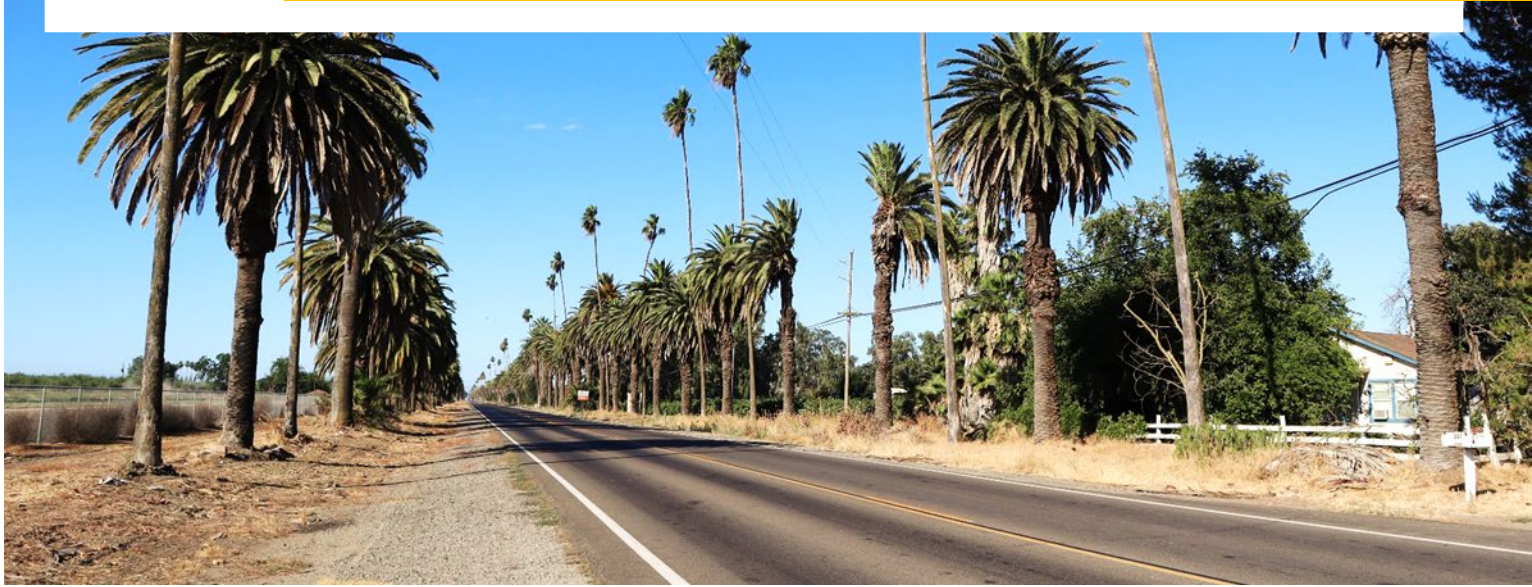


State Route 233 Corridor Plan





Cover photo: Palm-lined SR 233, just north of SR 152. Left to right: SR 233 near Myer Drive looking towards County Wood Shopping Center; School crossing sign for Wilson Middle School at 13th Street; SR 233 between Seventh and Sixth streets.

State Route



Corridor Plan



Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for the final design of any project. Any information in this Corridor Plan is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 6 System Planning Branch makes every effort to ensure the accuracy and timeliness of the information contained in the Corridor Plan. The information in the Corridor Plan does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

Caltrans Mission: Improving lives and communities through transportation.

Caltrans Vision: A thriving and connected California.

Approvals:

A handwritten signature in blue ink, appearing to read "C. Brock", written over a horizontal line.

Caleb Brock
Acting Deputy District Director
Transportation Planning &
Local Programs
Caltrans – District 6

2/24/2025

Date

A handwritten signature in blue ink, appearing to read "M. Navarro", written over a horizontal line.

Michael Navarro
District Director
Caltrans – District 6

2/24/2025

Date

System Planning Acronyms within this Corridor Plan

AADT - Average Annual Daily Traffic

ADA – Americans with Disabilities Act

ADT - Average Daily Traffic

ATP – Active Transportation Plan

C - Conventional Highway Facility

CAPTI – California State Transportation Agency's Climate Action Plan for Transportation Infrastructure

CATX – Chowchilla Area Transit Express

CHSR – California High-Speed Rail

CIIM – Caltrans Initial Investigation Map

COG - Council of Governments

CP – Corridor Plan

CT - Caltrans (California Department of Transportation)

CTP – California Transportation Plan

DOT - Department of Transportation

E - Expressway Highway Facility

F - Freeway Highway Facility

FY - Fiscal Year

GHG – Greenhouse Gas

ICES – Intermodal Corridors of Economic Significance

IRRS - Interregional Route System

JCT - Junction

LOS - Level of Service

MCC – Madera County Connection

MCTC - Madera County Transportation Commission

MPO - Metropolitan Planning Organization

NHS - National Highway System

NTN - National Truck Network
OC - Overcrossing
OH - Overhead
PA&ED – Project Approval and Environmental Document
PID – Project Initiation Document
PM – Post Mile
PS&E – Plans, Specifications, and Estimate
RIP – Regional Improvement Program
RTP - Regional Transportation Plan
RTPA - Regional Transportation Planning Agency
ROW-R/W - Right-of-Way
SHOPP - State Highway Operations and Protection Program
SHS – State Highway System
STRAHNET - Strategic Highway Corridor Network
SJVAPCD - San Joaquin Valley Air Pollution Control District
SR - State Route
STAA - Surface Transportation Assistance Act
STIP - State Transportation Improvement Program
TDM - Transportation Demand Management
TMS - Traffic Monitoring Station
TNS – Transportation Network Service
UC – Undercrossing
UP or UPRR – Union Pacific Railroad
UTC - Ultimate Transportation Corridor
V/C - Volume to Capacity Ratio
VMT - Vehicles Miles Traveled
YARTS – Yosemite Area Regional Transportation System

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About System Planning:

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans' statutory responsibility as owner/operator of the State Highway system (SHS) (Gov. Code 65086) by evaluating conditions and proposing enhancements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of:

- *Safety and Health*
- *Stewardship and Efficiency*
- *Sustainability*
- *Livability and Economy*
- *System Performance*
- *Organizational Excellence*

About Corridor Planning:

Corridor Planning (CP) is a multimodal transportation planning approach that recognizes that transportation needs are based on the complex geographic, demographic, economic, and social characteristics of communities. These locations are tied together by a complex system of streets, roads, highways, trails, paths, rail lines, bus corridors, and other elements that affect the convenience, safety, and accessibility of transportation choices. Caltrans is committed to developing transportation corridor plans that identify and recommend transportation strategies and improvements in coordination with our planning partners.

Corridor Plan Purpose:

California's SHS needs long-range planning documents to guide the logical development of transportation systems as required by California Gov. Code 65086 and as necessitated by the public, stakeholders, and system users. The purpose of the CP is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20–25-year planning horizon. The CP is developed with

goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor. Corridor Plans address community and environmental needs through integrated management of the transportation network, including the multimodal integration of highway transit, pedestrian, bicycle, freight, operational improvements, and travel demand management components of the corridor.

Partner/Stakeholder Participation:

Stakeholders were consulted during the research phase of this CP for their input and the accuracy of the data. Contact was done via e-mail, telephone, and virtual meetings. Once a draft was completed by the Caltrans Planning team, it was circulated for comments with internal stakeholders. Internal stakeholders included: the Division of Planning, Maintenance and Traffic Operations, Environmental, Project Development, Right of Way, and the Native American Liaison. As comments were collected, the CP was further edited and revised. As the CP became more finely tuned, it was then sent out via e-mail or regular mail for input from external stakeholders. These external stakeholders include, within the corridor: Metropolitan Planning Organizations (MPOs), Regional Transportation Planning Agencies (RTPAs), city and county planning and public works agencies, the California Trucking Association, San Joaquin Valley Air Pollution Control District, chambers of commerce, Native American tribes, farm bureaus, community-based organizations, and other transportation agencies.

For more information on input from stakeholders, please contact Alec Kimmel, District 6 – System Planning Branch Chief, at alec.kimmel@dot.ca.gov.

Executive Summary:

State Route (SR) 233 is situated within the northern portion of Madera County, in and near the City of Chowchilla. The existing facility for SR 233 is primarily a two-lane conventional highway with segment 3 being a four-lane conventional highway. The route begins at SR 152 to the south and extends north all the way to SR 99. The Ultimate Transportation Concept (UTC) for SR 233 is a four-lane conventional highway.

Corridor Overview:

Route Description:

Route Location: Located entirely in District 6, SR 233 begins at the intersection of SR 152 and SR 233 in Madera County (PM L0.121). The route travels northeast, ending at the intersection of SR 99 and SR 233 in Chowchilla (PM 3.887). It is nearly four miles long and is located solely in Madera County.

Route Purpose: The route primarily serves the City of Chowchilla and operates as a main street within the city. It provides a connection between communities along SR 152 and SR 99.

Major Route Features: State Route 233 begins as an interchange at SR 152. Major junctions include: Avenue 23 ½ (Madison Road), Avenue 24, Washington Road, 15th Street, 13th Street, 11th Street through First Street, Front Street, the Union Pacific Railroad tracks, Chowchilla Boulevard, and ends at SR 99.

The route encompasses the last 3.887 miles of Robertson Boulevard and beyond its end at SR 99, it becomes Avenue 26.

Route Description	
Functional Classification	Major Collector
National Highway System (NHS)	Yes from PM 0.577 (Ave 23 ½)
Freeway/Expressway System	No
Regionally Significant	Yes
Strategic Highway Network (STRAHNET)	No
Lifeline	No
Interregional Road System (IRRS)	No
Truck Network	Terminal Access (TA)
Scenic	No
Intermodal Corridor of Economic Significance (ICES)	No
General Plan/RTP LOS Standard	Madera Co LOS D for RTP Regionally Significant System

General Plan/RTP Standard Highway Classification	Expressway
Passing Lanes	No
Bike Use Allowed	Yes

Table 1: Route Description

Route Segmentation:

State Route 233 is divided into four segments from SR 152 to SR 99.

Segment	Location	County Route Beg. PM	County Route End PM
1	SR 233/SR 152 Sep to Palm Parkway	L0.121	2.036
2	Palm Parkway to Washington Rd	2.036	2.390
3	Washington Rd to Chowchilla Blvd	2.390	3.586
4	Chowchilla Blvd to Jct SR 99	3.586	3.887

Table 2: Route Segmentation

The route serves as the main street for the City of Chowchilla and provides a connection between SR 99 and SR 152. The route is also known as Robertson Boulevard; it has a stretch of palm trees that lines the road. The route runs through flat terrain.

Segment 1: State Route 152 to Palm Parkway

Begins: At SR 152 in Madera County

Ends: At Palm Parkway in Chowchilla

Land Use: This segment is primarily rural with flat terrain. There are some rural residences, agricultural businesses, restaurants, and a church.

Facility: This segment is a two-lane undivided conventional highway. The 2045 Concept calls for a two-lane conventional highway with improvements, such as turn lanes, passing lanes, signals, and other possible operational improvements. The posted speed limit ranges from 55 miles per hour (mph) to 50 mph.

Interchange(s) and other State highway connections:

- Interchange with SR 152.

Environmental/Historical Resources: No major issues.

Segments 2 – 4: Palm Parkway to State Route 99

Begins: At Palm Parkway in Chowchilla

Ends: At SR 99 in Chowchilla

Land Use: This section of the route is predominantly within the City of Chowchilla, an urban area. There are commercial and residential land uses in this section. It serves as a main street from Avenue 25 to SR 99. There is a park between Seventh and Sixth avenues on the northwest side of SR 233.

Facility: This part of the route varies from a two-lane undivided highway to a four-lane divided highway. There are median left-turn lanes in the two-lane undivided highway section. The 2045 Concept calls for a two-lane conventional highway with improvements and the existing four-lane to remain a four-lane. The posted speed limit ranges from 40 to 30 mph.

Interchange(s) and other State highway connections:

- None.

Environmental/Historical Resources: The California Natural Diversity Database identifies two rare species in this section of the route. Lesser Saltscall, an annual plant, and the hoary bat, a mammal, are presumed to be extant.

Safety:

Caltrans continues to make safety a top priority. The Caltrans 2020-2024 Strategic Plan aims to eliminate fatalities and serious injuries on California roads by 2050. In February 2022, the Department issued [Directors Policy 36 \(DP-36\)](#) Road Safety. DP-36 states Caltrans' vision of zero fatalities and serious injuries, and commits to providing safer outcomes for all communities by the following:

- A safety-first mindset prioritizing road safety.
- Prioritize the elimination of fatal and serious injury crashes through our existing safety improvement programs, along with development and implementation of new programs to enhance the safe use of our roadways.
- Eliminating race-, age-, ability-and mode-based disparities in road safety outcomes.



Figure 1: Safe System Approach

DP-36 states that the Department will achieve our intended results through adoption of the Safe System Approach (SSA). The SSA identifies the following six principles intended to shift the traditional approach to road safety towards a more holistic and comprehensive method:

- **Eliminate Death and Serious Injuries:**
Preventing fatal and serious injury crashes on our roads is priority #1.
- **Humans Make Mistakes:**
It is critical and realistic to design and operate our transportation system to accommodate mistakes.
- **Humans Are Vulnerable:**
The system's design and operation must account for human fragility and reduce impact forces.
- **Responsibility is Shared:**
All stakeholders must collaborate to ensure that crashes do not result in deaths or serious injuries.
- **Safety is Proactive and Reactive:**
Proactive tools must supplement – if not replace – reactive strategies to identify and mitigate risks.
- **Redundancy is Crucial:**
If one part of the system fails, other parts are in place and work as designed to protect people.

Adopting these principles represents a significant shift from Caltrans' traditional approach to safety while planning and constructing the State Highway System. The goal is to take a realistic and holistic view of safety for all road users, including pedestrians, bicyclists, transit riders, and vehicle users. The SSA calls for a proactive, not just reactive, response to implementing safety features. The U.S. Department of Transportation is also implementing the National Roadway Safety Strategy. This strategy proposes incorporating ["vehicle-to-everything \(V2X\) technology"](#) as part of the Safe System approach and has been identified by others, such as the National Transportation Safety Board, as a safety-critical "most wanted" technology.

