made available via a Project Website and shared through County social media channels and via the County's website.

This outreach effort included:

- Public Workshop at Farmer's Market
- Stakeholder Focus Group
- Online Corridor Survey (Social Pinpoint)
- Online interactive mapping tool (Social Pinpoint)
- Online comment page via the project website from November to February

3.1 Public Workshop

A public workshop was held Saturday, November 12, 2022, at the Farmers Market in Templeton. It was promoted via social media and website postings. The purpose of the workshop was to introduce the project to the community and obtain feedback on current issues and concerns regarding multimodal transportation along the Vineyard Drive corridor between Main Street and SR 46 West. There were approximately 60 people that interacted with GHD and County staff to provide their input. Community members were also provided with background information, the link to the project website and project survey to continue to provide comments.

The following is a summary of comments received from the community. These comments assisted and guided the Concept Alternatives and preferred plan.

- Most people use the corridor to either access the schools or SR 46 West
- Most common concern is traffic congestion during the peak hours, affects access on east end of Vineyard especially with school traffic
- Sidewalk at US 101 is on north side, but destinations like Trader Joe's, etc. are on south side; no pedestrian crossings across Vineyard at interchange
- Discontinuous bike lanes on west end of Vineyard
- People driving either too fast or too slow (road conditions prior to recent repaving)
- Commenters opined that Vineyard Drive is okay apart from school traffic

3.2 Technical Advisory Committee (TAC) Meetings

The first TAC meeting was held on November 17, 2022, at the School District to introduce the project and solicit feedback from stakeholders including SLOCOG, Templeton Unified School District, Community Services District, local Fire and Sherriff representatives. The project purpose and background were presented, along with a review of the scope of work, the project website, a discussion on existing conditions and concerns, followed by project goals and improvement suggestions. Several comments were received and are documented in meeting minutes attached in **Appendix B**. The second TAC meeting was held on May 10, 2023, to present the draft concepts and improvement alternatives to the stakeholders. Comments received from the TAC included to extend the westbound left turn to Vineyard Elementary School because vehicles queue up and there's little sight distance before the hill and curve approaching the left turn. There were also comments that a roundabout at Bethel Road would result in increased vehicular flow and queues to the left turn to the school. The Fire Department requested that the roundabout have a minimum 50-foot turn radius to meet the requirements of emergency vehicles (aerial fire apparatus). Additionally, the Fire Department suggested striping double yellow lines to implement the turn restrictions at Old County Road, so that emergency access can be maintained. The TAC was in favor of Alternative 1 (trail with bike lanes) and the proposed roundabout at Bethel Road.

3.3 Templeton Area Advisory Group (TAAG) Meetings

The Vineyard Drive Corridor Plan was presented to the TAAG on December 15, 2022, to introduce the project and get the word out about the website. At the meeting, GHD presented the scope of work and analysis metrics, existing infrastructure and operational information, and the project timeline. The goal of the first meeting was to solicit public input on comments and concerns on existing issues and direct people to the Project Website for the map-based comments and survey. The Final Plan recommendations were presented to TAAG on October 19, 2023.

3.4 Project Website Interactive Map Comments

A Project Website was created via the Social Pinpoint platform to solicit feedback from the community on existing issues along the corridor, improvement ideas, and inform the community on project updates and upcoming meetings. As part of the website, an interactive comment map was available to the community to express their concerns about issues related to pedestrians, bicyclists, traffic (vehicle and trucks), lighting, or other concerns. The interactive map was open for public comment from November 12, 2022, through February 3rd, 2023. **Figure 3.1** shows the number of unique stakeholders, interactive map comments, and survey responses that the website gathered during the public input period, and the stakeholder engagement by day. Unique stakeholders are the number of unique people who are interacting with the website by adding comments and/or answering surveys. The 7-day period with the most engagement (highest number of comments and survey responses submitted) was December 21 to 28th.

There were 136 comments on the interactive map feature of the website, of which 18 were input from the first TAC meeting to start the comments and allow the public to expand on these topics if they agreed or disagreed with comments. This feature allowed the public to drag icons to a location within the project limits and leave a comment regarding automobile, bicycle, lighting, pedestrian, or other improvements desired at specific locations or the corridor in general. The top comment type was automobile improvements with 66 responses as seen in **Figure 3.2** below. The interactive map comments as they appear on Social Pinpoint are represented in **Figure 3.3**.

VINEYARD DRIVE CORRIDOR PLAN

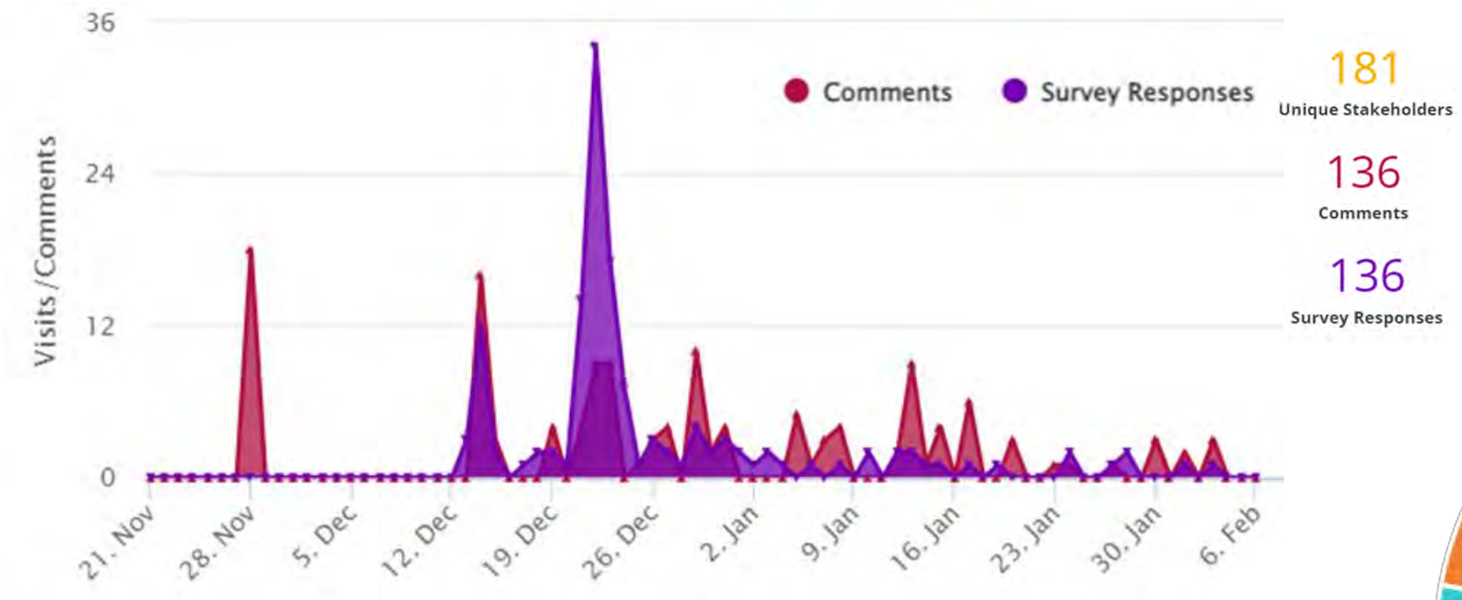


Figure 3.1 *Stakeholder Engagement by Day*

There were 136 comments on the interactive map feature of the website, of which 18 were input from the first TAC meeting to start the comments and allow the public to expand on these topics if they agreed or disagreed with comments. This feature allowed the public to drag icons to a location within the project limits and leave a comment regarding automobile, bicycle, lighting, pedestrian, or other improvements desired at specific locations or the corridor in general. The top comment type was automobile improvements with 66 responses as seen in **Figure 3.2**. The interactive map comments as they appeared on Social Pinpoint are shown in **Figure 3.3**.

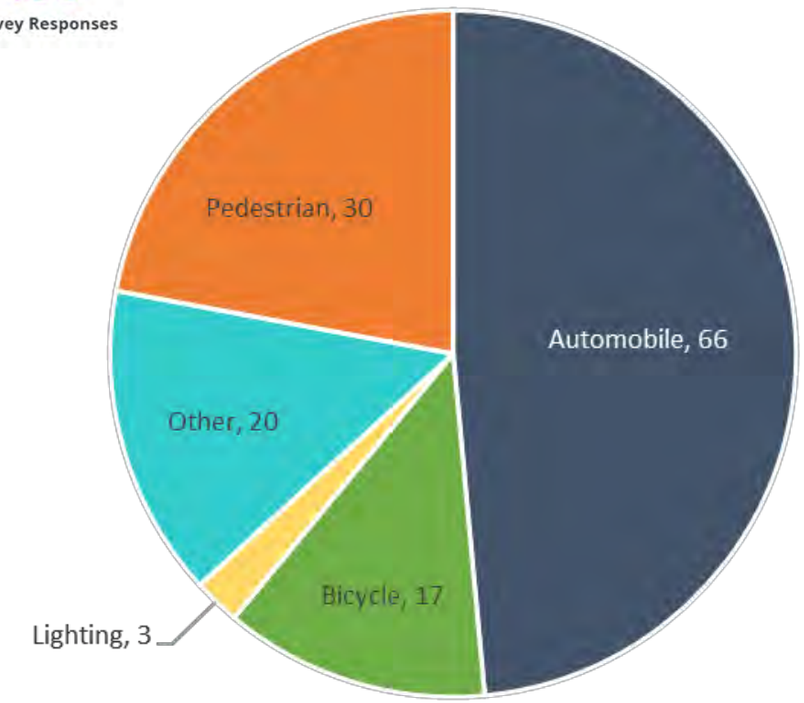


Figure 3.2 *Number of Interactive Map Comments by Type*

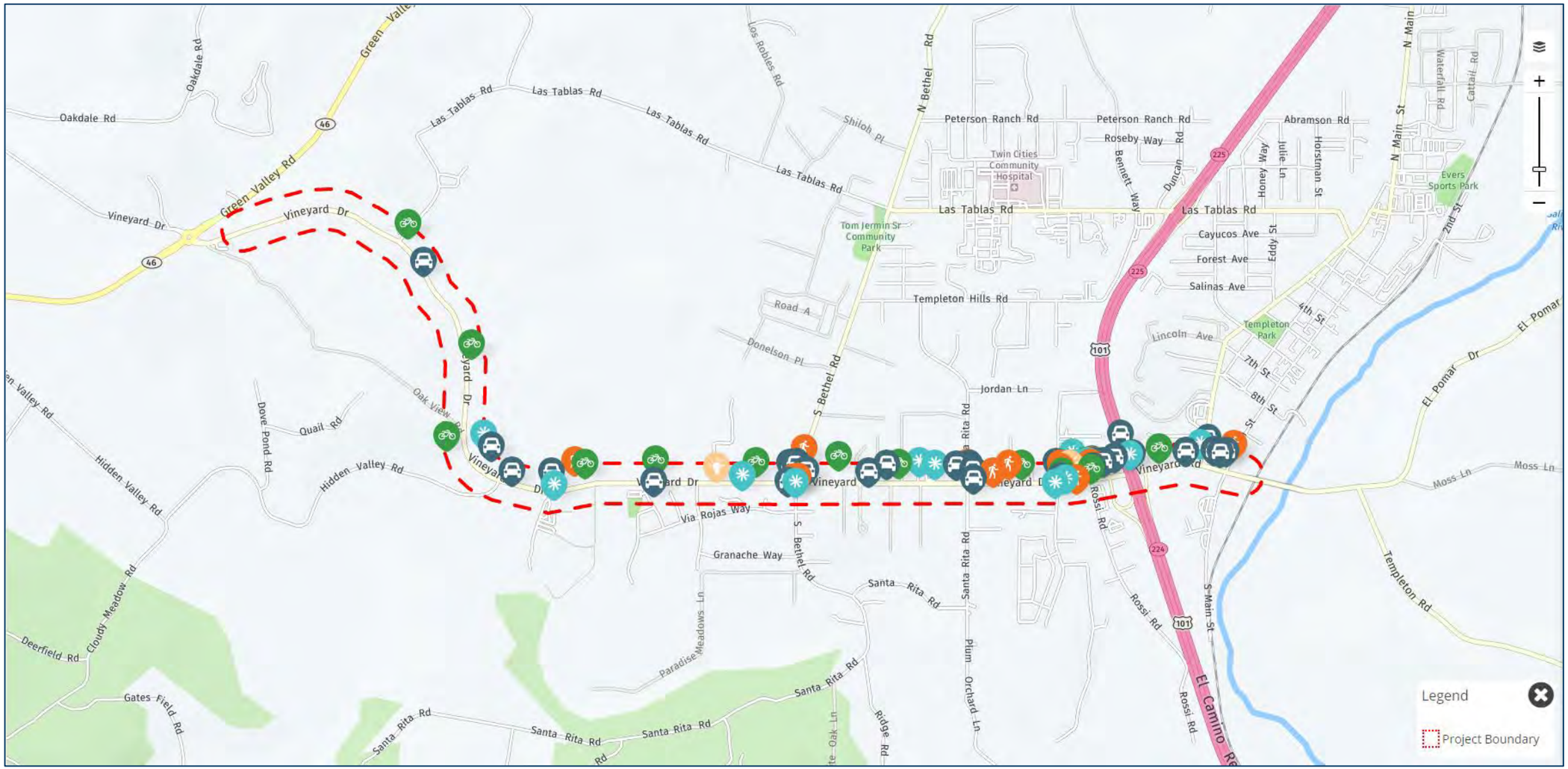


Figure 3.3 *Location of Interactive Map Comments*

3.5 Summary of Interactive Map Comments by Location

The following summarizes the comments received by the public based on the location provided in the interactive map. The intersection with the most comments was Rossi Road (32), followed by Bethel Road (20), Santa Rita Road (14), Bennett Road (12), and the central section between US 101 and Bethel Road (12).

