

## **4.13 Transportation and Traffic**

### **4.13.1 Introduction**

This section summarizes the results of the Project-specific transportation analysis prepared by Abrams Associates Traffic Engineering (2021). The section discusses the methodologies and findings of the analysis and evaluates the Project's potential to have significant impacts on local and regional traffic. The Santa Maria Site is addressed to the extent information is available and at a qualitative level of discussion.

The Project also includes the Pipeline Sites—four regional pipelines serving the Santa Maria Site and the Rodeo Refinery. The Santa Maria Site is connected to the Rodeo Refinery by approximately 200 miles of subterranean pipeline, crossing San Luis Obispo, Santa Barbara, Kern, Kings, Fresno, Merced, Stanislaus, San Joaquin, Alameda, and Contra Costa Counties. Phillips 66 proposes to empty and clean the pipelines at existing maintenance access points and to decommission or sell them; they would not be excavated as part of this Project. No physical changes would occur.

### **4.13.2 Environmental Setting**

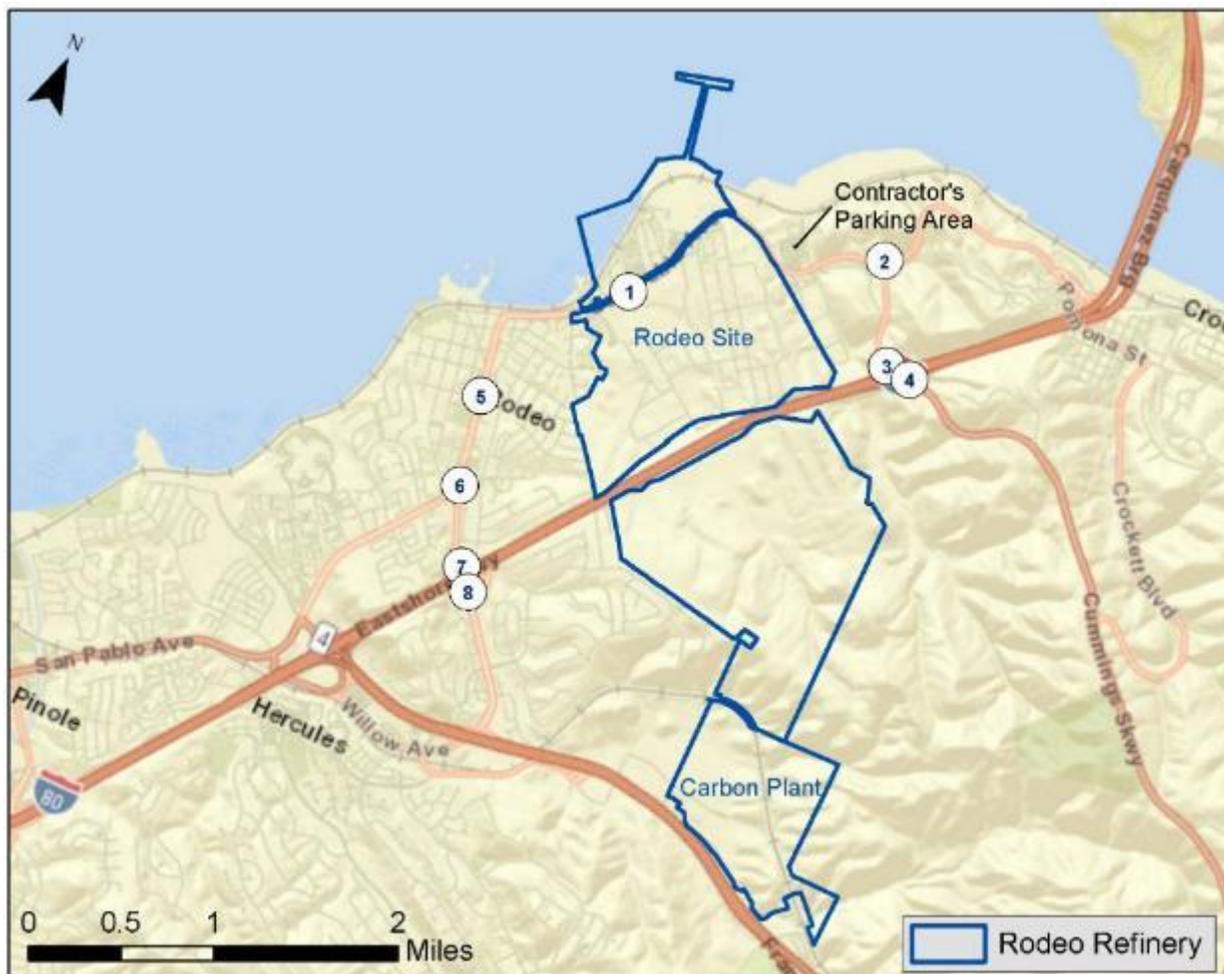
#### **4.13.2.1 *Existing Roadway Network***

##### **Rodeo Refinery**

Figure 4.13-1 illustrates the location of the Rodeo Refinery in relation to the regional and local circulation network and depicts the study area intersections described below.

##### ***Interstate 80***

I-80 is an east-west freeway (although oriented north-south in the immediate Project area) that connects Contra Costa County and Solano County via the Carquinez Bridge. I-80 is a heavily used route for commuters from Solano County and points north to the San Francisco Bay Area. In the vicinity of the Rodeo Refinery, the interchange of concern is Cummings Skyway, which provides the main access to the Rodeo Refinery. The freeway is designated as a *route of regional significance* (Contra Costa Transportation Authority [CCTA] 2017). Within the vicinity of the Project, I-80 is classified as a national Surface Transportation Assistance Act truck route.



Note: The numbered circles represent the eight study area intersections for the Project (see Section 4.13.2.2, *Rodeo Refinery Site Study Intersections*).

**Figure 4.13-1. Study Area and Traffic Monitoring Intersections**

### **Cummings Skyway**

Cummings Skyway is a two-lane arterial road extending from San Pablo Avenue west of I-80 to connect with State Route 4 east of I-80. The intersection at San Pablo Avenue is signalized, while the I-80 eastbound and westbound ramps are unsignalized, but controlled with stop signs. The roadway is designated as an *expressway* in the Contra Costa County General Plan (Contra Costa County 2010) and as a route of regional significance by the CCTA (2017). Cummings Skyway serves as the main truck route to and from the Rodeo Refinery via I-80. The speed limit on Cummings Skyway between I-80 and San Pablo Avenue is 40 mph.

