

## 4.11 Transportation and Traffic

### 4.11.1 Setting

Siskiyou County is primarily a rural, low-density county with its major trip attractors dispersed throughout the County. Therefore, the dominant mode of transportation is the private automobile. The roadway network that would be affected by the Proposed Project, Weed Segment, or alternatives (study area) is located in central Siskiyou County and the north/northwest portion of the City of Weed. The transportation system in the area is composed of an interconnected network of State, County and City roads; local transit systems; and a rail right-of-way (ROW). The transportation system in the study area is described below.

### Roadway Network

Regional and local access to the study area is provided by several State and local roadways, each of which would be used to transport construction materials, equipment, and workers to and throughout the study area. The project corridors and surrounding roadway network are illustrated in Figure 1-1. Descriptions of the regional and local roadway network in the study area are described below.

#### ***Regional Roadways***

Regional access to the study area is provided by State Route 97 (SR 97) and Interstate-5 (I-5). Below are summary descriptions of each of these regional roadways.

***State Route 97 (SR 97)*** is a southwest-northeast oriented highway that extends from I-5 in the City of Weed, up through Klamath Falls, Oregon and Yakima, Washington, to the Canadian border. This highway is generally a two-lane route with pull-out lanes on steep inclines and turn lanes at major intersections and crossroads. Due to the variety of recreational uses (e.g., camping, boating, and hunting) that occur in the region, traffic volumes tend to be higher during the summer months when these activities are in season. Traffic volumes are several times higher near the I-5 interchange compared to several miles northeast of the interchange. For example, immediately northeast of the I-5 interchange, the annual ADT level is 12,100 vehicles per day (vpd), while north of Big Springs Road (approximately 4.5 miles northeast of the interchange), the annual ADT is 3,100 vpd (Caltrans, 2007). SR 97 parallels the southern portion of the Weed Segment and the majority of the alternatives.

***Interstate 5 (I-5)*** is a north-south freeway that extends from the Mexican border to the Canadian border, traversing the states of California, Oregon, and Washington. In the project vicinity, I-5 is generally a four-lane, limited access freeway that traverses in a northwesterly direction. Traffic volumes along I-5 in the area are highest south of Weed, with an annual average daily traffic (ADT) level of 25,000 vpd. North of Weed and SR 97, traffic volumes are lower, with annual ADT levels ranging between 15,600 and 15,800 vpd (Caltrans, 2007).

### **Local Roadways**

The local roadways that border, cross, or may be used to access the study area are described below. Some of the roads would be affected during line stringing activities over the roads, while others would be used for access throughout the construction phase of the project. The majority of the local roads experience relatively low traffic volumes. Below are summary descriptions of the roadways that may be affected by the Proposed Project, the Weed Segment, and/or alternatives.

#### **Proposed Project**

The Proposed Project would cross one public road. Hoy Road would be crossed near the location of Pole 12. Hoy Road is a two-lane County roadway with no shoulders. The proposed staging area would be accessed from Alamo Road, approximately 400 feet south-southeast of the Alamo Road/Railroad Avenue intersection. Alamo Avenue is a two-lane City of Weed roadway with no shoulders that can be accessed from SR 97. A private road would also be crossed by the Proposed Project near Pole 18/48.

#### **Weed Segment**

The following three City of Weed public roadways would be affected by the Weed Segment: W. Lincoln Avenue would be crossed just west of Alameda Avenue, near Pole 3/46; Kennedy Avenue would be crossed near Pole 2/46; and Alameda Avenue would be paralleled from approximately Pole 22/45 to Pole 2/46. These City of Weed roadways have two-lanes with limited shoulders that provide access to the Lincoln Heights neighborhood. The Weed Segment would cross at least two private roadways near Poles 19/45 and 11/45.

#### **Alternatives**

The alternatives would cross one local public roadway, Rainbow Way, near the location of Pole 13/48. Rainbow Way is a two-lane County roadway with no shoulders. The alternatives would also cross several private roads, including roads near Poles 1/48, Pole 5/48, and Pole 7/48.

### **Public Transit**

The Siskiyou Transit and General Express (STAGE) provides fixed-route bus service to most of the communities along the I-5 corridor in the County, including the City of Weed (Siskiyou County, 2007a). The routes utilize I-5 in the study area.

### **Bicycle and Pedestrian Transportation**

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement legends, and signs. Bike routes are roadways that are designated for bicycle use, but do not have additional width for bicycle lanes. There are no designated bicycle facilities within the study area that would be crossed.