The comments with the most agreed-upon comments included:

- TAC comment stating, “No continuous walkway/jogging path between Vineyard Elementary School and Main Street” (26 agree, 0 disagree)
- At Bethel Road intersection, “to ensure traffic slowdown and continue traffic movement, this is an ideal location for a traffic circle” or roundabout (25 agree, 7 disagree)
- TAC comment stating, “Left turns in and out of Rossi during morning and evening peak are high risk” (19 agree, 0 disagree)
- TAC comment stating, “Needs to be better bike and pedestrian facilities” corridor-wide (19 agree, 2 disagree)
- Comment discussing bicycle facilities west of the elementary school are both difficult and dangerous and proposes a full bike lane on Vineyard from US 101 to the roundabout at SR 46 West (18 agree, 1 disagree)

Comments which the community disagreed with most included:

- A suggestion to add speed bumps to slow vehicles approaching and leaving Bethel Road intersection (6 agree, 8 disagree)
    - Note: The County follows California Fire Code Section 503.4 which states that fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles, and that traffic calming devices shall be prohibited unless approved by the fire code official (Section 503.4.1).
- A Suggestion to add streetlights near Hopkins Road and to add a center turn lane between US 101 and Bethel Road (2 agree, 8 disagree)

Main Street and Old County Road Intersections

The comments for these two intersections centered around school access and related congestion and queueing for both the high school and the middle school. Comments mention bringing back school buses to reduce traffic and employees directing traffic. Comments suggest lengthening the right turn lane on Vineyard and add sidewalks along Main Street to connect and provide a safe path to schools (4 comments). Comments from the TAC also included that the traffic signal helps but people drive too fast (6 agree).

Rossi Road and US 101 Southbound Ramps Intersections

Several comments centered around Rossi Road access, sight-distance issues due to the on-street parking area west of the intersection, vehicle conflicts with drivers heading to 101 on-ramp, and vehicles encroaching past the stop bar to see oncoming traffic to make the left turn. Comments stated there have been collisions here, and most recently, a bicyclist was hit. Comments also state that no crosswalks exist to cross the 101 bridge to get between the shopping area where Trader Joe’s is and areas east of 101 (i.e., to/from schools). Comments express safety concerns regarding the left turn and suggest adding a traffic signal. Comments also suggest adding a crosswalk with flashing lights and adding sidewalk on the south side of Vineyard to connect to residential areas. Comments also suggest adding another route out of the shopping area. Comments suggest restricting parking enough so that oncoming traffic is visible for left-turning traffic from Rossi Road or remove the parking entirely. Comments state that the bike lane approaching Rossi near the parking area needs to be restriped. Comments also suggest extending the shared-use path/trail that currently exists east to US 101, however, other commenters have concerns about right-of-way and property impacts with a trail extension. (35 comments)

Bennet Road Intersection

Comments centered around the lack of pedestrian access at Bennett and the increased traffic congestion related to the future land developments in the vacant lots nearby. Comments state that a traffic signal should be required as part of this improvement project, which would also allow safer pedestrian and bicycle access across Vineyard. Comments state that an enhanced crosswalk with a flashing beacon would be good here as many students need to cross Vineyard, including people from the Meadowbrook Mobile Home Park and surrounding residents. Crossing Vineyard either by car, bike, or on foot is difficult as vehicle volumes and speeds are prohibitive. There are concerns for student safety. Additionally, comments request a sidewalk on the south side of Vineyard Drive for access to shopping areas on Rossi Road. There were also comments related to the lack of adequate lighting along the corridor in general, but particularly Bennett Road to Main Street, and that lighting should be compliant with modern practices and appropriate shielding for adjacent residential properties.

Santa Rita

Comments state that turning left from either approach of Santa Rita is difficult due to oncoming traffic speeding, additionally northbound can be hard to see oncoming vehicles due to bushes/trees and utilities. Several comments suggest slowing traffic down here due to safety concerns and multiple near-miss collisions. Additionally, there was a comment stating that while waiting to turn left from Vineyard, vehicles would pass via the shoulder, and there was a request to widen the intersection for deceleration or right turn lanes/tapers. There was one request to install a 4-way stop control to slow traffic and provide safer turning. Additional comments request lowering the speed limit in this area to 35 mph and to install pedestrian crossings.

Bethel Road

Comments state that traffic congestion is largely only occurring during the school peak hours, and several comments observing vehicles running the stop signs due to not seeing them or driving too fast. One commenter suggested adding speed bumps on the approaches to slow traffic entering and leaving the intersection, and another comment suggested adding a median island. Several comments note the lack of pedestrian crossings and sidewalks adjacent to the trail in a high-trafficked area (peds/bikes). Several suggestions and community approval for a roundabout here, and that a roundabout would be much better than a traffic signal. Comments also state that parents are cutting through the adjacent neighborhood (Via Rojas) to pick up or drop off kids at the elementary school. One commenter suggested signals at both Bethel Road and the elementary school to be timed together (coordinated). Comments also voiced concerns with the roundabout resulting in more speeding and pedestrian crossings with the continuous vehicular movement.

Vineyard Elementary School Driveway

Comments state that the westbound left turn queues back because turning left is difficult and that easing congestion at Bethel could worsen the traffic here due to Bethel metering traffic currently. One comment suggested to have a traffic light timed for only the school peak times. Comments suggested providing school bus services again. One comment suggested adding a pedestrian/bike path on both sides to the school.

Vineyard segment west of Elementary School

Comments requesting bike lanes because the shoulder narrows down to 0 feet and there are safety concerns. This is also a known area for deer crossings. Comments also suggest widening to include a shoulder. Bicyclists end up needing to ride in the vehicle lane and compete against other vehicles. Comments suggest lowering the speed limit due to some blind corners for intersecting driveways/roads.

3.6 Project Website Corridor Survey

Additionally, a survey was conducted to gauge the use of the corridor and determine any desired improvements. The survey contained eight questions total – four multiple choice and four free responses. These questions and their corresponding responses are as follows. There was a total of 136 respondents.