State Route (SR) 233 is a short route, less than four miles, providing connection between SR 152 and SR 99 as well as serving as the main street through the City of Chowchilla. It is well known for its palm trees, which were originally planted in 1913, that line both sides of the route with spacing as little as 50 feet. Between Chowchilla and SR 152, about two miles, the route is currently a two-lane conventional highway rural facility. This rural segment is mostly bordered by agricultural and commercial lands. There is a cluster of residences near the SR 152 interchange with many driveways. Through the City of Chowchilla, the roadway which is mostly a four-lane facility, provides left turn pockets or two-way left turn lanes. The segment through Chowchilla is developed on each side of the route and connects to SR 99 via an interchange on the eastern end.

Proactive safety measures that can be considered for the rural segment include: standard shoulder widths, edge line and centerline rumble strips, pavement edge treatment, and six-inch lane striping. Traffic calming measures are essential to enhance the safety of roadways and encourages safe pedestrian and bicycle activity. Traffic calming in this setting is beneficial due to the numerous driveway locations and cross streets. Potential relocation, shielding, or delineation of fixed objects can also be considered to enhance safety. Realignment skewed intersections also increases sight distance and shortens pedestrian crossings.

Through the City of Chowchilla active transportation, complete streets, and traffic calming measures are being considered. Roundabout intersections have less conflict points than stop-controlled and signalized intersections, and statistics show significantly lower fatality and serious injury collision rates. Roundabouts are being considered at the SR 233/SR 99 ramps and other intersections. Due to Caltrans' commitment to engagement and advancing equity and livability in all communities as part of the Caltrans 2020-2024 Strategic Plan, ongoing collaboration with the City of Chowchilla is crucial. Bike lanes, sidewalk connectivity, Americans Disability Act (ADA) compliant curb ramps, enhanced pedestrian crossings, lighting, and transit amenities can all enhance safety and provide a more livable community.

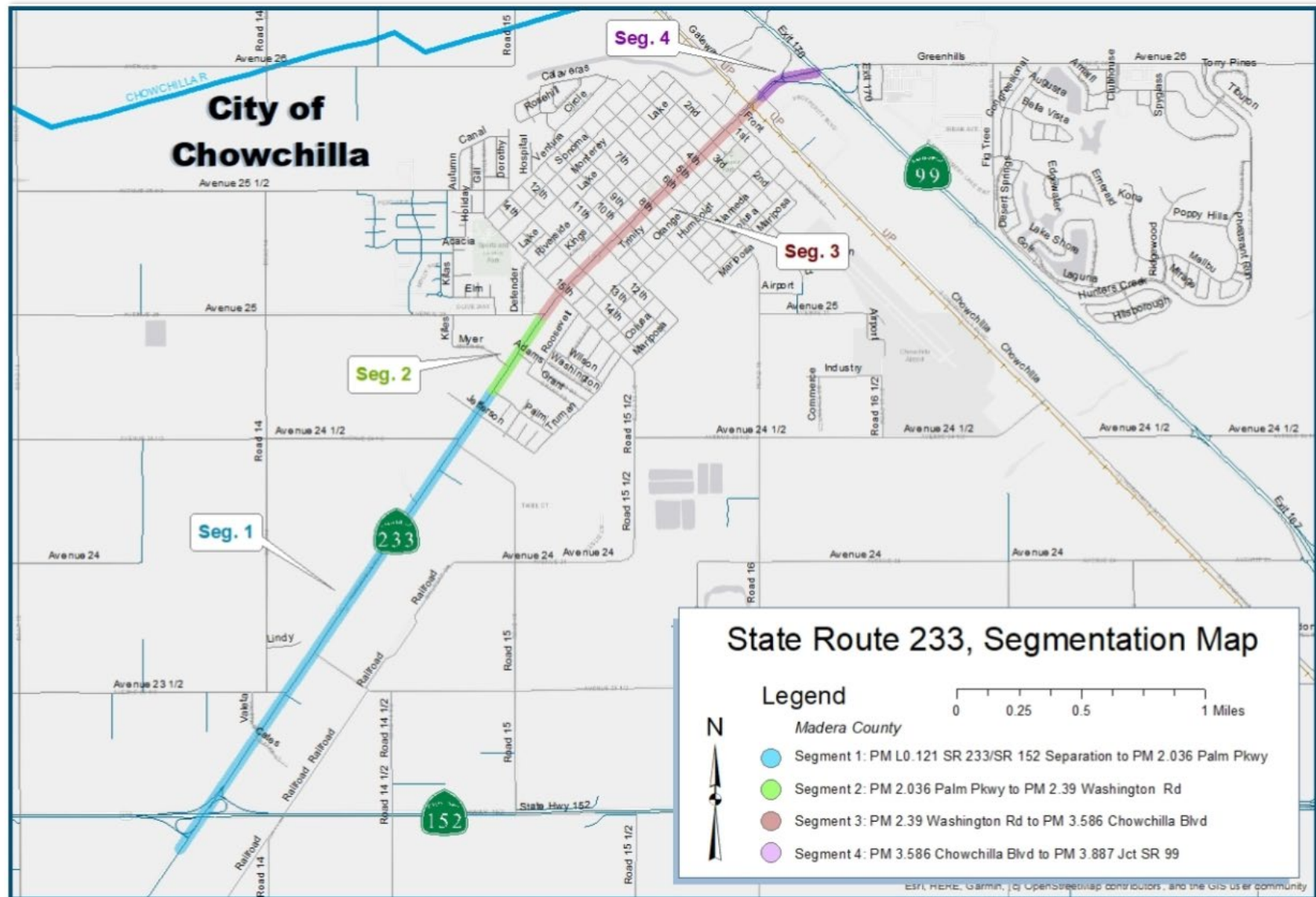


Figure 2: SR 233 Segment Map

Land Use and Community Characteristics:

Land Use:

State Route 233 begins at its junction with SR 152 in the south and extends north to SR 99. It also serves as the main street for the City of Chowchilla.



Figure 3: Near the start of SR 233, north of the SR 152/SR 233 Interchange

Segment 1 lies in Madera County. Currently, the segment is mainly agricultural with orchards, agricultural-related businesses, rural residences, and undeveloped land. The zoning for this segment includes: highway commercial, service commercial, public facility, medium-density residential, medium high-density residential, and high-density residential. Some businesses in the county portion of SR 233 include equipment rentals, small restaurants, a church, a livestock feed store, and agricultural and industrial equipment sales.

As mentioned in the “Community Characteristics” section, there are two proposed residential developments in this segment.

Segment 2 covers a small portion of Madera County but is primarily located within the City of Chowchilla. Currently, the segment contains some undeveloped land, a shopping center, a couple of residences, and other commercial uses. Zoning for this

segment is service commercial. The shopping center includes a market, some personal services, and a restaurant. The remaining commercial is automotive and a store.

Segment 3 is located in the heart of Chowchilla. Currently, the segment is mainly commercial with a middle school, churches, residences, and a park. Zoning for this segment includes: medium-density residential, high-density residential, service commercial, medium high-density residential, public facility, park, and downtown commercial. There are restaurants, a market, Wilson Middle School, the

Chowchilla Senior Center, personal services, churches, Veterans' Memorial Park, health service, and fueling stations located within this segment.

Segment 4 is a short section of the route in Chowchilla. Currently, it is commercial. Zoning for this segment includes service commercial and highway commercial. Restaurants, mainly fast food, a hotel, fueling stations, and a rental company are located in this segment.

As mentioned in the "Community Characteristics" section, there is a master-planned development on the northeast corner of SR 99/SR 233 (Robertson Boulevard), which will impact the SR 99/SR 233 interchange. The interchange improvement project is currently underway in the design and right-of-way phase and is expected to be completed in 2028.



Figure 4: SR 233 and Chowchilla Blvd, looking east towards SR 99

Community Characteristics:

Madera County

Madera County is located in the central portion of the San Joaquin Valley and is the geographical center of California. The county boundaries are defined by rivers and geological features. The northern boundary between Madera and Merced County is formed by the Chowchilla River. The western and southern boundary between Madera and Fresno County is formed by the San Joaquin River. The eastern boundary between Madera and Mono County is formed by the Sierra Nevada foothills. The northeastern neighboring county is Mariposa County.

According to the U.S. Census Bureau (2022), Madera County's estimated population as of July 1, 2022 is 160,256. Over 27% of the population is under 18 years of age, and 15% of the population is over 65 years of age. The median income is \$76,920 (2022 inflation-adjusted dollars), with over 24% of the

population falling below poverty level. About nine (9)% of households are classified as limited-English speaking.

There are a couple of significant developments in the early planning stages. One is the Fagundes Mixed Use Subdivision located at the northeast corner of SR 233 and SR 152. It calls for 594 residential lots, six outlots, and five highway commercial lots on 171 acres. The other is a residential development for 34 attached single-family residences and 160 multi-family residences at the northeast corner of SR 233 and Road 15.

Major industries in Madera County are educational services, health care, social assistance, agriculture, construction, manufacturing, and the arts. Major crops and agricultural industries in Madera County include almonds, nuts and hulls, milk, grapes, pistachios, cattle and calves, pollination, replacement heifers, nursery stock, corn silage, and poultry.

City of Chowchilla

The City of Chowchilla is an incorporated city in Madera County located along SR 99. The town was purchased and developed by Orlando Alison Robertson in 1912. He purchased the Chowchilla Ranch from the California Pastoral and Agricultural Company and set aside the northeast corner of the property as a site for a town named Chowchilla. The town was incorporated on February 7, 1923.

According to the U.S. Census Bureau, Chowchilla's population is estimated to be 18,826 as of July 1, 2021. About 21% of the population is under 18 years of age, and nearly 7% is over 65 years of age. The median income is \$60,875 (2021 inflation-adjusted dollars), with 16% living below poverty level. Only about two (2)% of households are classified as limited-English speaking.

There is a large, 561-acre master-planned development at the northeast corner of SR 99 and Robertson Boulevard/Avenue 26. The Rancho Calera Specific Plan will add 6,000 residents in over 2,000 residences (single and multi-family), 300,000 square feet of service commercial and mixed-use development, a 13-acre park, seven neighborhood parks, over five miles of trails and paths, and possibly a new school adjacent to the existing Ronald Reagan Elementary School. It will be developed in multiple phases. This development will have traffic impacts to the SR 99/SR 233 interchange since it will provide primary access to the development. Therefore, the developer will be paying traffic impact fees to the City of Chowchilla for needed traffic circulation improvements.

Major industries in Chowchilla include educational services, health care, social assistance, agriculture, construction, public administration, retail trade, and the arts.

Chowchilla has two (2) State prisons, the California Department of Corrections Central California Women's Facility, and the Valley State Prison. The women's facility houses over 2,200 inmates and is California's largest female institution. The Valley State Prison was originally a women's prison from 1995 to 2013. Since then, it has been converted to an all-male prison.

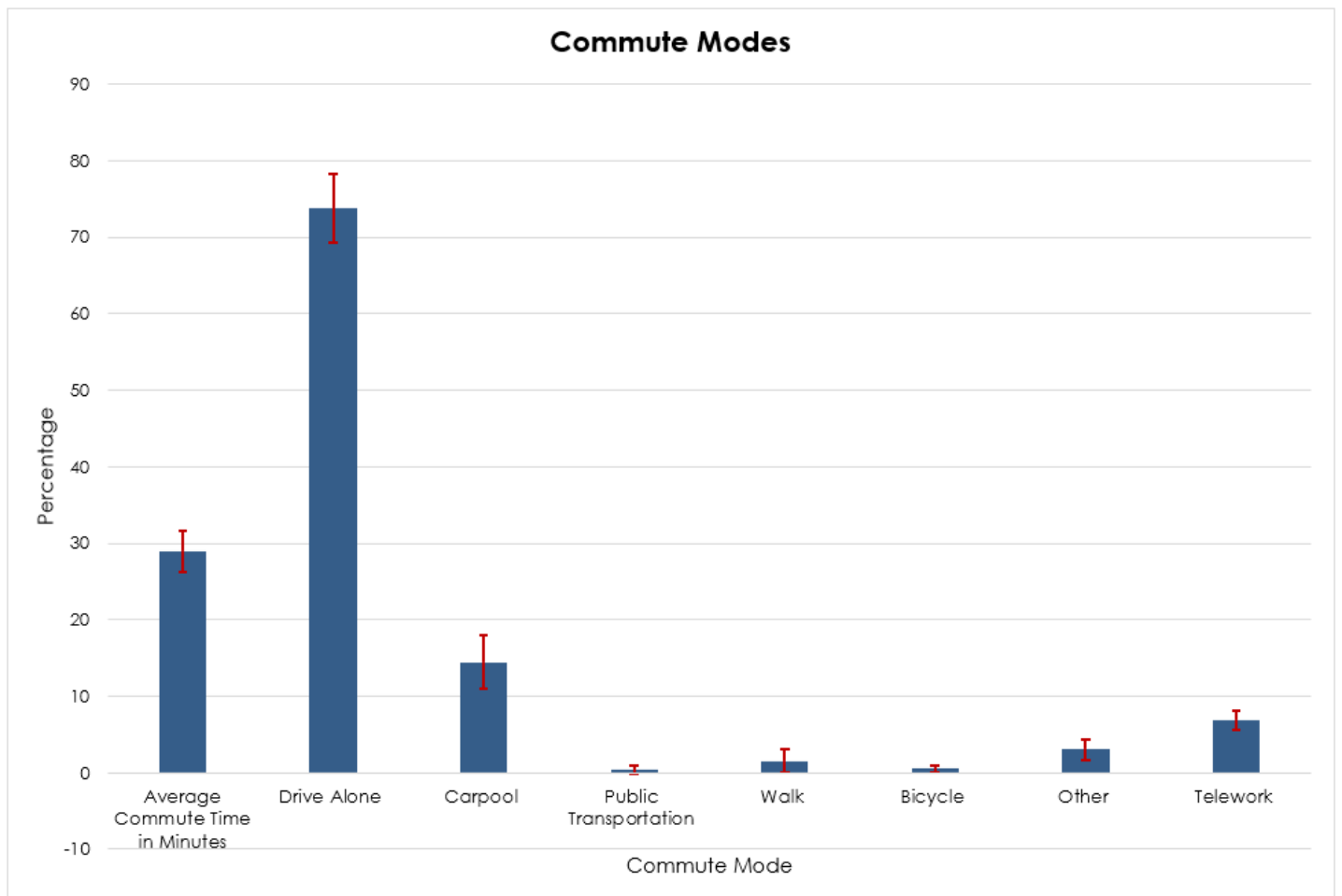
Table 3/Figure 5 shows the commute modes used by employees in Madera County and the City of Chowchilla. The average commute is just under 30 minutes with most choosing to commute by driving alone. A fair amount carpooled, followed by teleworking. Active transportation and transit were minimally used.

