GO OJAI
DEMONSTRATION PROJECT // 2020

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CITY OF OJAI MARICOPA HWY DEMONSTRATION PROJECT – TECHNICAL REPORT

Final Technical Report

Prepared for the City of Ojai and the
Southern California Association of Governments

June 22, 2020

CONTENTS

SUMMARY

This report summarizes the existing conditions along Maricopa Highway (SR 33), from E. El Roblar Drive/Cuyama Road to W. Ojai Avenue (SR 150) to inform the Go Ojai Demonstration Project.

A demonstration project is a temporary installation of infrastructure in anticipation of a longer term, permanent project. These types of projects are intended to provide a “rendering in real-time” of proposed infrastructure and/or permanent projects to evaluate the proposed improvements and offer hands-on participation from the community in the project delivery.

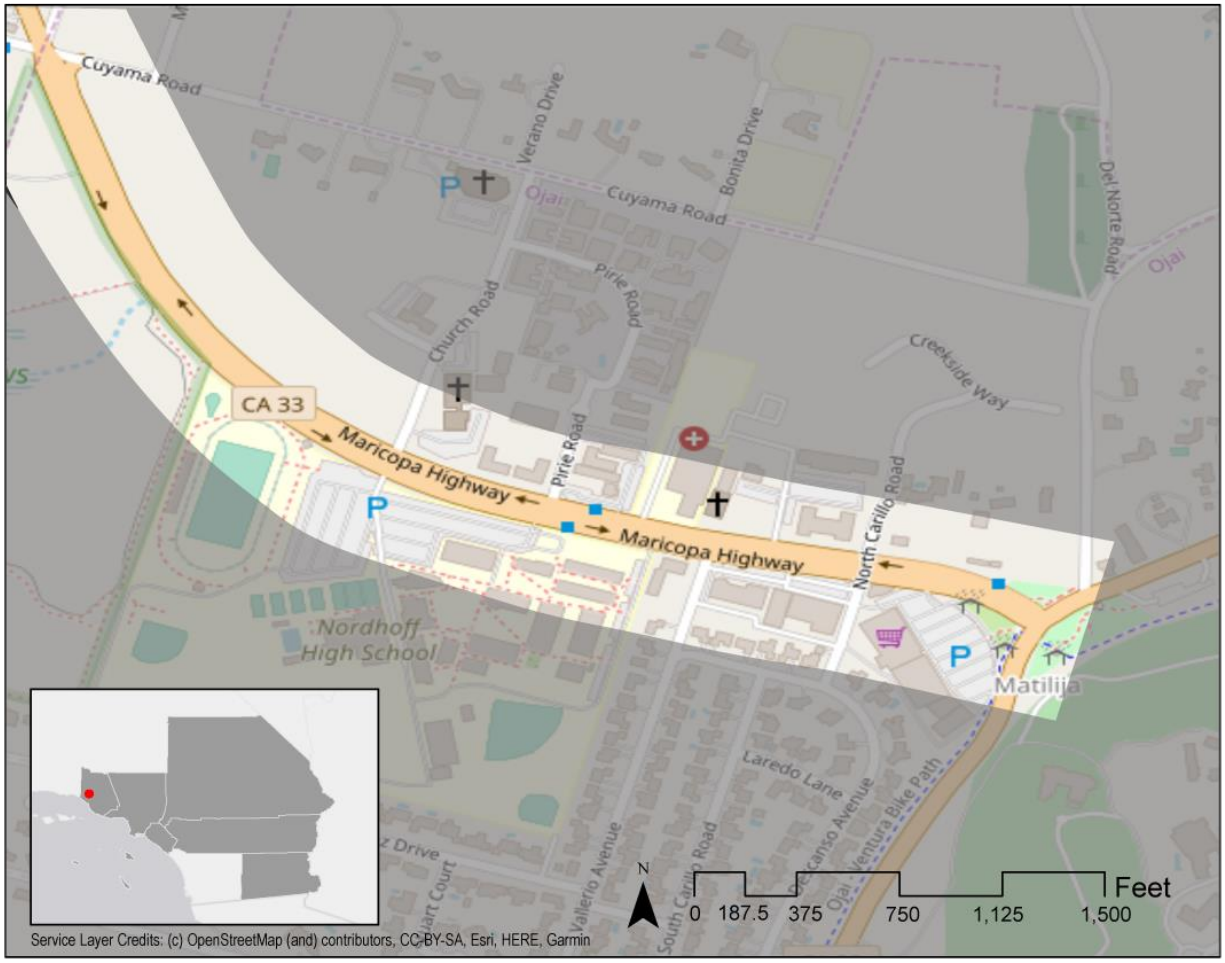
To be evaluated for six months, the City will implement on-street parking, Class IV (separated) bike lanes, and intersection treatments (like curb extensions) for a reconfiguration of the roadway that works better for all modes. The project will include one travel lane reduction in each direction, with no changes to existing striping or curbing except for where existing striping will conflict with the demonstration project striping. The demonstration will also address challenges with the pick-up and drop-off at Nordhoff High School, and contain site-specific mitigation strategies for the City to implement as needed in response to challenges during the evaluation period. Figure 1 shows the extents of the demonstration project corridor.

The primary goal of the demonstration project is to demonstrate the Council-supported concept design for the permanent ATP Project for Maricopa Highway between W. Ojai Avenue (“at the Y”) and Cuyama Road. The permanent ATP Project calls for a reduction of travel lanes, improved pedestrian crossings, the installation of on-street parking and separated bike lanes, and adding sidewalks and trees where they are missing. Other goals of the Go Ojai Demonstration Project include:

1. Increasing the number of persons walking and biking in the project area by 10%;
2. Providing safe connections between essential destinations in the city, including schools in the study area; and,
3. Educating and increasing awareness of active transportation by collecting a minimum of 300 before/after surveys from local residents.

In order to effectively measure these project goals, data collection and analysis must be completed before and after installation to document conditions. As such, the project team has acquired data and completed an existing conditions analysis in order to assess pre- and post-implementation impacts of the demonstration project.

Figure 1. Project Area Map - Maricopa Hwy (SR 33) from E. El Roblar Dr/Cuyama Rd to W. Ojai Ave (SR 150)



Project Area

Source: Southern California Association of Governments Open Data, County Boundaries, 2017

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EXISTING CONDITIONS

Assessing existing conditions of a project area helps to establish a baseline from which to evaluate the project and its future iterations. This report will help the project team create benchmarks for the demonstration project, and clearly evaluate its impacts.