1. How do you use the Vineyard Drive corridor?

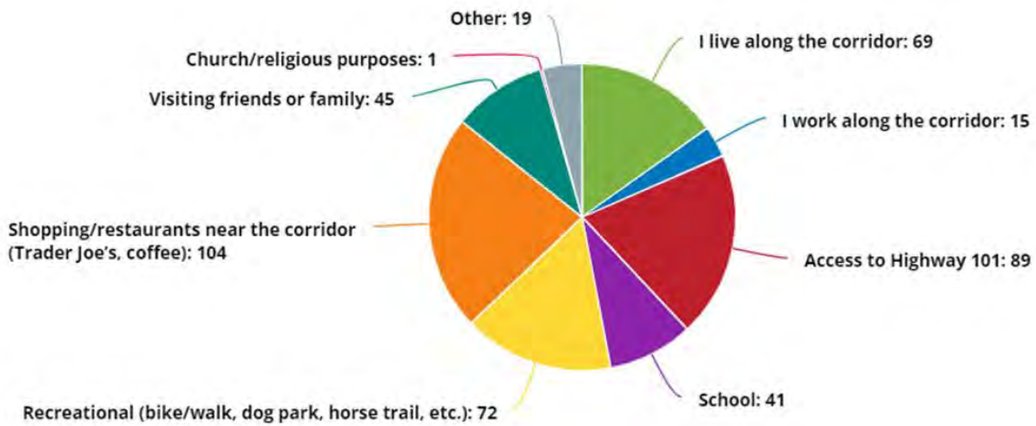


Figure 3.4 Use of Vineyard Drive Corridor by Respondents

2. If you have kids that attend schools along the corridor, which school(s)?

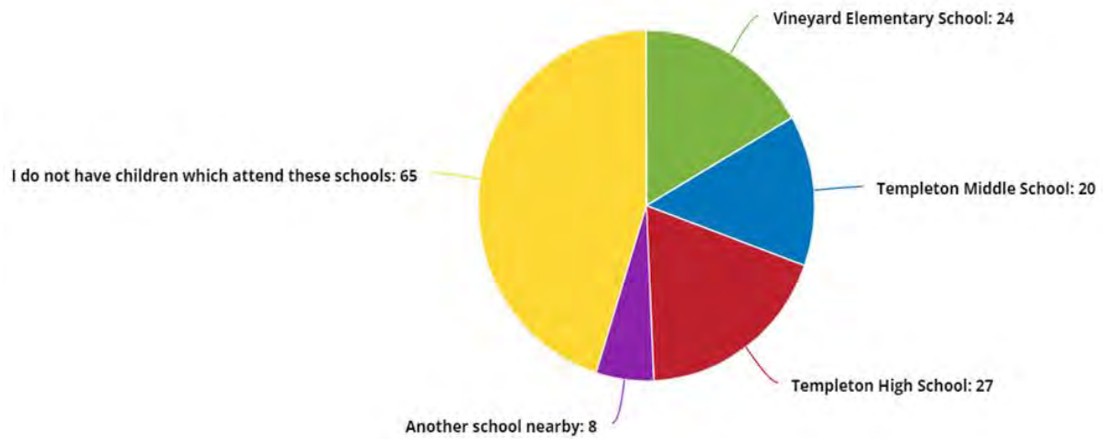


Figure 3.5 Schools Attended by Respondents' Children

3. How often do you use Vineyard Drive as a cyclist?

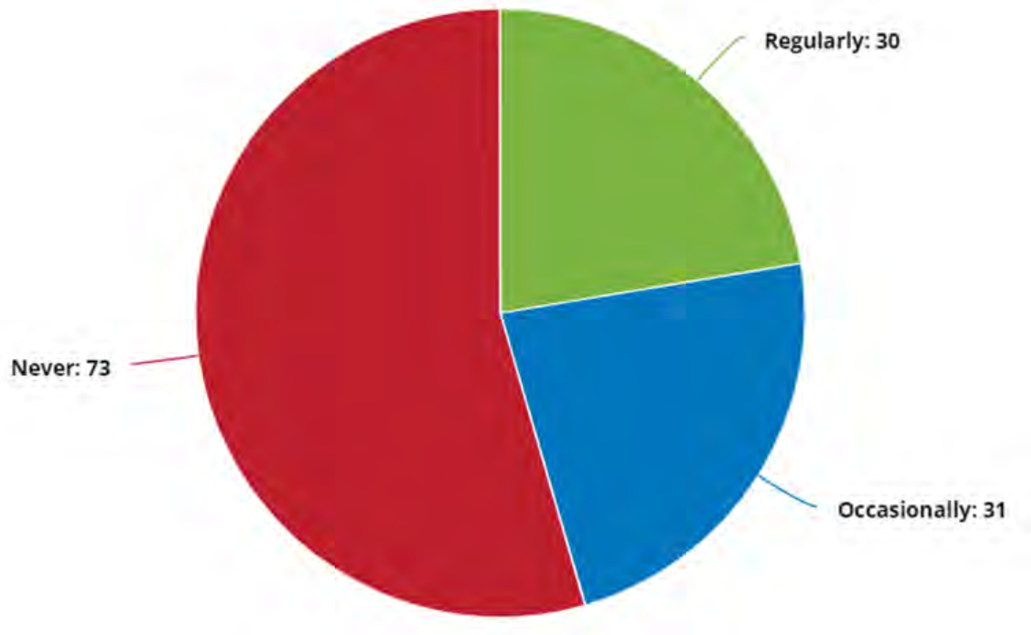


Figure 3.6 Use of Vineyard Drive as a Cyclist

4. How often do you use Vineyard Drive as a pedestrian?

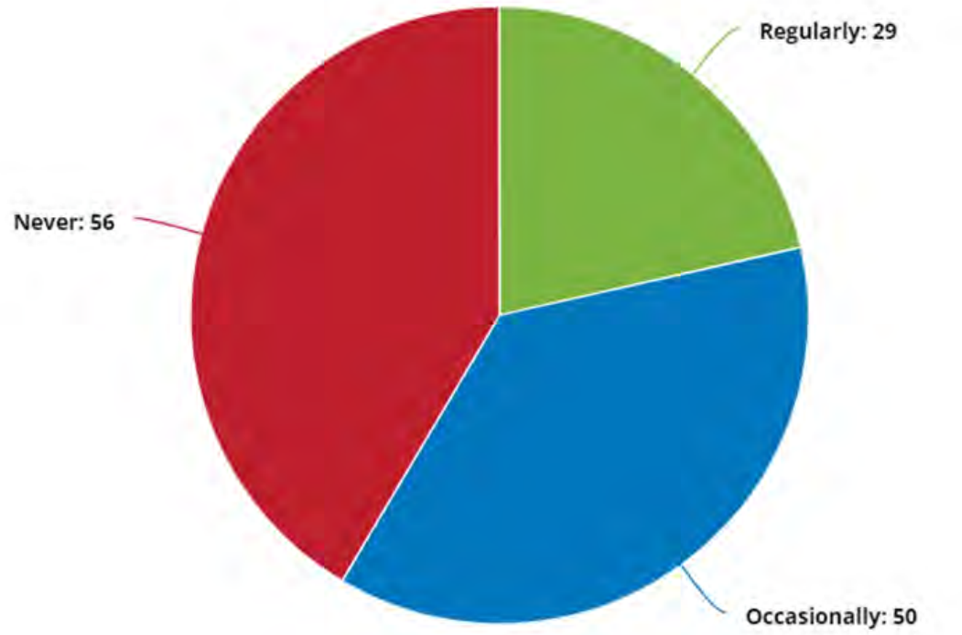


Figure 3.7 Use of Vineyard Drive as a Pedestrian

5. What transportation improvements would you most desire along Vineyard Drive?

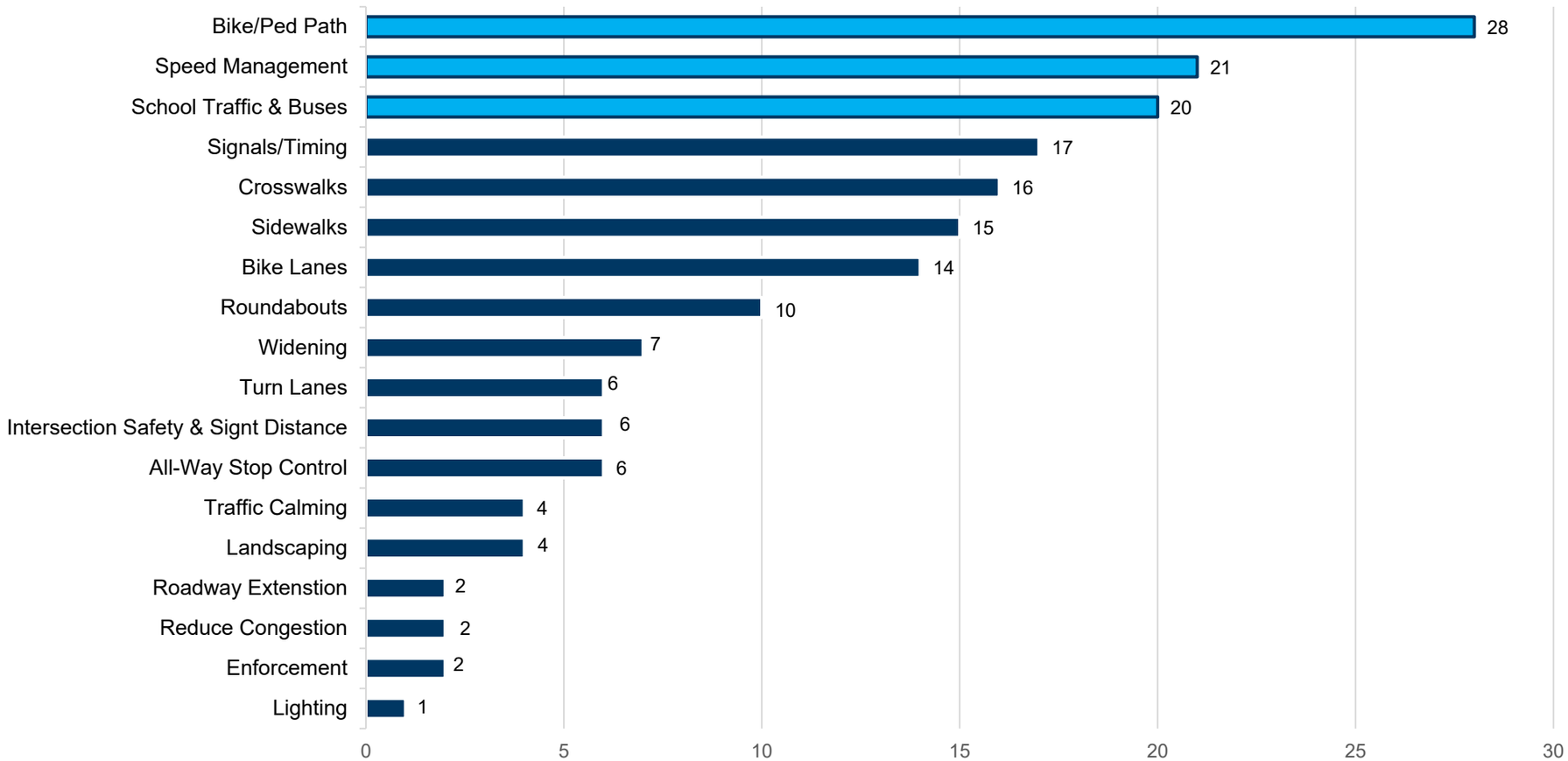


Figure 3.8 ***Desired Transportation Improvements Along Vineyard Drive***

Many respondents indicated multiple desired improvements along the corridor with the overwhelming response being access and infrastructure for vulnerable roadway users (i.e., pedestrians and bicyclists). A separated bicycle and pedestrian path was the most requested multimodal improvement followed by speed management, school traffic, signal timings, and then by marked crosswalks and connected sidewalks. Additionally, many requested the use of school buses to reduce congestion during school drop-off and pickup times.

For questions 6-8, respondents were asked about their experience at three different intersections along the corridor and if there are any desired improvements at these locations. Each response regarding experience was classified into one of three categories: Positive, Neutral, or Negative. A positive classification indicates the respondent has no issues with the specified intersection. A neutral classification indicates the respondent has no major issues with the specified intersection but would not be opposed to changes. A negative classification indicates the respondent has issues with the specified intersection and wants improvements. Many respondents either did not have experience with the intersection or did not provide a response. These non-responses are not included in the charts.

Desired improvements were categorized based on the suggested improvement or issue that the respondent determined needs to be addressed. The multimodal category includes any bicycle or pedestrian improvements, including but not limited to, crosswalks, bike lanes, and sidewalks. The operations category includes congestion from school traffic, difficulty with turning movements, and driver non-compliance (i.e., running stop signs, passing on the shoulder).

6. What is your experience at the intersection of Rossi and Vineyard, and what improvements if any would you like to see at this intersection?

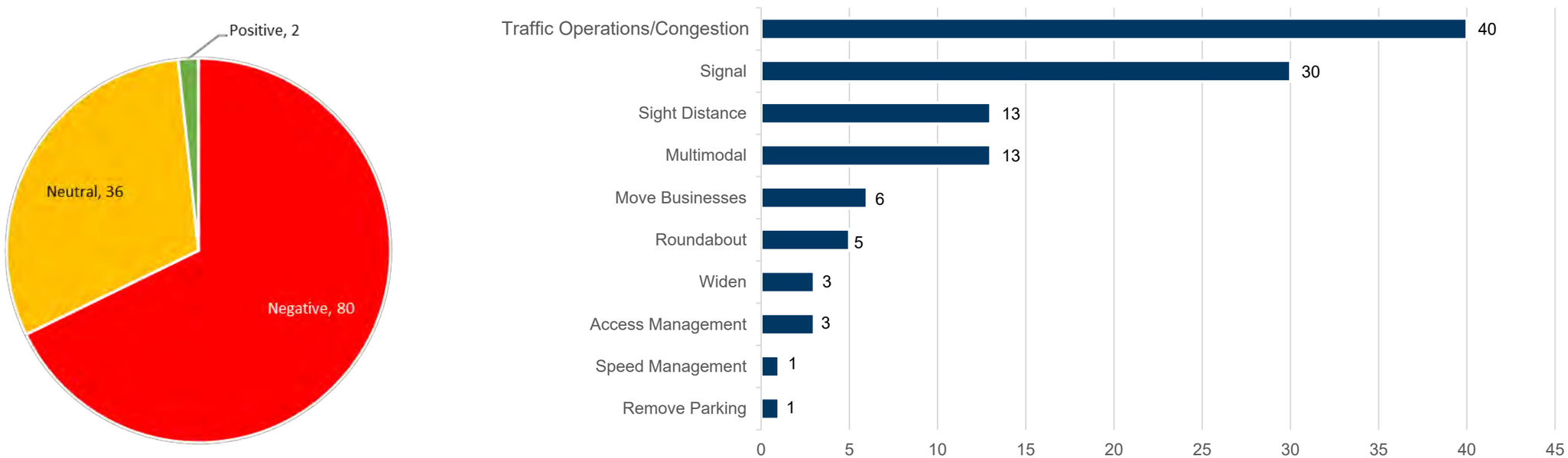


Figure 3.9 Overall Experience and Desired Improvements at Rossi Road and Vineyard Drive Intersection

Overall, the majority of respondents have negative experiences at the Rossi Road and Vineyard Drive intersection. Many indicated difficulties turning left onto Vineyard Drive due to lack of gaps in traffic, especially during school drop-off and pickup times.

7. What is your experience at the intersection of Bennett and Vineyard, and what improvements if any would you like to see at this intersection?

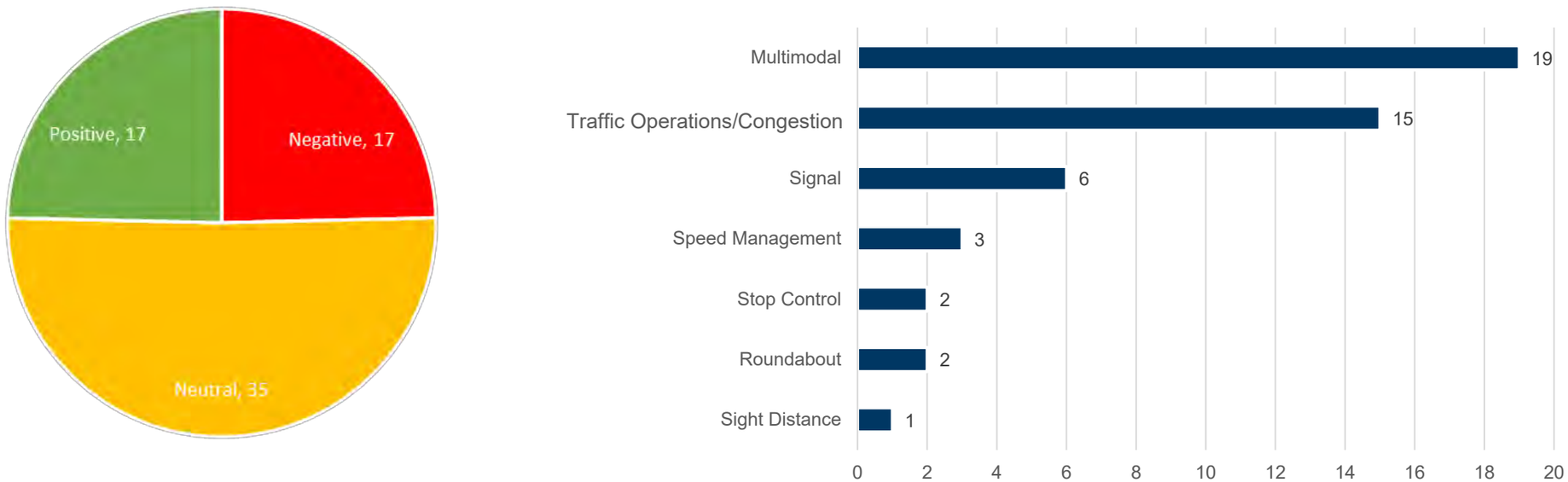


Figure 3.10 Overall Experience and Desired Improvements at Bennett Way and Vineyard Drive Intersection

Most respondents had a neutral experience regarding the intersection of Bennett Way and Vineyard Drive. Many indicated the need for crosswalks and bike paths for students who live in the area to walk and bike to school. Many attempt to cross Vineyard Drive at this location despite the lack of marked crosswalks.

8. What is your experience at the intersection of Bethel and Vineyard, and what improvements if any would you like to see at this intersection?

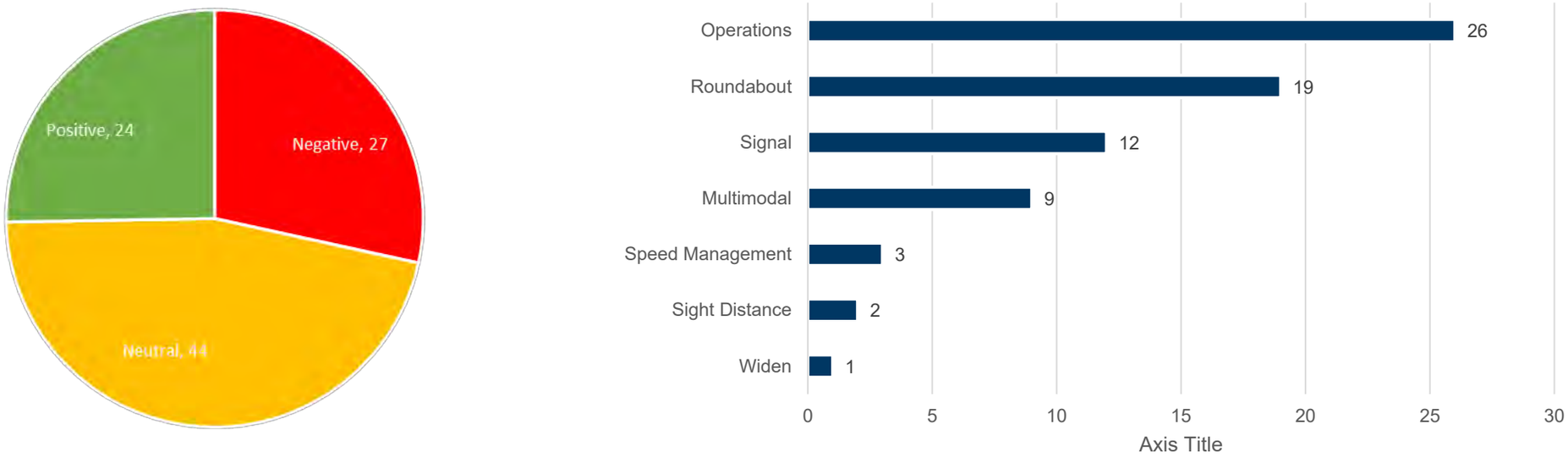


Figure 3.11 Overall Experience and Desired Improvements at Bethel Road and Vineyard Drive Intersection

Previous improvements to the stop signs were made at Bethel Road and Vineyard Drive and many respondents indicated that no changes need to be made to the intersection. Of those with neutral and negative experiences at this location, most indicated the need for improved operations during school drop-off and pickup hours and ideally through the installation of a roundabout.

Chapter 4. Corridor Concepts & Alternatives

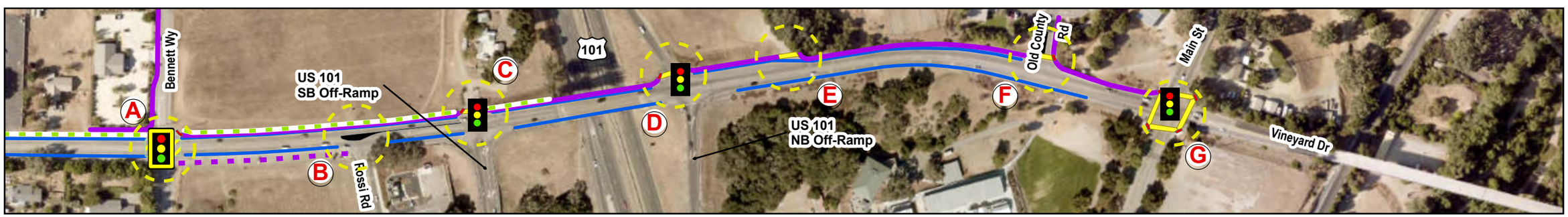
This section presents the improvement concepts developed for Vineyard Drive. These concepts reflect an iterative public engagement process with the community as well as from the TAC, and were informed by the in-depth analysis, identified needs, and corridor vision and goals documented in earlier chapters. The improvements identified are conceptual and further design considerations will need to be conducted separately.