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. There are no designated pedestrian facilities that would be affected by construction activities within the study area.

## **Airports**

One general aviation airport (Weed Airport) is located in the vicinity of the study area. Weed Airport is approximately four miles northwest of the City of Weed adjacent to I-5, and approximately three miles northwest of the nearest portion of the Proposed Project. Weed Airport is maintained and operated by Siskiyou County and is open to the public. It has one runway that is 5,000 feet long and 60 feet wide (Siskiyou County, 2007b).

## **Rail Service**

The Union Pacific Railroad (UPRR) line runs the entire length of the states of California, Oregon, and Washington and numerous other western states. In the study area, the UPRR passes approximately 500 feet south of the staging area and primarily parallels I-5. The Proposed Project, Weed Segment, and the alternatives would not cross the UPRR ROW.

## **Regulatory Context**

The development and regulation of the study area transportation network involves State and local jurisdictions. All roads within the study area are under the jurisdiction of State or local agencies. State jurisdiction includes permitting and regulation of the use of State roads, while local jurisdiction includes implementation of State permitting, policies, and regulations, as well as management and regulation of local roads. Construction work that would occur within or over a public roadway would require encroachment permits prior to commencing work in the public ROW from all jurisdictions that manage or maintain the applicable roadway(s). Applicable State and local laws and regulations related to traffic and transportation issues are discussed below.

### ***California Department of Transportation***

The California Department of Transportation (Caltrans) manages interregional transportation, including management of construction activities within or above the California highway system. In addition, Caltrans is responsible for permitting and regulating the use of State roadways. The study area includes two roadways that fall under Caltrans' jurisdiction (i.e., SR 97 and I-5).

Caltrans' construction practices require temporary traffic control planning for any time the normal function of a roadway is suspended. In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbances. Caltrans regulations would apply to the transportation of oversized loads associated with the construction of the Proposed Project, Weed Segment and/or alternative..

### ***Siskiyou County and City of Weed General Plans***

The majority of the roads that parallel or would be crossed by the Proposed Project, Weed Segment, or alternatives are under the jurisdiction of Siskiyou County or the City of Weed. County and City policies and regulations regarding the design or use of roadways are detailed in the circulation elements of the Siskiyou County General Plan and the City of Weed General Plan. However, because the plans focus on the design and implementation of circulation system improvements, policies in these elements do not directly relate to the Proposed Project, Weed Segment, or alternatives.

## **4.11.2 Significance Criteria**

Based on criteria in Appendix G of the CEQA Guidelines, a project would be considered to have a significant effect on the environment if it would:

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections);
- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that would result in substantial safety risks;
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- e) Result in inadequate emergency access;
- f) Result in inadequate parking capacity;
- g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.).

Regarding criterion c), the Proposed Project, Weed Segment, and alternatives would not change air traffic patterns and would not require the use of helicopters or other aircraft. No impacts would occur because the nearest airport is approximately three miles from the study area; therefore, impacts related to air traffic patterns are not discussed further in this EIR. For a discussion of general aviation safety hazards associated with the project, refer to Section 4.6, *Hazards and Hazardous Materials*.

Regarding Criterion g), the Proposed Project, Weed Segment, and alternatives would not conflict with adopted policies, plans, or programs supporting alternative transportation because the project would not require an increase in long-term use of traditional modes of transportation. No impacts

would occur; therefore, impacts related to conflicts with alternative transportation plans and programs are not discussed further in this EIR.

### 4.11.3 Transportation and Traffic Impacts and Mitigation Measures

#### Approach to Analysis

According to the CEQA *Guidelines*, a project would normally result in an impact to transportation and traffic if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Occasional post-construction maintenance activities involving one or two vehicle trips at a time would briefly affect only local segments. Therefore, these impacts would be less than significant.

The duration of potentially significant impacts related to short-term disruption of traffic flow and increased congestion generated by construction vehicles and/or loss of a travel lane to accommodate the construction work zone, would be limited to the period of time needed to complete construction of a project component. Therefore, mitigation measures identified below focus on reducing the short-term project construction effects; long-term mitigation measures are not needed. Impacts to transportation and traffic would result from increases in traffic volumes, short-term closure of roads, loss of travel lanes, and potential safety effects associated with construction were evaluated.