COMMUTE MODES								
Community	Average Commute Time in Minutes	Drive Alone %	Carpool %	Public Transportation %	Walk %	Bicycle %	Other %	Telework %
Madera County	29.5 (± 1.1)	73.3 (± 2.0)	12.6 (± 1.5)	0.2 (± 0.2)	1.5 (± 0.5)	0.1 (± 0.2)	4.7 (± 1.1)	7.5 (± 0.9)
Chowchilla	28.3 (± 4.2)	74.1 (± 7.0)	16.2 (± 5.5)	0.6 (± 0.8)	1.6 (± 2.4)	0.0 (± 0.8)	1.4 (± 1.6)	6.2 (± 3.3)
Average	28.9 (± 2.65)	73.7 (± 4.5)	14.4 (± 3.5)	0.4 (± 0.5)	1.55 (± 1.45)	0.5 (± 0.5)	3.05 (± 1.35)	6.85 (± 1.2)

Margin of Error is shown in red

U.S. Census data - 2022 American Community Survey 5-year Estimates

Table 3: Commute Modes



Margin of Error is shown in red

Figure 5: Commute Modes

CalEnviroScreen and Disadvantaged Communities:

Caltrans strives for equity and balance in transportation investments, economic prosperity, and environmental protection.

As stated in Caltrans' Director's Policy 21, November 5, 2001, Caltrans incorporates Environmental Justice into its programs, policies, and activities to ensure there are no disproportionate adverse impacts, particularly on minority, disabled, and low-income populations. In 2004, the California Environmental Protection Agency's (CalEPA's) *Environmental Justice Action Plan* called for the development of guidance to analyze the impacts of multiple pollution sources in California communities. From a *Cumulative Impacts* report published in 2010, CalEPA proposed methodology for ranking and identification of areas in California that face multiple pollution and socioeconomic burdens, particularly the level of poverty. Based on this methodology, the CalEnviroScreen Tool was developed.



Figure 6: Downtown Chowchilla looking west at SR 233/Front Street

Senate Bill (SB) 535 (De Leon) directs the California Environmental Protection Agency to identify communities as target areas for Cap-and-Trade program funding. Passed in 2012, it specifically directs that a quarter of the proceeds from the Greenhouse Gas Reduction Fund must also go to projects that provide a benefit to those communities. Furthermore, a minimum of ten percent of the funds must be for projects located within, or benefit, those disadvantaged communities.

Disadvantaged Communities, as defined by SB 535 and identified using the CalEnviroScreen Tool, are those communities whose Census Tracts overall exhibit the highest total scores. The CalEnviroScreen Tool uses data from federal and state sources; components of exposure and environmental effects are

combined to create a Pollution Burden group, and components of sensitivity and socioeconomic factors are combined to create a Population Characteristics group. The result of multiplying the Pollution Burden scores and Population Characteristic scores generates a final score and rank, which is represented as a color-coded map of census tracts indicating various levels of concentration of Disadvantaged Communities under SB 535, using CalEPA's methodology. For further information on CalEnviroScreen 4.0, please visit <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.

In developing strategies for delivering a safe, sustainable, and multi-modal transportation system to meet the needs of all Californians, Caltrans actively seeks to build partnerships with local agencies. By referencing CalEPA's work to identify these communities as opportunities for investment, Caltrans seeks to strengthen relationships with local partner agencies. CalEnviroScreen scores are used in State grant applications to determine the greatest need for funding. Caltrans' projects incorporate complete streets features to help alleviate air quality and health issues caused by single occupancy vehicles' exhaust; wear from fires, brakes, and clutches; road wear caused by mechanical abrasion; and suspension of road dust.

The map below indicates the overall CalEnviroScreen 4.0 scoring percentiles for SR 233. The percentiles along the route range from 75 to 82%. Several indicators contributed to this percentile score. Among the highest indicators were the following:

- Exposures
 - Ozone
 - Particulate Matter 2.5 microns (PM2.5)
 - Pesticides
 - Drinking water
- Environmental Effects
 - Groundwater threats
- Health
 - Asthma
 - Cardiovascular disease
- Socioeconomic Factors
 - Education
 - Poverty
 - Unemployment

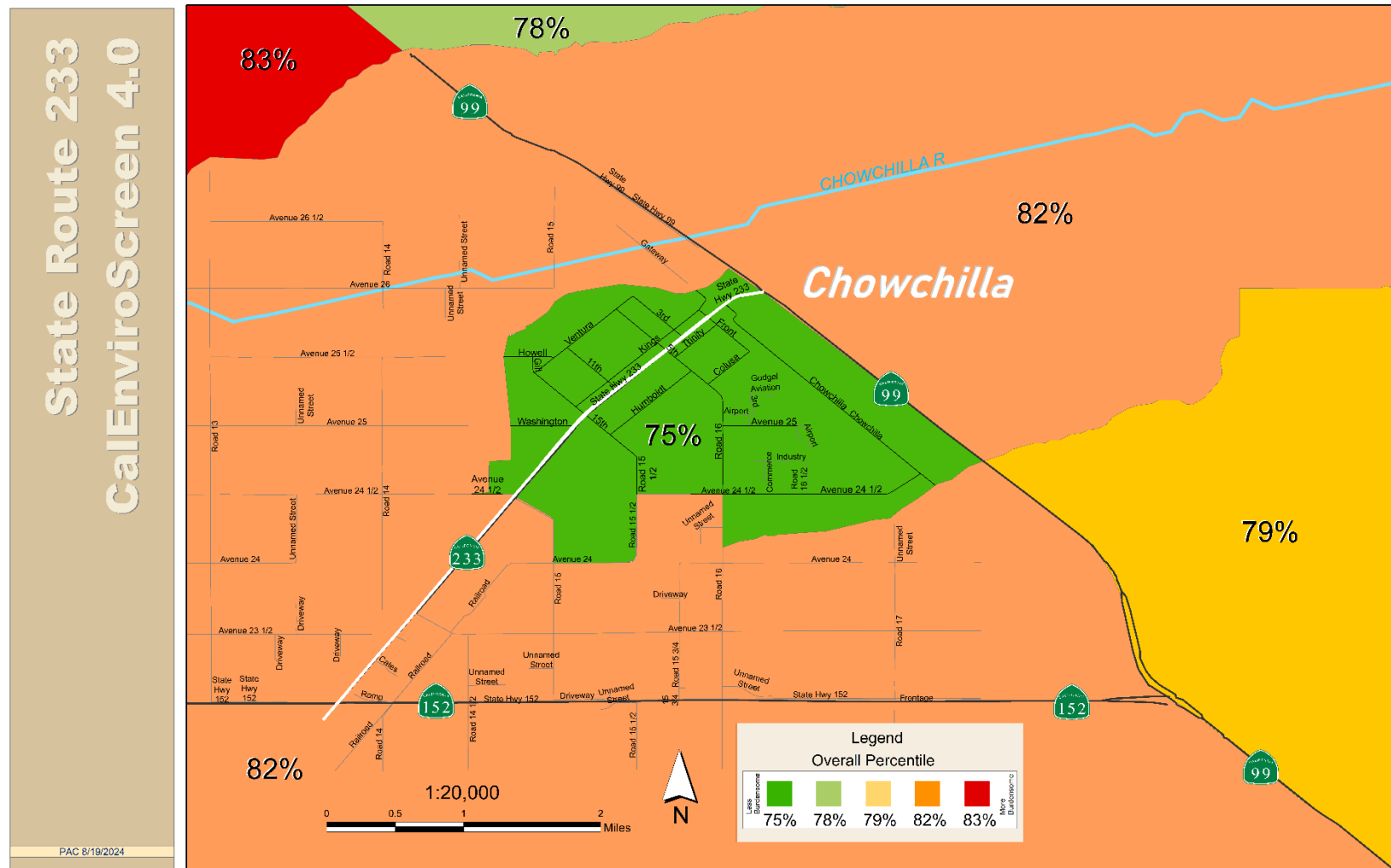


Figure 7: CalEnviroScreen Map

Native American Collaboration:

Many California roads and highways originated along tribal hunting and trading routes. The study, "California Central Valley Tribal Transportation Environmental Justice Collaborative Project," identified indigenous groups that consider portions of Fresno, Kern, Kings, Madera, and Tulare Counties as their ancestral lands.

The map below shows the Ethnographic Territories within Madera County. The SR 233 corridor passes through the Northern Valley Yokuts' traditional territory.

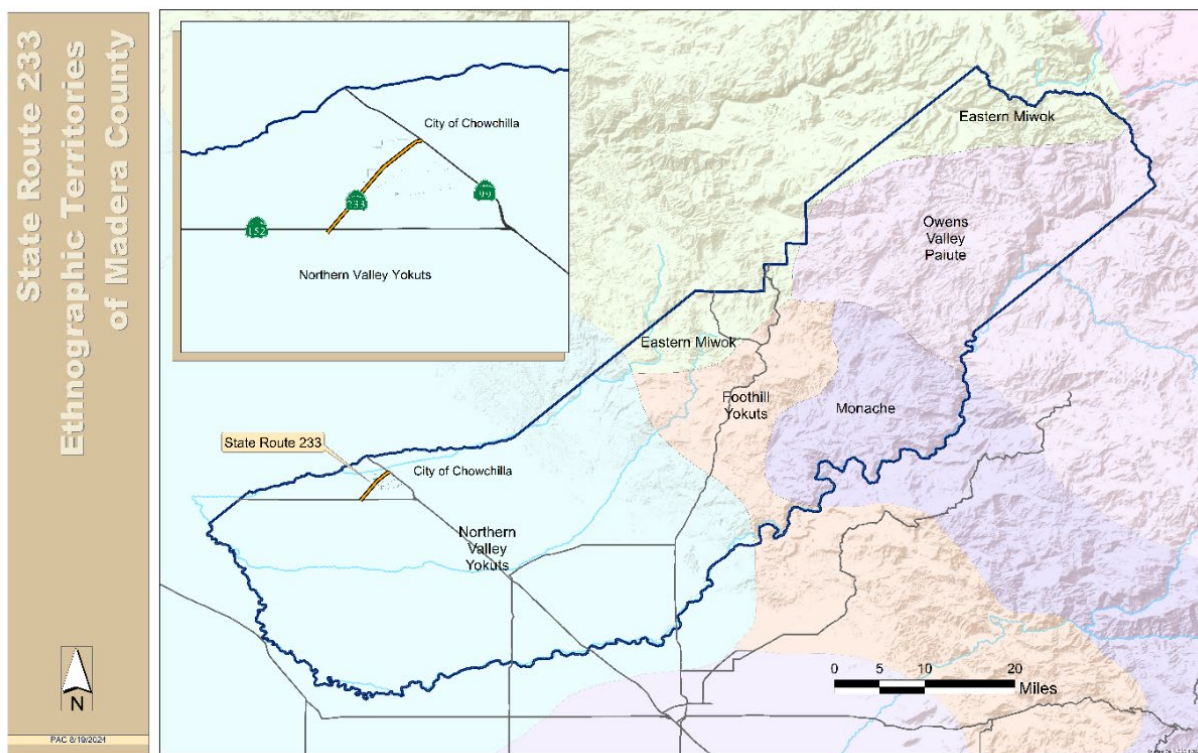


Figure 8: Map of Ethnographic Territories of Madera County and State Route 233

Caltrans considers tribal governments and communities as partners in the SR 233 Corridor Plan. Caltrans District 6 Planning reached out to the Picayune Rancheria on September 27, 2024.

System Characteristics (Facilities):

Complete Streets:

Per Caltrans Director's Policy (DP-37), "A complete street is a transportation facility that is planned, designed, constructed, operated, and maintained to provide comfortable and convenient mobility, and improve accessibility and connectivity to essential community destinations for all users, regardless of whether they are travelling as pedestrians, bicyclists, public transportation riders, or drivers. Complete streets are especially attuned to the needs of people walking, using assistive mobility devices, rolling, biking, and riding transit. Complete streets also maximize the use of the existing right-of-way by prioritizing space-efficient forms of mobility, such as walking and biking, while also facilitating goods movement in a manner with the least environmental and social impacts. Complete streets shift the focus of transportation planning and project development from vehicle movement as the primary goal to the movement of people and goods."

Complete streets aim to maximize the use of the existing right-of-way by prioritizing space-efficient forms of mobility, such as walking and biking, while also facilitating goods movement with the least environmental and social impacts possible.

"The California Department of Transportation (Caltrans) recognizes that walking, biking, transit, and passenger rail are integral to our vision of delivering a brighter future for all through a world-class transportation network. Additionally, Caltrans recognizes that streets are not only used for transportation but are also valuable community spaces. Accordingly, in locations with current and/or future pedestrian, bicycle, or transit needs, all transportation projects funded or overseen by Caltrans will provide comfortable, convenient, and connected complete streets facilities for people walking, biking, and taking transit or passenger rail unless an exception is documented and approved." Director's Policy 37 (DP-37).

Complete street and active transportation features exist on the route. There are also current projects adding or improving these features on SR 233.

Class I Shared Use Path

A Class I bike path provides a completely separated facility for the exclusive use of bicycles and pedestrians with crossflow by vehicles minimized.



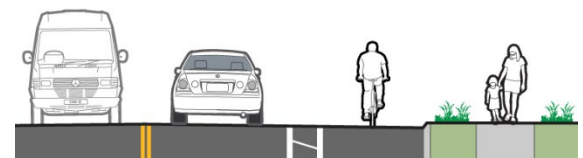
Class II Bike Lane

A Class II bike lane provides a striped lane for one-way bike travel on a street or highway.



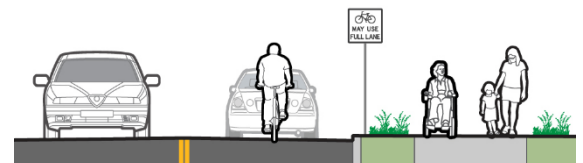
Class II Buffered Bike Lane

A buffered bike lane provides separation by a marked buffer between the bike lane and the traffic lane and/or parking lane.



Class III Bike Route

A Class III bike route provides for shared use with pedestrian or motor vehicle traffic.



Class IV Bikeway

A Class IV bikeway (separated bikeway) provides for the exclusive use of bicycles and includes a separation (e.g., grade separation, flexible posts, inflexible physical barrier, or on-street parking) required between the separated bikeway and through vehicular traffic.