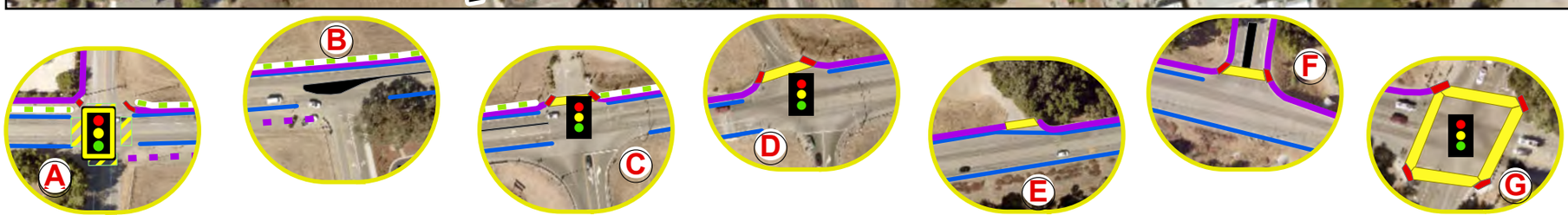
The proposed improvement concepts presented for the Vineyard Drive Multimodal Corridor Plan are divided into the following segments:

- West Segment (SR 46 West to Vineyard Elementary School)
- Central Segment (Vineyard Elementary School to US 101 Southbound Ramps)
  - Alternative 1 (Multipurpose Trail on north side)
  - Alternative 2 (Buffered Bike Lanes and Sidewalks on both sides)
- East Segment (US 101 Southbound Ramps to Main Street)

The Plan includes two segment concept alternatives for the Central Segment as well as a few intersections where more than one alternative is presented. Some of these locations represent alternative treatments or alignments that will require additional study or discussion with relevant partners to determine the preferred concept to implement. Some concepts can be implemented at a relatively lower cost and will be easier to implement paired with a longer-term concept for a more complex improvement.

The following Figure 4.1 and Figure 4.2 present the overview of the two proposed alternatives along the entire corridor.





Alternative 1:

Elevated 8' Detached Path, 8' BikeLane/Shoulder (Min. 13' Buffer From Travel-Way) With Dike On Trial Side Only

Proposed Intersection Control

- STOP All-Way Stop
- Improve Signal Timing
- Signal / Roundabout
- New Traffic Signal

Sidewalk / Bike Lane / Trail

- Existing Sidewalk
- Proposed Sidewalk
- Existing Trail
- Proposed Trail
- Existing Bike Lane

Crosswalk / Ramps

- Existing Crosswalk
- Proposed Crosswalk
- Existing Ramps
- Proposed Median

Paper Size Legal

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
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San Luis Obispo County
Vineyard Drive Corridor Plan

Alternative 1 Overview

Project No. **12570229**
Revision No. **5**
Date **7/25/2023**

FIGURE 4.1

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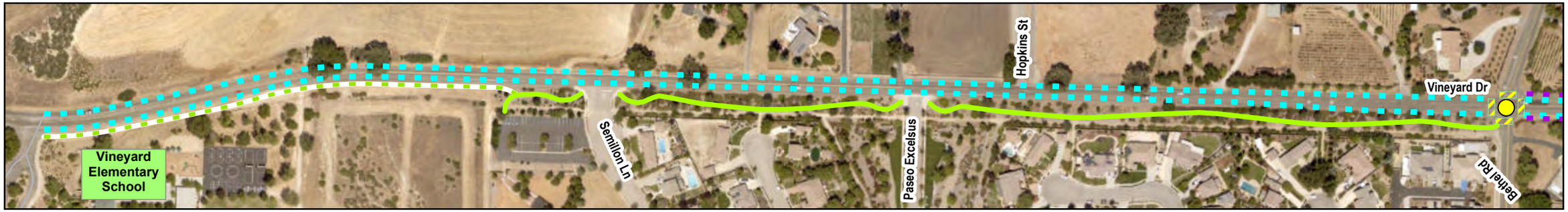
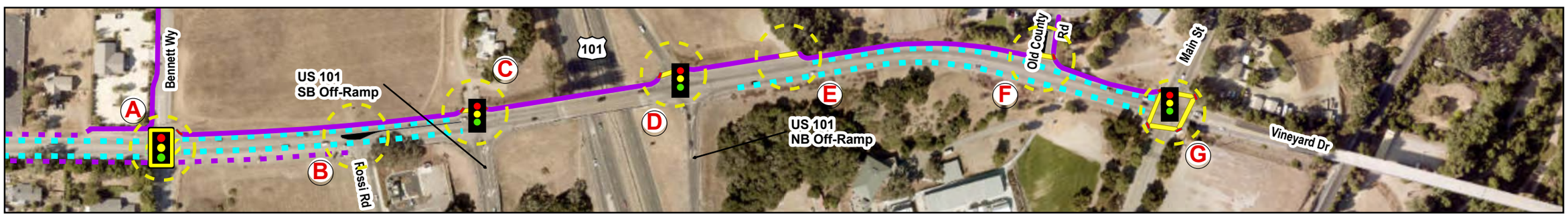
Data Disclaimer:
Location of pedestrian facilites are for visual representation only.

Data source: GIS TigerLine Shape Files (2018), CA State Geoportal, SWITRS/TIMS Collision data World Imagery: County of San Luis Obispo, Maxar, Microsoft
World Imagery: County of San Luis Obispo, Maxar. Created by: rsouthern





Alternative 2:

**Buffered Bike Lanes (Protected) 18" Min.
To Meet 8' Shoulder
With Asphalt Sidewalk (6')**

Proposed Intersection Control

- STOP All-Way Stop
- Improve Signal Timing
- Signal / Roundabout
- New Traffic Signal

Sidewalk / Bike Lane / Trail

- Existing Sidewalk
- Proposed Sidewalk
- Proposed Buffered Bike Lanes
- Existing Trail
- Proposed Trail

Crosswalk / Ramps

- Existing Crosswalk
- Proposed Crosswalk
- Existing Ramps
- Proposed Median

Paper Size Legal

0 130 260

Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California V FIPS 0405 Feet

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GHD

San Luis Obispo County
Vineyard Drive Corridor Plan

Alternative 2 Overview

Project No. 12570229
Revision No. 5
Date Feb. 2023

FIGURE 4.2

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Data Disclaimer:
Location of pedestrian facilites are for visual representation only.

Data source: GIS TigerLine Shape Files (2018), CA State Geoportal, SWITRS/TIMS Collision data World Imagery: County of San Luis Obispo, Maxar, Microsoft
World Imagery: County of San Luis Obispo, Maxar. Created by: rsouthern

4.1 West Segment

STATE ROUTE 46 WEST TO VINEYARD ELEMENTARY SCHOOL

On the westernmost end of Vineyard Drive within the study area, between SR 46 West and Vineyard Elementary School (VES), the roadway typology and surrounding land uses are primarily rural and agricultural, with vineyards, wineries, and bucolic open spaces. The existing roadway lacks sufficient shoulder width to incorporate new active transportation facilities, like designated Class II bicycle lanes. To better connect people traveling in all modes of transportation between SR 46 West and the community of Templeton, and regional recreational cyclists, widening the road to the County standard 8-foot paved shoulder widths is proposed in this segment. When implemented, these widened shoulders would accommodate bicyclists separately from the vehicular travel lane and close the gap between the active transportation facilities proposed for destinations east and SR 46 West. Figure 4.3 presents the concept for a portion of the West Segment.

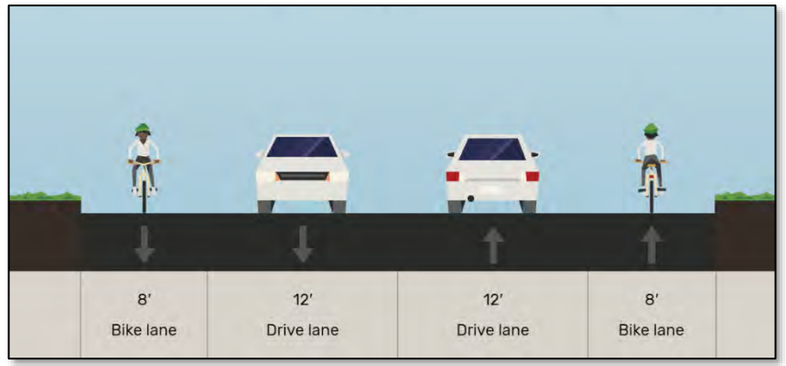


Figure 4.3 West Segment Concept: SR 46 West to Vineyard Elementary School

4.2 Central Segment

VINEYARD ELEMENTARY SCHOOL TO US 101

The proposed improvements to the central segment of Vineyard Drive, extending from Vineyard Elementary School to US 101, are captured in two different segment concept alternatives. For Alternative 1, a separated and elevated multipurpose trail is proposed with a 5' buffer along much of the segment length. This is paired with 6' Class II bicycle lanes (which currently exists in most places along the Central Segment), and 11' travel lanes for motor vehicles. For Alternative 2, Class II buffered bicycle lanes and new sidewalk on both sides of the street are proposed. Regardless of the alternative concept selected, improvements proposed for the Central Segment of Vineyard Drive also include intersection improvements, including the intersections of Vineyard Drive and Bethel Road, Santa Rita Road, Bennett Way, and Rossi Road. Where Buffered Bicycle Lanes or Class II Bike Lanes are implemented, this Plan proposes green paint in the conflict areas where cyclists and vehicles would need to merge on intersection approaches and through the intersection along the extension of the marked bicycle lane. Green paint as a supplement to the bike lane markings will make cyclists more visible to drivers and provide a clearly defined route for bicycles on the roadway, reinforcing the priority of bicyclists to drivers. Additionally, new roadway connections are planned, as identified in the Templeton Circulation Study (2016) and as part of the Capital Improvements Program. The new roadway connections include the Rossi Road realignment and the Bennett Way extension north to Templeton Hills Road.

SPEED MANAGEMENT

Community comments display a concern for vehicular speeds along the corridor during off-peak times, and speed management was a top priority for desired improvements. There are limited ways to implement effective traffic calming measures for rural roads, like the Vineyard Drive corridor. Currently, there are speed feedback signs west of Santa Rita Road, adding another set near VES could be effective. These can also be accompanied by having the word "SLOW" appear in the feedback sign for speeding vehicles, which may help effectiveness. Pavement markings that display the posted speed limit can be used to emphasize the speed limit signage. Additionally, transverse bar pavement markings or "optical speeds bars" can also be implemented, but sparingly, at intersection approaches (e.g., Bethel Road) to reduce approach speeds. Flashing advance intersection warning signs may also help reduce speeds and collisions approaching the intersection of VES (for the westbound turn lane) or Bethel Road (eastbound and westbound). Narrowing lane widths can also be effective to reduce speeds; this Plan proposes 11-foot-wide lanes from Main Street to VES. The County may conduct supplemental speed surveys to determine if a systematic disregard for the posted speed limit is present.

4.2.1 Intersection Improvements

VINEYARD DRIVE AT BETHEL ROAD

The intersection of Bethel Road and Vineyard Drive will be improved to make it more efficient for all road users to access key destinations to the north and south and connecting the existing trail along the south side of the street to a proposed new 8-foot multipurpose trail on the north side, continuing east of Bethel Road. New striped crosswalks will improve access for pedestrians crossing. Two alternatives are proposed to improve traffic operations and multimodal access at this intersection: a new traffic signal or a new roundabout, replacing the existing stop sign control. The roundabout concept is provided in **Appendix E**.

- **Traffic Signals** control vehicle traffic passing through the intersection of two or more roadways by visually indicating when to proceed, when to slow, and when to stop. The traffic signal option would include new 11' turn lanes on Vineyard Drive in both directions to accommodate left turns onto Bethel Road, and improved pedestrian and bicycle facilities.
- **Roundabouts** are an intersection design treatment that decrease conflict points compared to traffic signals, stop signs, or yield-controlled intersections. They can also improve operations and reduce delay for drivers by allowing continuous flow from all directions. A roundabout at this location would also serve to calm traffic as it enters the community. Flashing beacons can also be installed at the crosswalks if desired, and the approaches would be designed to slow vehicles down in advance of the intersection.

Local feasibility and community support of each alternative should be examined prior to selection.

VINEYARD DRIVE AT SANTA RITA ROAD

The intersection of Santa Rita Road and Vineyard Drive will be improved to increase mobility options across the intersection and reduce travel speeds along the corridor. New high-visibility striped crosswalks across the northern and eastern approaches, a new Rectangular Rapid Flashing Beacon (RRFB) for the crosswalk crossing Vineyard Drive, as well as new curb ramps will improve visibility and accessibility for pedestrians crossing.

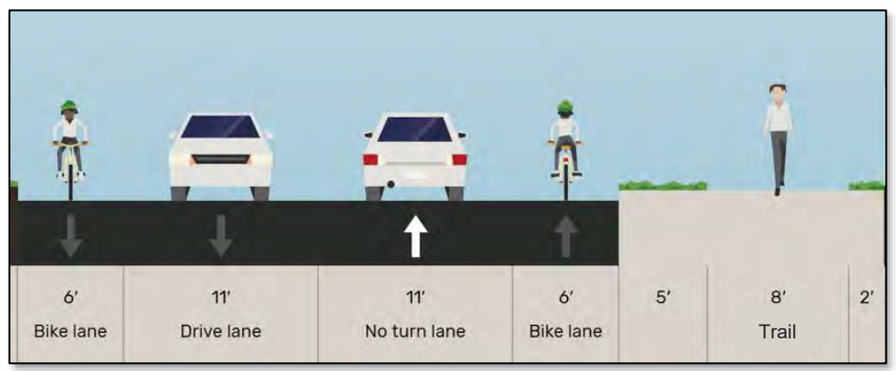
The installation of stop signs on Vineyard Drive at Santa Rita Road are also proposed, creating an all-way stop controlled intersection that will aid turning vehicles as well as slow traffic speeds through this section of the corridor. The stop control should be implemented once warranted, however, all other proposed improvements for this intersection should be delivered regardless of stop sign warrant, including the new crossing with RRFB.

