

## 5.17 Transportation

### 5.17.1 Environmental Setting

#### Existing Roadway Network

The roadway network in the region of the proposed project area consists of Interstate 5 (I-5) through the center of the county, state highways, and local roads within unincorporated Shasta County. The proposed project is located west of I-5 and southwest of Redding, California.

**Roadway Network.** Major transportation routes near the proposed project are limited. I-5 is located through the center of Shasta County and east of the proposed project. Daily traffic volumes on I-5 near the proposed project area range from 43,500 to 58,000 vehicles (Caltrans 2015). State Route 273 (SR 273) serves as a secondary north-south route in Redding between the proposed project and I-5. Traffic volumes on SR 273 near the proposed project range from 10,500 to 14,300 vehicles trips per day (Caltrans 2016). Shasta County’s Title 12, Road District county code 12.04.030 states, “all the unincorporated territory and area of the county shall be, and here is, constituted to be one road district” (Shasta County 2018). The proposed project is located within the existing right-of-way (ROW) of the road district. Local roadways where the proposed project would be located within the ROW are listed below.

- China Gulch Drive
- Cloverdale Road
- Coyote Lane
- Craig Lane
- Ditch Grade
- Happy Valley Road
- Laverne Lane
- Monte Vista Road
- Oak Street
- Olinda Road
- Olive Street
- Palm Avenue
- Scout Avenue
- Serendipity Lane
- South Fork Road
- Treat Avenue

**Public Transit.** The Redding Area Bus Authority provides transit service primarily within Redding and with some service provided in nearby unincorporated areas of Shasta County. Additional routes operated by the Redding Area Bus Authority provide service between Redding and Burney, and within the city of Anderson. None of the Redding Area Bus Authority routes are located near or include scheduled stops near the proposed project (Redding Area Bus Authority n.d.). No rail lines would be crossed by the proposed project.

**Air Transportation.** The Redding Municipal Airport is located approximately 5 miles east of the nearest proposed underground fiber-optic cable (telecom line) route segment. Benton Field is located approximately 5.5 miles north of the nearest proposed underground telecom line route segment. The proposed project would be outside of any potential imaginary slope extending from these runways, as defined by the Federal Aviation Administration (FAA) (14 Code of Federal Regulations [CFR] 77).

**Pedestrian Facilities.** The walkability of existing facilities is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile. There are generally no sidewalks present in the proposed project area due to its rural setting and low-density settlement pattern. Furthermore, there are limited business facilities in the proposed project area.

1 **Bicycle Facilities.** Bicycle lanes are a component of street design with dedicated striping, separating  
2 vehicular traffic from bicycle traffic and offering a safer environment for both cyclist and motorist.  
3 Bicycle routes are identified as bicycle friendly streets where motorists and cyclists share the roadway,  
4 and there is no dedicated striping of a bicycle lane. Bicycle routes are preferably located on collector and  
5 lower volume arterial streets.

6  
7 The 2015 Regional Transportation Plan for Shasta County classifies bicycle facilities based on a standard  
8 typology, which is described in further details below:  
9

10 Class I – A dedicated non-motorized facility, paved or unpaved, physically separated from  
11 motorized vehicular traffic by an open space or barrier.

12 Class II – A bike lane on a roadway, delineated by pavement striping, markings, signing for the  
13 preferential or exclusive use of bicyclist.

14 Class III – A bike route designated by the jurisdiction having authority, with appropriate  
15 directional and informational markers, but without striping, signing and pavement markings for  
16 the preferential or exclusive use of bicyclists.