Figure 9: Bicycle Facility Classes

For more information on bicycles and complete streets, please see the Caltrans webpage "Complete Streets Elements Toolbox 3.0" located at:

<https://storymaps.arcgis.com/stories/38530ceb5e3b4ee08b9b5b569e92587c>.



Figure 10: Non-existent sidewalk south of Washington Rd

Segment 1 does not have existing bicycle facilities or sidewalks. This section of the corridor has been identified as needing sidewalk improvement. There are no transit stops located within this segment.

Currently, there is a Caltrans' project that will add a shared shoulder/bike lane, shared use path, and Class II bike lanes from Avenue 24 ½ to the end of the route.

Segment 2 has a Class III bike route and sidewalks from Myer Drive to the Dollar Tree store. In the Madera County Transportation Commission's (MCTC) Active Transportation Plan (ATP) adopted in 2018, corridor improvements are planned for this segment including addressing sidewalk gaps along the entirety of this segment as well as pedestrian crossing improvements on Palm Parkway and SR 233. Currently, there is a Caltrans' project that will

add a Class II bike lane, sidewalks, and complete streets features within this segment. There is a planned locally funded project to construct a roundabout at SR 233 and Washington Road. Once the City has acquired the funds through developer fees, it will be incorporated into the Caltrans' project. There is one Madera County Connection (MCC) transit stop at the Countrywood Shopping Center.

Segment 3 has a Class III bike route with sidewalks on both sides of the route. There are three schools within the SR 233 corridor: Wilson Middle School, adjacent to SR 233 between 11th Street and 13th Street, Chowchilla High School, situated southeast of SR 233 at Humboldt Avenue and 8th Street, and Fuller Elementary School, located northwest of SR 233 at Riverside Avenue and 11th Street.

There are two ADA curb ramp projects in this segment. Both projects are funded through Caltrans' Minor A program and are in the environmental phase. The first project is the Chowchilla West ADA Railroad Improvements, at Front Street. The second project is the Chowchilla East ADA Improvements, at Chowchilla Boulevard. There is also a Caltrans' project in the design phase that will construct Class II bike lanes, add bulb-outs, complete the remaining ADA ramp improvements, and include other complete streets elements within this segment. State Route 233 has been awarded a Clean CA grant for beautification, scheduled to be completed in 2025. This project includes rectangular flashing beacons at crosswalks, and repair of sidewalks in both segments 3 and 4. There is one transit stop at the Community Sports Center.

Segment 4 is designated as a Class III bike route. Sidewalks exist on both sides of SR 233. A Class II bike lane will be constructed along with other complete streets features due to a Caltrans' project that is in the design phase. The SR 99/SR 233 Interchange Improvement project will help connect the City of Chowchilla on both sides of SR 99 by providing safer active transportation access through the interchange.



Figure 11: SR 233 between Washington Rd and 15th St - cracks in driveway and pavement

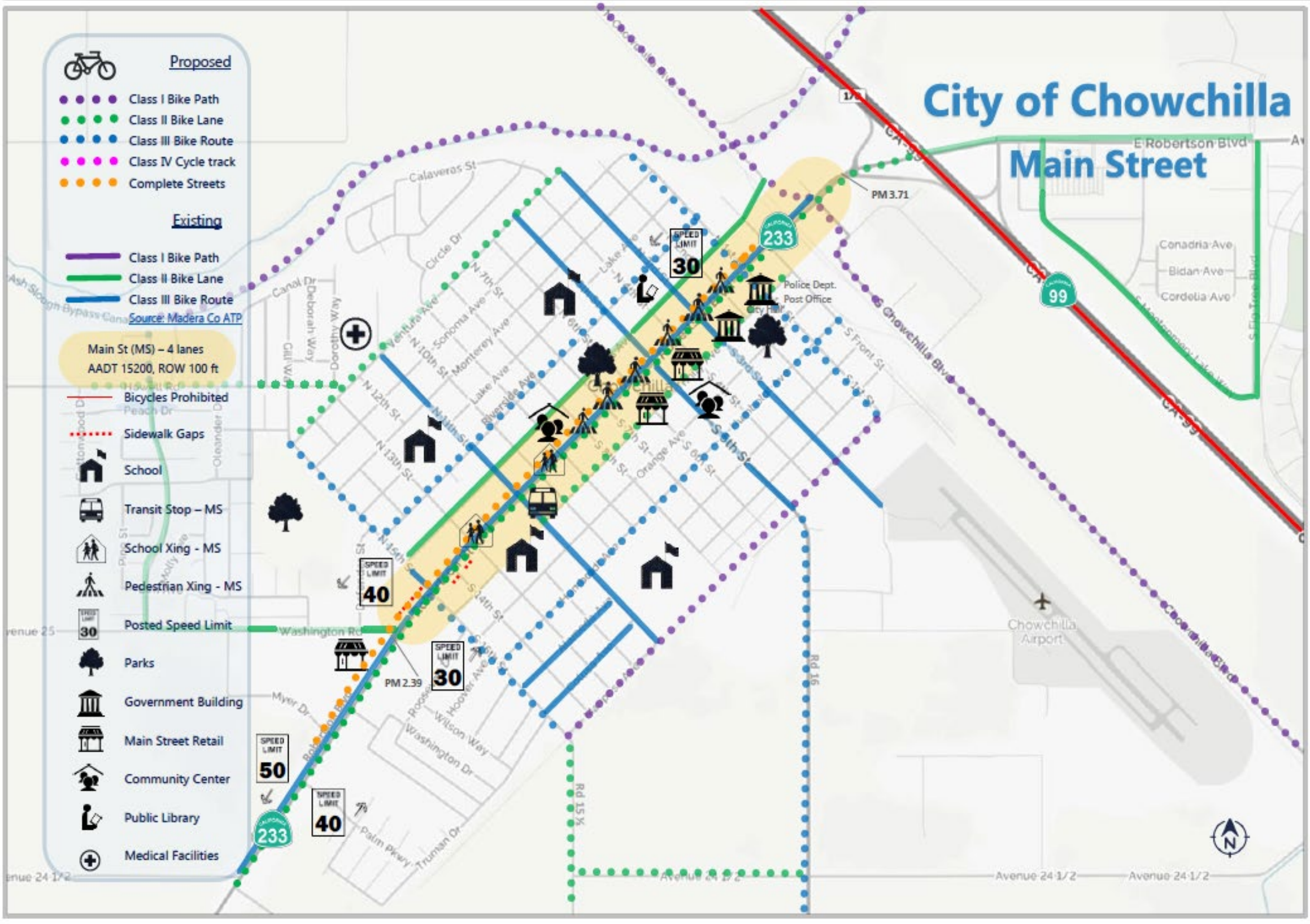


Figure 12: Caltrans District 6 Bicycle Plan for the City of Chowchilla

Public Transit:

Figure 13: MCC transit vehicle picking up rider at SR 233/Eleventh St

Chowchilla Area Transit Express (CATX) and the Madera County Connection (MCC) provide service throughout the City of Chowchilla. CATX offers a local curb-to-curb, demand-response bus transit service in the city limits of Chowchilla. Ridership was 11,103 for the 2023/24 fiscal year.

MCC provides a fixed-route service between

Madera and Chowchilla, via the Chowchilla-Fairmead route that operates Monday through Friday and offers five trips per day. Ridership for this route was 3,864 for the 2023/24 fiscal year.

Public transit plays a key role in the complete streets by aiming to make streets safe and accessible to all users. MCC has implemented transit shelters and amenities at each of its transit stops in Chowchilla.

At this time, there are no known unmet transit needs in this area; however, there is development occurring within the area that could create additional demand in the future. This is especially true with the large-scale Rancho Calera development on the east side of SR 99.

Electric or hybrid buses produce fewer greenhouse gas emissions and reduce traffic congestion which aligns with sustainability to the system.

Other transportation network services (TNS) are also available in the Chowchilla area, such as Lyft and Uber. Located within city limits, the Chowchilla Municipal Airport is managed by the City of Chowchilla Public Works Department and is marketed for private use only and does not provide commercial flights. The nearest commercial flights are found at the Merced Regional Airport and the Fresno Yosemite International Airport.

Freight:

State Route 233 is a Surface Transportation Assistance Act (STAA) terminal access route connecting to SR 152 in the southwest and to SR 99 at its northeast terminus. The Surface Transportation Assistance Act of 1982 allows large trucks to operate on the Interstate system and certain primary routes, collectively called the National Network. The STAA trucks are longer than California legal trucks, which require a larger turning radius than many local roads are designed to accommodate.



Figure 14: SR 233 designated truck route designation



Figure 15: Trucks on SR 233 near 15th St

The route primarily serves the need for local access to Chowchilla and for regional traffic moving between SR 152 and SR 99. According to the “Summary Chart Table A” on page 50, overall truck traffic is fairly low ranging from eight to ten percent of average annual daily traffic (AADT). Segment 1 has the highest truck traffic.

Five-plus axle trucks account for 18 to 48 percent of the total truck traffic.

The City of Chowchilla envisions incorporating more complete streets elements into the streetscape of SR 233/Robertson Boulevard, which serves as the crosstown main street. The city recognizes that a multi-modal approach to the route’s design will make it more inviting to pedestrians and bicyclists. Higher volumes of vehicle traffic on the thoroughfare reduce comfort for active transportation and contribute to noise and air pollution within the city.

MCTC's 2021 technical memorandum, "Truck Route Study – Existing Conditions, Analysis Methodology, and Evaluation," counted vehicle traffic from SR 99 as 44,800 AADT with 23% trucks, and traffic from SR 152 as 15,000 AADT with 15% trucks. Based on this memorandum and information available from the *Chowchilla Industrial Park Specific Plan* (September 2018), the following segments were recommended for designation as truck routes within the City of Chowchilla:

- South Chowchilla Boulevard, from SR 233/Robertson Boulevard to City Limits
- Front Street, from Kings Avenue to Colusa Avenue
- Road 16, from Mariposa Avenue to City Limits
- Avenue 24 ½, from Road 16 to Chowchilla Boulevard
- Avenue 25, from Road 16 to Airport Drive
- Avenue 24, from Road 16 to SR 99
- Avenue 23 ½, from SR 233 to Road 16
- Road 16, from Avenue 24 to SR 152

It should be noted that although Colusa Avenue scored high on the evaluation, it is not recommended as a truck route as the route would cut through a neighborhood where single-family homes are the predominant land use. Similarly, Montgomery Lake Way scored high on the evaluation, but due to the lack of connectivity to industrial/commercial land uses, it should not be designated as a truck route. Figure 15 obtained from the SR 233/Robertson Boulevard Corridor Planning Study and Downtown Master Plan, illustrates the proposed truck routes and circulation. Prior to implementing truck routes, traffic indices should be assessed to determine the appropriate pavement thickness.

Coordination between the City of Chowchilla and Madera County is required to designate Avenue 23 ½ and Road 16 (Avenue 24 to SR 152) as truck routes, as the roadway segment is under County jurisdiction. The two segments provide connectivity to the Chowchilla Municipal Airport and allow trucks to bypass downtown Chowchilla.

South Chowchilla Boulevard, Front Street, Road 16, and Avenue 24 are also identified as proposed truck routes in the *Chowchilla Industrial Park Specific Plan*. The Plan also proposes a new roadway between Front Street and Road 16. Figure 16 illustrates the proposed realignment. The proposed realignment would

improve the circulation of trucks within the industrial park. Montgomery Lake Way is also listed as a proposed truck route once an overpass over SR 99 is constructed. These future projects would improve circulation and make the proposed truck routes more attractive to truck drivers, which would divert trucks from city streets.