VINEYARD DRIVE AT BENNETT WAY & AT ROSSI ROAD

The Plan proposes to install a traffic signal at Bennett Way and restrict left turns in and out of Rossi Road. With future development in the vacant land between these two intersections, a new roadway connecting Bennett Way to Rossi Road will be constructed south of Vineyard Drive. Bennett Way will serve as a more efficient way to access destinations on Rossi Road. The intersection of Bennett Way and Vineyard Drive will be improved to make it more accessible for all road users and connect to other adjacent facilities that facilitate walking and biking. A new traffic signal is proposed at this intersection as well as new striped crosswalks across all four approaches and new curb ramps at the southeast and southwest corners, improving comfort and access for pedestrians crossing. Traffic will be rerouted to connect left turning northbound traffic on Rossi Road to Vineyard Drive via the new roadway link with Bennett Way through the adjacent vacant parcel. New ‘No Left Turn’ restrictions and new roadway medians will be added to Rossi Road at Vineyard Drive to direct motorists and prevent collisions.

4.2.2 Central Segment – Corridor Alternative 1

VINEYARD ELEMENTARY SCHOOL TO US 101 SOUTHBOUND RAMPS



Central Segment Corridor Alternative 1 includes a new 8’ separated and elevated multipurpose trail starting just east of the Vineyard Elementary School driveway on the south side of Vineyard Drive, connecting with the existing Vineyard Trail near the surface parking lot adjoining Vineyard Dog Park, and continuing on the north side of Vineyard Drive east of Bethel Road. The north side of Vineyard Drive was chosen rather than the south side because of rights-of-way availability, utilities, and drainage concerns. Separated by a 5’ buffer, this new trail runs parallel to the existing roadway and will accommodate bicyclists and pedestrians in both directions, providing physical separation from traffic for community members, including VES students and their families, traveling on foot or by bicycle. The buffer separating the trail from traffic may incorporate green infrastructure and resiliency best practices, including landscaped vegetation and/or water management techniques, like an embankment or dike, with buffer width varying by location. As seen in the cross-section, existing 6’ Class II bicycle lanes will remain on both sides of the street, with one 11’ travel lane in each direction and shoulders of varying widths. Although buffered bike lanes are not shown as part of this Alternative, striping a buffer where there is room along portions of the bike lane is ideal. A minimum of 18” would be required for striping a buffer (NACTO). Alternatively, a thicker stripe (10”-12” can be used to delineate the bike lane for better visibility). This will need to be determined and considered in further detail during the design of the project when funded. An extended 11’ wide left turn lane is included at the VES driveway, westbound, and 11’ turn lanes at Bethel Road, Bennett Way, and the US 101 Southbound ramps. At Rossi Road, travel lanes widen to 12’ in each direction and turn pockets narrow to 10’.

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1 inch = 60 ft.

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 1
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.4a

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 1
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.4b

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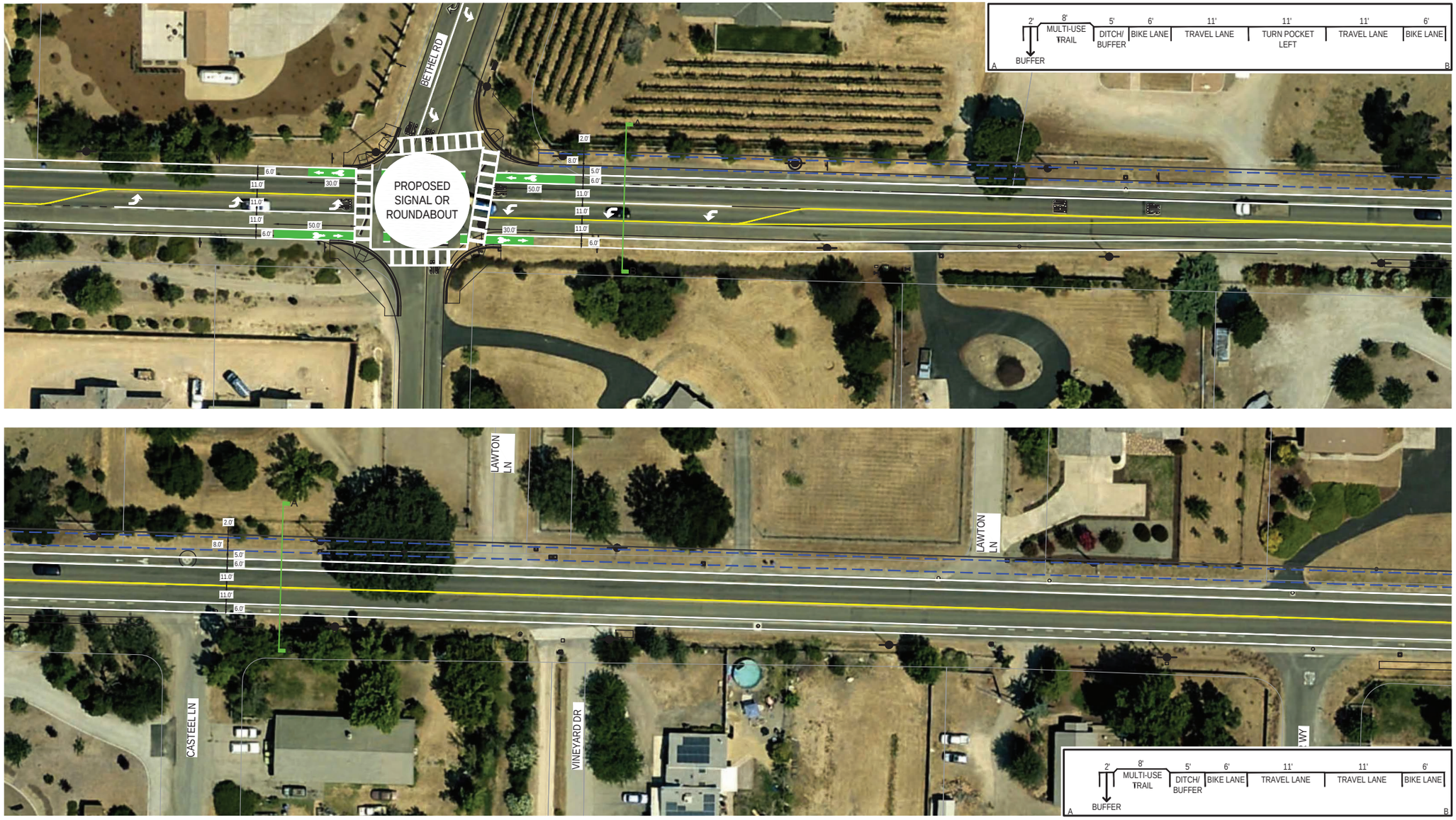

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1 inch = 60 ft.

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 1
(Layout and Detail)

Project No. 12570229
Report No. 001
Date Feb. 2023

FIGURE 4.4c

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 1
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.4d

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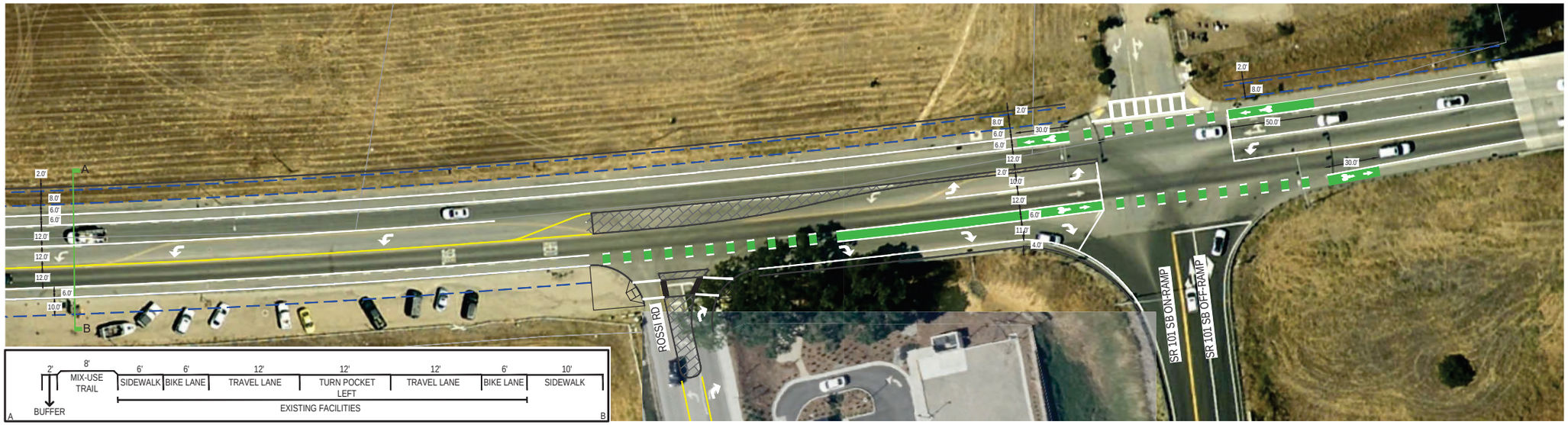

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1 inch = 60 ft.

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 1
(Layout and Detail)

Project No. 12570229
Report No. 001
Date Feb. 2023

FIGURE 4.4e

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1 inch = 60 ft.

GHD

San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 1
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.4f

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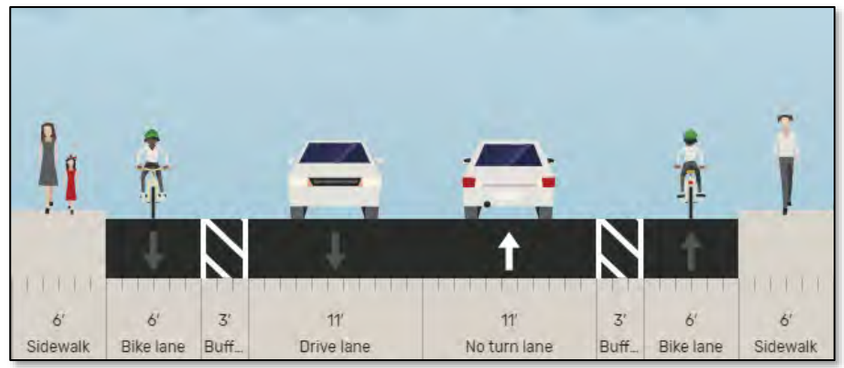
4.2.3 Central Segment – Corridor Alternative 2

VINEYARD ELEMENTARY SCHOOL TO US 101 SOUTHBOUND RAMPS

Central Segment Corridor Alternative 2 upgrades the existing Class II bicycle lanes on Vineyard Drive to Class II buffered bicycle lanes, beginning just east of the Vineyard Elementary School driveway on the south side of the street and continuing to the US 101 Southbound ramps. Each buffered bicycle lane will be 6' wide with a 3' buffer. On intersection approaches with no dedicated right turn only lane the buffer markings should transition to a conventional dashed line[2]. Additionally, a new extension of the existing Vineyard Trail from its current terminus near Vineyard Dog Park to Vineyard Elementary School will improve connectivity for residents and students with a key community destination. Beginning just east of the VES driveway and running parallel to the existing roadway, this trail extension will accommodate bicyclists and pedestrians in both directions. Like in the alternative mentioned above, the buffer separating the trail from traffic may incorporate green infrastructure and resiliency best practices, with typical buffer widths of 5'.

New 6' sidewalk on both sides of the street is proposed for Vineyard Drive between Bethel Road and Bennett Way. Between Bennett Way and Rossi Road, new 10' sidewalk is proposed only along the south side of the street (due to commercial zoning requirements), as sidewalk already exists on the north side between Bennett Way and US 101. Alternative 2 incorporates one 11' travel lane in each direction, an extended 11' wide left turn lane is included at the VES driveway, and 11' turn lanes at Bethel Road, Bennett Way, and US 101 Southbound ramps. The bicycle lane buffer narrows from 3' to 1.5' east of Bennett Way.



[2] *Urban Bikeway Design Guide, Second Edition*. National Association of City Transportation Officials (NACTO). March 2014.

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1 inch = 60 ft.