17 Class IV – A roadway not designated by directional and informational markers, striping, signing  
18 or pavement markings for the preferential or exclusive use of bicyclists, but that provides  
19 appropriate bicycle-friendly design standards such as wide-curb lanes and bicycle safe drain  
20 grates.  
21

22 The Shasta County Bike Plan identifies existing and planned bikeways throughout the county. Class II  
23 bike lanes on the proposed underground telecom line route are present in Happy Valley Road between  
24 Olinda Road and Palm Avenue. The proposed Happy Valley Road Bikeway Corridor includes Happy  
25 Valley Road from Gas Point Road to Hawthorne Avenue. In addition, Class II bike lanes are proposed for  
26 Cloverdale Road from Placer Road to Oak Street, on Palm Avenue from Oak Street to Happy Valley  
27 Road, and on Olinda Road from Happy Valley to the Anderson City line (Shasta County 2010).  
28

## 29 **5.17.2 Regulatory Setting**

### 30 **Federal**

31  
32 There are no relevant federal regulations applicable to the proposed project relating to transportation and  
33 traffic.  
34

### 35 **State**

36 **California Department of Transportation.** The California Department of Transportation (Caltrans) is  
37 responsible for overseeing state highways within California. Caltrans has the discretionary authority to  
38 issue special permits for the movement of vehicles or loads exceeding statutory limitations on the size,  
39 weight, and loading of vehicles contained in Chapters 1 to 5 of Division 15 Size, Weight, and Load of the  
40 California Vehicle Code. Completion of a Transportation Permit application is required for requests for  
41 such special permits (Caltrans 2016). Relevant transportation policies and ordinances are presented in  
42 Table 5.17-1.  
43

**Table 5.17-1 Relevant Transportation Policies and Ordinances**

Policy	Description
<b>California Department of Transportation</b>	
Oversize Vehicles	A special permit must be obtained to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations on state highways. Maximum limitations are generally as follows: width = 102 inches, height = 14 feet, length = 75 feet, weight = 80,000 lbs. <sup>1</sup>
Target LOS Standard	LOS C. <sup>2</sup>
<b>Shasta County</b>	
Work in public ROW	An encroachment permit, subject to Chapter 5.5, Section 1450, Division 2 of the Streets and Highways Code of California, from the Public Works Director is required prior to excavation in any county highway. <sup>3</sup>
Oversize Vehicles	A transportation permit must be obtained from the Public Works Director to operate overweight or oversize vehicles on roads maintained by Shasta County. <sup>4</sup>
Target LOS Standard	LOS C. New development which may result in exceeding LOS E shall demonstrate that all feasible methods of reducing travel demand have been attempted to reach LOS C. <sup>5</sup>
Congestion Management Program	No regionally significant corridors are located within the proposed project area. The LOS planning threshold is LOS C in Shasta County. <sup>6</sup>

Sources:

<sup>1</sup> California Vehicle Code Section 35100-35111, 35250-35252, 35400-35414, and 35550-35558 and Streets and Highways Code Section 670-695

<sup>2</sup> Caltrans 2002

<sup>3</sup> Shasta County 2012

<sup>4</sup> Shasta County n.d.

<sup>5</sup> Shasta County 2004

<sup>6</sup> SRTA 2015

Key:

lbs      pounds

LOS      Level of Service

1  
2  
3  
4  
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20

**Local**

**Regional Transportation Plan for Shasta County.** The Shasta Regional Transportation Agency is the designated metropolitan planning organization and regional transportation planning agency for Shasta County and is responsible for developing the Regional Transportation Plan. The Regional Transportation Plan serves as a guide for developing a regional intermodal transportation system that is coordinated with local land use planning. Regional transportation projects must be included in the plan to be eligible for federal and state funding. The plan also serves as the congestion management program for Shasta County. Regionally significant corridors identified in the plan include I-5 and SR 273. There are no regionally significant corridors within the proposed project area. The plan identifies the level of service (LOS) threshold as “LOS C.”

The regional transportation plan also includes a number of proposed improvements in the proposed project area to increase safety and capacity. Potential projects include:

- Shoulder widening and realignment along Happy Valley Road from Palm Avenue to Warwick Street;
- Shoulder Widening along Olinda Road from Sammy Lane and Red Leaf Lane; and
- Installation of roundabout/signal at intersection of Canyon Road and China Gulch Drive.

1 **Shasta County General Plan and Municipal Codes.** The Circulation Element of the Shasta County  
2 General Plan includes several policies relevant to the local plans and municipal codes were reviewed for  
3 goals and policies related to the proposed project. Relevant transportation policies and ordinances are  
4 presented in Table 5.17-1.