### **San Pablo Avenue/Parker Avenue**

San Pablo/Parker Avenue is designated as an *arterial roadway* in the Contra Costa County General Plan (Contra Costa County 2010) and as a *route of regional significance* by the CCTA (2017). San Pablo Avenue is a four-lane arterial that provides north-south access in the Project vicinity, and runs through the Refinery Site. San Pablo Avenue connects with I-80 via the Cummings Skyway interchange north of the refinery and in Crockett. The speed limit on San Pablo Avenue in the vicinity of the Rodeo Site is 45 mph. Parker Avenue is a two-lane divided roadway that connects San Pablo Avenue to Willow Avenue, providing access to the Willow Avenue interchange with I-80 to the south of the Refinery Site. The speed

limit on Parker Avenue is 30 mph. Contra Costa County currently has plans for a road improvement project on San Pablo Avenue between Rodeo and Crockett, adjacent to the Rodeo Refinery. Phillips 66 is not proposing modifications to existing Rodeo Refinery access points; however, minor changes to internal roadways may be necessary.

### ***Willow Avenue***

Willow Avenue is designated as an *arterial roadway* in the general plan and as a *route of regional significance* by the CCTA (2017). Willow Avenue is a four-lane road running in a northwest-southeast direction. The street extends from Seventh Avenue to connect with San Pablo Avenue and the I-80 interchange. From San Pablo Avenue, Willow Avenue continues through northern Hercules before crossing State Route 4 and terminating at Sycamore Avenue. The speed limit on Willow Avenue is 40 mph.

### **Santa Maria Site**

The Santa Maria Refinery, located in San Luis Obispo County, generates approximately 206 vehicle roundtrips per day or 412 one-way vehicle trips per day, including truck trips and personnel vehicle trips (San Luis Obispo County 2015).

### ***State Route 1***

State Route 1 from the Santa Maria Site entrance north to Halcyon Road is primarily a north-south, two-lane arterial; portions of the roadway have a median turning lane near certain intersections. State Route 1 from the Santa Maria Site entrance east to Willow Road (local) is an east-west, two-lane arterial. State Route 1 south of Willow Road is a north-south, two-lane arterial. Stretching from Willow Road south to W. Clark Avenue, State Route 1 is locally known as Guadalupe Road. It becomes Cabrillo Highway south of the town of Guadalupe and Casmalia Road south of Black Road.

### ***Willow Road***

Willow Road is a county-managed, east-west, two-lane minor arterial with access from the Santa Maria Site via State Route 1. The intersection at Willow Road and State Route 1 is controlled by a stop sign on Willow Road. The Willow Road extension provides a full access interchange at Highway 101 and extends Willow Road to N. Thompson Avenue. Willow Road is the county-designated truck route from the Santa Maria Site to Highway 101.

#### **4.13.2.2 Rodeo Refinery Site Study Intersections**

As required by the CCTA's Technical Procedures, the project-specific analysis is required to include affected intersections for projects that would add more than 50 peak hour trips (CCTA 2013). Based on the Project's trip generation and the potential for adverse effects on traffic operations, eight study intersections were selected in coordination with Contra Costa County staff (Figure 4.13-1). The eight study area intersections include the following:

1. San Pablo Avenue at Refinery Road (Main Project Entrance)
2. San Pablo Avenue at the Cummings Skyway
3. Cummings Skyway at the I-80 Westbound Ramps
4. Cummings Skyway at the I-80 Eastbound Ramps
5. Parker Avenue at Fourth Street
6. Willow Avenue at San Pablo Avenue

7. Willow Avenue at the I-80 Westbound Off-Ramp
8. Willow Avenue at the I-80 Eastbound Ramps

The I-80 ramp intersections fall under the jurisdiction of Caltrans; all other intersections fall under Contra Costa County jurisdiction. The geometry of each of the analyzed intersections (i.e., turning and through lanes and signalization) is illustrated in Figures 4.13-2a and 4.13-2b. Freeway mainline operations along segments of I-80 were not included as part of this analysis because, in general, such an analysis is required only if the project in question is expected to increase peak-hour traffic in the peak direction of the freeway by more than 3 percent, which would not be the case for the Project.

#### 4.13.2.3 Existing Traffic Volumes

For analysis of construction traffic, existing operational conditions at the eight study intersections were evaluated according to using the methodology set forth in CCTA’s Technical Procedures (CCTA 2013). Analysis of traffic operations at signalized and unsignalized intersections was conducted using the methodology described in the Highway Capacity Manual (Transportation Research Board 2016) with Synchro software (Appendix F, *Transportation Analysis*). Vehicle counts for the AM and PM peak periods were collected in March and April of 2021 and are depicted in Figures 4.13-2a and 4.13-2b.