Due to the impacts of COVID-19 restricting travel and in-person contact, the “before” manual, in-field counts were not collected. Counts from a 2016 traffic impact study are included in this report in place of the manual counts, and “after” in-field counts will be executed after the project is installed.

Table 1 is a summary of the data included in this report.

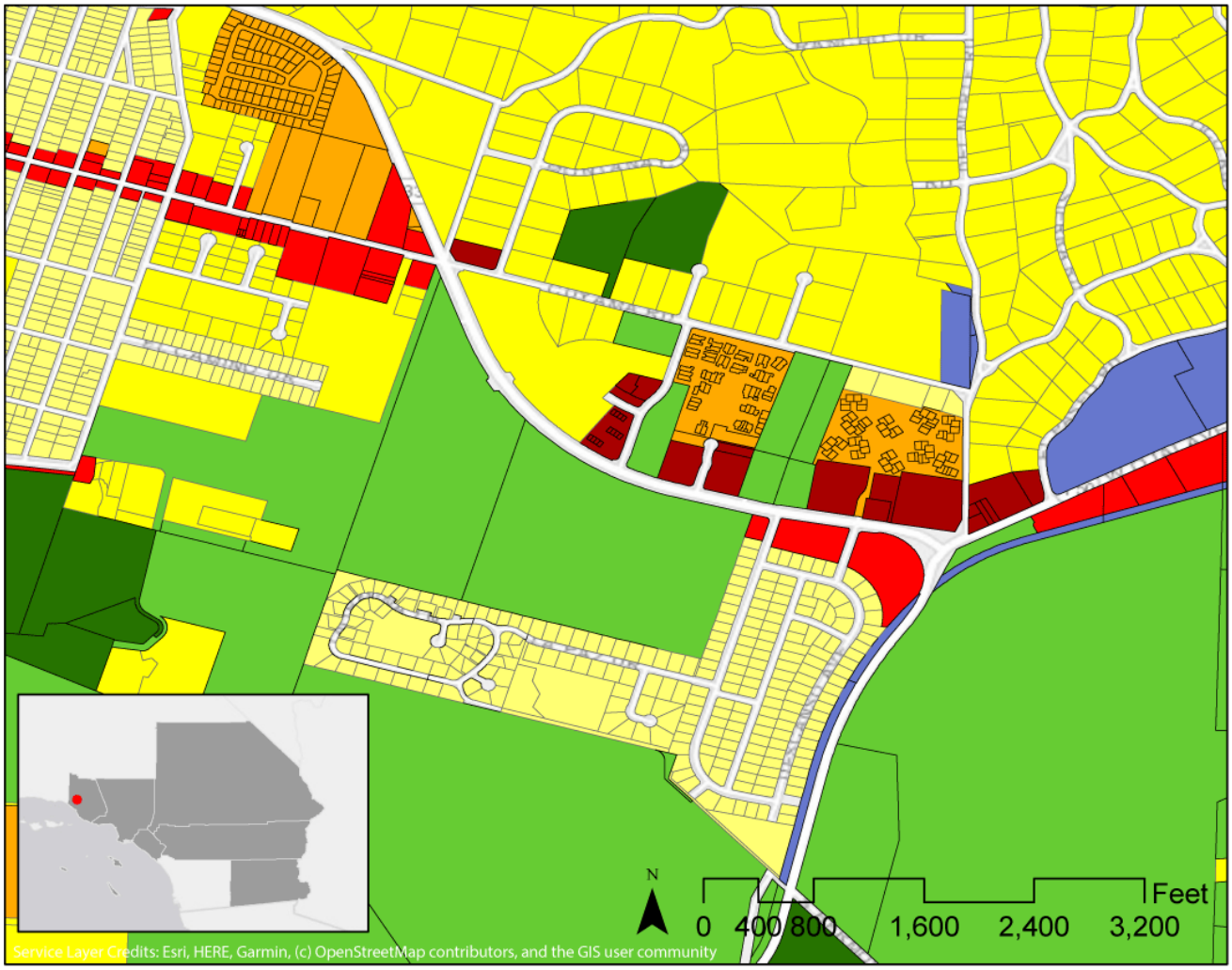
Table 1. Elements included in Technical Report

Data	Included in Report
Traffic volumes and roadway capacity	Yes
Mode share	Yes
Description of land use/ destinations	Yes
Pedestrian and bicycle crash data	Yes: Pre-installation only; Post-installation data will not be available until likely 1-2 years after installation
Pedestrian and bicycle count data	Yes: Pre-installation only (2016 data); in-field counts will be collected after project is installed.
Automated counts	No: Report will be updated once counts are collected, although historic Caltrans daily count volumes have been included
Manual in-field counts	No: Pre-installation only (2016 data); in-field counts will be collected after project is installed.
Connectivity to essential destinations and services	Yes
Regulations affecting active transportation	Yes
Speed survey data	Yes (2019 data)

LAND USE

SCAG land use data from 2016 shows that south of the project area is predominantly open space, with some single family residential and commercial uses. Nordhoff High School is within an open space parcel. Uses north of the project area include mostly office space, with some open space and residential uses. The vacant lot area between Cuyama Road and Church road north of the project area is currently zoned for single-family residential use.

Figure 2. Project Area Land Use (SCAG 2016)



Source: Southern California Association of Governments Open Data, Ventura County Land Use Dataset, 2018

RELEVANT POLICIES, ORDINANCES, AND STUDIES

Below are relevant policies, ordinances, and studies in the City of Ojai with relevance to the demonstration project:

City of Ojai General Plan: The 2014 – 2021 Housing Element projects gradually declining traffic volumes, and the 1997 Circulation Element calls for decreased dependence on single occupant automobile travel by providing a high level of pedestrian, bicycle, and public transit opportunities.

City of Ojai Complete Streets Master Plan (2017): In addition to being aligned with goals from the city's General Plan, the ATP project and the Go Ojai Demonstration Project are supported by the city's 2017 Complete Streets Plan. Goals from the Plan include prioritizing safety features at locations where crashes occur frequently and creating better bicycle and pedestrian features for safe and convenient travel. The Maricopa Highway corridor is identified in the Complete Streets Plan as a proposed low stress route for people bicycling, with modal emphasis on pedestrians. The Plan notes Maricopa Highway is "overbuilt" and considers the roadway "needlessly and dangerously wide." The plan recommends creating appropriate bicycle facilities on Maricopa Highway and reducing travel lanes from four to two, consistent with what is being proposed for the ATP project and the Go Ojai Demonstration Project.