- a) **Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections). *Less than significant with mitigation (Class II). See discussion under b.***

- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. *Less than significant with mitigation (Class II).***

**Impact TRA-PPWS-1: Construction activities could adversely affect traffic and transportation conditions in the study area. *Less than significant with mitigation (Class II).***

The Proposed Project and Weed Segment would not introduce any new uses to the study area that would generate long-term changes in traffic. Thus, potential traffic and transportation effects would be confined to construction of the Proposed Project and Weed Segment.

Construction activities would consist of replacing the existing wood poles with new wood poles and eight new steel poles, establishing a new 1.2 mile ROW with wood poles, installing new conductor, and upgrading the Weed Substation. Proposed Project construction activities are expected to require approximately one month to complete, but may occur over a four month period depending on weather. The construction period for the Weed Segment is expected to last approximately eight months, also depending on weather. Portions of the Proposed Project and Weed Segment construction activities would overlap. Daily vehicle trips would be generated associated with the arrival and departure of construction workers. Heavy truck trips would be required for hauling equipment and materials to and from the construction sites. It is estimated that several construction crews would operate concurrently each day, with a total of up to 35 workers associated with each the Proposed Project and the Weed Segment. Construction activities would include hauling of oversize loads, including poles, conductor spools, substation hardware, various types of equipment, etc.

A four-acre staging area is proposed to be located on the east side of SR 97, approximately 500 feet southeast of Weed Substation. The staging area would include a field office, provide a reporting area for workers, be used to store materials and equipment, and provide a parking area for project vehicles. Construction worker and truck trips would be concentrated along Alamo Avenue near the proposed staging area. Access to the site would be achieved directly from Alamo Avenue.

Installation of the Proposed Project and Weed Segment would require overhead crossings of several private and public roadways, including Hoy Road, W. Lincoln Avenue, Kennedy Avenue, and Alameda Avenue. The placement of the transmission line on poles across these roadways would temporarily disrupt existing transportation and traffic patterns in the vicinity of the crossings. Impacts would include direct disruption of traffic flows and street operations.

Prior to stringing conductor, temporary guard structures are proposed to be installed along the road crossings for public protection. The purpose of the guard structures would be to prevent the conductor from being lowered or falling into traffic. The guard structures would consist of H-frame wood poles placed on each side of the road being crossed. Installation and removal of the guard structures would be similar to that of wood poles. It should be noted that the use of guard structures during transmission line stringing activities over roadways would be at the discretion of the regulatory agency with permit authority of the roadway. For example, the County or City may require other or additional safety measures as part of its encroachment permit requirements.

In addition to transmission line stringing activities over public roads, both the Proposed Project and Weed Segment would cross private roads, potentially resulting in short-term (e.g., a couple of hours) restrictions to private property access.

Construction of the transmission lines would generate both construction worker and truck delivery trips. Assuming a trip generation rate of 1.5 trips per day per worker, the

35 employees would not be anticipated to exceed 53 auto round trips (106 round trips associated with both the Proposed Project and Weed Segment) from the construction workers traveling to and from the work sites each day. Accounting for the delivery of construction components and material excavation, the total number of off-site construction truck trips would be up to 10 round trips (20 one-way trips) per work day over a one-month period. Construction of the Weed Segment is anticipated to result in a similar amount of daily construction trips.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service on any of the roadways in the vicinity of the Proposed Project or Weed Segment. Because not all construction-related trips would be assigned to the same construction location (i.e., crews would be assigned to the Weed Substation or a different section of the alignments), these project-generated trips would not result in substantial traffic. Therefore, this short-term increase in vehicle trips would not significantly affect level of service and traffic flow on roadways. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles.

**Mitigation Measure TRA-PPWS-1a:** PacifiCorp shall obtain and comply with local road encroachment permits for public roads that are crossed by the approved transmission line. PacifiCorp shall also coordinate short-term construction activities at private road crossings with the applicable private property owners. Copies of all encroachment permits and evidence of private property coordination shall be provided to the CPUC prior to the commencement of construction activities.

**Mitigation Measure TRA-PPWS-1b:** PacifiCorp shall prepare and implement a Traffic Management Plan subject to approval of the appropriate state agency and/or local government(s). The approved Traffic Management Plan and documentation of agency approvals shall be submitted to the CPUC prior to the commencement of construction activities. The plan shall:

- Include a discussion of work hours, haul routes, work area delineation, traffic control and flagging;
- Identify all access and parking restriction and signage requirements;
- Require workers to park personal vehicles at the approved staging area and take only necessary project vehicles to the work sites;
- Lay out plans for notifications and a process for communication with affected residents and landowners prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which road/lanes and access

point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints; and

- Include plans to coordinate all construction activities with emergency service providers in the area, consistent with Mitigation Measure PS-PPWS-2 (see Section 4.10, *Public Services*). Emergency service providers would be notified of the timing, location, and duration of construction activities. All roads would remain passable to emergency service vehicles at all times.
- Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow.