GHD

San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 2
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.5a

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 2
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.5b

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 2
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.5c

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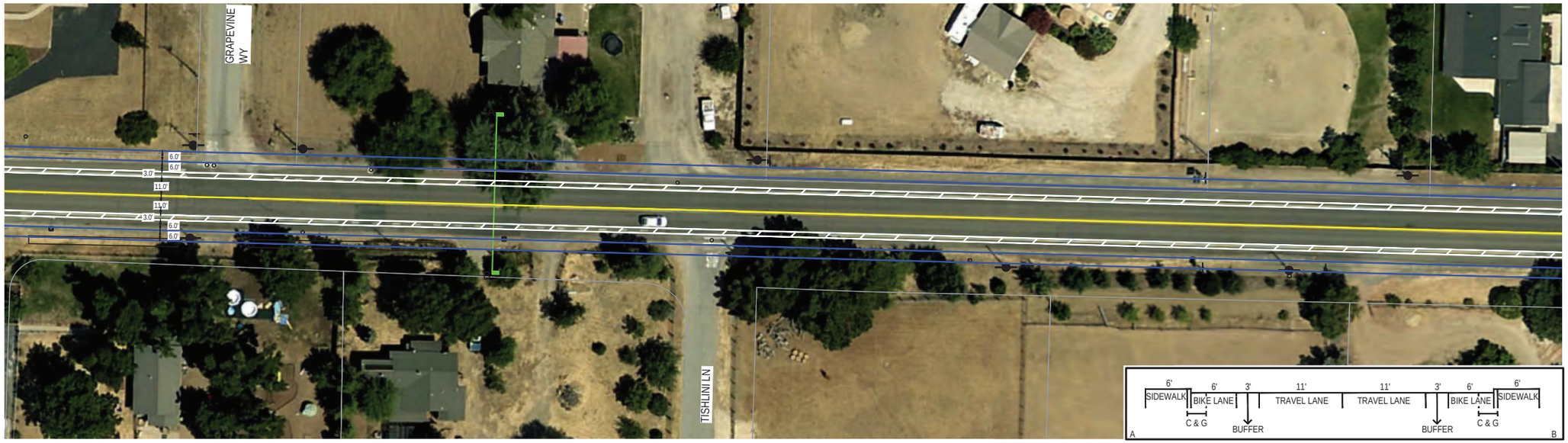

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 2
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.5d

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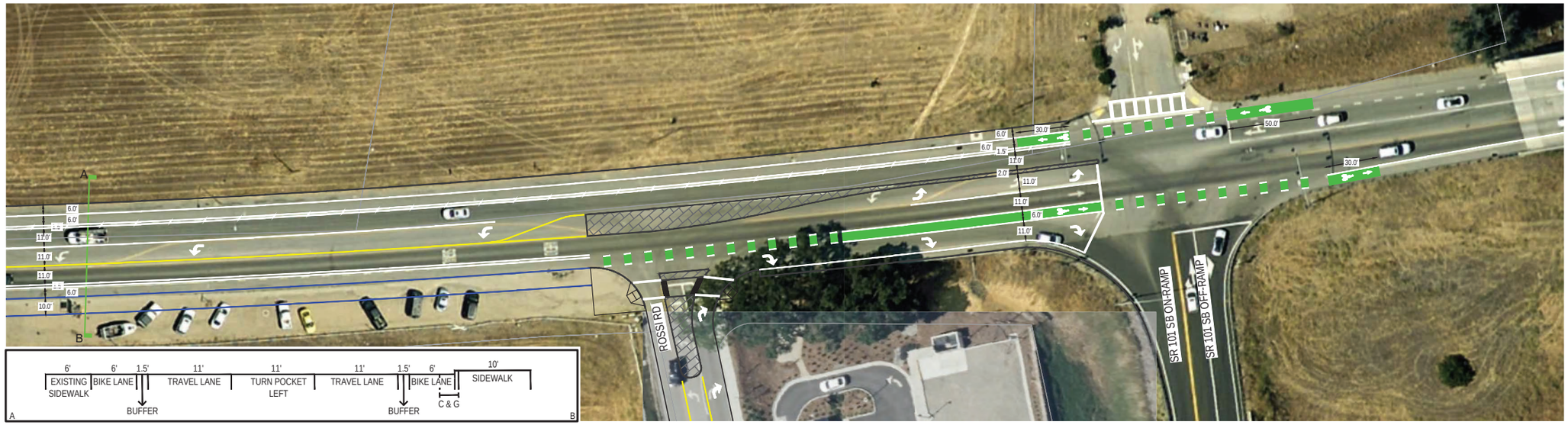

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 2
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.5e

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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

Central Segment
Alternative 2
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.5f

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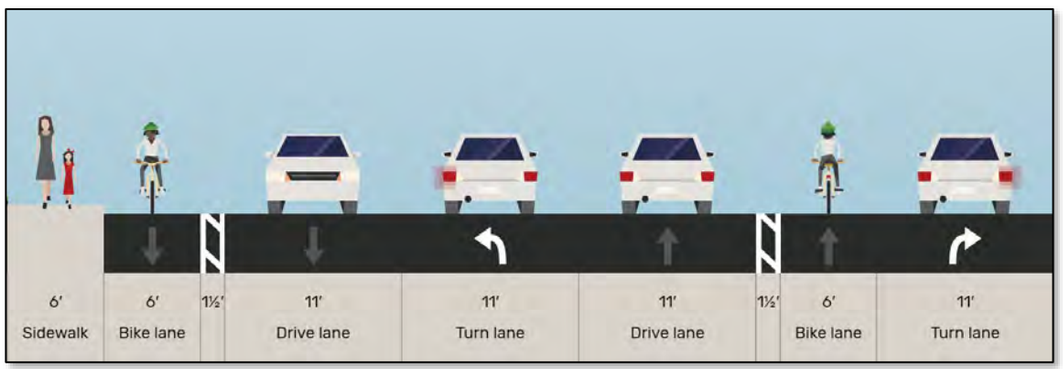
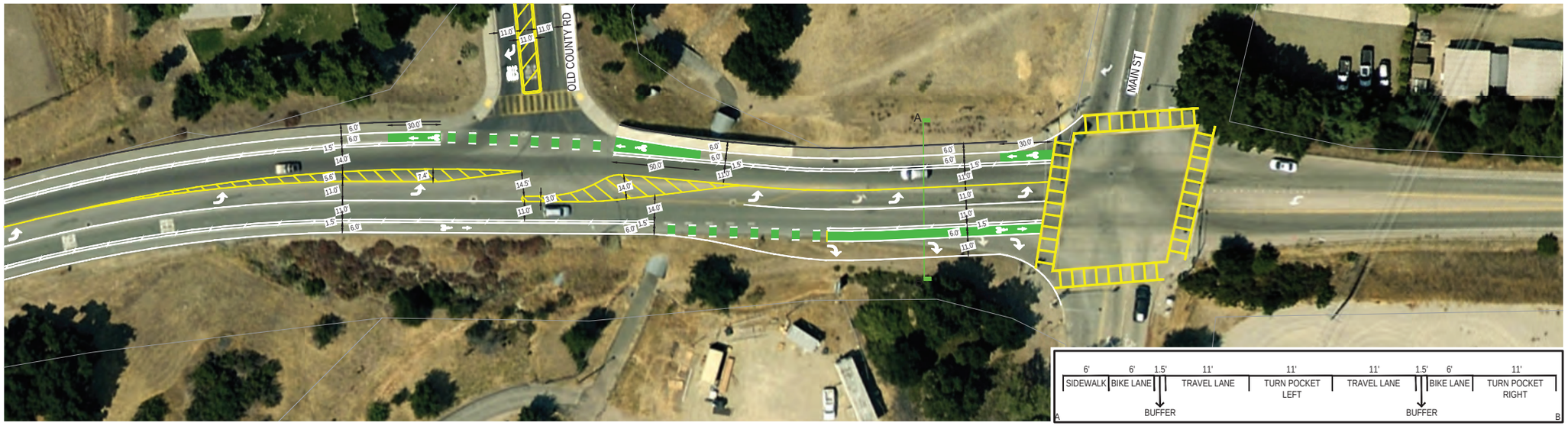
4.3 East Segment

US 101 SOUTHBOUND RAMPS TO MAIN STREET

The proposed improvements to the East Segment of Vineyard Drive, extending from US 101 southbound ramps to Main Street, include intersection timing adjustments, access modifications, improved pedestrian crossings, and improved bikeways. The improvements include upgrading the existing Class II bicycle lanes to Class II buffered bicycle lanes. The Class II buffered bicycle lanes begin east of the US 101 northbound ramps and extending to Main Street. Buffered bicycle lanes here are 6' wide with 1.5-3' buffers, depending on existing roadway widths, and will provide a more comfortable active transportation connection to and from Main Street and its destinations. Additionally, the bike lanes will have green paint at intersection approaches to improve visibility of the designated bikeway and dashed green paint marking in the conflict zones where vehicles merge across the bike lane in advance of a turn and through the intersections where vehicles would turn across the bike lane. The green-painted bike lanes increase the visibility of the facility, identifies potential areas of conflict, and reinforces priority of bicyclists to drivers. 11' travel lanes and 11-11.5' turn pockets at the Vineyard Drive intersections with Old County Road and Main Street will aim to reduce travel speeds during off-peak times while providing more room for active transportation modes. Existing 6' sidewalk remains along the north side of Vineyard Drive, extending the full length of the East Segment.

Traffic signal timing adjustments and coordination to accommodate "Time of Day" timing plans are proposed for the intersections of Vineyard Drive and the US 101 southbound ramps, northbound ramps, and Main Street, improving overall traffic flow between Bennett Way and Main Street. Additionally, at Main Street, a Leading Pedestrian Interval (LPI) is proposed, which gives the pedestrians the opportunity to enter the crosswalk 3-7 seconds before vehicles are given the green indication.





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San Luis Obispo County
VINEYARD DRIVE CORRIDOR PLAN

East Segment
(Layout and Detail)

Project No. 12570229
Report No. 001
Date April 2023

FIGURE 4.6

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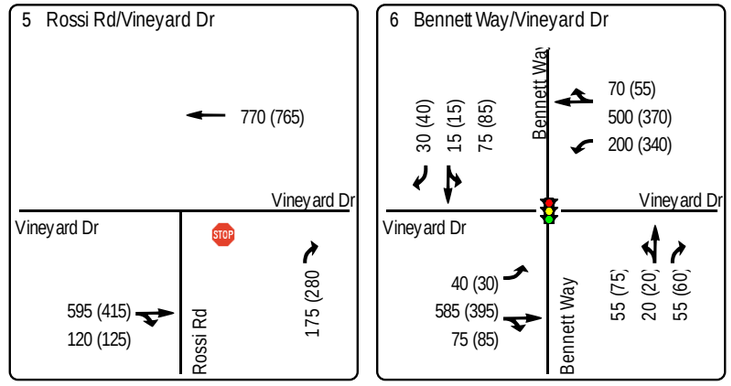
4.4 Forecasted Operations with Improvements

4.4.1 Forecasted Traffic Volumes with Improvements

With the new proposed roadway linking Bennett Way and Rossi Road, and the proposed turn restrictions at Rossi Road, traffic will be diverted to Bennett Way for inbound traffic from the east and outbound traffic heading west. Therefore, traffic volumes at Bennett Way will increase, especially for the westbound left turn, and the turn lane will need to be extended back approximately 350 feet to accommodate the anticipated turning vehicles. The forecasted peak hour turning movement volumes, lane geometry, and intersection controls are shown in Figure 4.7 to the right.

AM (PM) peak hour volumes:



School peak hour volumes:

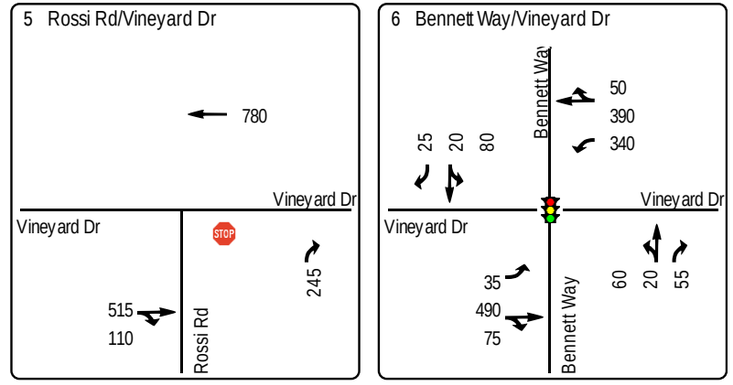


Figure 4.7 Forecasted Peak Hour Intersection Volumes at Rossi Road and Bennett Way with Improvements

4.4.2 Forecasted Level of Service with Improvements

Cumulative conditions for weekday AM, School, and PM peak hour intersection operations with the proposed improvements, including alternative intersection controls, were quantified. Table 4.1 provides the delay (in sec/veh) and resulting LOS for the study intersections under forecasted conditions with the improvement options. The Synchro outputs are provided in **Appendix C**. The signal warrant analysis is provided in **Appendix D**. As shown in Table 4.1 all study intersections, apart from Old County Road and the VES driveway during the AM peak hour, are projected to operate acceptably.

Table 4.1 Forecasted Conditions Intersection Operations with Improvement Options

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour			School PM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]	Delay	LOS	Warrant Met?[3]
1	Vineyard Dr & S. Main St	Signal	D	34.3	C	-	27.4	C	-	23.0	C	-
2	**Vineyard Dr & Old County Road**	**TWSC**	**D**	**78.3**	**F**	**Yes**	23.1	C	-	11.8	B	-
3	Vineyard Dr & US 101 Northbound Ramps	Signal	C	26.5	C	-	27.6	C	-	29.6	C	-
4	Vineyard Dr & US 101 Southbound Ramps	Signal	C	30.4	C	-	27.3	C	-	25.4	C	-
5	Vineyard Dr & Rossi Road	TWSC	D	25.3	D		23.2	C		17.4	C	
6	Vineyard Dr & Bennett Way	Signal	D	27.5	C	Yes	31.8	C	Yes	25.0	C	Yes
		RNDBT	D	25.8	C	Yes	21.0	C	Yes	13.7	B	Yes
7	Vineyard Dr & Bethel Road	Signal	D	32.7	C	Yes	22.4	C	-	17.6	B	-
		RNDBT	D	8.7	A	Yes	6.5	A	-	5.1	A	-
8	**Vineyard Dr & Vineyard Elem. School**	**TWSC**	**D**	**293.8**	**F**	**Yes**	13.8	B	-		N/A	-

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC, Signal, RNDBT
3. Warrant = Based on California MUTCD Warrant 3
4. **Bold** = Unacceptable Conditions
5. OVR = Delay over 300 seconds