City of Ojai Bicycle and Pedestrian Master Plan (1999): While it does not specifically reference the project area, the Bicycle and Pedestrian Plan calls out the value of bicycle and pedestrian improvements for the City and has the goal of developing a city-wide bicycle and pedestrian system to meet the needs of commuters and recreational users while reducing vehicle trips.

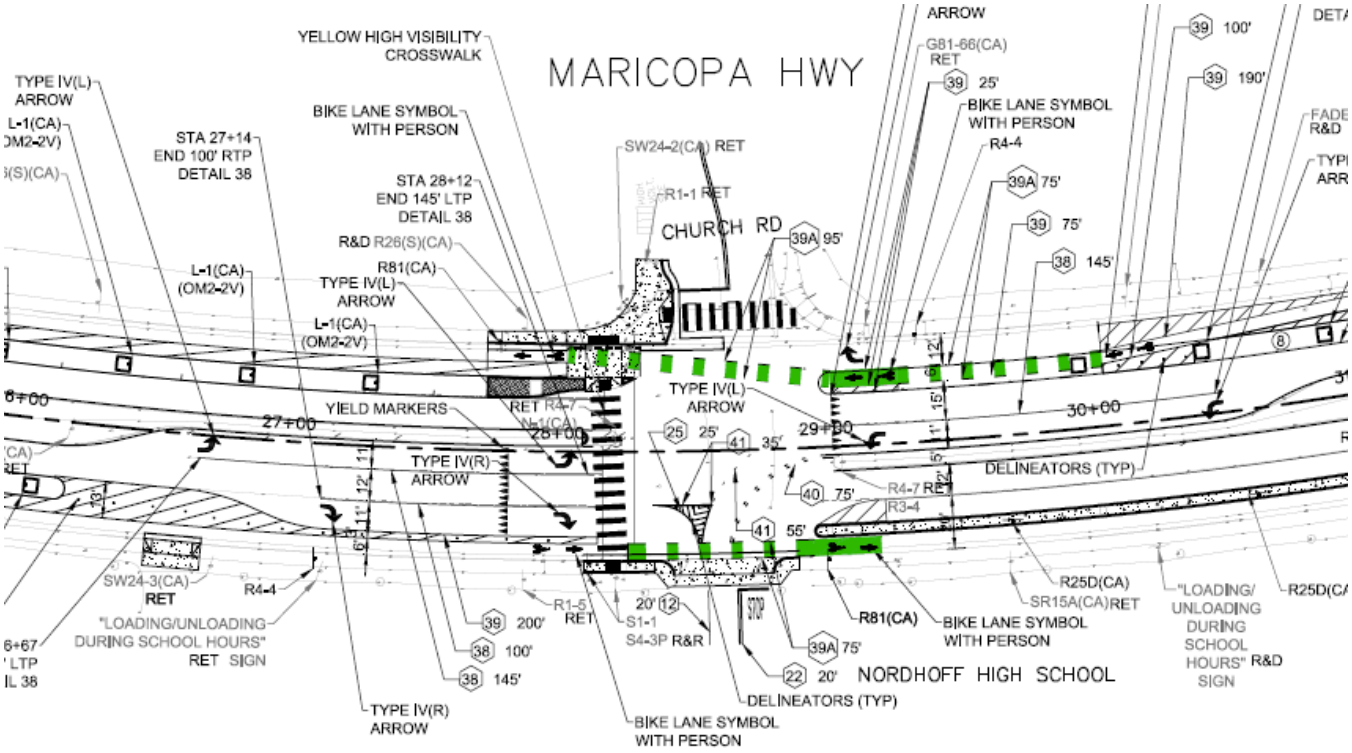
City of Ojai Council Actions (2011-2019): Ojai City Council has been supportive of safety improvements along Maricopa Highway. In 2011 and 2012, pedestrian crosswalk safety, bicycle network, and complete streets implementation on Maricopa Highway were identified as top priorities. From 2011 through 2015, all City Council votes related to this project had unanimous support. Council passed a resolution supporting the ATP grant application in May 2015 and has supported the project since winning the grant with additional workshops, meetings, and review. Specific City Council actions related to this project, both the permanent ATP Project and Demonstration Project, include:

- **January 13, 2015**: Council authorized the ATP grant application for redesign of Maricopa Highway
- **May 26, 2015**: Council reauthorized the ATP grant application with resolution #15-17, and authorized the traffic engineering consultant
    - "A RESOLUTION OF THE CITY COUNCIL SUPPORTING PEDESTRIAN AND BIKE IMPROVEMENTS ON OJAI AVENUE AND MARICOPA HIGHWAY, AUTHORIZING THE CITY MANAGER TO APPLY FOR THE ACTIVE TRANSPORTATION PROGRAM GRANT FOR THESE IMPROVEMENTS AND TO USE A CONGESTION MITIGATION AND AIR QUALITY GRANT FOR MATCHING FUNDS"
- **March 8, 2016**: Council authorized the ATP grant management consultant
- **December 13, 2016**: Council reviewed the proposed ATP project, and authorized the outreach effort
- **September 18, 2017**: Council reviewed the proposed ATP project, and adopted the Complete Streets Master Plan, which included the proposed Maricopa Highway lane reduction
- **July 10, 2018**: Council reviewed the proposed ATP project and proposed outreach
- **September 20, 2018:** Public meeting for the ATP project held at the Ojai Valley Women's Club
- **September 29, 2018:** Public meeting for the ATP project held at City Hall

- **October 16, 2018**: Public workshop for the ATP project held at the Jack Boyd Community Center, with 100 members of the public in attendance
- **December 11, 2018**: Council reviewed the proposed ATP project, approved the release of the ATP project RFP, and authorized the City to apply for SCAG demonstration project grants (5 Y; 0 N)
- **January 22, 2019**: Council approved the lane reduction with separated bike lanes as the proposed Maricopa Highway ATP project design
- **March 26, 2019**: Council reviewed the *Emergency Evacuation - Functionality of Maricopa Highway (SR 33) During Emergencies* report
- **May 28, 2019**: Council reviewed the ATP project consultant design contract
- **June 11, 2019**: Council approved the ATP project consultant design contract
- **January 28, 2020**: Council authorized the creation of a truck management plan
- **February 11, 2020**: Council reviewed the ATP project 35% design plans
- **March 10, 2020**: Council received an ATP project status update
- **April 28, 2020**: Council received an ATP project status update
- **June 18, 2020**: Council approved the ATP project 60% design plans