5  
6 Shasta County permits co-locating telecommunication infrastructure within public roadways through  
7 encroachment permits. The encroachment permit process conditions and regulates construction (e.g.,  
8 trenching, grading, erosion control, etc.) to meet established engineering and safety standards and avoid  
9 indirect impacts outside of the construction zone. See Section 5.10, “Land Use and Planning,” for further  
10 details.

### 11 12 **5.17.3 Environmental Impacts and Mitigation**

13  
14 The impact analysis below identifies and describes the proposed project’s potential impacts on  
15 transportation and traffic within the proposed project area. Potential impacts were evaluated according to  
16 significance criteria based on the checklist items presented in Appendix G of the CEQA Guidelines and  
17 listed at the start of each impact analysis section below. Both the construction and maintenance/operations  
18 phases were considered; however, because the construction phase could result in physical changes to the  
19 environment, analysis of construction phase effects warranted a more detailed evaluation. On December  
20 28, 2018, the California Natural Resources Agency adopted the revised CEQA guidelines. This update  
21 included a shift in how transportation impacts are analyzed, by switching the threshold of significance  
22 from level of service (LOS) to vehicles miles traveled (VMT). Although the checklist questions below  
23 are revised, lead agencies have until July 1, 2020 to adopt new significance thresholds for VMT. At this  
24 time, At this time, CPUC’s new thresholds of significance are pending, therefore the LOS threshold  
25 remains in place for the proposed project. However, since the proposed project would only generate new  
26 vehicle trips during construction and does not involve changes in land use that would create a permanent  
27 source of traffic in the area, LOS would provide a more accurate accounting of the traffic impacts than  
28 VMT for the proposed project.

#### 29 30 **Applicant Proposed Measures**

31 The applicant would implement the following APMs to minimize or avoid impacts on transportation and  
32 traffic. Mitigation Measure (MM) GEN-1 requires implementation of these APMs to mitigate impacts to  
33 cultural resources and the impact analysis in this section applies to these APMs to reduce impacts. A list  
34 of all project APMs is included in Table 4-2.

35  
36 **APM TRA-1:** TDS and/or their contractors will require the project contractor to obtain all necessary  
37 local road encroachment permits prior to construction and will comply with all the  
38 applicable conditions of approval.

39  
40 **APM TRA-2:** As deemed necessary by the applicable jurisdiction, the road encroachment permits may  
41 require the contractor to prepare a traffic control plan in accordance with professional  
42 engineering standards prior to construction.

43  
44 **APM TRA-3:** TDS and/or their contractors will develop circulation and detour plans to minimize  
45 impacts to local street circulation. This will include the use of signing and flagging to  
46 guide vehicles through and/or around the construction zone.

47  
48 **APM TRA-4:** TDS and/or their contractors will schedule truck trips outside of peak morning and  
49 evening commute hours.

- 1 **APM TRA-5:** TDS and/or their contractors will limit lane closures during peak hours to the extent  
2 possible.  
3
- 4 **APM TRA-6:** TDS and/or their contractors will include detours for bicycles and pedestrians in all areas  
5 potentially affected by project construction.  
6
- 7 **APM TRA-7:** TDS and/or their contractors will install traffic control devices as specified in the  
8 California Department of Transportation Manual of Traffic Controls for Construction and  
9 Maintenance  
10
- 11 **APM TRA-8:** TDS and/or their contractors will coordinate with local transit agencies for the temporary  
12 relocation of routes or bus stops in work zones as necessary.  
13

14 **Impacts on Transportation**

15 Table 5.17-2 describes the significance criteria from Appendix G of the CEQA Guidelines' transportation  
16 and traffic section which the California Public Utilities Commission used to evaluate the environmental  
17 impacts of the proposed project.  
18

Table 5.17-2 Transportation Checklist

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a. Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 19
- 20 **a. *Would the project conflict with a plan, ordinance or policy addressing the circulation system,***  
21 ***including transit, roadway, bicycle and pedestrian facilities?***  
22