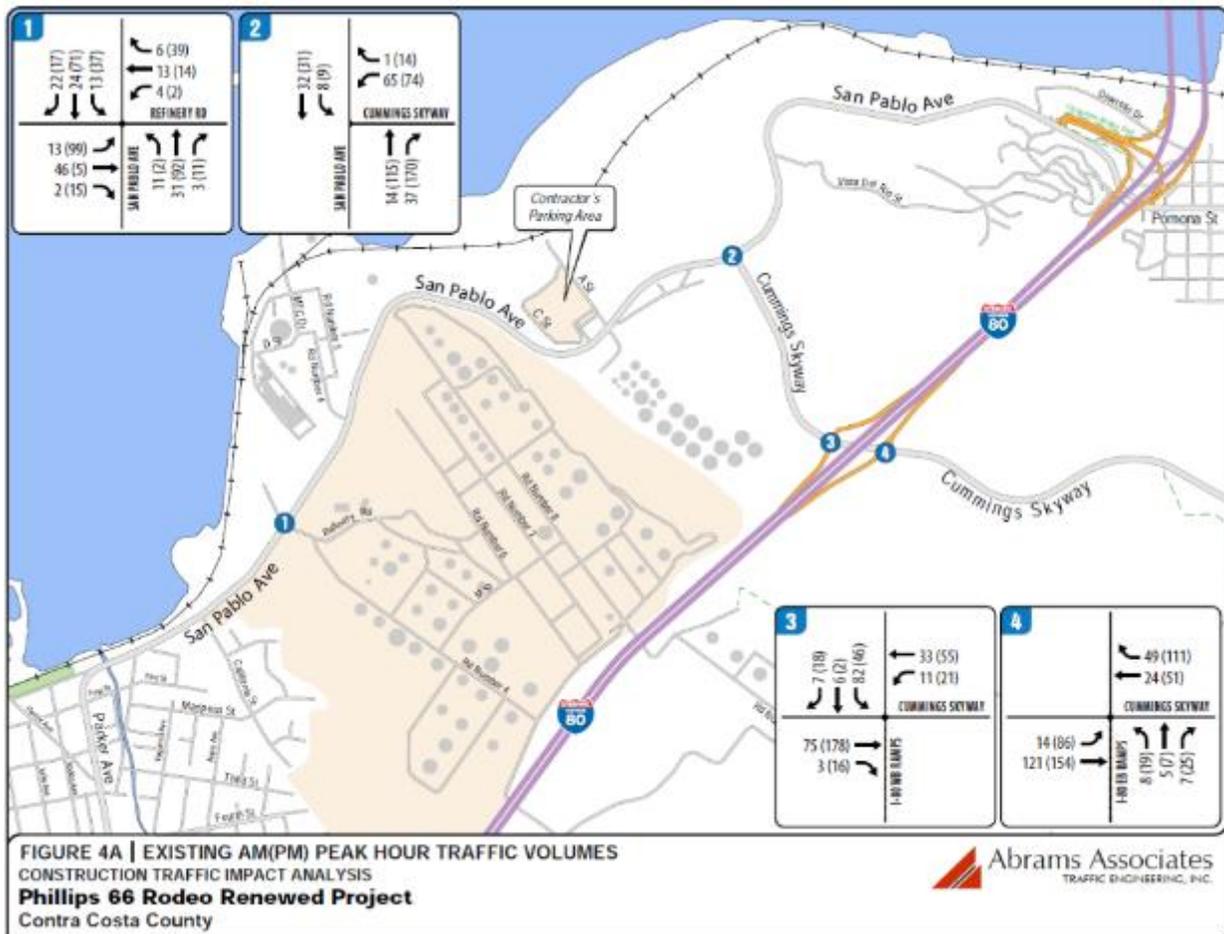


Figure 4.13-2a. Existing (2021) Peak-Hour Traffic at Study Intersections 1–4

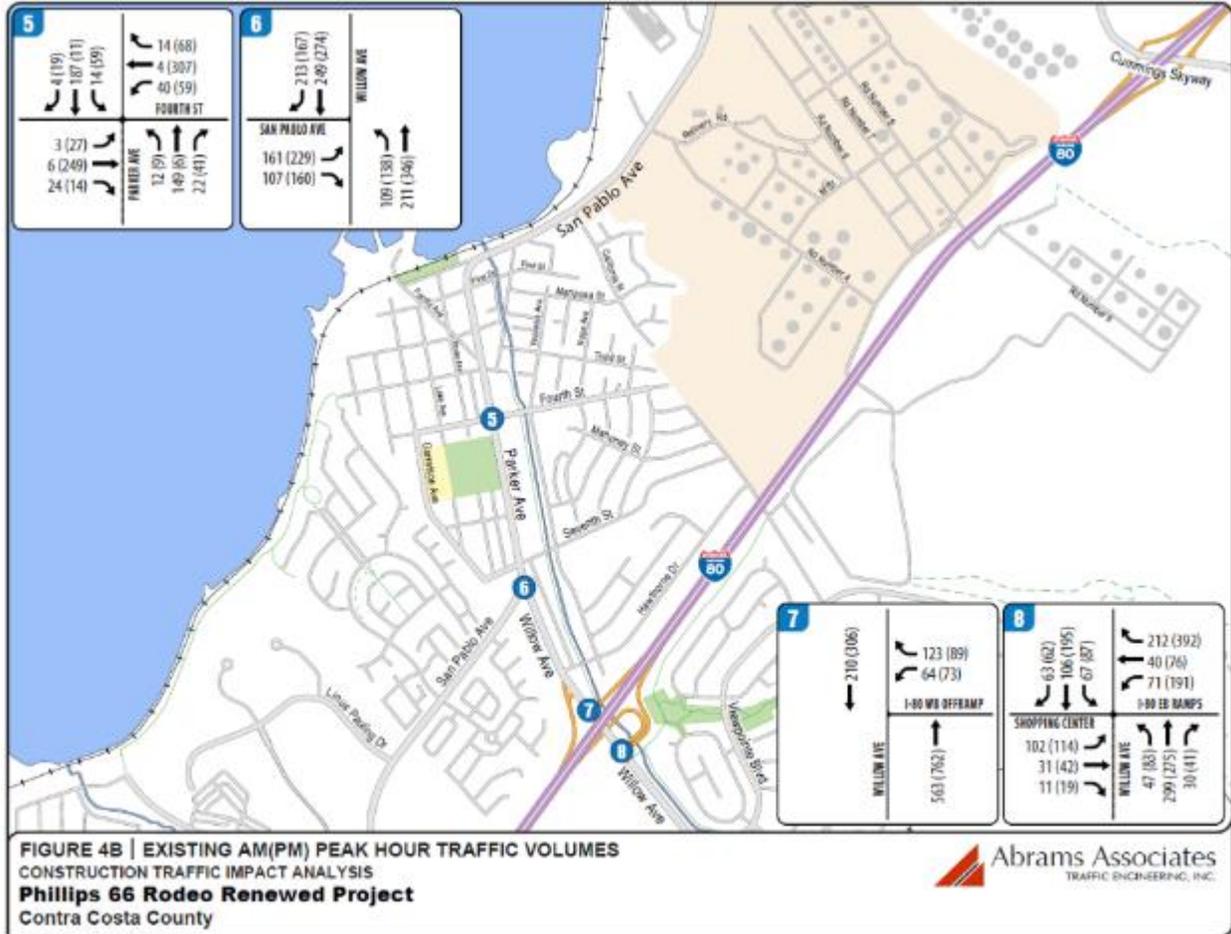


Figure 4.13-2b. Existing (2021) Peak-Hour Traffic at Study Intersections 5–8

#### 4.13.2.4 Rail Facilities

##### Rodeo Refinery

The Rodeo Refinery is served by two rail lines: the Union Pacific/Amtrak mainline passing through the Rodeo Site along the shoreline and the Burlington Northern-Santa Fe mainline passing by the Carbon Plant Site through Franklin Canyon. The Union Pacific line supports daily service to the Rodeo Site to handle approximately five butane railcars per day at a rail loading facility adjacent to the mainline tracks. The Burlington Northern-Santa Fe line supports a thrice-weekly service handling an average of seven petroleum coke railcars per week (a little more than two per visit on average).

##### Santa Maria Site

The Union Pacific lines access the Santa Maria Site via the Union Pacific Coast Line, which runs from San Jose to about Moorpark. Freight rail services along this line are operated by Union Pacific, providing service that roughly parallels the Highway 101 corridor between San Jose in the north, and Camarillo in the south. The crude oil unit trains servicing the Santa Maria Site would use various Union Pacific tracks that are shared with a number of intercity passenger rail lines. The Santa Maria Site generates up to eight petroleum coke railcars per week, which are hauled by a weekly Union Pacific train delivering empty cars and hauling loaded cars.