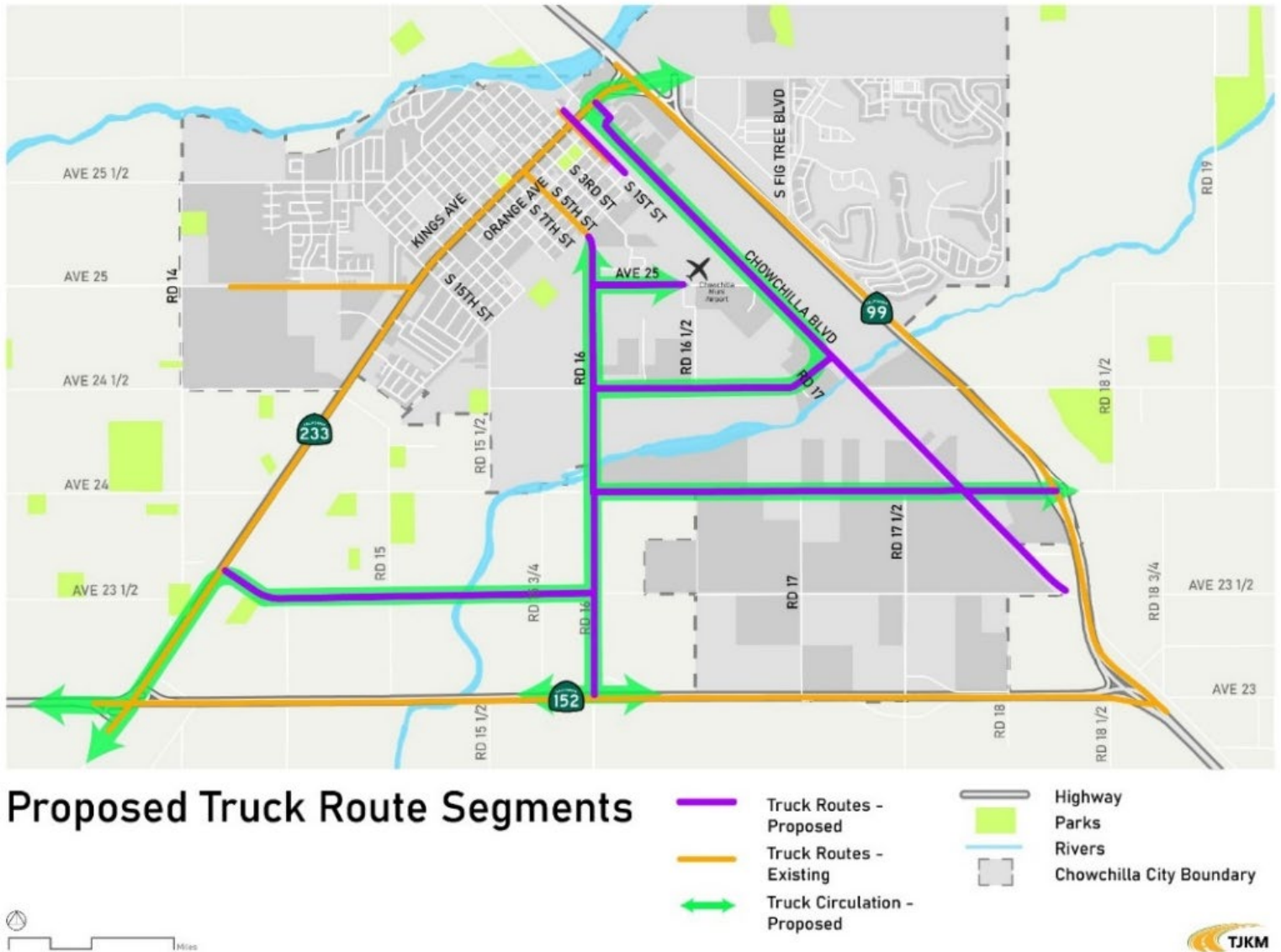


Figure 16: Proposed Truck Route Segments

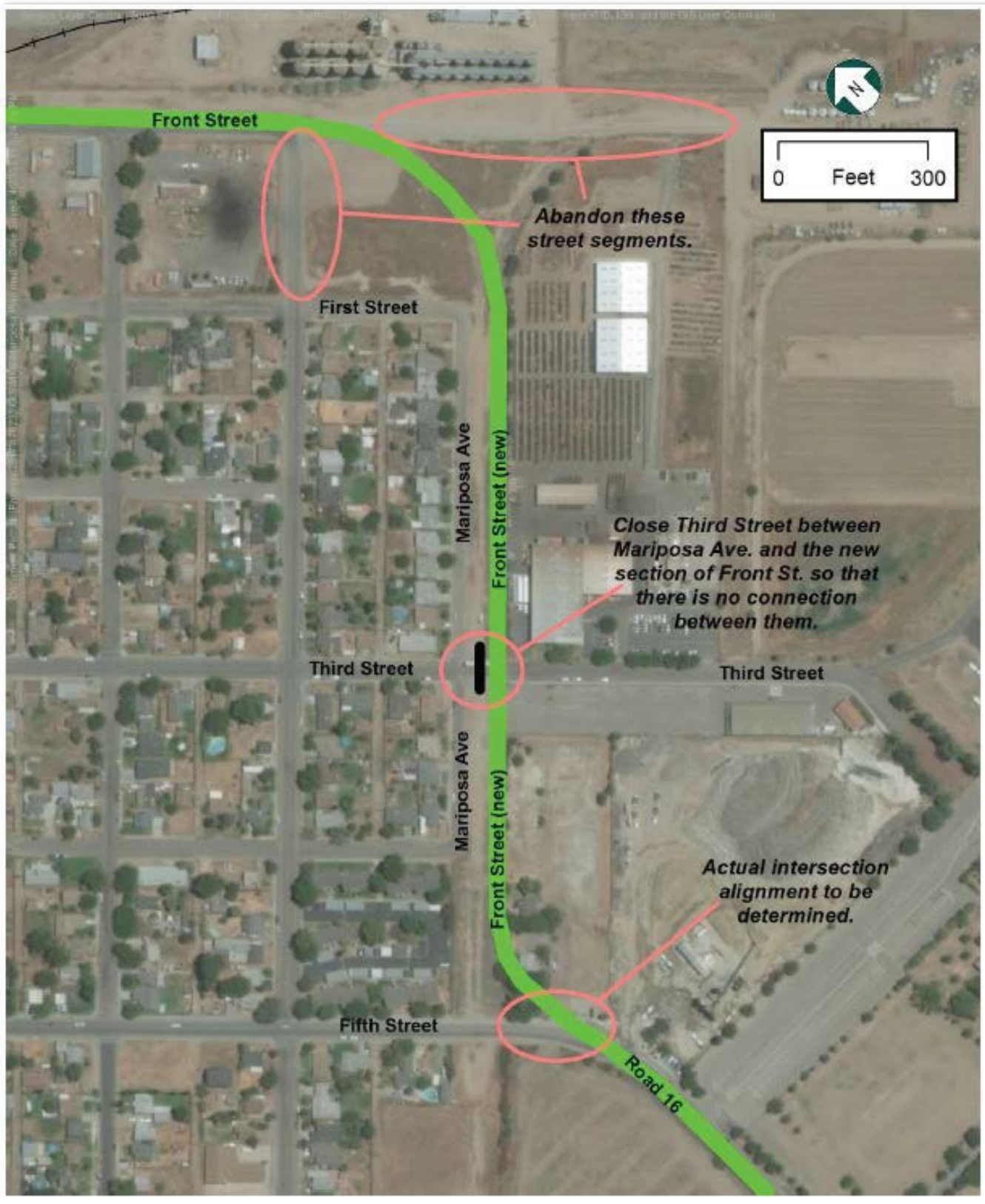


Figure 17: Front St/Rd 16 Realignment

Environmental Considerations:

Climate Change:

Climate change refers to the long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. California is vulnerable to nearly every climate change stressor and extreme weather condition: increasing temperatures, larger wildfires, heavier rainstorms, extended periods of drought, rising sea levels, and storm surges. These stressors associated with climate change pose a significant risk to California's natural and human resources and to the State's transportation infrastructure. Caltrans must therefore plan proactively and incorporate mitigation and resilience into its planning, programming, design, maintenance, and operations.

Caltrans is committed to leading climate action and advancing social equity in the transportation sector, consistent with the California State Transportation Agency's Climate Action Plan for Transportation Infrastructure (CAPTI). This plan supports the California Transportation Plan 2050 (CTP 2050) goals that work to meet the State's ambitious climate change mandates, targets, and policies set forth by Executive Order N-19-19 and N-79-20, signed by Governor Newsom in 2019 and 2020, respectively. The CTP 2050 is the State's broad vision for the future of the transportation system in California, with a focus on advancing equity and climate priorities by expanding travel modal options for all Californians.

Caltrans' climate change efforts revolve around 1) creating and maintaining sustainable practices to reduce greenhouse gas emissions from transportation operations and projects, and 2) implementing adaptation measures to increase the resilience of the State highway system to climate impacts and address vulnerabilities. Recently, Caltrans developed a series of vulnerability assessments for each of the Department's 12 districts. These assessments identified climate change vulnerabilities along the State highway system, including impacts from changes in temperature, precipitation, increased wildfires, sea level rise, storm surge, and cliff retreat. The assessments provide an important tool for communicating climate vulnerabilities both within Caltrans and to the Department's external partners. Caltrans is using the vulnerability assessment findings to inform adaptation plans customized for each district to increase highway resilience. Caltrans has prioritized segments of the State highway

system that are most likely to be affected by climate change. They are divided by four assets: bridges, large culverts, small culverts, and roadways.

The Caltrans Initial Investigation Map (CIIM) indicates that land subsidence is an issue to consider on SR 233. The San Joaquin Valley is sinking five centimeters per month in some locations, in large part due to groundwater depletion from agriculture draw down combined with hydro-compaction. Though groundwater pumping rates have slowed in the region since the 1970s, droughts (such as the 2011 to 2017 drought) typically result in an increase in groundwater use. If droughts become more frequent and groundwater depletion continues as a result, land subsidence will continue. Impacts to infrastructure (such as the State highway system) may occur where it crosses subsiding areas, especially if the depths or rates of subsidence are uneven across the landscape. Subsidence in the San Joaquin Valley and greater Central Valley area is being watched carefully by both researchers and infrastructure managers. For example, the California High-Speed Rail Authority is preparing for potential subsidence by using ballast, as opposed to “highway-like” concrete slabs, to support track in subsidence prone areas. This design will be easier to maintain and fix if the land sinks, saving time and costs in the future. Subsidence will be an ongoing issue for the region that will undoubtedly affect infrastructure planning, management, and maintenance for Caltrans and other infrastructure owners. The Caltrans District 6 Climate Change Vulnerability Assessment Map and CIIM show the main climate stressor for SR 233 into the future would be changes in minimum and maximum temperatures. The seven-day maximum temperature for the year 2055 is forecasted to be about 6.0° F higher than current averages. The average minimum temperature in 2055 would be about 4.0° F higher than current averages. With these forecasted temperature conditions, SR 233 will likely have roadway impacts. Higher temperatures and longer heat spells can increase the buckling and rutting of roads due to the binder in the pavement becoming more pliable and losing its shape with the stress of traffic, the warping of rails, and health risks for maintenance and construction crews working during the day. The figure below shows the locations impacted and their prioritization by vulnerability. The highest priority areas are reflected by a scale from one to four, with one being the highest.

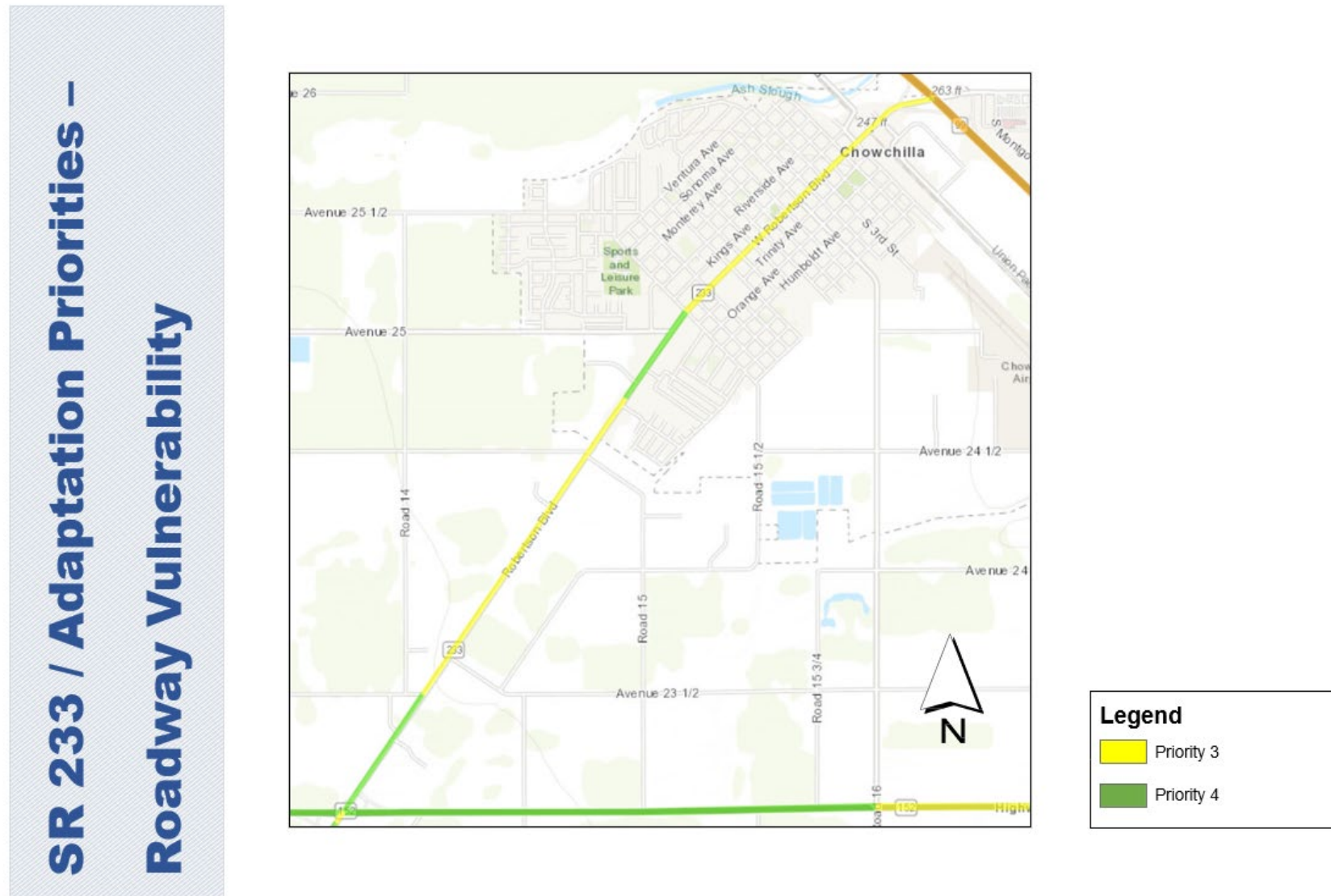


Figure 18: SR 233/Adaptation Priorities – Roadway Vulnerability

Biological Concerns:

The Endangered Species Act of 1973 (ESA) created means to conserve threatened and endangered species and their habitats. The ESA recognizes that these species “are of aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people.” One of Caltrans’ goals covers sustainability, livability, and economy: “Make long-lasting, smart mobility decisions that improve the environment, support a vibrant economy, and build communities, not sprawl.” The table below shows the rare species, both flora and fauna, that may be found within the SR 233 corridor. Due to potential impacts, special studies or mitigation may be required for projects along the corridor. For more information about the California Department of Fish and Wildlife’s California Natural Diversity Database, please visit: <https://wildlife.ca.gov/Data/CNDDDB>.

Vulnerable Species		
Segment	Flora	Fauna
1	None observed	None observed
2	Lesser saltscale	None observed
3	Lesser saltscale	Hoary bat
4	Lesser saltscale	Hoary bat

Table 4: Vulnerable Species from the California Natural Diversity Database

Air Quality:

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the local agency responsible for addressing emissions by developing plans and implementing control measures. State Route 233 lies within the San Joaquin Valley Air Basin which is in non-attainment by State standards for various air pollutants: ozone, particulate matter 10 micrometers (PM10) (in attainment-maintenance per Federal status), and particulate matter 2.5 micrometers (PM2.5). Non-attainment areas do not meet ambient air quality standards due to various pollutants. Figures 19 through 21 show the sources of PM2.5 and ozone in the San Joaquin Valley Air Basin.