23 The proposed project would generate construction trips from worker vehicles, equipment delivery, and  
24 other similar activities. During the 60 to 120 day construction period, a maximum of 22 workers would be  
25 needed for all project components, generating a total of 44 daily one-way trips. Additional trips would be  
26 generated for delivery of construction equipment.  
27

28 Construction activities for installation of the telecom line would potentially require temporary traffic lane  
29 closures. This would limit traffic capacity of affected roadways and, in some instances, allow for only one  
30 lane of travel for both directions of traffic. However, construction activities would occur primarily on  
31 rural roadways that are not identified as congested in the regional transportation plan based on LOS  
32 metrics. Delays to motorists are expected to average 1 to 2 minutes. Construction trips would be  
33 temporary, and would not result in roadways exceeding LOS thresholds as shown in Table 5.17-1.  
34 Although no bicycle lanes are located within the proposed project area, Class II bicycle lanes are  
35 proposed in portions of the proposed project areas. Bicyclists may be temporarily affected by construction

1 activities during temporary closure of vehicle lanes. Further, no transit routes are present near the  
2 proposed project area; therefore, the implementation of the project would not result in the permanent  
3 closure of any bus stops and would not impact public transit.

4  
5 Operation and maintenance of the telecom line would not require any additional disturbance of roadway  
6 lanes. Some vehicle trips on local roadways would occur from TDS technicians connecting and  
7 disconnecting service to customers and for maintenance of equipment. Therefore, the proposed project  
8 would not conflict with the regional transportation plan or directly impact any roadway included in the  
9 congestion management program. The potential impact would be less than significant.

10  
11 The applicant would implement APMs to further minimize potential traffic delays resulting from  
12 temporary lane closures during construction. **APM TRA-1** would require the applicant to comply with all  
13 conditions of approval for encroachment permits. A traffic control plan would be developed as required  
14 by the local jurisdiction under **APM TRA-2**. **APM TRA-3** would require the applicant to develop  
15 circulation and detour plans and use signing and flaggers to direct or reroute traffic. **APM TRA-4** would  
16 require the applicant to schedule truck trips outside of peak commute hours to further lessen any potential  
17 impact. **APM TRA-5** would require the applicant to limit lane closures during peak traffic hours.  
18 Additionally, **APM TRA-7** would require the applicant to install traffic control devices as specified in the  
19 Caltrans Manual of Traffic Controls for Construction and Maintenance. **APM TRA-6** would require the  
20 applicant and/or its contractors to provide detours for bicycles and pedestrians in all areas potentially  
21 affected by project construction. Although there are no existing transit routes identified in the proposed  
22 project area, **APM TRA-8** would require coordination with transit agencies to temporarily relocate transit  
23 routes and bus stops as necessary.

24  
25 **Significance: Less than significant.**

26  
27 **b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision***  
28 ***(b)?***

29  
30 Construction of the proposed project would not directly impact any roadways included in the congestion  
31 management program. Some construction workers and equipment delivery may utilize I-5, SR 273, or  
32 other roadways identified as regionally significant corridors in the regional transportation plan; however,  
33 these trips would be negligible compared to existing traffic volumes. Construction activities and lane  
34 closures would not occur in any regionally significant corridors. As described in criterion (a), the traffic  
35 volumes from maintenance activities would be negligible, since minimal vehicle trips on regionally  
36 significant roadways would occur as TDS technicians connected and disconnected service to customers.  
37 Therefore, no impact would occur under this criterion.

38  
39 **Significance: No impact.**

40  
41 **c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp***  
42 ***curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

43  
44 The proposed project would not require the construction of publicly accessible roads that would have a  
45 substantially hazardous design feature such as sharp curves or dangerous intersections. However,  
46 construction activities could result in hazards due to work in public roadways, and potential road damage  
47 from oversized construction vehicles.