## **Pipeline Sites**

The Pipeline Sites do not have rail service.

### **4.13.2.5 Bicycle and Pedestrian Facilities**

Caltrans provides guidelines and standards for four distinct types of bikeway facilities: Class I (bicycle paths separated from roads with crossing points minimized); Class II (restricted right-of-way designated lane for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and cross-flows by pedestrians and motorists permitted); Class III (signed bicycle routes that allow cyclists to share streets with vehicles); and Class IV (an adjacent bike lane or bikeway that is physically separated from motor vehicle traffic). Pedestrian facilities generally include sidewalks, crosswalks, curb ramps, pedestrian signals, and streetscape amenities (e.g., benches, tree-lined buffers).

## **Rodeo Refinery**

No sidewalks or bicycle lanes are located along San Pablo Avenue in the immediate vicinity of the Rodeo Refinery. Cumming Skyway has bicycle lanes, but no sidewalk. Parker Avenue and Willow Avenue have bicycle lanes and sidewalks in most areas. Marked crosswalks, pedestrian push buttons, and pedestrian signals are provided at all nearby signalized intersections. There are also some Class I trails in the area, including the Rodeo Creek Trail and a section of the San Francisco Bay Trail, to the south of Rodeo that starts at the west end of Third Street.

## **Santa Maria Site**

There are no sidewalks or bicycle lanes in the immediate vicinity of the Santa Maria Site (Google Maps 2021). Based on aerial imagery, an unpaved road and informal trail exists between the Santa Maria Site and sand dunes near Lettuce Lake, providing access to the beach.

### **4.13.2.6 Public Transportation**

## **Rodeo Refinery**

Two major public transit operators—Bay Area Rapid Transit (BART) and Western Contra Costa County Transit Authority (WestCAT)—provide service in the study area.

WestCAT provides local, express, and regional service to the cities of Pinole and Hercules and the unincorporated communities of Montalvin Manor, Tara Hills, Bayview, Rodeo, Crockett, and Port Costa (WestCAT 2021). WestCAT Route 11 provides service on Willow, San Pablo, and Parker Avenues between Hercules and Crockett, passing through Rodeo. As of May 1, 2021, WestCAT Route 11's Covid-reduced service operates Monday through Friday with approximately 30- to 60-minute headways between about 5:45 a.m. and 9:30 p.m. and less frequently on Saturdays. Routes JR/JL, 11, and 15 and the LYNX route operate on Willow Avenue and San Pablo Avenue. The nearest bus stops to the Rodeo Refinery, all on WestCAT Route 11, are located on San Pablo Avenue at California Street, adjacent to the main entrance to the Rodeo Site, and at the contractors' parking area farther east.

BART is a rapid mass transit system providing regional transportation connections to much of the Bay Area. North-south, it runs from Richmond to Fremont, and east-west, it runs from Bay Point to the San Francisco Airport and Millbrae with several connections in Oakland. The Richmond BART station, about 9 miles from the Rodeo Refinery, is the closest BART station to the study area and has trains running with approximately 30-minute headways between 5:00 a.m. and 9:00 p.m.

#### **4.13.2.7 Emergency Access**

The Rodeo Refinery has several temporary/emergency vehicle access entrances on San Pablo Avenue, in addition to the main signalized entrance intersection with Refinery Road. Multiple roadways provide external access to the Rodeo Site, and internal roadways within the Rodeo Refinery also provide access for both general and emergency vehicles.

#### **Santa Maria Site**

There are no public transit corridors adjacent to the Santa Maria Site, or along State Route 1 in the Project area (Google Maps 2021).

#### **4.13.2.8 Regulatory Setting**

##### **State Authority**

Caltrans is a state agency responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as segments of the Interstate Highway System that lie within the state's boundaries. Headquartered in Sacramento, Caltrans is organized into 12 districts. Caltrans District 4 in Oakland is responsible for the operation and maintenance of I-80, State Route 4, and other state-administered facilities in Contra Costa County, as well as other state-maintained highways in nearby counties. Caltrans' construction practices require temporary traffic control planning "when the normal function of the roadway, or a private road open to public travel, is suspended" (Caltrans 2021).

Specifically, if it is determined that traffic restrictions and detours are needed on, or would affect, state highways, a Transportation Management Plan may be required of the Project applicant for approval by Caltrans prior to construction. The plan must be prepared in accordance with the *California Manual on Uniform Traffic Control Devices* (Caltrans 2021). In addition, Caltrans requires permits for transporting oversized loads and certain materials as well as for construction-related traffic disturbance.

The Caltrans *Guide for the Preparation of Traffic Impact Studies* provides consistent guidance for Caltrans staff who review local development proposals (Caltrans 2002). This guide also informs local agencies about the information needed for Caltrans to analyze the traffic impacts to state highway facilities, which include freeway segments, on- or off-ramps, and signalized intersections.

##### **Local Authority**

##### ***Contra Costa County***

##### **Contra Costa Countywide Comprehensive Transportation Plan**

Transportation policies that are currently applicable within Contra Costa County are based on the *Contra Costa County Comprehensive Transportation Plan* (CCTA 2020). That document identifies the criteria for analyzing transportation impacts and sets forth plans for future roadway improvements in the county.

##### **Contra Costa County Transportation Analysis Guidelines**

The Transportation Analysis Guidelines, amended in December 2020, provides guidance for the preparation of traffic analyses for projects. The purpose of the document is to establish a uniform approach, methodology, and tools to evaluate the transportation impacts on the County transportation system that may result from land use projects (Contra Costa County 2020).

##### **Contra Costa County General Plan**

The purpose of the Transportation and Circulation Element of the Contra Costa County General Plan is to "establish transportation goals and policies, and to establish specific implementation measures to assure that the transportation system of the County will have adequate capacity to serve planned growth in

Contra Costa County through the year 2020” (Contra Costa County 2010). The following policies are applicable to the Project:

- Circulation Phasing and Coordination
  - **Policy 5-4:** Development shall be allowed only when transportation performance criteria are met and necessary facilities and/or programs are in place or committed to the developed within a specified period of time.
- Circulation Safety, Convenience and Efficiency
  - **Policy 5-14:** Physical conflicts between pedestrians, bicyclists, and vehicular traffic shall be minimized.
  - **Policy 5-17:** Emergency response vehicles shall be accommodated in development of project design.