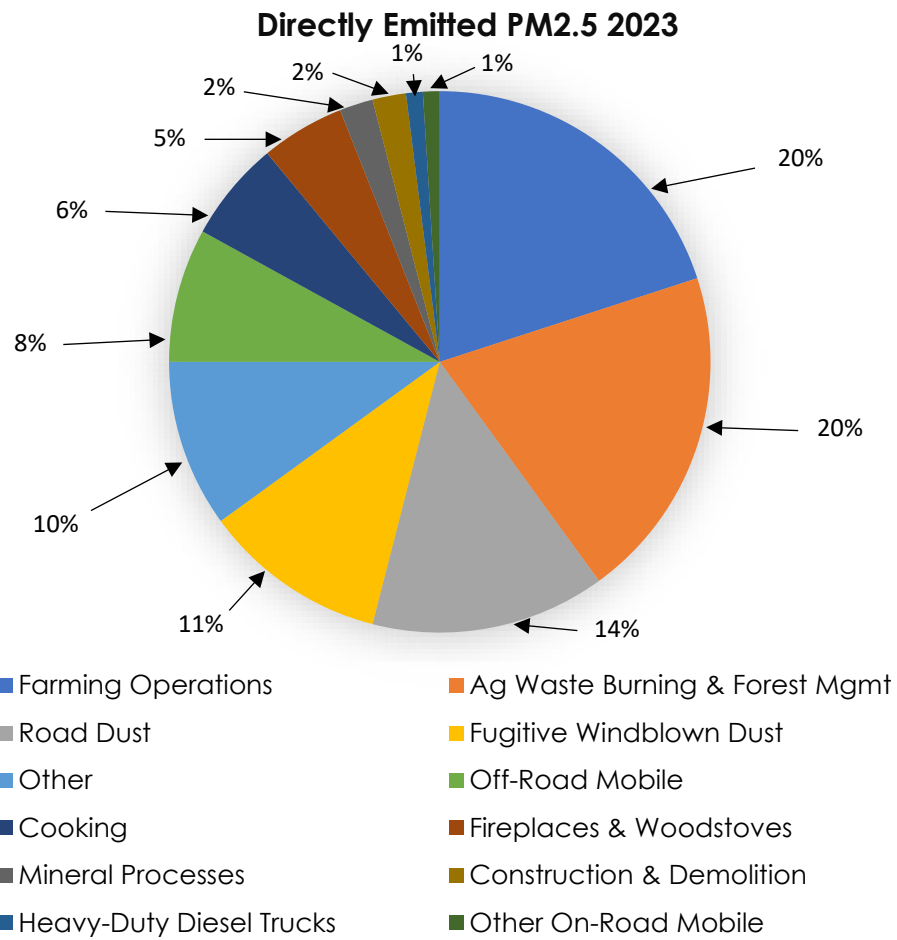


Figure 19: Directly Emitted PM2.5 Sources – SJVAPCD

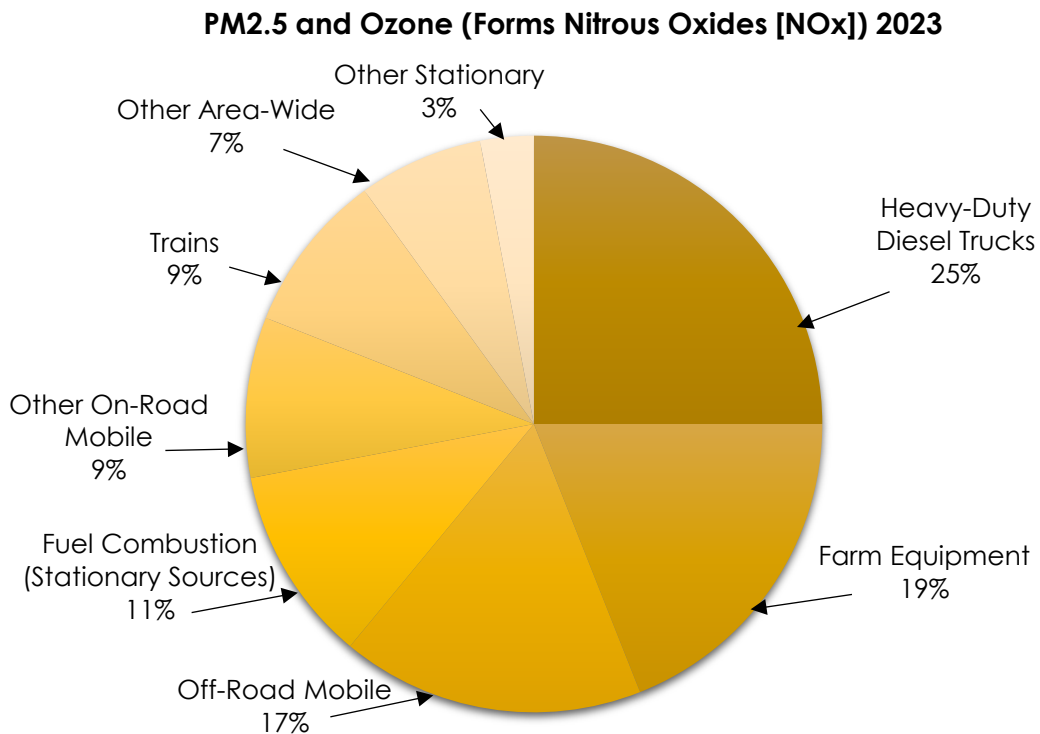


Figure 20: PM2.5 and Ozone Sources – SJVAPCD

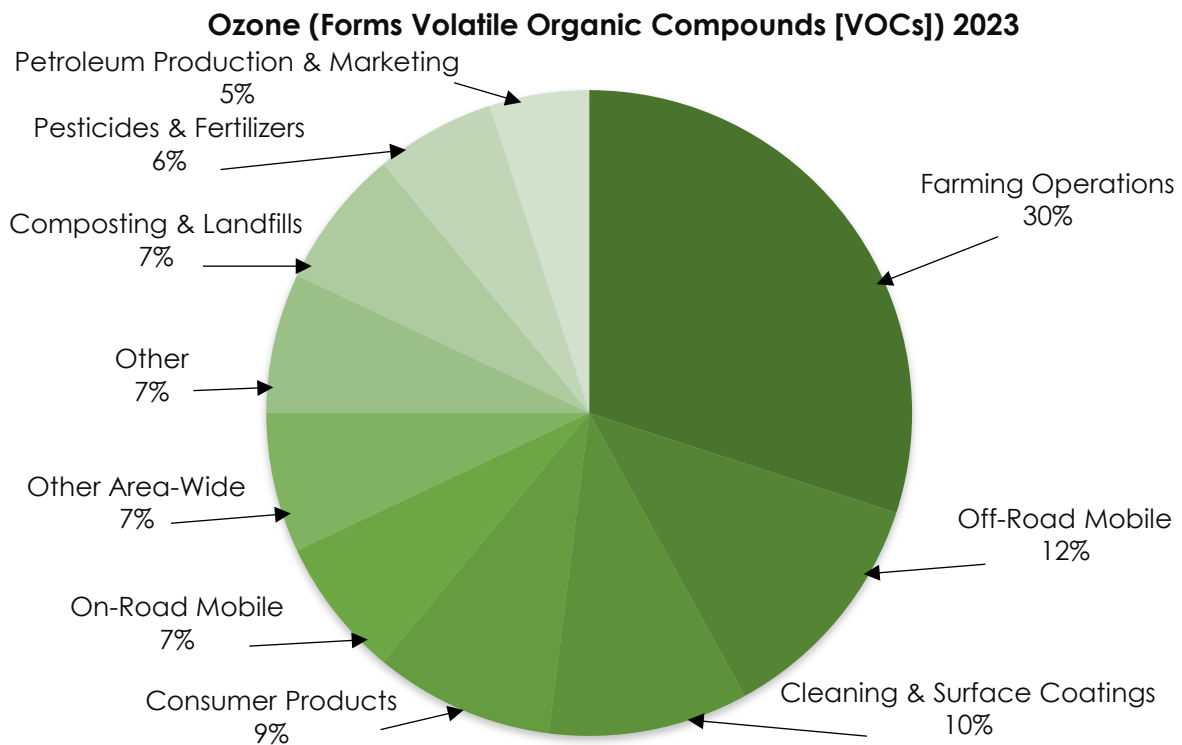


Figure 21: Ozone Sources - SJVAPCD

States must develop a state implementation plan (SIP) to describe how an area will attain national ambient air quality standards (NAAQS), per the Clean Air Act. In non-attainment areas, the SIP must include additional requirements to reduce air pollution and provide for attainment of the standards. Failure to meet attainment by the target date in the SIP can trigger penalties, such as the withholding of federal highway funds that can impact future highway improvements. In non-attainment areas for PM 2.5 or PM 10 are subject to project level conformity and must receive a project level conformity determination from the Federal Highway Administration (FHWA) before the environmental document can be signed.

Air pollution has been linked to increased mortality rates by causing various cancers, cardiovascular disease, respiratory disease, diabetes mellitus, obesity, reproductive disorders, neurological disorders, and immune system disorders. It has detrimental impacts to plant and animal life, by damaging ecosystems. It also leads to greenhouse gases which are a major component of climate change.

According to the San Joaquin Valley Air Pollution Control District, air quality has been improving due to investments by Valley businesses, regulations, and support by residents. The San Joaquin Valley has reduced emissions at a better rate than some other areas of the State, despite natural challenges of geography, topography, and meteorology. Table 5 below shows the improvement in air quality from 2002 to 2022.

Air Quality Trends		
Year	Days Meeting Health Standard (%)	Days Exceeding Health Standard (%)
2002	53%	47%
2012	75%	25%
2022	86%	14%

Table 5: Air Quality Trends - SJVAPCD

For further information on the air district, please see <https://www.valleyair.org/>.

Historical Concerns:

The City of Chowchilla's Robertson Boulevard, which SR 233 encompasses, is well-known for its iconic palm trees originally planted in 1913. In some stretches of Robertson Boulevard/SR 233, the palm trees are sporadic. In November 1989, they were recognized as a Point of Historical Interest in California. This status provides limited protection. For example, if a project (such as widening the roadway) threatens the property, environmental review may be required under the California Environmental Quality Act of 1970 (CEQA).

Contaminated Sites:

According to the California State Water Resources Control Board, there are 15 cleanup sites within a block of SR 233. These sites are monitored and managed to protect contaminants from seeping into the groundwater. They include underground storage tanks, disposal sites, and other potential sites that impact groundwater. The table below shows the general locations, contaminants, and concerns. For further information, please visit <https://geotracker.waterboards.ca.gov/>.

Cleanup Sites				
Segment	Estimated Post Mile	Location	Contaminant	Status
1	0.585	Northside of route, north of Ave 23 1/2/Madison Rd	Gas	Case closed 10/1987
1	1.20	Northside of route	Pesticides/Herbicides	Case closed 1/1965
3	2.489	Southside of route, southwest corner of 15 th St	Gas	Case closed 5/2013
3	2.747	Northside of route, northwest corner of 11 th St	Gas	Case closed 5/1990
3	2.747	Northside of route, northwest corner of 11 st St	Gas	Case closed 12/2003
3	3.149	Northside of route, north of 5 th St	Gas	Case closed 11/2021

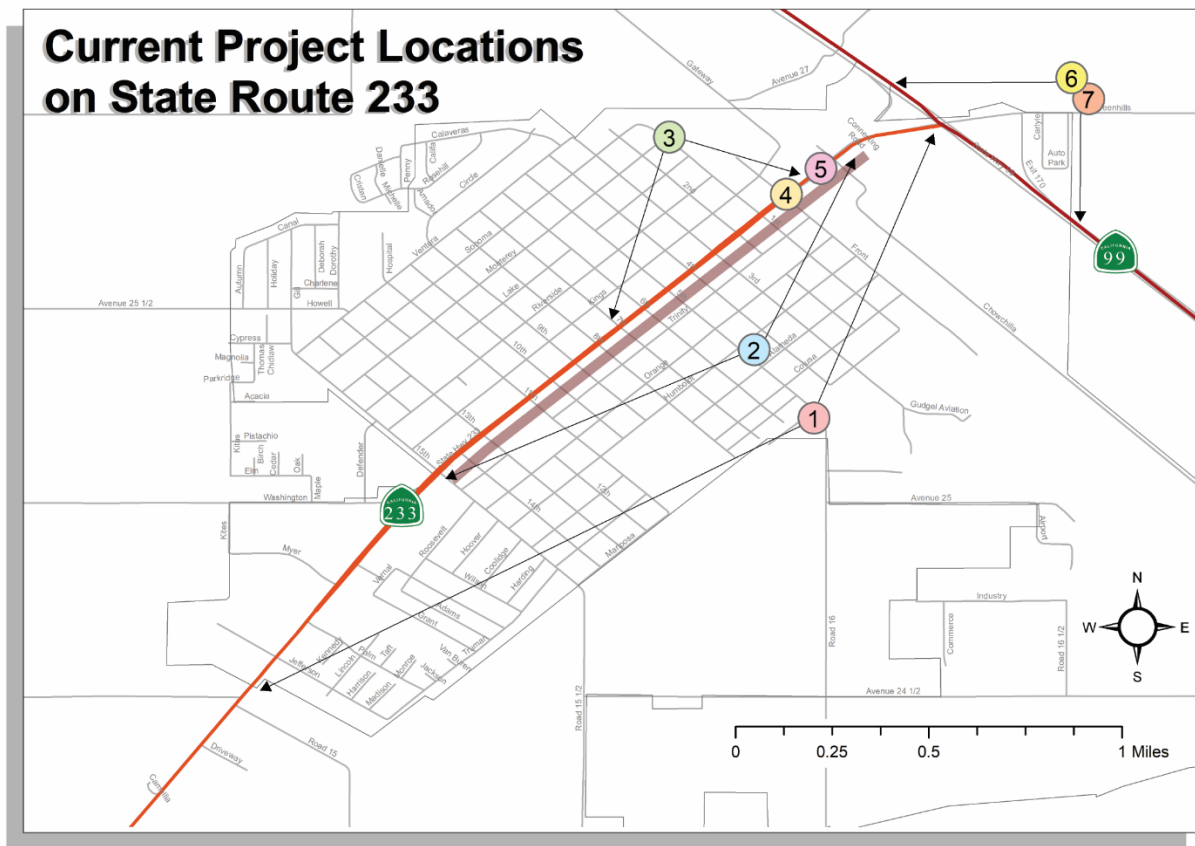
3	3.166	Southside of route, north of 5 th St	Gas	Case closed 10/2015
3	3.181	Southside of route, north of 5 th St	Gas	Case closed 3/1996
3	3.315	Southside of route, north of 3 rd St	Gas	Open
3	3.351	North of route, south of 4 th St	Chlorinated Solvents, Volatile Organic Compounds	Open
3	3.407	Southside of route, southwest corner of 1 st St	Gas	Case closed 11/94
3	3.460	Northside of route, northeast corner of 1 st St	Gas	Case closed 4/1992
4	3.600	Northside of route, northwest corner of Chowchilla Blvd	Diesel	Case closed 10/1996
4	3.662	Southside of route, southeast corner of Chowchilla Blvd	Gas	Case closed 9/1992
4	3.760	North of route, north of Chowchilla Blvd	Gas	Case closed 4/2014

Table 6: Cleanup Sites

Projects and Strategies on Corridor

Current Projects:

Most of the planned and programmed projects on SR 233 are non-capacity increasing. Many of the projects include complete streets elements and are for maintenance of the roadway. The following figure shows the constrained projects for SR 233.