SR 150 and SR 33 Pedestrian and Bicycle Safety Improvements (2019-2020): The ATP-funded project started with Council authorization in 2015. As shown in the list above, consultant Alta Planning was hired to produce the design and construction documents for this project in June 2019 and that effort continues. To date, 35% design plans were submitted to Caltrans in February 2020, and revised 60% plans were submitted in April 2020. Updated 60% design plans were submitted in May 2020. A small snapshot of the submitted Caltrans plans at Church Road is provided in Figure 4 for reference. The proposed design includes two parking protected bike lanes (one in each direction), one travel lane per direction (today there are two per direction) with left-turn lane pockets, on-street parking with trees in the parking lane, curb extensions, and pedestrian ramp reconstruction. All materials and permitting for the project will require approval by Caltrans and are consistent with the direction of the council.

Figure 4. May 2020 60% Design Submittal for Intersection of Maricopa Highway (SR 33) and Church Road



Pedestrian and Bike Safety Improvements Traffic Impact Study (2018): Consultant Alliance JB evaluated a proposal from Ojai's Pedestrian and Bike Safety Improvements Project on Maricopa Highway (SR 33) and Ojai Ave (SR 150) between El Roblar Drive and Gridley Road. The proposed project included pedestrian and bicycle improvements, as well as the removal of one travel lane in each direction along part of Maricopa Highway. This document was reviewed by Caltrans. Further findings from this traffic impact study are detailed later in this technical report.

Supplemental Traffic Evaluation Report of the Functionality of Maricopa Highway (2019): Consultant Alliance JB evaluated the existing emergency evacuations functionality of 4-lane Maricopa Highway (SR 33) between El Roblar Drive and Ojai Avenue (SR 150) compared to the emergency evacuations functionality of the road segment if converted to a 2-lane highway as proposed as part of the Pedestrian & Bike Safety Improvements Project. The evaluation report found that the emergency evacuations functionality of the roadway would not change if reconstructed as a 2-lane highway and was approved by Caltrans.

Engineering and Traffic Survey (2019): In 2019, Caltrans conducted a Speed Zone Survey on Maricopa Highway (SR 33) between Ojai Avenue (SR 150) and the Los Padres National Forest Boundary, a roadway section that includes the demonstration project area. Findings from this study are detailed later in this technical report.

PEDESTRIAN AMENITIES

Much of the project area has existing sidewalks, with the exception of three small areas: west of the intersection of N Carrillo Road on the south side of Maricopa Highway, the access point for the Ojai Meadows Preserve on the

south side of Maricopa Highway, and across Maricopa Highway from the Ojai Meadows Preserve (see Figure 5). While the latter two locations are likely property access curb cuts, due to the fencing across both entrances they operate as gaps in the sidewalk network.

Four intersections lack traffic lights: N Carrillo Road/Maricopa Highway, Vallerio Avenue/Maricopa Highway, Pirie Road/Maricopa Highway, and Church Road/Maricopa Highway (indicated in Figure 5 as “Uncontrolled Crossing”). All of these intersections have stop-controlled side streets, as well as RRFBs (installed June 2019). The crossing distance for pedestrians at these intersections is between 83-87 feet (ADA ramp to ADA ramp), which takes approximately 15 seconds to cross.

There are 4 continental crosswalks across Maricopa Highway between W. Ojai Ave. and E. El Roblar Drive/Cuyama Road. Distance between marked pedestrian crossings is around 500 feet (a two-minute walk), with the exception of the roadway segment between Pirie Road and El Roblar Drive/Cuyama Road, which has a distance over 2,000 feet between marked crossings (an 11-minute walk, approximately).

Table 1. Distance between Marked Crosswalks on Maricopa Highway (SR 33)

Intersection with Marked Crosswalk	Distance to Next Marked Crosswalk (moving west)	Time to Walk to Next Marked Crosswalk (moving west)
Ojai Ave/Maricopa Hwy	480 ft	2 min
Carrillo Rd/Maricopa Hwy	480 ft	2 min
Vallerio Ave/Maricopa Hwy	560 ft	2 min
El Roblar Dr/Cuyama Rd/Maricopa Hwy	2,320 ft	11 min