### ***San Luis Obispo County***

#### 2019 Regional Transportation Plan

The San Luis Obispo Council of Governments adopted the Final Regional Transportation Plan in 2019 (San Luis Obispo County Council of Governments 2019), which serves as the “region’s blueprint for a transportation system that enhances quality of life and meets the mobility needs of the region’s residents and visitors...” Applicable to the proposed Project are the following safety policies:

- Safety – Improve public safety and security
  - **Policy 4.1:** Reduce fatalities, serious injuries, and collisions for motorized and non-motorized users.
  - **Policy 4.2:** Reduce congestion and increase safety by improving operations.
  - **Policy 4.3:** Enhance public safety and security in all modes of transportation.

#### **4.13.3 Significance Criteria**

According to the CEQA Guidelines Appendix G and Contra Costa County’s Transportation Analysis Guidelines (Appendix C), a project would have a significant impact to transportation conditions if it would:

- a. Conflict with a plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- b. Conflict with or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b);
- c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and
- d. Result in inadequate emergency vehicle access.

In addition to the above-listed criteria, the following criterion, derived from common engineering practice, applies to the Project impact analysis:

- Cause substantial damage or wear of public roadways by increased movement of heavy vehicles.

#### **4.13.4 CEQA Baseline**

The baseline traffic operations scenario evaluates the existing conditions with the addition of traffic from reasonably foreseeable projects in the area and a general baseline growth in traffic. For this analysis, the baseline volumes were developed based on the assumption that Project completion and full occupancy would be in 2022 with a conservative assumption that the traffic volumes in the study area would have returned to 95 percent of pre-Covid levels at the time of counts in March and April 2021. Based on forecasts of the share of the work force that would work from home in the future (i.e., post-COVID), the future share is forecast to be 10 percent (versus a 5 percent share pre-COVID) (Institute of Transportation Engineers 2020). Based on the traffic volumes on Bay Area freeways, as reported by MTC (2021), and a comparison to pre-COVID traffic counts at the study intersections, it was determined that traffic volumes in the study area were close to 90 percent of pre-COVID levels. However, to be conservative a 20 percent increase was applied to the traffic counts taken in March and April of 2021. The traffic volumes for each of the study intersections for the baseline (2022) scenario are shown in Figures 4.13-2a and 4.13-2b. The baseline setting also includes the applicable regulatory framework to protect environmental resources, which are described above.

##### **4.13.4.1 Methodology**

The transportation analysis was conducted in accordance with the requirements and methodologies set forth by the Circulation Element of the Contra Costa County General Plan, CCTA Congestion Management Program, Contra Costa County Transportation Analysis Guidelines, Caltrans, and CEQA. Detailed data, raw calculation worksheets and other pertinent raw data for the study area roadways and intersections are provided in Appendix F, *Transportation Analysis*.

Based on the CEQA Guidelines 15064.3(c), the performance measure used to quantify the environmental impacts of a project is the vehicle miles traveled. Level of service analysis no longer constitutes the basis of significance determination. Vehicle miles traveled is typically estimated using an area-wide travel demand model from a regional transportation agency that calculates the vehicle miles traveled based on the number of vehicles multiplied by the typical distance traveled by each vehicle originating from or driving to a certain area.

The California OPR's 2018 Technical Advisory and Contra Costa County's Transportation Analysis Guidelines include standards for screening the vehicle miles traveled. These standards specify that low trip-generating projects that are consistent with the general plan and that "generate or attract fewer than 110 trips per day" can be presumed to cause a less-than-significant impact under CEQA and would not require further analysis of the vehicle miles traveled.

Employee traffic would not change with implementation of the proposed Project. Therefore, the vehicle miles traveled associated with commuter trips would not be increased. Truck traffic related to the refinery deliveries and waste byproducts in 2019 was 7,540 roundtrips per year. Truck traffic related to the transport of petroleum coke to and from the Carbon Plant Site, which totals 32,673 round trips in 2019, would no longer occur. As a result, annual truck round trips under the Project would total approximately 16,026 truck roundtrips per year. The Project would result in a decrease from approximately 110 roundtrips per day to and from the Rodeo Refinery as a whole to approximately 44 roundtrips per day to and from the Rodeo Refinery. Therefore, the proposed Project would qualify for this screening criteria because it is forecast to generate a net reduction of approximately 66 truck trips per day (Contra Costa County 2020).

The analysis of construction and demolition assumes the entire Project would be implemented in one phase to identify the potential worst-case traffic effects. If the project is built in phases over time, the effects of each phase would be less.

#### **4.13.5 Discussion of No Impacts on Transportation and Traffic**

The Pipeline Sites would be cleaned out and decommissioned or sold. No physical changes would occur. Their associated maintenance traffic (minimal and periodic) would cease under the Project. Therefore, the Pipeline Sites are not further addressed in this section.

Comparison of the setting and the Project's characteristics with the significance criteria stated above shows that no significant impacts would occur associated with the following criteria:

- a. *Would the Project result in a Conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

Operation and maintenance of the Project would not result in increased traffic on any roadway segments currently being used by pedestrian, bicycle, or transit facilities in the area, and the use of these existing facilities would not increase because Project operation would be accommodated with the existing workforce. Therefore, operation and maintenance of the Project would not result in a conflict with a plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Rail traffic would be altered by the Project, but result in a reduction in rail cars overall. Refer to Impact 4.13-3 for discussion of potential rail impacts. Potential impacts associated with construction and demolition are addressed in Impact 4.13-1. At the Santa Maria Site, existing traffic would be eliminated at Project completion. Employee commuters using pedestrian, bicycle, and transit facilities would no longer be needed. Therefore, no conflict with a plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system would occur. No impact would occur.

- b) *Conflict with or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b);*

At the Rodeo Refinery, employee traffic would not change with implementation of the proposed Project. Therefore, the vehicle miles traveled associated with commuter trips would not be increased. Operational traffic at the Santa Maria Site would cease with demolition of refinery facilities. No adverse effects on area traffic infrastructure would occur. Therefore, a vehicle miles traveled analysis is not required for the Project. No impact would occur.

- c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Phillips 66 does not propose any changes to existing public roadways or to the type of vehicles entering and exiting the Rodeo Site. Operation and maintenance activities would be the same as those currently existing, but with fewer vehicle trips. The Project could require minor changes in the configuration of internal roads at the Rodeo Site, but these changes, if they were to occur, would be constructed to operate safely in compliance with established design standards and would not affect public roadways or be substantial; however, as part of the permitting process for the Project Phillips 66 will need to obtain approvals from the Contra Costa County Public Works Department to ensure that any changes to site plans and layouts, including internal roadways, would not conflict with the planned road improvement project on San Pablo Avenue adjacent to the Rodeo Refinery. Therefore, the Project would not result in a substantial increase in hazards due to a geometric design feature or incompatible uses. No impact would occur.