4.4.3 Forecasted Peak Queues with Improvements

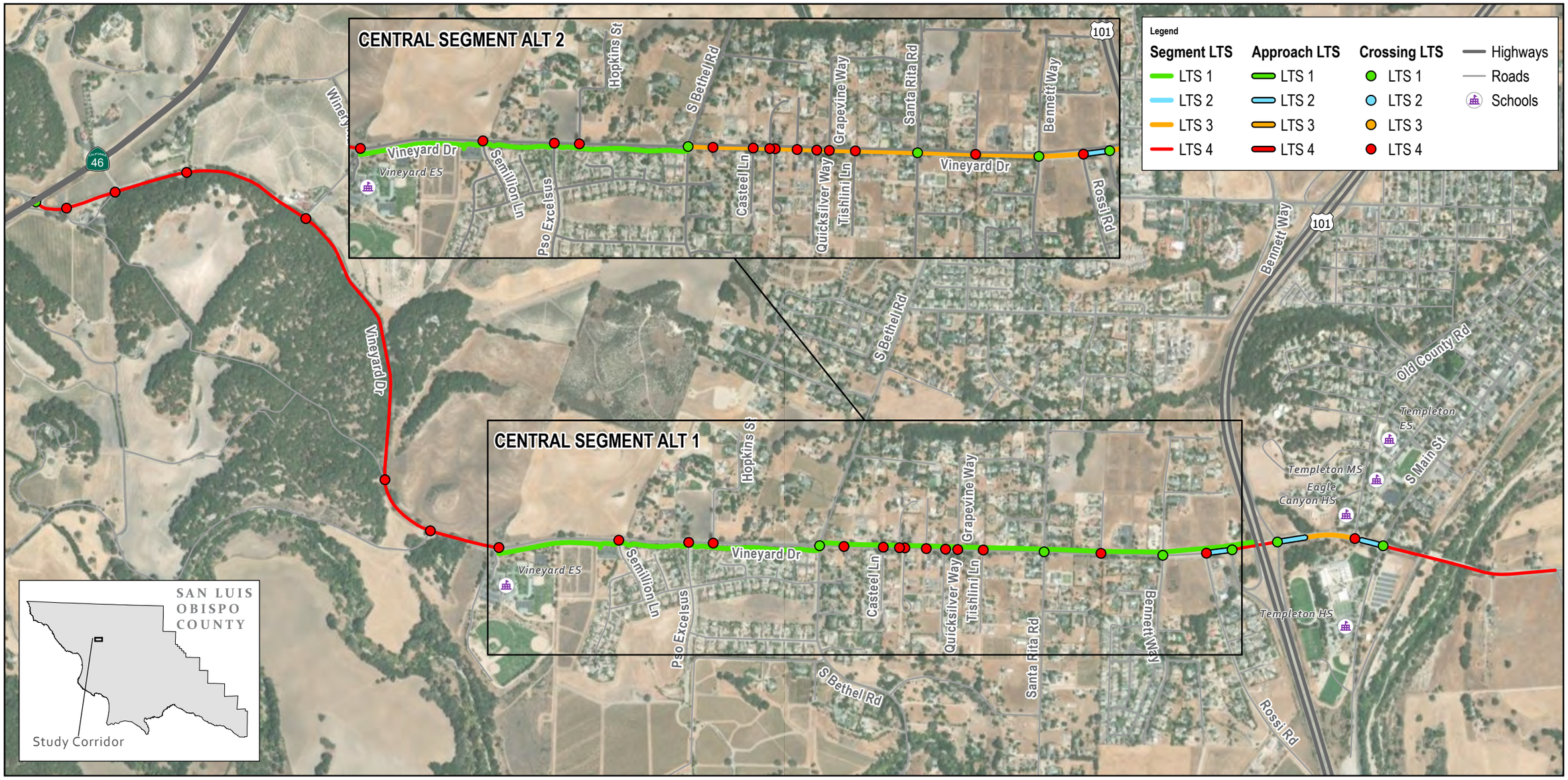
The forecasted peak hour queue lengths with the proposed intersection improvements are presented in **Table A.3** in **Appendix A**, with the simulated maximum and 95th percentile queueing results for the eight study intersections. The highest estimated vehicle queues occur during the AM Peak hour and are along Vineyard Drive at Bennett Way where a traffic signal is proposed. Traffic signal timing modifications and optimization can be made to reduce certain queue lengths, however that may impact other opposing queue lengths. Installing a roundabout at Bethel Road will significantly reduce queue lengths compared to both current conditions and conditions with a traffic signal.

4.5 Projected Bicycle LTS with Improvements

The proposed bikeway improvements along Vineyard Drive make a significant change for the Central segment and the East Segment. With a multipurpose trail connecting from VES to US 101 (Alternative 1) the segment improves from LTS 4 to LTS 1. Installing a marking crossing with an RRFB at Santa Rita Road will also provide a crossing score of LTS 1. These relate to the pedestrian comfort and connectivity along the corridor as well, as currently there are no sidewalks or multiuse paths between Ashton Way and Bethel Road. Installing sidewalks and buffered bike lanes on both sides of the road (Alternative 2) would provide access to both pedestrians and bicycles, however, the corridor only improves to LTS 3. This is due to having little separation from the traveled way, which has high speeds (45 mph). Installing a roundabout or traffic signal at Bethel Road, and a traffic signal at Bennett Way will also facilitate easier, controlled crossings for both pedestrians and bicyclists. Along the East Segment, the buffered bike lanes with green paint in the conflict zones creates a space for bicyclists that is more visible to vehicles. Additionally, having the bike lane to the left of the right turn lane is recommended as this design enables bicyclists to correctly position themselves to reduce the conflict with turning vehicles. It also alerts motorists to expect and yield to merging bicycle traffic.

4.6 Vehicle Miles Traveled (VMT) Considerations

Per SB 743, VMT is the measure to determine transportation impacts under CEQA. The project's potential CEQA impacts on transportation are included in this section. This Plan proposes to improve or construct new pedestrian and bicycle facilities along the corridor, including a roundabout or traffic signal at Bethel Road, a new traffic signal at Bennett Way, additional turn lanes or turn restrictions. Per the County's VMT guidance, which are consistent with the Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, 2018), these are all identified as transportation projects which would not likely lead to an increase in VMT as they aim to reduce vehicular travel. This does not include the evaluation of the new roadway connections of Bennett Way extension north or the Rossi Road realignment to Bennett Way. These will need to undergo an evaluation of environmental impacts, in addition to VMT, through the CEQA process when funded.



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Templeton
San Luis Obispo County
Vineyard Drive Corridor Plan

Bicycle Level of Traffic Stress (LTS) with Improvements

Project No. **12570229**
Revision No. **-**
Date **7/25/2023**

FIGURE 4.8

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Data source: Roads: TIGER, 2021; Bikeways; Urban Service Line: SLO County Open Data Portal\World Imagery: Maxar. Created by: rsouthern

4.7 Cost Estimates

Preliminary opinions of costs were prepared for the segments and alternatives identified in Chapter 4, based on recent construction bids and coordination with County staff. The detailed cost estimates are provided in **Appendix F.**

Table 4.2 Total Cost Estimates by Alternative

Central Segment Alternatives	Total Cost of Corridor
Alt 1 (Trail) w/Roundabout	$ 13,320,000
Alt 1 (Trail) w/Traffic Signal	$ 8,620,000
Alt 2 (sidewalks, buffered bike lanes) w/Roundabout	$ 14,900,000
Alt 2 (sidewalks, buffered bike lanes) w/Traffic Signal	$ 10,770,000

Table 4.3 Cost Estimates by Segment

Segment	Cost	% of Total Cost
East	$ 660,000	2% - 3%
Central	$ 8.6M - $ 14.9M	39% - 52%
West	$ 7,710,000	27% - 35%
Rossi Rd Realignment	$ 5,160,000	18% - 23%
Total Cost:	**$ 22.1M - $ 28.4M**	

4.8 Alternatives Analysis & Recommendations

Life-Cycle Benefit/Cost (B/C) Analysis

This section briefly discusses the parameters used to assess and monetize the life-cycle benefits and costs for one of the alternatives along the Vineyard Drive Corridor. Alternatives 1 and 2 of the Central Segment were considered for the B/C analysis, however, in coordination with County staff, the Central Segment Alternative 1 (trail) is preferred as the anticipated costs for Alternative 2 outweigh its benefits compared to Alternative 1. Therefore, the two alternatives (roundabout and traffic signal) for the intersection of Bethel Road at Vineyard Drive were evaluated for a B/C comparison. The B/C analysis is presented for comparison of the two alternatives solely at the Bethel Road intersection and does not present the benefit of the whole corridor. The benefits of each alternative are evaluated against a “No Build” scenario which would not improve the existing intersection configuration over a 20-year period.

Safety Benefit

To calculate the safety benefit, the cost of collisions is evaluated based on the existing collision rate, forecasted traffic volumes, and collision reduction factors for the proposed improvements.

To compute the existing collision rate, existing collision data over a five-year period was utilized. The intersection average daily traffic was converted to a Million Vehicles Entering (MVE) per year. The number of collisions were then divided by the total number of vehicles to obtain a collision rate (collisions/MVE). This determines the base cost of collisions for existing conditions. In the future as traffic volumes increase, more collisions may occur without any improvements, therefore improving the intersection would result in a larger safety benefit over the 20-year life-cycle. Costs associated with collisions anticipated for each proposed intersection alternative were quantified using the Caltrans Intersection Control Evaluation Collision Cost Analysis spreadsheet. As previously mentioned, the benefits of converting to a roundabout includes reducing the number of conflict points for vehicles. Additionally, roundabouts reduce the entry speed of vehicles which in turn reduce the severity of collisions. Signal improvements aim to reduce congestion, which would in turn reduce potential collisions, however higher speeds and right-angle collisions are not reduced.

Vehicular Delay Reduction Benefit

To calculate the delay reduction benefit, the value of travel time was quantified for each proposed alternative. Costs associated with vehicular delay were computed using the delay for the AM and PM peak hour periods of all the alternatives. In assessing the delay costs, the weighted average for costing the value of time for automobiles and trucks was used. An average delay cost of

$25.75/person/hour was used — based on the values published in the Cal-B/C tools for Vehicle Operation Costs Parameters, 2022 (*Transportation Economics | Caltrans*). The rate was grown by 38% from the 2016 values. The delay reduction benefit, therefore, includes the reduction in delay in dollar amounts compared to No Build conditions.

Fuel Benefit

To calculate the fuel cost for the alternatives, the vehicle operating costs were quantified. The fuel costs (vehicle operating costs) were computed using the delay for the AM and PM peak hour periods of all alternatives. An average fuel price for regular unleaded automobile fuel of $4.79 was used based on the average price of unleaded gas for 2022 in San Luis Obispo County.

Environmental Benefit

To calculate the environmental cost, the greenhouse gas emissions costs were quantified for the project. The health cost of Carbon Monoxide (CO) in a rural/suburban California town is $80/ton. The health cost of Nitrogen Oxide is $15,100/ton. The methodology for using the environmental costs comes from the Cal-B/C tools, 2022.

Construction Cost

Based on the concept-level preliminary project costs estimates, the total estimated project construction costs (including design, environmental, right of way, construction, and construction management costs) for each alternative are presented in the Life Cycle Benefit/Cost Analysis results tables below.

Other Costs

Operation and maintenance costs are other important components of the cost associated within the various alternatives. The operation and maintenance costs for a traffic signal include providing power service to the signal and street lighting ($750/year), signal retiming ($1,000/year), and signal maintenance for power outages/new detector loops/etc. ($1,500/year). The roundabout alternative would have lower operation and maintenance costs limited to power service for street lighting ($750/year). These values are typical industry averages.

Life Cycle Benefit/Cost Analysis Results

Table 4.4 presents a summary of the life-cycle benefits and costs for the two proposed intersection alternatives at Bethel Road and Vineyard Drive, and Table 4.5, presents the summary of the benefit/cost (B/C) analysis. The B/C summary for each alternative is calculated in comparison to the “No Build” scenario.

As shown, the Roundabout Alternative has a higher B/C of 0.4 and the Traffic Signal has a B/C of -2.3. Generally, B/C ratios less than 1.0 are less favorable. However, negative ratios show that benefits would not be sufficient to justify the cost. Other potential benefits of roundabouts, which are not quantified here, include particulate matter/pollutants for air quality considerations. Based on the benefit-cost analysis of the Bethel Road/Vineyard Drive intersection, the roundabout is the preferred alternative.

Table 4.4 Life-Cycle Costs

Life-Cycle Costs (20-year design)	No Build	Roundabout Alternative 1	Traffic Signal Alternative 2
Collision and Mobility Costs			
Collision Costs of predicted crashes	$737,000	$537,000	$7,040,000
Delay Costs	$2,280,000	$390,000	$1,280,000
Fuel and GHG Costs	$1,416,000	$1,463,000	$1,070,000
Project Costs Including Design, Construction and Maintenance			
Operations and Maintenance Costs	$12,000	$34,000	$60,000
Construction Costs	$0	$5,100,000	$2,085,000
Total Life Cycle Costs	**$4,445,000**	**$7,524,000**	**$11,535,000**

Table 4.5 B/C Analysis Summary of Bethel Road at Vineyard Drive

Life Cycle Benefit/Cost Ratios		
	No Build VS Roundabout	No Build VS Signal
Safety Benefit	$ 200,000	$ (6,303,000)
Delay Reduction Benefit	$ 1,890,000	$ 1,000,000
Fuel and GHG Benefit	$ (47,000)	$ 346,000
Total Benefits	**$ 2,043,000**	**$ (4,957,000)**
Added Operations & Maintenance Costs	$ 22,000	$ 48,000
Construction Costs	$ 4,475,000	$ 987,500
Total Costs	**$ 5,122,000**	**$ 2,133,000**
Life Cycle Benefit/Cost Ratio	**0.4**	**(-2.3)**

4.9 Alternatives Analysis Summary

If the existing intersection at Vineyard Drive & Bethel Road is not improved with either a traffic signal or roundabout, then traffic operations will deteriorate with severe delays and queueing, likely beyond the peak periods. With installation of either the traffic signal or a roundabout, multimodal improvements will also be improved at this intersection. However, installing a traffic signal at Bethel Road does not slow vehicles entering the community during off-peak hours. The traffic signal also does not rid the potential of more severe right-angle collisions like a roundabout does. Constructing a roundabout at Bethel Road/Vineyard Drive will provide a more accessible and more comfortable environment for vulnerable road users including schoolchildren, pedestrians, and bicyclists alike, as well as provide higher efficiency for motorists through the intersection while serving as a gateway treatment to the Templeton community. **A roundabout at Vineyard Drive/Bethel Road is the preferred option.**

This Corridor Plan will transform the current vehicle-centric Vineyard Drive to one that balances the diverse travel needs and introduces efficient, connected, and comfortable multimodal mobility options for all ages and abilities. This Corridor Plan proposes to enhance pedestrian and bicycle access throughout, by reassigning the right-of-way to active transportation modes. In addition to bridging the gaps in multimodal mobility, this Plan proposes intersection improvements to increase efficiency, reduce congestion during peak times, and aims to reduce travel speeds along the corridor through speed management techniques. The two alternatives for the Central Segment are compared qualitatively in Table 4.6, as to how well each alternative meets the Plan's purpose and goals. A Poor rating does not meet the goals or improve from existing conditions, a Fair rating minimally improves from existing, and a Good rating provides optimal improvements.