Source: Google Maps, 2020

Figure 5. Pedestrian Network Conditions

Missing Sidewalks and Uncontrolled Crossings

Missing Sidewalks Uncontrolled Crossing

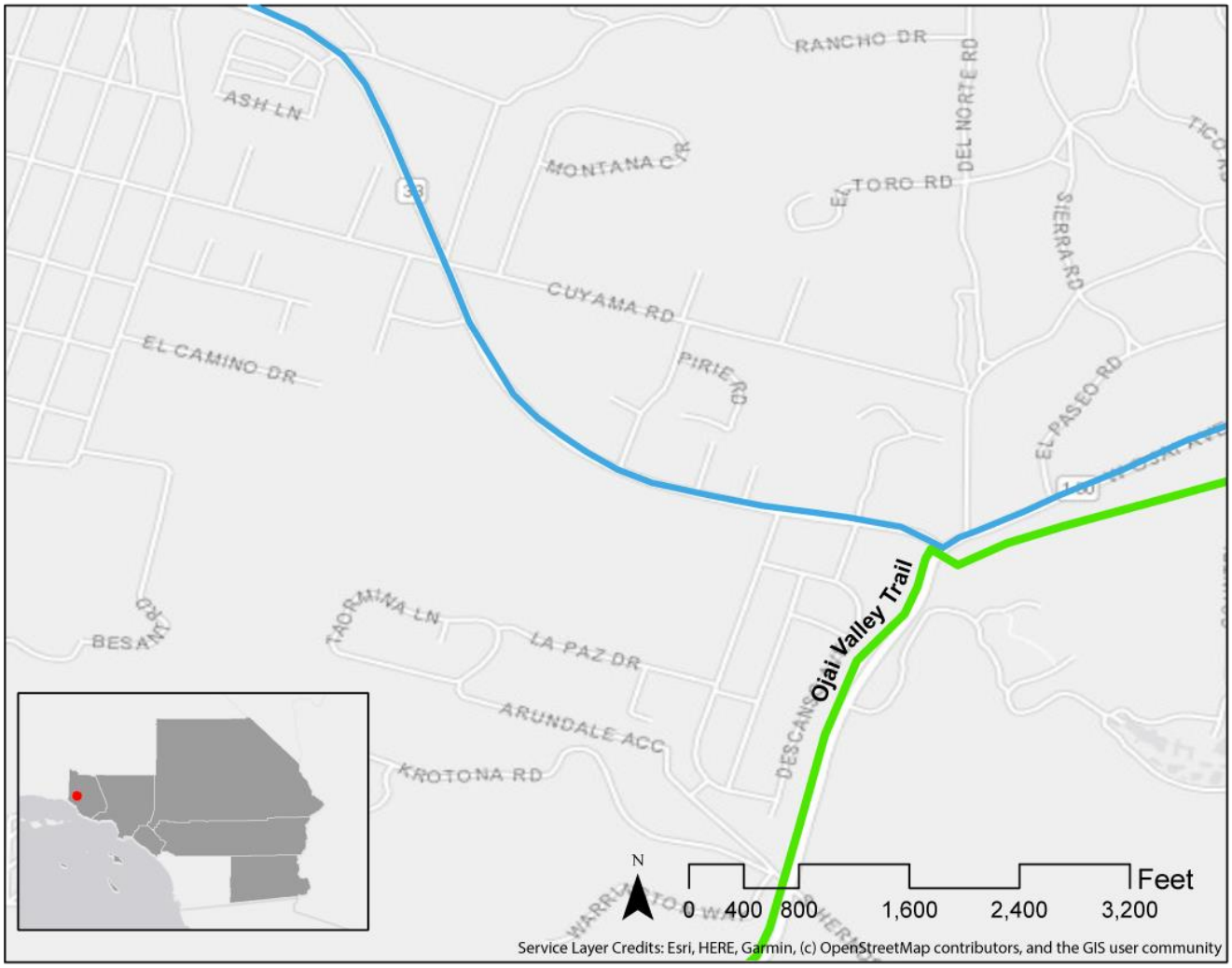
Source: Google Street View, 2019

BICYCLE AMENITIES

There are no existing bicycle facilities within the project area, but the eastern endpoint of the project area at Maricopa Highway and Ojai Avenue connect to the Ojai Valley Trail, a nine-mile trail that parallels Ojai Avenue and Highway 33 from Foster Park in West Ventura to Fox Street in Ojai. One side of the trail is paved for people walking, biking, jogging, or walking their pets, while a fence separates the paved path from a dirt path for horseback riders. See Figure 6 for existing and proposed bicycle routes.

The proposed City of Ojai SR 33 and SR 150 Pedestrian & Bike Safety Improvements Project includes bicycle improvements along Maricopa Highway. These improvements include Class II Buffered Bike Lanes, Class IV Bike Lanes, and Shared Lane Markings, along with improved signage, markings and/or roadway lane reconfigurations. The *Pedestrian and Bike Safety Improvements Traffic Impact Study* found that these proposed improvements will create significant safety improvements for bicyclists with no significant impact to pedestrians or vehicular traffic. The study proposed bicycle lanes in the project area (Maricopa Highway between El Roblar Drive and Ojai Avenue), as well as east of the project area on Ojai Avenue to Gridley Road.

Figure 6. Map of Existing and Proposed Bicycle Routes in Project Area



2018 Existing and Proposed Bicycle Routes

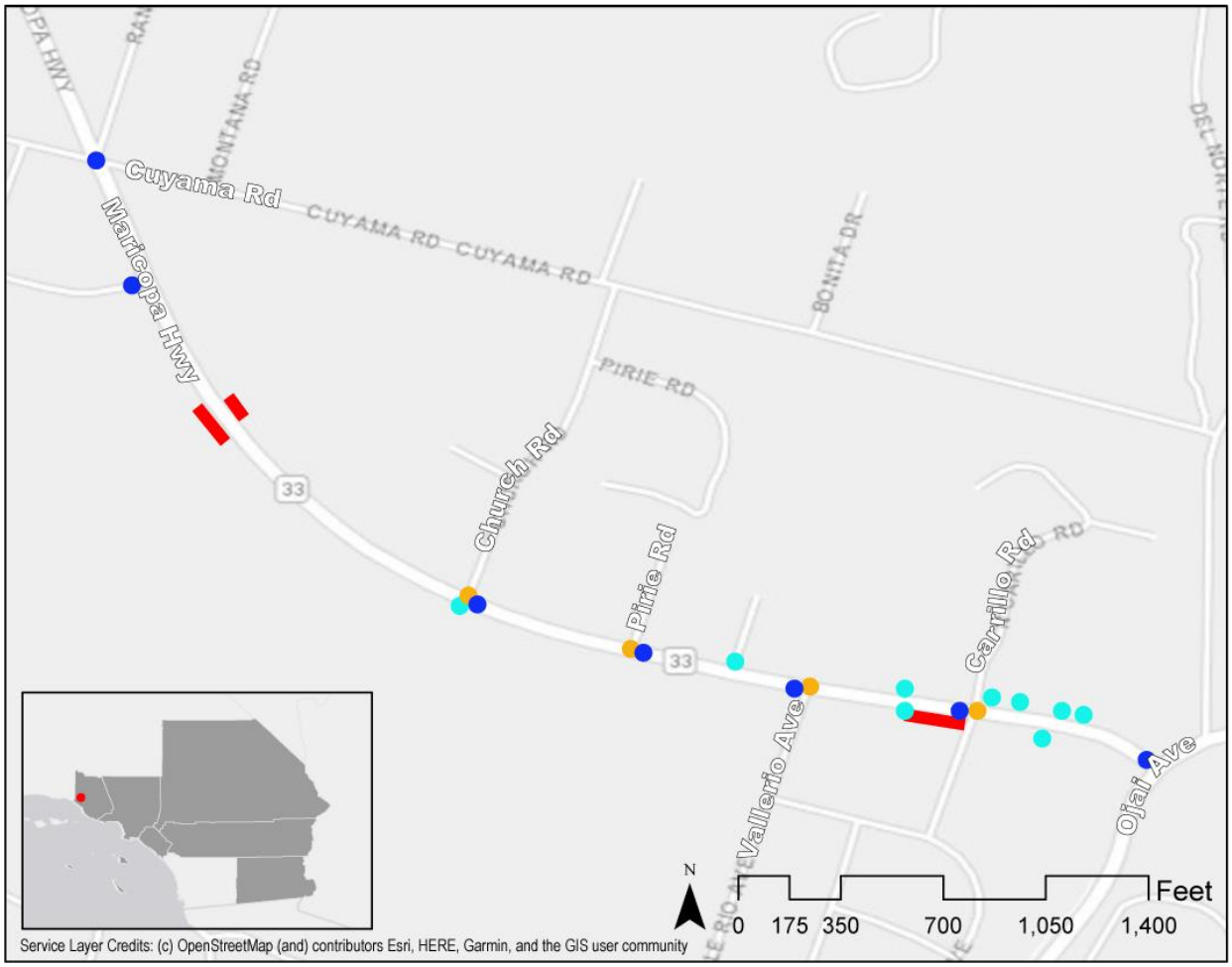
Proposed Bicycle Facility Existing Bicycle Facility (Trail)