**Mitigation Measure TRA-PPWS-1c:** PacifiCorp shall coordinate with the appropriate state agency, local government(s), and/or any other appropriate entity, regarding measures to minimize the cumulative effect of simultaneous construction activities in overlapping areas.

For the Proposed Project and Weed Segment, coordination with Siskiyou County and the City of Weed would be required.

**Significance after Mitigation:** Less than significant.

### ***Operations***

Once constructed, the transmission lines and the Weed Substation would require routine maintenance trips, inspection, and vegetation management activities. Vegetation management in the transmission line corridors could include control of noxious weeds and trimming of shrubs or trees for safety upkeep and would be limited to seasonal and yearly traffic. Maintenance activities would not increase above existing levels that are employed to maintain the existing transmission line ROWs and therefore, would not result in an increase in traffic in the study area.

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- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). *Less than significant with mitigation (Class II).***

**Impact TRA-PPWS-2: Project construction activities could increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. *Less than significant with mitigation (Class II).***

The Proposed Project and Weed Segment would not change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. However, heavy equipment operating adjacent to or within a road ROW could increase the risk of accidents. Construction related trucks on

local and State roadways would interact with other vehicles. Potential conflicts could also occur between construction traffic and alternative modes of transportation (e.g., bicyclists and buses).

**Mitigation Measure TRA-PPWS-2:** Implement Mitigation Measure TRA-PPWS-1b.

Implementation of Mitigation Measure TRA-PPWS-1b requires PacifiCorp to prepare a Traffic Management Plan in accordance with professional engineering standards prior to construction, including compliance with roadside safety protocols to reduce the risk of accidents thereby ensuring temporary increases in the potential for accidents would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

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e) **Result in inadequate emergency access:** *Less than significant with mitigation Class II).*

**Impact TRA-PPWS-3:** Construction activities could result in delays for emergency vehicles on study area roadways. *Less than significant with mitigation (Class II).*

Construction of the Proposed Project and Weed Segment would have temporary effects on traffic flow, particularly where the line would be constructed over roadways. Transmission line pole installation across roads and the temporary reduction in travel lanes could result in delays for emergency vehicles passing through the vicinity of a Proposed Project or Weed Segment work area.

**Mitigation Measure TRA-PPWS-3:** Implement Mitigation Measures TRA-PPWS-1b and PS-PPWS-2.

Implementation of Mitigation Measure TRA-PPWS-1b requires the construction contractor to coordinate all construction activities with emergency service providers in and along the Proposed Project and Weed Segment to minimize disruption to emergency vehicle access to land uses along the corridors. Specific requirements are identified under Mitigation Measure TRA-PPWS-1b and PS-PPWS-2 (see Section 4.10, *Public Services*). Implementation of these measures would ensure potential impacts associated with temporary effects on emergency access would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

f) **Result in inadequate parking capacity: *Less than significant.***

Construction vehicles associated with the Proposed Project and Weed Segment that would transport materials and workers on a daily basis to and from the staging area would be parked overnight at the staging area. Other vehicles would be parked at the various construction sites within the transmission corridor if space is available and some workers would park near that day's construction site. Vehicles would also be parked at the Weed Substation. Nonetheless, given the dispersed nature and small size of the proposed construction workforce, the Proposed Project and Weed Segment would not generate a substantial number of parked vehicles along the project corridors at any one location and impacts would be relatively brief; therefore, impacts would be less than significant.

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#### 4.11.4 Cumulative Impacts

Proposed Project and Weed Segment construction activities, as described in Section 4.11.3, could have a temporary construction-related impact on local traffic flow in the Proposed Project and Weed Segment areas as street and lane closures may be required. In conjunction with other construction projects identified in Section 3.6, *Cumulative Projects*, potential cumulative impacts could occur. For example, Roseburg Forest Products has proposed to construct a cogeneration power plant in the same general vicinity of the staging area associated with the Proposed Project. If these two projects were to occur at the same time, a cumulative traffic impact could result at the access locations to the site. However, as identified above, Mitigation Measure TRA-PPWS-1b requires PacifiCorp to prepare a Traffic Management Plan prior to construction and Mitigation Measure TRA-PPWS-1c requires PacifiCorp to coordinate with appropriate agencies to minimize the cumulative effect of simultaneous construction activities. These measures would ensure that the Proposed Project and Weed Segment's contribution to transportation and traffic-related cumulative impacts would not be cumulatively considerable (Class II).