At the Santa Maria Site, the refinery would cease operation and be demolished. Removal of the Santa Maria Refinery would not result in a substantial increase in hazards due to a geometric design feature or incompatible uses. No impact would occur.

d) *Result in inadequate emergency access?*

Sufficient emergency access is determined by factors such as the number of access points, roadway width, and proximity to fire stations. The Rodeo Refinery has several temporary emergency vehicle access entrances on San Pablo Avenue, in addition to the main signalized entrance intersection with Refinery Road. Multiple roadways provide external access to the Rodeo Site, and internal roadways within the Rodeo Refinery also provide access for both general and emergency vehicles. Because operational truck traffic volumes at the Rodeo Refinery would be substantially less than under baseline conditions (44 trucks per day versus 110 trucks per day) and light-duty vehicular traffic would not increase, the Project would not adversely affect emergency access. Therefore, operation and maintenance of the Project at the Rodeo Refinery would have no impact on emergency access. Impacts related to construction and demolition, including the transitional phase, are addressed in Impact 4.13-1.

Truck traffic at the Santa Maria Site (approximately 36 trucks per day in 2019) would cease completely under the Project. Therefore, once the Project is implemented emergency access would not be needed, so no impact would occur. Demolition impacts at the Santa Maria Site are discussed in Impact 4.13-1.

**4.13.6 Direct and Indirect Impacts of the Project**

Table 4.13-1 presents a summary of the potential transportation and traffic impacts, as well as significance determinations for each impact.

**Table 4.13-1. Summary of Impacts**

Impact	Significance Determination		
	LTS	LTSM	SU
Impact 4.13-1. Would the Project result in inadequate emergency vehicle access? Project construction/demolition would temporarily increase peak-hour traffic volumes, and could result in inadequate emergency vehicle access.			
Rodeo Refinery and Santa Maria Site			
<i>Construction/Demolition, Including Transitional Phase<sup>a</sup></i>		✓	
Impact 4.13-2. Conflict with or be inconsistent with CEQA Guidelines Section 15064.3 subdivision(b)			
Rodeo Refinery			
<i>Operation and Maintenance</i>	✓		
Impact 4.13-3. Would the Project result in a Conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including transit, roadway, bicycle, and pedestrian facilities? Operation of the Project would result in potential changes to rail operations.			
Rodeo Refinery			
<i>Operation and Maintenance</i>	✓		
Impact 4.13-4 Cause substantial damage or wear of public roadways by increased movement of heavy vehicles?			
Rodeo Refinery and Santa Maria Site			
<i>Construction/Demolition, Including Transitional Phase<sup>a</sup></i>	✓		

Notes: LTS = Less than significant, no mitigation proposed  
LTSM = Less-than-significant impact with mitigation  
SU = Significant and unavoidable

<sup>a</sup>. Transitional phase applies only to Rodeo Refinery

## IMPACT 4.13-1

### d) *Would the Project Result in inadequate emergency access?*

***Project construction/demolition would temporarily increase peak-hour traffic volumes, and could result in inadequate emergency vehicle access.***

#### **Construction/Demolition: Less-than-significant Impact with Mitigation**

##### ***Rodeo Refinery***

The Project would result in truck and employee traffic to and from the Rodeo Site and the Carbon Plant during construction/demolition, including the transitional phase. Materials such as concrete, structural steel, pipe and fittings, vessels and associated equipment, electrical equipment, insulation and construction services equipment (e.g., portable toilets, temporary office trailers for construction contractors) would be delivered by truck. Asphalt, steel, and concrete generated by demolition and site preparation activities would be transported offsite by truck.

The Project includes onsite and offsite contractor parking in areas owned and operated by Phillips 66. For the offsite area, shuttle buses would be provided to transport workers to and from work sites. The weekday work is expected to begin around 7:00 a.m. and end around 4:00 p.m. The construction worker arrival peak would occur between 6:30 a.m. and 7:30 a.m., and the departure peak would occur between 4:00 p.m. and 5:00 p.m. The intersection operations analysis assumes that the peak hours of employee trips coincide with the peak hours of adjacent street traffic to provide a conservative basis for the analysis.

As shown in Table 4.13-2, construction of the Project is expected to employ up to 500 workers at its peak, and during this period the hauling of materials could involve up to 20 truck trips (10 round trips) per day. With an estimate of approximately 30 vehicle visits per day from vendors, deliveries, and other visitors, the Project is forecast to generate up to 1,080 vehicles per day during the peak phase of construction. The peak phase for traffic generation is expected to occur for approximately 4 months out of the 21-month construction period. As seen in Table 4.13-2, with adjustments to convert the trucks into the equivalent number of passenger car trips (passenger car equivalent), the Project is forecasted to generate up to 552 trips during the peak hours.

**Table 4.13-2. Peak Project Construction Vehicle Trip Generation**

<b>Trip Generation Component</b>	<b>Daily VehicleTrips</b>	<b>PCE Rate<sup>b</sup></b>	<b>PCE DailyTrips</b>	<b>PCE Peak Hour Trips<sup>c</sup></b>
Workers	1,000	1.0	1,000	500
Hauling Trucks	20	2.0	40	4
Vendors/Other Vehicles <sup>a</sup>	60	1.6	96	48
<b>Totals</b>	<b>1,080</b>		<b>1,136</b>	<b>552</b>

Source: *Abrams Associates 2021*

Notes: PCE = passenger car equivalent

<sup>a</sup> Vendors and other vehicles are expected to include a mix of pickup trucks, buses, and 18-wheeler trucks.

<sup>b</sup> The Passenger Car Equivalent (PCE) assumption for trucks is based on recommendations in the Highway Capacity Manual and assumes that a portion of the project generated trucks would be empty.

<sup>c</sup> Based on the Mitigation Monitoring Program Reports for previous projects at the refinery, 50% of the employee trips are assumed to occur during the peak commute hour. Hauling trucks would be restricted from arriving or leaving during the peak commute periods but 10% are assumed to occur the peak hour. 50% of the trips associated with vendors and other vehicles were assumed to occur during the peak commute hour.

The AM and PM, peak-hour construction-generated trip generation estimates were applied to the distribution paths described previously to determine the construction period trip assignment. The assigned Project trips were added to the projected baseline AM and PM peak-hour volumes to determine Project-specific construction and demolition traffic impacts to study area intersections.

As shown in Figures 4.13-3a and 4.13-3b, the bulk of construction traffic (92 percent) would occur at the study intersections north and east of the Rodeo Site, at Cummings Skyway intersections (study locations 2-4). This is consistent with existing Contra Costa County requirement that Rodeo Refinery traffic use Cummings Skyway. At those intersections, construction worker commuter traffic to and from the contractor parking area would result in additional traffic relative to the existing volumes during the peak hours. Those traffic volumes, added to the forecasted 2022 baseline traffic volumes, would result in increased delay at the study intersections, but operating conditions would remain acceptable (i.e., within county general plan standards) at all study intersections.