Source: Southern California Association of Governments Open Data, Southern California Regional Bikeway Shapefile (RBS), 2018

CONFLICT ZONES

Locations where people walking, biking, and driving intersect paths are often areas of notable conflict. Intersections and crossings can create issues as motorists attempt to turn across paths of people walking and biking, most often by motorists turning right as non-motorists attempt to travel straight through. These areas of potential conflict can be retrofitted by enhancing visibility (e.g., green paint, raised crossings, improving sight distance, etc.) and slowing turning vehicles (e.g., tightening curb radii). Figure 7 identifies areas of potential conflict based on missing infrastructure or locations where multiple modes of transportation cross paths.

Figure 7. Conflict Zones for Pedestrians, Bicyclists and Drivers



Conflict Zones

Missing Sidewalk · Uncontrolled Crossing · Right Turn Bicycle/Vehicle Conflict · Driveway

Source: Google Street View, 2019

MODE SHARE & DEMOGRAPHICS OF WALKING AND BIKING

American Community Survey (ACS) data from 2017 shows that 7% of Ojai commuters over 16 years old commute to work by walking or bicycling, with women more likely to walk than men and men being more likely to bike than women (see Table 2). It is important to note that this data cannot provide a complete picture of everyone who is walking and biking in the city or the project area, as it excludes non-work travel and the movements of anyone under 16 years old. For example, observations of bicyclists at Nordhoff High School suggest a larger percentage of bicyclists in the project area than what is reported in these statistics. While they are a small percentage of the overall population, the number of existing walking and bicycling commuters in the project area could provide an opportunity to improve bicycle and pedestrian facilities beyond what is currently scoped for Maricopa Highway, and include improvements on cross streets throughout the city.

Table 2. Means of Transportation to Work (workers 16 years and over): City of Ojai

Gender	Walking	Biking	Transit	Driving
Male (1,788 total)	0.6%	2.0%	2.5%	89.3%
Female (1,588 total)	1.2%	0.4%	7.7%	79.8%
Total (3,376)l	4.9%	2.1%	0.9%	75.4%

Source: 2013-2017 American Community Survey 5-year Estimates - Commuting Characteristics by Sex

The project area is made up of two census tracts (9.01 and 10.02). Census tract 9.01 includes the area directly north of the project and includes geographic areas within the City of Ojai (29.8% of tract area) and unincorporated area (70.2% of tract area). Census tract 10.02 includes the area directly south of the project and includes geographic areas within the City of Ojai (14.2% of tract area) and unincorporated area (85.8% of tract area). – ACS walking and bicycling commuting data for each tract by gender is in the Tables 3 and 4 below. Like the city overall, men in both census tracts were more likely than women to bike to work, and women were more likely than men to walk to work. Census Tract 9.01 had a higher percentage of walking commuters, while Census Tract 10.02 had a higher percentage of bicycling commuters.

Table 3. Means of Transportation to Work (workers 16 years and over): Census Tract 9.01

Gender	Walking	Biking	Transit	Driving
Male (526 total)	4.6%	1.7%	1.0%	73.4%
Female (429 total)	7.5%	0.0%	3.3%	70.4%
Total (955)	5.9%	0.9%	2.0%	72.0%

Source: 2013-2017 American Community Survey 5-year Estimates - Commuting Characteristics by Sex

Table 4. Means of Transportation to Work (workers 16 years and over): Census Tract 10.02

Gender	Walking	Biking	Transit	Driving
Male (1,772 total)	0.6%	2.0%	2.5%	89.3%
Female (1,566 total)	1.2%	0.4%	7.7%	79.8%
Total (3,338)	0.9%	1.3%	4.9%	84.8%

Source: 2013-2017 American Community Survey 5-year Estimates - Commuting Characteristics by Sex

MULTIMODAL TRAFFIC VOLUMES

CALTRANS TRAFFIC VOLUMES

Caltrans traffic volumes were collected from their online Traffic Census Program for the years 2013 - 2017, including daily and peak hour volumes, with most recent available data from 2017. The only available traffic count location in the study area is near the El Roblar Avenue/Cuyama Road/Maricopa Highway (SR 33) intersection, and it shows consistent peak hour volumes of 1,300 total vehicles and average annual average daily traffic (AADT) of 8,980 over that time period. Details are provided in Table 5.

Table 5. Maricopa Highway (SR 33) south of El Roblar Drive

Year	Peak Hour	Peak Month AADT	AADT
2017	1,300	11,600	7,000
2016	1,300	10,000	9,500
2015	1,300	10,000	9,500
2014	1,300	10,000	9,400
2013	1,300	10,000	9,500

Source: Caltrans (2013 – 2017)

TRAFFIC VOLUMES FROM 2016 TRAFFIC IMPACT STUDY

In 2016, motor vehicle, pedestrian, and bicycle traffic counts were conducted for AM, School PM, and Later Afternoon PM peak period conditions as part of the *Pedestrian and Bike Safety Improvements Traffic Study (AllianceJB, 2018)*. Data was collected while school was in session on Tuesday, April 26, 2016. Unless counts are completed prior to installation of the demonstration project on Maricopa Highway, these counts will be used as the "before" count data in the final assessment of the project. Additionally, according to the report, the School PM pedestrian and bicycle counts are estimated to be approximately 24% higher than shown in Tables 7 and 8, as the junior class (170 students) at Nordhoff High School (total enrollment of 718 students at the time) was let out early at about 1:00 PM on the day of the counts (170/718=24%). Figure 8 maps the bicycle and pedestrian turning movement counts from Tables 7 and 8.