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#### 4.11.5 Alternatives

##### PacifiCorp Option 4 Alternative

- a) **Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections). *Less than significant with mitigation* (Class II). See response to b.**
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- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. *Less than significant with mitigation (Class II).***

**Impact TRA-OPT4-1: Construction activities could adversely affect traffic and transportation conditions in the study area. *Less than significant with mitigation (Class II).***

The PacifiCorp Option 4 alternative would not introduce any new uses to the study area that would generate long-term changes in traffic. Thus, potential traffic and transportation effects would be confined to construction of the PacifiCorp Option 4 alternative.

Construction activities would consist of replacing existing wood poles with new wood poles and one steel pole, installing new 115 kV conductor, and transferring the existing 69 kV and distribution conductors between Poles 19/45 and 14/48 to the new poles. The PacifiCorp Option 4 alternative would require approximately 12 additional new poles, require disturbance of approximately 1.5 additional acres of access road work, and would require more vegetation clearing compared to the Proposed Project and Weed Segment. The PacifiCorp Option 4 alternative and Weed Segment construction activities are expected to require approximately nine months to complete. Daily vehicle trips would be generated associated with the arrival and departure of construction workers. Heavy truck trips would be required for hauling equipment and materials to and from the construction sites. It is estimated that several construction crews would operate concurrently each day, with a total of up to 35 workers associated with each the PacifiCorp Option 4 alternative and the Weed Segment.

Installation of the PacifiCorp Option 4 alternative would require overhead crossings of several private roadways and two public roadways, including a transmission line crossing of Rainbow Way and a span guy cable crossing over SR 97 from Pole 5/48 to a stub pole on the south side of the highway. The placement of the transmission line or span guy cables on poles across active roadways would temporarily disrupt existing transportation and traffic patterns in the vicinity of the crossings. Impacts would include direct disruption of traffic flows and street operations.

Prior to stringing conductor, temporary guard structures are proposed to be installed along the road crossings for public protection. The purpose of the guard structures would be to prevent the conductor from being lowered or falling into traffic. The use of guard structures during transmission line stringing or span guy cable installation activities over roadways would be at the discretion of the regulatory agency with permit authority of the roadway. For example, for the SR 97 span guy crossing, Caltrans may require other or additional safety measures as part of its encroachment permit requirements. In addition to transmission line stringing activities over public roads, the PacifiCorp Option 4 alternative would cross private roads, potentially resulting in short-term (e.g., a couple of hours) restrictions to private property access.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service on any of the roadways in the vicinity of the PacifiCorp Option 4 alternative. Because not all construction-related trips would be assigned to the same construction location, these project-generated trips would not result in substantial traffic. Therefore, this short-term increase in vehicle trips would not significantly affect level of service and traffic flow on roadways. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles.

**Mitigation Measure TRA-OPT4-1a:** Implement Mitigation Measure TRA-PPWS-1a, TRA-PPWS-1b and TRA-PPWS-1c.

As specified under Mitigation Measure TRA-PPWS-1a (see above), PacifiCorp shall obtain all necessary local road encroachment permits (i.e., Caltrans and City of Weed) and coordinate all private road crossings with applicable property owners prior to construction. Mitigation Measure TRA-OPT4-1b, which requires the contractor to prepare a traffic management plan in accordance with professional engineering standards prior to construction, and Mitigation Measure TRA-OPT4-1c, which requires PacifiCorp to coordinate with agencies (i.e., Caltrans and City of Weed) to minimize the cumulative effect of simultaneous construction activities. Implementation of Mitigation Measures TRA-OPT4-1a through TRA-OPT4-1c would ensure that potential impacts associated with temporary road and lane closures, and increases in construction traffic, would be less than significant.

**Significance after Mitigation:** Less than significant.

### ***Operations***

Once constructed, the transmission line would require routine maintenance trips, inspection, and vegetation management activities. Vegetation management in the transmission line corridors could include control of noxious weeds and trimming of shrubs or trees for safety upkeep and would be limited to seasonal and yearly traffic. Maintenance activities would not increase above existing levels that are employed to maintain the existing transmission line ROWs and therefore, would not result in an increase in traffic in the study area (Class III).