48  
49 Construction activities involving plowing and trenching and overweight or oversized vehicles for the  
50 delivery of construction equipment and materials would require ROW and oversize vehicle permits.  
51 Plowing and trenching activities involving removal of asphalt and overweight vehicles can shorten the life

1 of the pavement and eventually lead to rutting and cracking. Damage to roadways from construction  
2 activities within the proposed project area may result in hazardous conditions to motorists. As part of  
3 **APM TRA-1**, the applicant would obtain the necessary permits from Shasta County prior to beginning  
4 construction and comply with all applicable conditions. Impacts would still be significant; however,  
5 because local transportation permits for overweight vehicles may not require documentation of pavement  
6 conditions before and after construction as a condition of approval. The applicant would implement  
7 Mitigation Measure (MM) **TRA-1**, which would require repairs to road damage caused indirectly as a  
8 result of project-related vehicle traffic.  
9

10 Installation of telecommunications cables would require temporary closure of the lane adjacent to the  
11 trenching location. This could cause safety impacts to motorists. Implementation of APMs would  
12 minimize potential safety hazards resulting from temporary lane closures. A traffic control plan would be  
13 developed as required by the local jurisdiction under **APM TRA-2**. **APM TRA-3** would require the  
14 applicant to develop circulation and detour plans and use signing and flaggers to direct or reroute traffic.  
15 **APM TRA-5** would require the applicant to limit lane closures during peak traffic hours. Additionally,  
16 **APM TRA-7** would require the applicant to install traffic control devices as specified in the Caltrans  
17 Manual of Traffic Controls for Construction and Maintenance. Such measures would limit the number of  
18 motorists exposed to potential safety hazards and direct those vehicles safely through the construction  
19 zone. The applicant would also adhere to conditions set forth in the encroachment permit, which are  
20 established to minimize environmental impact and address safety concerns; see Section 5.10, "Land Use."  
21 **MM GEN-1** would ensure that the applicant would implement all proposed APMs. With the  
22 implementation of **APM TRA-1**, **APM TRA-2**, **APM TRA-3**, **APM TRA-5**, **APM TRA-7**, **MM TRA-**  
23 **1**, and **MM GEN-1**, impacts would be less than significant.  
24

25 **Significance: Less than significant with mitigation.**

26  
27 *d. Would the project result in inadequate emergency access?*  
28

29 Installation of the telecom line would require temporary lane closures of multiple roadways in the  
30 proposed project area. Closure of lanes may significantly impact emergency access. **APM TRA-1** would  
31 require the applicant to obtain all necessary local road encroachment permits and to comply with all  
32 applicable conditions of approval. However, impacts would still be significant because local road  
33 encroachment permits may not require notification of emergency services agencies and maintaining  
34 emergency access during road closures as a condition of approval. The applicant would implement **MM**  
35 **TRAN-2**, which requires the applicant to maintain emergency access on roadways at all times.  
36 Construction of the proposed project would not result in the permanent closure of any roads or lanes, and  
37 no temporary road or lane closures are planned during operations. **MM GEN-1** would ensure that the  
38 applicant would implement all proposed APMs. With the implementation of **APM TRA-1**, **MM TRAN-**  
39 **2**, **MM GEN-1**, impacts would be less than significant.  
40

41 **Significance: Less than significant with mitigation.**

42  
43 **Mitigation Measures**

44 See Section 5.3, "Air Quality" for **MM GEN-1**.

45  
46 **MM TRA-1: Road Repair.** The applicant shall repair to pre-project conditions any roads damaged by  
47 project vehicle traffic. The applicant shall document roadway conditions with photographs prior to the  
48 project along roadways within the project area. The applicant shall take photographs after the project and  
49 after any repairs that document restoration of pre-project pavement conditions.  
50

1 **MM TRA-2: Emergency Access.** The applicant shall notify local emergency service providers (i.e.,  
2 police departments, ambulance services, and fire departments) of lane closures at least one week prior to  
3 the closure. The applicant shall notify the provider of the location, date, time, and duration of the lane  
4 closure. The applicant shall make provisions to maintain emergency vehicle access at all times in  
5 coordination with local emergency service providers, such as allowing for bypass of slow vehicle traffic  
6 during lane closures.