SR 233 PLANNED & PROGRAMMED PROJECTS								
	Seg.	Post Mile	Location	Description	Status	Type	Total Est. Cost \$1,000	Completion Year
1	1-4	1.8/3.88	In and near Chowchilla, from Ave 24 1/2 to SR 99	Pavement preservation (multi-asset CAPM)	PS&E/RW	SHOPP	\$21,313	2028
2	3-4	2.47/3.7	In Chowchilla, from 13th St to 1st St	Intersection improvement with complete streets elements and beautification	Construction	Clean CA Grant	\$1,300	2025
3	3	2.95/3.57	In Chowchilla, from 8th St to the UPRR Xing	Streetscape	Planned	Local	\$1,000	N/A
4	3	3.5	In Chowchilla, at Front St	ADA and complete streets improvements	PA&ED	Minor A	\$1,650	2029
5	3-4	3.6	In Chowchilla, at Chowchilla Blvd	ADA and complete streets improvements	PA&ED	Minor A	\$1,650	2027
6	4	SR 99 26.3/26.8	SR 99/233 Separation from 2.6 miles north of the Ave 24 OC to 1.3 miles south of the Le Grande OC	Interchange improvement	PA&ED	Local	\$32,901	2028
7	4	SR 99 26.3/26.8	At SR 99/SR 233	Construct interchange	PID - Inactive	STIP-RIP/Local/Oversight	\$74,700	2037
*8	VAR	VAR	From south of the Diridon Station in San Jose to east of the SR 152/233 Interchange south of the City of Chowchilla	Oversight of the CP1 design build construction contract for high speed rail	PS&E/RW	CHSR	\$203	NA

* Due to various locations, #8 is not shown on map

Figure 22: SR 233 Planned and Programmed Projects

1. "Chowchilla CAPM" – in and near Chowchilla, from Avenue 24 ½ to SR 99. This project is in the design phase. It is anticipated to be completed in 2028. The project will extend the service life of the pavement by resurfacing the existing roadway pavement that is showing signs of distress. The project will update existing signage to the latest standards. Hydraulic facilities will be replaced, including dikes and valley gutters. Guardrails will also be upgraded. The four signals within the project limits will also be modified. A roundabout at Washington Road will also be constructed which will help realign the Washington Road to SR 233. Complete street elements to be incorporated include an updated school crossing with signage to increase visibility; updated crosswalks with signage at 8th Street and 6th Street along Veterans' Memorial Park to also increase visibility; added bulbouts; closed sidewalk gaps; upgraded ADA curb ramps; a shared use path from Avenue 25 to the shopping center; and added Class II bike lanes.
2. "Chowchilla SR 233 Enhancement" – in Chowchilla, from 13th Street to 1st Street. This project is a Clean CA project currently in construction. It is anticipated to be completed in 2025. The project includes complete street elements of bulb-outs and rectangular rapid-flashing beacons (RRFBs) at crosswalks. Also, street name signs will be updated with decorative street name signs.
3. Streetscape - in Chowchilla, from 8th Street to the Union Pacific Railroad crossing. It is a planned locally funded project included in the 2022 Madera County Transportation Commission's (MCTC) Regional Transportation Plan (RTP).
4. "Chowchilla West ADA Railroad Improvements" – in Chowchilla, at Front Street. This project is in the environmental phase and funded through the Minor A program. It is anticipated to be completed in 2029. The project will upgrade existing non-standard ADA curb ramps and install missing ADA curb ramps. It also will upgrade the existing signal, replace damaged concrete cross gutters, replace sidewalks, install a traffic count station, enhance the visibility of the crosswalk, and replace pavement striping and markers. It is needed to improve mobility and pedestrian accessibility.
5. "Chowchilla East ADA Improvements" – in Chowchilla, at Chowchilla Boulevard. This is the sister project to the west section project. It is also a Minor A-funded project in the environmental phase with an anticipated completion date in 2027. The project will upgrade the existing non-standard ADA curb ramps and install missing ADA curb ramps. It is needed to improve mobility and pedestrian accessibility.

6. "Chowchilla Interchange Improvement" – in Madera County, at the SR 99/SR 233 Separation, from 2.6 miles north of the Avenue 24 Overcrossing to 1.3 miles south of the Le Grande Overcrossing. This project is a locally funded project in the design and right of way phase, with an anticipated completion date in 2028. It will consist of two roundabouts on either side of SR 99 and include complete streets features. A new bridge will be constructed over SR 99 which will accommodate westbound travel and bicyclists and pedestrians. The old bridge will remain to accommodate eastbound travel. The project is needed to provide safer active transportation through the interchange, improve accessibility and connectivity, and improve operations.
7. "Chowchilla 99/233 Interchange" – at SR 99/SR 233. This project is inactive. It has a completed project initiation document and is awaiting RIP funding, along with other funds. This project is needed due to the growth in the area.
8. "High Speed Train System – San Jose to Merced Segment" – This project is currently in the design phase. It is a rail-funded project with Caltrans in charge of the oversight.

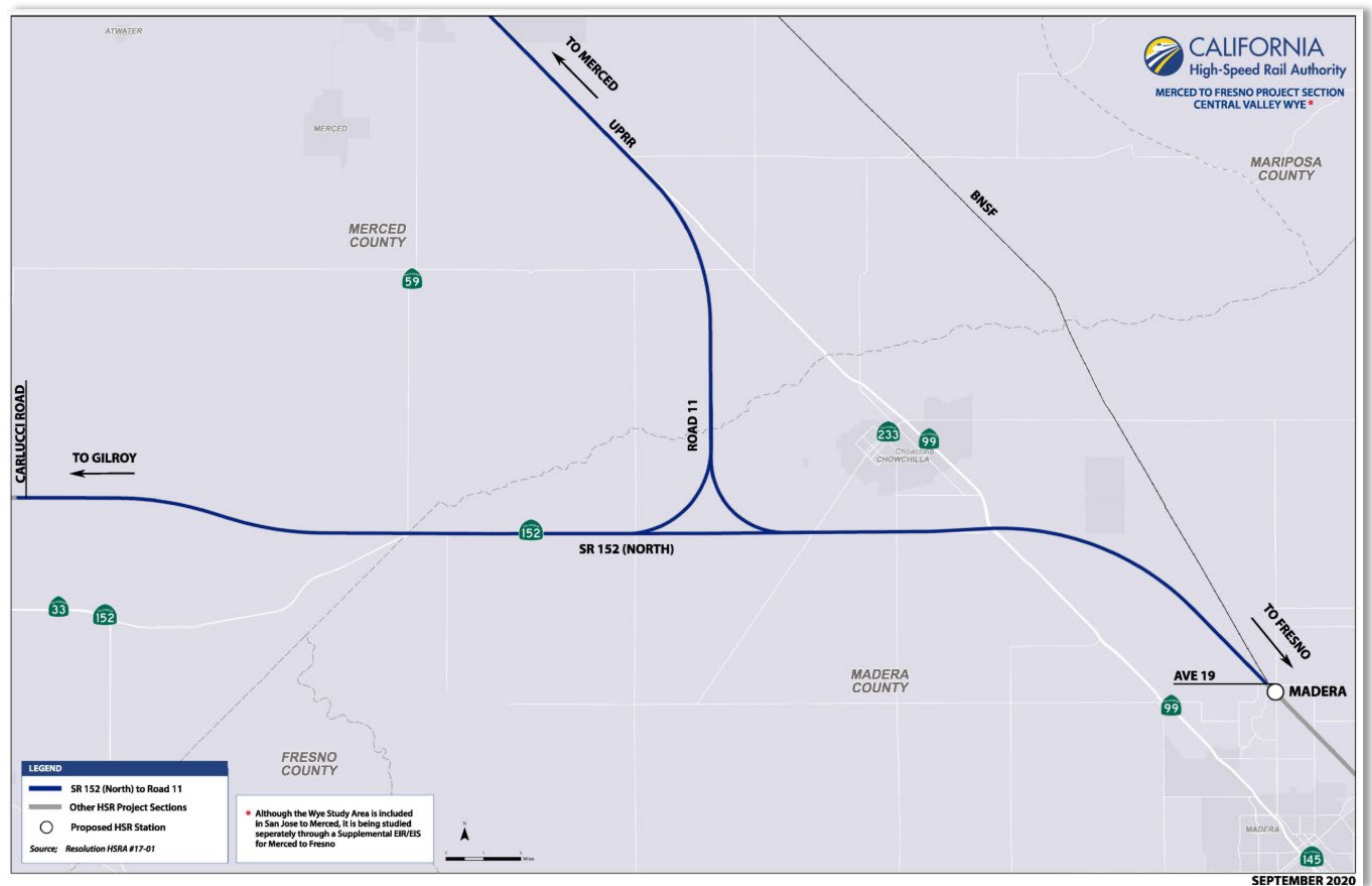


Figure 23: California High-Speed Rail Authority Central Valley Wye

Conceptual Projects:

There are concerns on how the route will function in the future. For example, how will it continue to function as a main street while still designated as a truck route. The City of Chowchilla, along with Caltrans, has been in support of active transportation and complete street projects along the route. However, these goals conflict with the route remaining a terminal access truck route. One solution the city has proposed, is to construct Avenue 24 as a through-road between SR 233 and SR 99 (please see Figure 15: Proposed Truck Route Segments). Currently, Avenue 24 from SR 99 ends at Road 15 $\frac{3}{4}$, picks up again at Road 15 $\frac{1}{2}$ and ends past Road 15. Avenue 24 would require additional right-of-way and a bridge to be constructed over Berenda Slough. In doing so, trucks would be able to avoid downtown Chowchilla by accessing the southbound SR 99/Avenue 24 Interchange to SR 152. Improvements to the SR 233/SR 152 Interchange will need to be constructed in the future, as well.

As mentioned previously, the city and Caltrans are encouraging active transportation in downtown Chowchilla. In Caltrans' Ten-Year State Highway Operation and Protection Program (SHOPP), there is a project to construct ADA pedestrian infrastructure from Myer Drive to SR 99. In the 2022 MCTC RTP, there are two unconstrained projects listed. One calls for sidewalk gap and crossing improvements throughout the route. The second calls for the installation of crosswalks for all approaches, and curb extensions to reduce pedestrian crossing distances and corner turn radii at Eleventh Street.

The SR 233/Robertson Boulevard Corridor Planning Study and Downtown Master Plan of March 2021, which was funded in part by a SB-1 Sustainable Communities Grant, identified complete streets improvements. Please see the table below:

SR 233/Robertson Boulevard Corridor Planning Study and Downtown Master Plan Proposed Improvements				
Segment	Bicyclist	Driver	Pedestrian	Transit
1	Class IV bike lane Signing modifications*	Driveways Signing modifications Wider travel lanes	ADA compliant curb ramps Sidewalk installation Crosswalk marking upgrades	N/A
2	Class II bike lane Signing modifications	Driveways Pavement marking upgrades Signing modifications Traffic signal modifications	ADA compliant curb ramps Bulb-out installation Crosswalk marking upgrades High visibility crosswalks Rectangular rapid flashing beacon (RRFB) system installation Sidewalk installation	Bus stop upgrades
3	Class II bike lane Class IV cycle track Signing modifications	Pavement marking upgrades Traffic signal modifications	ADA compliant curb ramps Bulb-out installation High visibility crosswalks RRFB system installation	Bus stop upgrades
4	Class II bike lane Class III bike route Signing modifications	Pavement marking upgrades	ADA compliant curb ramps Crosswalk marking upgrades	N/A

* Shaded improvements are already in constrained projects.

Table 7: SR 233/Robertson Blvd Corridor Planning Study & Downtown Master Plan

Also considered by the City of Chowchilla is the possibility of relinquishing the route. This would allow the city to eliminate its truck route designation, thereby making it easier to implement roadway configurations conducive to active transportation and complete streets elements. However, there are issues with relinquishment; primarily, it would put the maintenance and its costs onto the City of Chowchilla.

Other conceptual ideas would be to collaborate with CATX to provide transit services to the Merced Regional Airport located an estimated 20 miles north of SR 233 and the Merced Amtrak Station located 19 miles north of SR 233. Taking this approach would offer Chowchilla residents a safe and convenient alternative for their travel needs. By providing access to the Merced Regional Airport through CATX, Chowchilla residents could connect to the Yosemite Area Regional Transportation System (YARTS) and explore Yosemite Village and other local communities. Also, connectivity between SR 233 and high-speed rail stations would provide enhanced accessibility for residents, facilitating smoother and more efficient travel within the region. This link would offer a direct route for commuters and travelers to access the high-speed rail network, significantly improving connectivity and reducing travel times across the county and beyond. Lastly, active transportation networks can help incorporate physical activity in daily life by encouraging people to walk, cycle, or roll to get where they need to go while also avoiding the release of air pollutants that can harm human health.

The following summary chart contains detailed information on existing and forecasted conditions for the facility. The Summary Chart utilizes the Demand/Capacity Ratio as a performance metric for each segment. The Demand/Capacity Ratio expresses the relationship between traffic demand and what can be accommodated by the facility on a segment-by-segment basis.