Table 4.6 Alternatives Comparison Summary

Metric	Existing	Alternative 1 (Trail & Bike Lanes)	Alternative 2 (Sidewalks & Buffered Bike Lanes)
Pedestrian Access			
Allows optimum sidewalk width	Poor	Good	Good
Provides buffer from travel lane	Poor	Good	Fair
Bicycle Access			
Provides buffer from travel lane	Poor	Fair	Good
LTS Score	Poor	Good	Fair
Minimizes conflicts at intersections	Poor	Good	Good
Auto Circulation			
Promotes traffic flows with reasonable congestion limits	Poor	Good	Good
Promotes slower speeds	Poor	Good	Good
Conceptual Design			
Right-of-Way Encroachment	n/a	Good	Fair
Estimated Cost	n/a	Good	Poor

- The multipurpose trail in Alternative 1 provides better pedestrian access as it has a greater buffer from the roadway than the sidewalks.
- For bicyclists, either option would provide a more comfortable setting, less-confident or less-experienced cyclists can take the trail, and more experienced and confident riders can stay in the bike lane. The benefit with Alternative 2 is that the bike lanes would have a 3' buffer from vehicular traffic. With the trail option, bicyclists would be sharing the trail with other users who walk or roll (including scooters, or wheelchairs). The separated trail would provide an optimum LTS score.
- Either Alternative 1 or 2 would provide optimum vehicular circulation during peak times while aiming to slow travel speeds during off-peak times. The intersection improvements are consistent between the two alternatives and both segment concepts include speed management techniques.
- For the design considerations, at this early conceptual-level stage, right-of-way (ROW) encroachment, including potential impacts to properties, utilities, and drainage, and preliminary cost estimates were generally considered. Alternative 2 is rated Fair and Poor in these categories because of the impacts to the south side of Vineyard Drive and the associated cost increase as compared to Alternative 1. Alternative 1 minimizes ROW encroachment by reassigning existing ROW for the trail and reduces cost.
- **Alternative 1 (Trail with Bike Lanes) is the preferred concept because it provides the best option that meets all the goals.**

Chapter 5. Funding Strategies & Implementation

5.1 Funding Opportunities

This chapter provides potential phasing for implementation of the Vineyard Drive Corridor Plan as well as a listing of available funding sources with a brief description of each source, and the processes for obtaining the funds. Some funding sources are designed for planning and preliminary engineering level studies while other sources are intended for design and construction of improvements. Funding for the construction of bike and pedestrian improvement projects is available through various State & Federal Programs (i.e., Active Transportation Program). Funding for the construction of a roundabout at Bethel Road could possibly come from the federal Congestion Mitigation and Air Quality (CMAQ) Program or the Regional Surface Transportation Program (RSTP).

Federal Funding Programs

Congestion Mitigation and Air Quality

The Congestion Mitigation and Air Quality (CMAQ) program was implemented to support surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief. Funds are directed to transportation projects and programs, which contribute to the attainment and maintenance of National Ambient Air Quality Standards in non-attainment or air quality maintenance areas for ozone, carbon monoxide, or particulate matter under provisions in the Federal Clean Air Act. Eligible CMAQ projects include public transit improvements; high occupancy vehicle lanes; Intelligent Transportation System Infrastructure; traffic management and traveler information systems (i.e., electric toll collection systems); employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); fringe parking facilities serving multiple occupancy vehicles; shared ride services; bicycle and pedestrian facilities; flexible work-hour programs; outreach activities establishing Transportation Management Associations; fare/fee subsidy programs; and under certain conditions, Particulate Matter improvement projects.

Source: SLOCOG **https://slocog.org/programs/funding-programming/grants**

Reconnecting Communities: Highways to Boulevards (RC:H2B) Program

The RC:H2B program was established, to be administered by the California Department of Transportation (Caltrans), with guidance from the California State Transportation Agency, and in consultation with the California Transportation Commission, the Department of Housing and Community Development, the Strategic Growth Council, and the Governor's Office of Planning and Research, to provide funding, upon appropriation by the Legislature, for the purpose of awarding competitive grants to eligible entities, in partnership with Caltrans, for planning or implementing the conversion or transformation of underutilized state highways into multimodal corridors that serve residents of underserved communities. The primary goal of the RC:H2B Pilot Program is to reconnect communities harmed by transportation infrastructure, through community-supported planning activities and capital construction projects that are championed by those communities.

Rural Surface Transportation Grant (Rural)

Under the Bipartisan Infrastructure Law (BIL), the Rural Surface Transportation Grant Program (Rural) supports projects that will improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, generate regional economic growth, and improve quality of life. Eligible uses include highway, bridge, tunnel, or highway freight projects eligible under the National Highway Performance Program, Surface Transportation Block Grant Program, or the Tribal Transportation Program, highway safety improvement projects, and projects on a publicly owned highway or bridge that improve access to an agricultural, commercial, energy, or intermodal facility, as well as integrated mobility management systems, transportation demand management system, or on-demand mobility services.

Safe Streets and Roads for All (SS4A)

The Bipartisan Infrastructure Law (BIL) established the new Safe Streets and Roads for All (SS4A) discretionary program, with $5 billion in appropriated funds over 5 years, 2022-2026. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. The program supports the development of a comprehensive safety action plan that identifies the most significant roadway safety concerns in a community and the implementation of projects and strategies to address roadway safety issues. Action Plans are the foundation of the SS4A grant program. SS4A requires an eligible Action Plan be in place before applying to implement projects and strategies.

Surface Transportation Block Grant Program (STBG)

The STBG is a program under the Bipartisan Infrastructure Law (BIL) and has the most flexible eligibilities among all Federal-Aid highway programs. The STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs. (*See RSTP*)

State Funding Programs

Active Transportation Program (ATP)

On September 26, 2013, Governor Brown signed legislation creating the Active Transportation Program (ATP) in the Department of Transportation (Senate Bill 99, Chapter 359 and Assembly Bill 101, Chapter 354). The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. The ATP is administered by the Division of Local Assistance, Office of Active Transportation and Special Programs. The purpose of ATP is to encourage increased use of active modes of transportation by achieving the following goals:

– Increase the proportion of trips accomplished by biking and walking.

- Increase safety and mobility for non-motorized users.
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals.
- Enhance public health.
- Ensure that disadvantaged communities fully share in the benefits of the program.
- Provide a broad spectrum of projects to benefit many types of active transportation users.

Highway Safety Improvement Program (HSIP)

The intent of this program is to significantly reduce public roadway fatalities and serious injuries. The emphasis will be at locations that are data and strategically driven. The HSIP has several major program features; separate fact sheets are available on each of these:

- Strategic Highway Safety Plan (SHSP)
- High Risk Rural Roads (HRRR)
- Reporting Requirements (HSIP Reports)

The project must be on any public road or publicly owned bicycle, pedestrian pathway, or trail. Projects must identify a specific safety problem that can be corrected or improved substantially. City or County transportation planning agencies can apply for these funds. The maximum funding amount for a project is $1 million, and the federal reimbursement rate is 90 percent. Caltrans district staff will solicit candidate projects from eligible public agencies. Interested agencies must apply by the due date to compete for funding. Caltrans staff will evaluate applications based on a Safety Index (calculated based on traffic safety data). A notice is made once a year to local agencies to submit applications for candidate HSIP projects.

Local Streets and Roads (LSR) Program

The purpose of the program is to provide approximately $1.5 billion per year to cities and counties for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system.

Regional Surface Transportation Program (RSTP)

Surface Transportation Block Grant Program funds are apportioned to States to provide flexible funding that may be used by States and localities for projects to preserve or improve conditions and performance on any Federal-Aid highway, bridge projects on any public road, facilities for active transportation, transit capital projects and public bus terminals and facilities. Fifty percent of a State's funds are to be distributed to areas based on population, known as Regional Surface Transportation Program (RSTP) funds. In addition, a portion of its RSTP funds is to be set aside for bridges not on Federal-Aid highways. Furthermore, a special rule is provided to allow a portion of funds reserved for rural areas to be spent on rural minor collectors. Examples of projects eligible for RSTP include highway projects; bridges (including construction, reconstruction, seismic retrofit, and painting); transit capital improvements; carpool, parking, bicycle, and pedestrian facilities; safety improvements and hazard elimination; research; traffic management systems; surface transportation planning; transportation enhancement activities and control measures; and wetland and other environmental mitigation.

Safe Routes To School (SRTS)

Safe Routes to School (SRTS) is an approach that promotes walking and bicycling to school through infrastructure improvements, enforcement, tools, safety education, and incentives to encourage walking and bicycling to school. Separate state and federal Safe Routes to School programs serve California. Caltrans distributes Safe Routes funding from the Federal Highway Administration.

State Highway Operations and Protection Program (SHOPP)

The State Highway Operating and Protection Plan (SHOPP) is a four-year program of projects that have the purpose of collision reduction, major damage restoration, bridge preservation, roadway preservation, roadside preservation, mobility enhancement, and preservation of other transportation facilities related to the state highway system. Non-capital projects are programmed through the SHOPP. The SHOPP is adopted simultaneously with the STIP every two years. While SLOCOG is allowed input to the SHOPP, the State has sole discretionary authority over the use of SHOPP funds. The SHOPP program includes projects designed to maintain the safety and operational integrity of the state highway system. Most of the projects are for pavement rehabilitation, bridge rehabilitation, and traffic safety improvements. Other projects may include such things as operational improvements (e.g., traffic signalization) and roadside rest areas. It does not include projects to add through lanes to increase capacity.

State Transportation Improvement Program (STIP) and Interregional Transportation Improvement Program (ITIP)

At the State level, these funds are divided into two programs: (1) the Regional Improvement Program (RIP) funded from a local share of the 75 percent of State Highway Account (SHA) funds set aside for regional transportation agency programming, and the Interregional Improvement Program (IIP), funded from the remaining 25 percent available for State programming. SLOCOG has authority to decide how to program the San Luis Obispo County regional share of RIP funds, subject to STIP eligibility guidelines. To be eligible, projects must be nominated by the regional agency in their Regional Transportation Improvement Program (RTIP).

Caltrans has the authority to program the Interregional Transportation Improvement Funds. Similar to the RTIP, Caltrans must nominate projects within the ITIP. STIP funds are primarily intended for capital projects. Eligible projects include constructing and widening state highways, local roads, public transit (including buses), pedestrian and bicycle facilities, grade separations, intermodal facilities, and safety projects. While these funds may also be used for local road rehabilitation, the California Transportation Commission (CTC), which has authority over the STIP, has not supported the programming of STIP funds for road rehabilitation projects in recent STIP cycles.

Sustainable Transportation Planning Grant

The Sustainable Transportation Planning Grant Program was created to support the California Department of Transportation’s (Caltrans) Mission: Provide a safe and reliable transportation network that serves all people and respects the environment. The purpose of the Sustainable Communities grants is to fund local and regional multimodal transportation and land use planning projects that further the region’s RTP SCS/APS (where applicable), contribute to the State’s GHG reduction targets, and assist in achieving the Caltrans Mission and Grant Program Objectives.

Developer In-Kind Contributions

Infrastructure frontage improvements in correlation with land development are typically the responsibility of the developer unless other funding sources can be identified. This cost would be included within the project budget. Developer-responsibility for improvements within the corridor would include frontage roads providing access to commercial and/or residential development along the corridor.

Regional Programs

Communities Betterment Grant

This grant is administered by SLOCOG and is for community-level infrastructure improvements that support sustainable transportation goals. Funding for the program includes uncommitted funds from the Surface Transportation Block Grant (STBG) and CMQA and CRP. Priority shall be given to projects that have demonstrated performance benefits in mobility and accessibility, safety and security, and

healthy communities. The guidelines for Cycle 2 will be developed in fall 2023, additionally a Call for Projects is anticipated in early November/December 2023.This grant is meant for smaller-scale infrastructure improvements and could potentially be used for constructing improved bike lanes with green paint or implementing a Leading Pedestrian Interval (LPI) at traffic signals.

County Road Impact Fee (RIF) Program

San Luis Obispo County has a transportation impact fee program in the Templeton community consistent with Government Code 66000, which was created by AB 1600. Recognizing the arterial function of Vineyard Drive, this roadway and its intersections have been and will continue to be in Templeton Road Impact Fee program. Therefore, transportation impact fees could be a resource for at least a portion of the costs for the identified improvements in this Plan. The transportation impact fee program funds the expansion of existing traffic facilities and the construction of new facilities that will be needed to provide and maintain adequate traffic circulation within the fee area to support new development. Currently, improvements to Bethel Road at Vineyard Drive, and the new roadways such as the Rossi Road realignment are programmed in the Templeton planning area Capital Improvements Program and RIF.

Additional Grant Programs

Additional grant programs that may fund active transportation improvements like those included in this Plan include:

- Clean Mobility Options
- Local Partnership Program
- Office of Traffic Safety Grant Program
- Solutions for Congested Corridors
- Sustainable Transportation Equity Project
- Transformative Climate Communities
- Transportation Development Act Funding

5.2 Phasing Potential

The key elements of the Plan and recommended alternatives as presented in Chapter 4 consists of installing green-painted bike lanes through all traffic signals, constructing a multiuse trail along the north side of Vineyard Drive between US 101 and Bethel Road, and installing a roundabout at Bethel Road. The multiuse trail provides a dedicated path for pedestrians and cyclists separate from the traveled way. Should the County consider implementing portions of this Plan via a phased approach, most improvements can be constructed individually. Funding for the largest projects will require the most time and effort to secure. Therefore, a phased approach can be implemented near-term, where the roundabout or trail could be constructed once funding is secured:

- Green-painted bike lanes can be implemented on existing bike lanes in conflict zones as the 1st phase. This would be low-cost and would improve access and visibility for cyclists along the corridor and through intersections.
- Prioritize pedestrian improvements at Vineyard Drive/Main Street by installing high-visibility crosswalks and a Leading Pedestrian Interval (LPI) for the traffic signal.
- Speed management techniques are relatively low-cost and can be implemented in the near-term. This could include additional speed feedback signs (use sparingly), pavement speed limit markings, flashing advance intersection warning signs, optical speed bars, and lane narrowing.
- The County should consider a roundabout **Pilot Project** at the intersection of Bethel Road & Vineyard drive.
  - Prioritize installing a roundabout at Bethel Road.
- Prioritize extending the westbound left turn pocket at the elementary school.