Additional traffic through the intersections south and west of the Rodeo Site (study locations 5 through 8) would not constitute a substantial increase in relation to existing volumes. The forecasted traffic volumes are within the existing capacity of the intersections and would not be expected to result in any substantial increases in congestion or delay.

The presence of additional trucks and heavy equipment movements could potentially affect emergency access during construction and demolition. To ensure Project construction and demolition activities would not substantially interfere with existing traffic or emergency access in the vicinity of the Rodeo Refinery, Mitigation Measure TRA-1 requires that Phillips 66 prepare and implement a Traffic Management Plan for review and approval by the County Public Works Department and the Department of Conservation and Development, prior to issuance of construction permits. With implementation of an approved Traffic Management Plan, potential traffic impacts associated with all phases of construction and demolition of the Project would be less than significant.

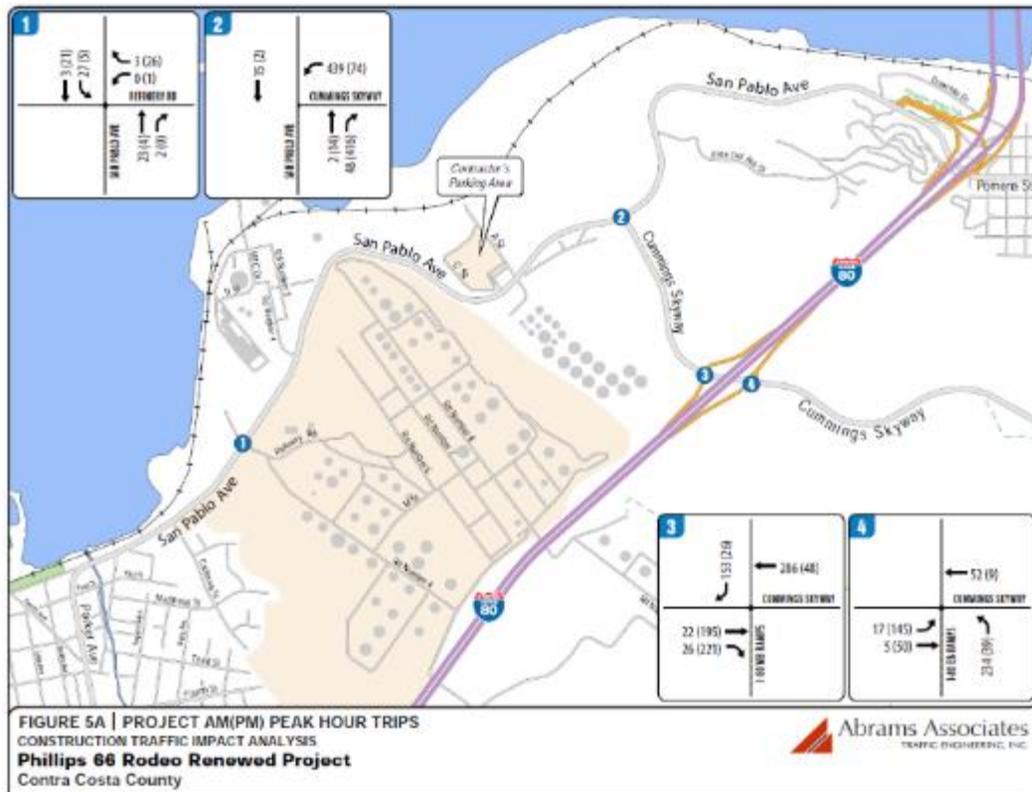


Figure 4.13-3a. Peak-Hour Construction Traffic, Study Intersections 1–4

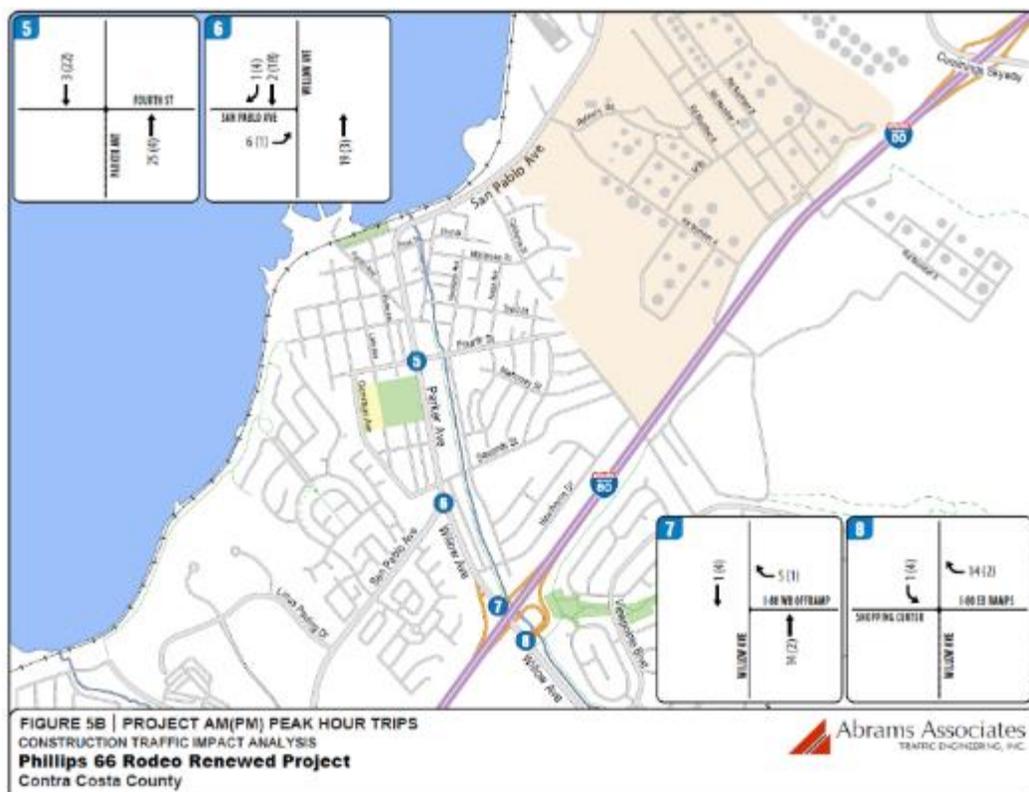


Figure 4.13-3b. Peak-Hour Construction Traffic, Study Intersections 5–8

**Mitigation Measure TRA-1: Implement a Traffic Management Plan**

Prior to issuance of grading and building permits, Phillips 66 shall submit a Traffic Management Plan for review and approval by the Contra Costa County Public Works Department. At a minimum the following shall be included:

- The Traffic Management Plan shall be prepared in accordance with the most current California Manual on Uniform Traffic Control Devices, and will be subject to periodic review by the Contra Costa County Public Works Department throughout the life of all construction and demolition phases.
- Truck drivers shall be notified of and required to use the most direct route between the site and the freeway;
- All site ingress and egress shall occur only at the main driveways to the Project site;
- Construction vehicles shall be monitored and controlled by flaggers;
- If during periodic review the Contra Costa County Public Works Department, or the Department of Conservation and Development, determines the Traffic Management Plan requires modification, Phillips 66 shall revise the Traffic Management Plan to meet the specifications of Contra Costa County to address any identified issues. This may include such actions as traffic signal modifications, staggered work hours, or other measures deemed appropriate by the Public Works Department.
- If required, Phillips 66 shall obtain the appropriate permits from Caltrans for the movement of oversized or excessive load vehicles on state-administered highways.