Summary Chart Table A

STATE ROUTE 	SR 233/SR 152 SEP	PALM PARKWAY	WASHINGTON RD	CHOWCHILLA Ave	JCT RTE 99
			City of Chowchilla		
SEGMENT	1	2	3	4	
County / Route	MADERA / 233	MADERA / 233	MADERA / 233	MADERA / 233	
Description Begin	SR 233/SR 152 SEP	PALM PARKWAY	WASHINGTON RD	CHOWCHILLA AVE	
Description End	PALM PARKWAY	WASHINGTON RD	CHOWCHILLA AVE	JCT RTE 99	
Postmile Limits Begin/End (PM)	LO.121 / 2.036	2.036 / 2.390	2.390 / 3.586	3.586 / 3.887	
Length (M)	1.9	0.4	1.2	0.3	
Rural / Urban	Rural	Urban	Urban	Urban	
Terrain	Flat	Flat	Flat	Flat	
ROW: Range Existing (FT)	100 / 110	100 / 100	50 / 100	50 / 100	
Median Range (FT)	0 / 11	11 / 11	0 / 11	0 / 0	
Shoulder Range (FT) - Treated	2 / 8	8 / 8	0 / 12	0 / 8	
Lane Width (FT)	12	11 / 12	11 / 13	12 / 14	
Ultimate ROW (FT)	110	110	100	100	
Facility: Existing	2C	2C(I) +	4C	2C	
2045 Concept	2C(I) +	2C(I) +	4C	2C(I) +	
UTC	4C	4C	4C	4C	
Demand/Capacity Ratio: Year 2018	B	C	C	C	
Demand/Capacity Ratio: Year 2030	B	C	C	D	
LOS: Horizon Year 2045 Without Improvements	B	E	C	E	
LOS: Concept 2045	D	D	D	D	
Deficiency / Year Deficient	N/A	2045	N/A	2045	
Project in STIP/RTP (Y/N)	No	No	No	No	
LOS Horizon Year 2045 With Improvements	N/A	N/A	N/A	N/A	
Directional Split (Peak Hour)	63/37	51/49	51/49	55/45	
AADT: Base Year 2018	3,800	11,800	15,200	13,400	
AADT: Year 2030	5,500	16,000	19,000	15,700	
AADT: Horizon Year 2045	7,500	21,300	23,800	18,500	
Peak Hour: Base Year 2018	370	1,150	1,490	1,250	
Peak Hour: Year 2030	540	1,560	1,870	1,460	
Peak Hour: Horizon Year 2045	740	2,070	2,340	1,730	
% Trucks: AADT	10%	8%	8%	8%	
% Trucks: Peak Hour	9%	7%	7%	7%	
Total Average Annual Daily Truck Traffic (AADT): Base Year 2018	684	5,664	7,296	6,432	
5+ Axle Average Annual Daily Truck Traffic (AADT): Base Year	68	453	584	515	
5+ Axle Trucks (as % of Truck AADT) : Base Year 2018	18%	48%	48%	48%	

++: indicates improvements such as turn lanes, signals, passing lanes, etc.
Table 8: Summary Chart Table A

Summary Chart Table B

STATE ROUTE 	SR 233/SR 152 SEP	PALM PARKWAY	WASHINGTON RD	CHOWCHILLA Ave	JCT RTE 99
			City of Chowchilla		
SEGMENT	1	2	3	4	
County / Route	MADERA / 233	MADERA / 233	MADERA / 233	MADERA / 233	
Description Begin	SR 233/SR 152 SEP	PALM PARKWAY	WASHINGTON RD	CHOWCHILLA AVE	
Description End	PALM PARKWAY	WASHINGTON RD	CHOWCHILLA AVE	JCT RTE 99	
Postmile Limits Begin/End (PM)	L0.121 / 2.036	2.036 / 2.390	2.390 / 3.586	3.586 / 3.887	
Length (Mile)	1.9	0.4	1.2	0.3	
Functional Classification	Major Collector / Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial	
National Highway System (NHS) (Y/N)	Yes (From Ave 23 1/2)	Yes	Yes	Yes	
Freeway/Expressway System (Y/N)	No	No	No	No	
Regionally Significant (Y/N)	Yes	Yes	Yes	Yes	
STRAHNET (Y/N)	No	No	No	No	
Lifeline (Y/N)	No	No	No	No	
IRRS (Yes: HE=High Emphasis, F=Focus, G=Gateway or No)	No	No	No	No	
TRUCK NETWORK, STAA: (NN=National Network, TA=Terminal Access, CL= California Legal, R= Special Restrictions, or A=Advisory)	TA	TA	TA	TA	
Scenic (Yes: Officially Designated, Eligible or No)	No	No	No	No	
ICES (Intermodal Corridor of Economic Significance) (Y/N)	No	No	No	No	
General Plan/RTP LOS Standard	Madera Co RTP LOS C for State Routes	Madera Co RTP LOS C for State Routes	Madera Co RTP LOS C for State Routes	Madera Co RTP LOS C for State Routes	
General Plan/RTP Standard Highway Classification	Arterial	Arterial	Arterial	Arterial	
Passing Lanes (Y/N)	No	No	No	No	
Bike Use Allowed (Y/N)	Yes	Yes	Yes	Yes	

Table 9: Summary Chart Table B

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Definitions:

AADT – Annual Average Daily Traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Traffic counting is generally performed by electronic counting instruments moved from location throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present. Annual ADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning, and designing highways and other purposes.

Arterial Highway - A general term denoting a highway primarily for through travel usually on a continuous route.

Auxiliary Lane – The portion of the roadway for weaving, truck climbing, speed change, or for other purposes supplementary to through movement.

Base year – The year that the most current data is available to the district.

Bikeway Class I (Bike Path) – Provides a completely separated facility for the exclusive use of bicycles and pedestrians with crossflow by motorists minimized.

Bikeway Class II (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.

Bikeway Class III (Bike Route) – Provides for shared use with pedestrian or motor vehicle traffic.

Bikeway Class IV (Separated Bikeway) – Provides the exclusive use of bicycles and includes a separation (e.g., grade separation, flexible posts, inflexible physical barrier, or on-street parking) required between the separated bikeway and the through vehicular traffic.

Bottlenecks – A bottleneck is a location where traffic demand exceeds the effective carrying capacity of the roadway. In most cases, the cause of a bottleneck relates to a sudden reduction in capacity, such as a lane drop, merging and weaving, driver distractions, a surge in demand, or a combination of factors.

Bypass – An arterial highway that permits users to avoid part or all a city or town center, a suburban area, or an urban area.

Caltrans Initial Investigation Map (CIIM) – A Caltrans District 6 ArcGIS database tool that provides various information of potential impacts on the State highway system for initial review.

Capacity – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time under prevailing roadway, environmental, traffic, and control conditions.

Capital Facility Concept – The 20–25-year vision of future development on the route to the capital facility. The capital facility can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility (Intercity Passenger Rail, Mass Transit Guideway etc.), grade separation, and new managed lanes.

Channelization - The separation or regulation of conflicting movements into definite paths of travel using pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movement of vehicles, bicycles, and pedestrians.

Collector Road – A route that serves travel of primarily intracounty rather than statewide importance in rural areas or a route that serves both land access and traffic circulation within a residential neighborhood, as well as commercial and industrial areas in urban and suburban areas.

Conceptual Project – A conceptual improvement or action is a project that is needed to maintain mobility or serve multimodal users but is not currently included in a fiscally constrained plan and is not currently programmed. It could be included in a General Plan or in the unconstrained section of a long-term plan.

Conventional Highway - A highway without control of access which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations.

Corridor – A broad geographical band that follows a general directional flow connecting major sources of trips that may contain several streets, highways, bicycle, pedestrian, and transit route alignments. Off system facilities are included as informational purposes and not analyzed in the CP.

Crosswalk – That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street. Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Demand/Capacity Ratio – A metric that expresses the ratio of demand flow to capacity and serves as a performance measure for each segment of a facility. Uncongested flow conditions require that the demand to capacity ratio is less or equal to 1.0.

Divided Highway – A highway with separated roadbeds for traffic traveling in opposing directions.

Expressway – An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

Facility Concept – Describes the facility and strategies that may be needed within 20-25 years. This can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility, non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, Transportation Demand Management, and Incident Management.

Facility Type – The facility type describes the State Highway facility type. The facility could be freeway, expressway, conventional, or one-way city street.

Freeway – A highway in respect to which the owners of abutting lands have no right or easement of access to or from their abutting lands or in respect to which such owners have only limited or restricted right or easement access. A divided arterial highway with full control of access and with grade separations at intersections.

Freight Generator – Any facility, business, manufacturing plant, distribution center, industrial development, or other location (convergence of commodity and transportation system) that produces significant commodity flow, measured in tonnage, weight, carload, or truck volume.

Frontage Street or Road – A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

Grade Separation – A crossing of two highways, highway and local road, or a highway and a railroad at different levels.

Headway – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles.

Horizon Year – The year that the future (20-25 years) data is based on.

Intermodal Freight Facility – Intermodal transport requires more than one mode of transportation. An intermodal freight facility is a location where different transportation modes and networks connect and freight is transferred (or “transloaded”) from one mode, such as rail, to another, such as truck.

Interregional Road System (IRRS) – A series of state highway routes, outside the urbanized areas, that provide access to and links between the state’s economic centers, major recreational areas, and urban and rural regions.

ITS – Intelligent Transportation System improves transportation safety and mobility and enhances productivity through the integration of advanced communications technologies into the transportation infrastructure and in vehicles. Intelligent transportation systems encompass a broad range of wireless and wire line communications-based information and electronics technologies to collect information, process it, and take appropriate actions.

Median – The portion of a divided highway separating the traveled ways in opposite directions.

Multi-modal – The availability of transportation options using different modes within a system or corridor, such as automobile, subway, bus, rail, or air.

National Ambient Air Quality Standards (NAAQS) – An air quality standard that defines the maximum amount of a pollutant averaged over a period of time that can be present in outdoor air without harming public health, and thus, it defines clean air.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between 6

percent and 10 percent of the ADT. The lower values are generally found on roadways with low volumes.

Peak Period – Is a part of the day during which traffic congestion on the road is at its highest. Normally, this happens twice a day, once in the morning and once in the evening; the time periods when the most people commute. Peak Period is defined for individual routes, not a District or statewide standard.

Planned Project – A planned improvement or action is a project in a fiscally constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

Post-25 Year Concept – This dataset may be defined and re-titled at the district's discretion. In general, the Post-25 Year concept could provide the maximum reasonable and foreseeable roadway needed beyond a 20–25-year horizon. The post-25-year concept can be used to identify potential widening, realignments, future facilities, and rights-of-way required to complete the development of each corridor.

Post Mile – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route within a county to the next county line. The milepost values start over again at each county line. Milepost values usually increase from south to north or west to east depending upon the general direction the route follows within the state. The milepost at a given location will remain the same year after year. When a section of road is relocated, new milepost (usually noted by an alphabetical prefix such as "R" or "M") are established for it. If relocation results in a change in length, "milepost equations" are introduced at the end of each relocated portion so that mileposts on the remainder of the route within the county will remain unchanged.

Programmed Project – A programmed improvement or action is a project in a near-term programming document identifying funding amounts by year, such as the State Transportation Improvement Program or the State Highway Operations and Protection Program.

Railroad Class I – The Surface Transportation Board (STB) defines a Class I railroad in the U.S. as a carrier having annual operating revenues of \$250 million or more. This class includes the nation's major railroads. In California, Class I railroads include Union Pacific Railroad (UP) and Burlington Northern Santa Fe Railway (BNSF).

Railroad Class II – STB defines a Class II railroad in the U.S. as having annual carrier operating revenues of less than \$250 million but more than \$20 million. Class II railroads are considered mid-sized freight-hauling railroad in terms of operating revenues. They are considered “regional railroads” by the Association of American Railroads.

Railroad Class III – Railroads with annual carrier operating revenues of \$20 million or less. The typical Class III is a short line railroad, which feeds traffic to or delivers traffic from a Class I or Class II railroad.

Roadbed – That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

Roadway – That portion of the highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

Roundabout - A type of circular intersection with specific geometric and traffic control features that in combination lower speed operations and lower speed differentials among all users immediately prior to, through, and beyond the intersection. Vehicle speed is controlled by deflection in the path of travel, and “yield upon entry” rule for traffic approaching the roundabout’s circulatory roadway. Curves and deflections are introduced that limit operating speeds.

Route Designation – A route’s designation is adopted through legislation and identifies what system the route is associated with on the State Highway System. A designation denotes what design standards should apply during project development and design. Typical designations include, but are not limited to: National Highway System (NHS), Interregional Route System (IRRS), and Scenic Highway System.

Rural – Fewer than 5,000 in population designates a rural area. Limits are based upon population density as determined by the U.S. Census Bureau.

Scenic Highway – A State or county highway, in total or in part, that is recognized for its scenic value, protected by a locally adopted corridor protection program, and has been officially designated by the Department.

Segment – A portion of a facility between two points.

Shoulder – The portion of the roadway contiguous with the traveled way for the accommodation of stopped vehicles, for emergency use, for errant vehicle

recovery, and for lateral support of base and surface courses. The shoulder may accommodate bicyclists and pedestrians.

Sidewalk – A surfaced pedestrian way contiguous to a roadbed used by the public where the need for which is created primarily by the local land use.

State Highway Operation and Protection Program (SHOPP) – A four-year program proposed by Caltrans and adopted by the CTC, limited to projects related to State highway safety and rehabilitation. The funding source and the 10-year plan for such projects is called SHOPP.

State Implementation Plan (SIP) – A comprehensive plan that describes how an area will attain national ambient air quality standards (NAAQS) per the Clean Air Act.

State Transportation Improvement Program (STIP) – A list of transportation projects, proposed in RTIPs and the ITIP, which are approved for funding by the CTC. The STIP has two main components: the Regional Improvement Program (RIP, the 75% allocated to the regions for regional improvements) and the Interregional Improvement Program (IIP, the 25% allocated to Caltrans for interregional improvements). It is a five-year program of projects, updated every two years. It is also the biennial estimate of funds anticipated to be available for programming during the STIP cycle.

Strategic Highway Network (STRAHNET) – A system of public highways that is key to United States strategic policy. It provides defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war. Most large military convoys use the Strategic Highway Network. These routes connect military bases to the interstate highway network and include over 15,000 miles of roadway nationally.

System Operations and Management Concept – Describe the system operations and management elements that may be needed within 20-25 years. This can include non-capacity increasing operational improvements (Aux. lanes, channelization's, turnouts, etc.), conversion of existing managed lanes to another managed lane type or characteristic (e.g., HOV land to HOT lane), TMS Field Elements, Transportation Demand Management, and Incident Management.

TDM – Transportation Demand Management programs designed to reduce or shift demand for transportation through various means, such as the use of public transportation, carpooling, telework, and alternative work hours. Transportation

Demand Management strategies can be used to manage congestion during peak periods and mitigate environmental impacts.

TMS – Transportation Management System is the business processes and associated tools, field elements and communications systems that help maximize the productivity of the transportation system. TMS includes, but is not limited to, advanced operational hardware, software, communications systems, and infrastructure, for integrated Advanced Transportation Management Systems and Information Systems, and for Electronic Toll Collection System.

Urban – 5,000 to 49,999 in population designates an urban area. Limits are based upon population density as determined by the U.S. Census Bureau.

Urbanized – Over 50,000 in population designates an urbanized area. Limits are based upon population density as determined by the U.S. Census Bureau.

VMT – Is the total number of miles traveled by motor vehicles on a road or highway segment.