Table 6. Intersection Vehicle Turning Movement Counts (2016)

Intersection	AM Peak Hour	School PM Peak Hour	PM Peak Hour
Ojai Ave/Maricopa Hwy	-	-	-
Carrillo Rd/Maricopa Hwy	1,776	2,278	2,029
Vallerio Ave/Maricopa Hwy	1,756	2,228	1,888
Pirie Rd/Maricopa Hwy	1,731	2,075	1,786
Church Rd/Maricopa Hwy	1,607	1,832	1,611
El Roblar Dr/Cuyama Rd/Maricopa Hwy	1,756	1,877	1,604

Source: City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study

Table 7. Intersection Bicycle Turning Movement Counts (2016)

Intersection	AM Peak Hour	School	PM Peak Hour

			PM Peak Hour
Ojai Ave/Maricopa Hwy	28	33	33
Carrillo Rd/Maricopa Hwy	11	15	12
Vallerio Ave/Maricopa Hwy	-	-	-
Pirie Rd/Maricopa Hwy	6	23	22
Church Rd/Maricopa Hwy	10	19	27
El Roblar Dr/Cuyama Rd/Maricopa Hwy	12	33	15

Source: City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study

Table 8. Intersection Pedestrian Turning Movement Counts (2016)

Intersection	AM Peak Hour	School PM Peak Hour	PM Peak Hour
Ojai Ave/Maricopa Hwy	36	63	32
Carrillo Rd/Maricopa Hwy	23	38	17
Vallerio Ave/Maricopa Hwy	-	-	-
Pirie Rd/Maricopa Hwy	8	30	20
Church Rd/Maricopa Hwy	9	34	23
El Roblar Dr/Cuyama Rd/Maricopa Hwy	19	30	18

Source: City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study

In 2015, manual bicycle and pedestrian counts were conducted at Nordhoff High School while school was in session (see Table 9). AM peak hour counts (7am-9am) were collected on May 11th, 2015, and School PM counts (2pm-4pm) were collected on May 15th, 2015. In 2016, bicycle and pedestrian counts were conducted as a part of the City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study (see Table 10). These counts will form the basis of the project's "after" evaluation.

Table 9. Bicycle/Pedestrian Counts at Nordhoff High School (2015)

Mode	AM Peak Hour	School PM Peak Hour
Bicycles	33	32
Pedestrians	135	140
Total	168	172

Source: City of Ojai

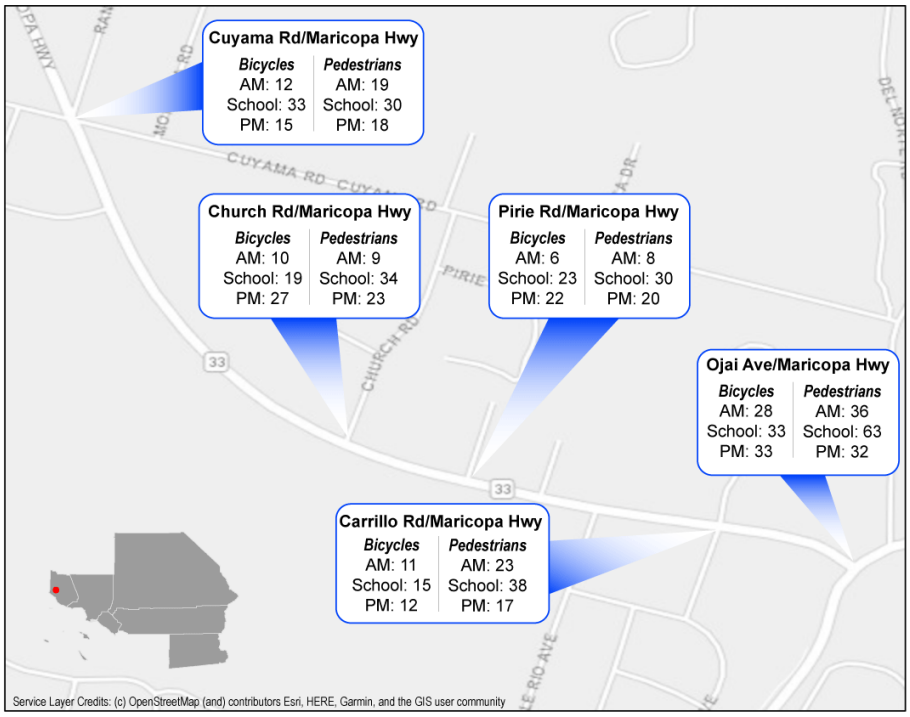
Table 10. Bicycle & Pedestrian Volumes at Intersections on Maricopa Highway (2016)

Mode	AM Peak Hour	School	PM Peak Hour
Cuyama Rd			
Bicycles	12	33	15
Pedestrians	19	30	18
Total	31	63	33
Church Rd			
Bicycles	10	19	27
Pedestrians	9	34	23
Total	19	53	50
Pirie Rd			

Bicycles	6	23	22
Pedestrians	8	30	20
Total	14	53	42
Carrillo Rd			
Bicycles	11	15	12
Pedestrians	23	38	17
Total	34	53	29
Ojai Ave			
Bicycles	28	33	33
Pedestrians	36	63	32
Total	64	96	65

Source: City of Ojai, see Figure 8

Figure 8. Bicycle and Pedestrian Volumes at Intersections on Maricopa Highway



Bicycle and Pedestrian Volumes at Intersections

Source: City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study, 2016

SPEED DATA

As noted previously, Caltrans conducted a Speed Zone Survey in 2019 on Maricopa Highway (SR 33) between Ojai Avenue (SR 150) and the Los Padres National Forest Boundary, a roadway section that includes the

demonstration project area. This survey obtained vehicle speed samples from June 6, 2019 through June 18, 2019 to provide recommendations of appropriate speed limits. The survey found that the existing speed limit of 35 MPH in the project area (including a school zone speed limit of 25 MPH when children are present) should be retained. This determination was based on observed 85th percentile vehicle speeds of 35-42 MPH, and a lower than statewide average crash rate for this road segment type. Speed data is summarized in Table 10.