### ***Santa Maria Site***

The Project would result in truck and employee traffic to and from the Santa Maria Site during demolition. Demolition traffic at the Santa Maria Site would consist of up to 36 worker vehicles per day and up to 12 pieces of mobile equipment, which would include heavy equipment transporters, delivery trucks, and hauling trucks to transport asphalt, steel, and concrete offsite. Based on CalEEMod assumptions, the total hauling trips for the entire demolition phase duration are estimated to be approximately 730 one-way trips, or approximately 3 one-way trips per day.

According to a recent EIR for a proposed project at the site (San Luis Obispo County 2015), all of the study road segments and intersections in the immediate vicinity of the Santa Maria Site were being used at less than 50 percent of capacity. The addition of demolition traffic, particularly when much of that traffic would be off-peak under a typical construction schedule, would not represent a substantial increase to existing traffic. It is anticipated that demolition impacts would be less than significant.

Demolition of the Santa Maria Site will undergo its own separate and project-level environmental analysis. San Luis Obispo County will be the CEQA Lead Agency for demolition of the Santa Maria Refinery because it has the primary discretionary authority to determine whether or how to approve demolition and issue required county permits. As part of the permit process, it is expected that San Luis Obispo County would require a Construction Traffic Management Plan prior to project approval to ensure that demolition traffic would not interfere with traffic on area roads and highways.

## **IMPACT 4.13-2**

### ***b. Conflict with or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)***

#### **Operation and Maintenance: Less Than Significant, No Mitigation Proposed**

Based on the CEQA Guidelines 15064.3(c), the performance measure used to quantify the operational impacts of a project is the vehicle miles traveled. Guidelines for the vehicle miles traveled screening specify that low trip generating projects that are consistent with the Contra Costa County Transportation Analysis Guidelines (2020) and general plan and “generate or attract fewer than 110 trips per day” can be presumed to cause a less-than-significant impact under CEQA and would not require further vehicle miles traveled analysis.

#### ***Rodeo Refinery***

Worker vehicle traffic associated with equipment changes at the Rodeo Site would not change because operation and maintenance would be accommodated by the existing Refinery workforce. Therefore, the vehicle miles traveled associated with commuter trips would not be increased. With decommissioning of the Carbon Plant all operation and maintenance traffic associated with this facility would cease. Truck traffic related to the transport of petroleum coke to and from the Carbon Plant Site, which totaled 32,673 round trips in 2019, would no longer occur. Truck traffic related to the refinery deliveries and waste byproducts in 2019 was 7,540 roundtrips per year. As a result, annual truck round trips under the Project would total approximately 16,026 truck roundtrips per year, a decrease from approximately 110 roundtrips per day to approximately 44 roundtrips per day to and from the Rodeo Refinery.

Because the Project would result in a net decrease in vehicular traffic, the Project meets the Contra Costa County guidelines for the presumption of a less-than-significant impact on the basis that it would generate less than 110 additional vehicle trips. Therefore, a vehicle miles traveled analysis is not required for the Project, and the Project would be consistent with CEQA Guidelines Section 15064.3(b). Impacts of operational traffic would be less than significant.

**Mitigation Measure:**                      **None required**

### **IMPACT 4.13-3**

- a. *Would the Project result in a Conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including transit, roadway, bicycle, and pedestrian facilities?***

Operation of the Project would result in potential changes to rail operations.

#### **Operation and Maintenance: Less Than Significant, No Mitigation Proposed**

##### ***Rodeo Refinery***

Project operations would result in an increase in the number of railcars delivered to and from the Rodeo Site, although rail traffic at the Carbon Plant would cease. The additional railcars would not require additional train trips, but rather would be handled by the existing train traffic on the Union Pacific mainline that passes through the Rodeo Site. Trains would no longer travel on the branch line to access the Carbon Plant, which would represent a decrease in rail activity on that line. Therefore, the Project would not require additional trains or add congestion that could affect operation of the existing rail facilities, and impacts would be less than significant.

**Mitigation Measure:           None Required**

### **IMPACT 4.13-4**

- Cause substantial damage or wear of public roadways by increased movement of heavy vehicles?***

#### **Construction/Demolition: Less Than Significant, No Mitigation Proposed**

##### ***Rodeo Refinery***

The use of large trucks to transport equipment and material to and from the Project site could affect road conditions on haul routes by increasing the rate of road wear and tear. The degree to which this impact would occur depends on the roadway design (pavement type and thickness) and the existing condition of the road. Freeways, such as I-80, are designed to handle a mix of vehicle types, including heavy trucks. Arterial and collector streets, such as Cummings Skyway, San Pablo Avenue/Parker Avenue, and Willow Avenue, are likewise designed to handle a mix of vehicle types.

As shown in Table 4.13-2, peak construction and demolition is expected to occur for approximately 4 months out of the 21-month construction period. During this period large trucks to transport equipment and material, and delivery and hauling trucks would be necessary. This results in approximately 20 truck trips per day that would be added to the surrounding street network.

Relative to the baseline, the Project's truck traffic generation is minor, and the addition of up to 20 daily truck trips over a limited period, the Project's impact relative to roadway wear and tear would be less than significant.

##### ***Santa Maria Site***

Demolition truck traffic at the Santa Maria Site would consist of up to 12 pieces of mobile equipment, which would include heavy equipment transporters, delivery trucks, and hauling trucks to transport asphalt, steel, and concrete offsite. This results in approximately 24 truck trips per day that would be added to the surrounding street network.

It is expected that relative to the baseline, the Project's truck traffic generation would be minor. The addition of up to 24 daily truck trips over a limited period would not be expected contribute to substantial roadway wear and tear. The impact would be less than significant.

**Mitigation Measure:           None Required**

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