Table 11. Speed Survey Data (2019)

Location	Posted Speed	85th Percentile Speed	Average Speed
Maricopa Hwy - 150 ft south of Carrillo Rd	NB: 35 SB: 35	NB: 36 SB: 35	NB: 33 SB: 32
Maricopa Hwy - 930 ft south of Cuyama Rd	NB: 35 SB: 35	NB: 42 SB: 39	NB: 38 SB: 35

Source: City of Ojai Engineering & Traffic Survey (2019)

TRAFFIC OPERATIONS

The *Pedestrian and Bike Safety Improvements Traffic Impact Study* was completed in 2017/2018 to assess current and future multimodal traffic conditions on Maricopa Highway (SR 33) and Ojai Avenue (SR 150). Specifically, the study evaluated future conditions with the proposed roadway modifications documented in the city's Active Transportation Program (ATP) grant, including a road diet and parking protected bike lanes on Maricopa Highway and a few pedestrian and bicycle enhancements on Ojai Avenue. The summary of existing conditions traffic operations for weekday (AM and PM peak hour) and school PM peak hour documented in Tables 11, 12, and 13 was taken from that report.

Table 12. Traffic Operations Summary: AM Peak Hour

Intersection	LOS	Average Delay (sec)
Ojai Ave/Maricopa Hwy	A	14.6
Carrillo Rd/Maricopa Hwy	B	1.1
Vallerio Ave/Maricopa Hwy	C	1.5
Pirie Rd/Maricopa Hwy	C	2.2
Church Rd/Maricopa Hwy	C	2.1
El Roblar Dr/Cuyama Rd/Maricopa Hwy	B	12.5

Source: City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study

Table 13. Traffic Operations Summary: School PM Peak Hour

Intersection	LOS	Average Delay (sec)
Ojai Ave/Maricopa Hwy	B	18.3
Carrillo Rd/Maricopa Hwy	C	3
Vallerio Ave/Maricopa Hwy	C	2.4
Pirie Rd/Maricopa Hwy	C	2.3

Church Rd/Maricopa Hwy	F	20.1
El Roblar Dr/Cuyama Rd/Maricopa Hwy	B	11.8

Source: City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study

Table 14. Traffic Operations Summary: PM Peak Hour

Intersection	LOS	Average Delay (sec)
Ojai Ave/Maricopa Hwy	B	18.8
Carrillo Rd/Maricopa Hwy	C	2.9
Vallerio Ave/Maricopa Hwy	C	1.9
Pirie Rd/Maricopa Hwy	C	1.6
Church Rd/Maricopa Hwy	C	2.7
El Roblar Dr/Cuyama Rd/Maricopa Hwy	B	10.8

Source: City of Ojai State Route 33 and State Route 150 Pedestrian and Bike Safety Improvements Traffic Impact Study

COLLISION DATA

Collision data used for this analysis was collected from the Statewide Integrated Traffic Records System (SWITRS) from 2013 to 2018, and from the Transportation Injury Mapping System (TIMS) for 2019. Both datasets include information for each crash record including date, time, location information, weather, severity, primary collision factor, lighting, and other information. The SWITRS data includes information on all recorded geocoded crashes, although 2018 is still considered “preliminary” by the state of California. In lieu of 2019 SWITRS data, TIMS was used. A key drawback of TIMS data is that it does not include non-injury crashes. The data also includes information on the parties and victims involved in each crash. In total between 2013 and 2019, there were 31 total collisions, with six involving a bicyclist and three involving a pedestrian on Maricopa Highway between El Roblar Drive/Cuyama Road and Ojai Avenue. A summary of crash data is provided in Table 14 and Figure 9, and a summary of injuries related to collisions is provided in Table 15. Of the 29 injuries between 2013-2019, five were bicyclist injuries and two were pedestrian injuries. While no fatalities were recorded in SWITRS data between 2013 and 2018, TIMS data shows one pedestrian fatality in 2019.

Table 15. Collision Data (2013-2018)

Year	*All Crashes*	*Pedestrian Crashes*	*Bicycle Crashes*	*Motor Vehicle Crashes*	*Motorcycle Crashes*
2013	7	0	1	6	0
2014	7	0	2	4	0

2015	3	0	0	5	1
2016	3	0	0	3	0
2017	1	0	0	1	0
2018	5	1	1	0	0
*2019**	5	1	2	2	0

Source: Statewide Integrated Traffic Records System (SWITRS) for 2013-2018 data, Transportation Injury Mapping System (TIMS) for 2019 data

*2019 non-injury data is not available.

Table 16. Collision Injury Data (2013-2018)

Year	*All Injuries*	*Fatal*	*Severe Injury*	*Other Visible Injury*	*Complaint of Pain*
2013	8	0	1	2	5
2014	8	0	0	3	5
2015	2	0	0	1	1
2016	0	0	0	0	0
2017	2	0	0	0	2
2018	4	0	0	1	3
*2019**	5	1	1	1	2

Source: Statewide Integrated Traffic Records System (SWITRS) for 2013-2018 data, Transportation Injury Mapping System (TIMS) for 2019 data

*2019 non-injury data is not available.

Figure 9. Map of Collisions from 2013 to 2019

Collisions (2013-2019)

● Pedestrian Collision ● Bicycle Collision ● Motor Vehicle Collision ● Motorcycle Collision

Source: Statewide Integrated Traffic Records System (SWITRS), Collision Data, 2013 - 2018, Transportation Injury Mapping System (TIMS), Collision Data, 2019

Note: 2019 data does not include non-injury collisions

CONNECTIVITY

Due to the current width of the roadway, navigating Maricopa Highway (SR 33) and Ojai Avenue can be an uncomfortable experience for people walking and biking. Wide roadways allow for higher motor vehicle speeds, and the low volumes seen on this five-lane roadway can exacerbate dangerous high-speed driving. People walking or biking in Ojai who wish to access amenities like the Ojai Valley Trail would likely need to move along and/or cross two Caltrans roadways with fast-moving motor vehicles. This significantly limits the project area's connectivity between jobs, homes, schools, and other important destinations. The intent of the demonstration

project is to highlight ways to improve these existing conditions for pedestrians and cyclists, while potentially increasing connectivity to and from key places of interest throughout the community.

CONCLUSION

The information in this technical report will be used as a baseline to assess and evaluate the Maricopa Highway Demonstration Project after installation. Existing conditions data are critical in order to evaluate the efficacy of the project and to ensure that improvements meet the project's goals: increasing the amount of people walking and biking, demonstrating safety features, providing safe connections, and increasing education and awareness of active transportation.

The data gathered in this report on mode share, demographics, and multimodal traffic volumes and speeds provide a benchmark to measure change for people walking and biking in the project area after installation. Analysis of the existing bicycle and pedestrian facilities and potential areas of conflict provides a comparison point for future safety features. Post-installation analysis of the demonstration project should refer to the draft technical report to measure and report on the project's impact.