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- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). *Less than significant with mitigation* (Class II).**

**Impact TRA-OPT4-2: Project construction activities could increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. *Less than significant with mitigation* (Class II).**

The PacifiCorp Option 4 alternative would not change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. However, heavy equipment operating adjacent to or within a road ROW could increase the risk of accidents. Construction related trucks on local and State roadways would interact with other vehicles. Potential conflicts could also occur between construction traffic and alternative modes of transportation (e.g., bicyclists and buses).

**Mitigation Measure TRA-OPT4-2:** Implement Mitigation Measure TRA-OPT4-1b.

Implementation of Mitigation Measure TRA-OPT4-1b requires PacifiCorp to prepare a Traffic Management Plan in accordance with professional engineering standards prior to construction, including compliance with roadside safety protocols to reduce the risk of accidents. Thus, implementation of Mitigation Measure TRA-OPT4-1b would ensure temporary increases in the potential for accidents would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

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- e) **Result in inadequate emergency access. *Less than significant with mitigation* (Class II).**

**Impact TRA-OPT4-3: Construction activities could result in delays for emergency vehicles on study area roadways. *Less than significant with mitigation* (Class II).**

Construction of the PacifiCorp Option 4 alternative would have temporary effects on traffic flow, particularly where the line would be constructed over roadways. Transmission line pole installation across roads and the temporary reduction in travel lanes could result in delays for emergency vehicles passing through the vicinity of PacifiCorp Option 4 alternative work areas.

**Mitigation Measure TRA-OPT4-3:** Implement Mitigation Measures TRA-OPT4-1b and PS-PPWS-2.

Implementation of Mitigation Measure TRA-OPT4-1b requires the construction contractor to coordinate all construction activities with emergency service providers in and along the PacifiCorp Option 4 alternative area to minimize disruption to emergency vehicle access to land uses along the corridor. Specific requirements are identified under Mitigation Measure TRA-OPT4-1b and PS-PPWS-2 (see Section 4.10, *Public Services*). Implementation of these measures would ensure potential impacts associated with temporary effects on emergency access would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

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f) **Result in inadequate parking capacity: *Less than significant (Class III)*.**

Construction vehicles associated with the PacifiCorp Option 4 alternative that would transport materials and workers on a daily basis to and from the staging area would be parked overnight at the staging area. Other vehicles would be parked at the various construction sites within the transmission corridor if space is available and some workers would park near that day's construction site. Vehicles would also be parked at the Weed Substation. Nonetheless, given the dispersed nature and small size of the proposed construction workforce, the PacifiCorp Option 4 alternative would not generate a substantial number of parked vehicles along the project corridors at any one location and impacts would be relatively brief; therefore, impacts would be less than significant.

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### **Mackintosh/ALJ Variation A Alternative**

a) **Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections): *Less than significant with mitigation (Class II)*.** See response to b.

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b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. *Less than significant with mitigation (Class II)*.**

**Impact TRA-VAR/A-1: Construction activities could adversely affect traffic and transportation conditions in the study area. *Less than significant with mitigation (Class II)*.**

The Mackintosh/ALJ Variation A alternative would not introduce any new uses to the study area that would generate long-term changes in traffic. Thus, potential traffic and transportation effects would be confined to construction of the Mackintosh/ALJ Variation A alternative.

Construction activities would consist of replacing existing wood poles with new wood poles and one steel pole, installing new 115 kV conductor, reinstalling the existing 69 kV and distribution conductors between Poles 19/45 and 14/48, and installation of a temporary transformer at Weed Substation. The Mackintosh/ALJ Variation A alternative would require approximately 12 additional new poles, require disturbance of approximately 1.5 additional acres of access road work, and would require more vegetation clearing compared to the Proposed Project and Weed Segment. Portions of the Mackintosh/ALJ Variation A alternative and Weed Segment construction activities are expected to overlap, and would require a total of approximately nine months to complete. Daily vehicle trips would be generated associated with the arrival and departure of construction workers. Heavy truck trips would be required for hauling equipment and materials to and from the construction sites. It is estimated that several construction crews would operate concurrently each day, with a total of up to 35 workers associated with each the Mackintosh/ALJ Variation A alternative and the Weed Segment.

Installation of the Mackintosh/ALJ Variation A alternative would require overhead crossings of several private roadways and two public roadways, including a transmission line crossing of Rainbow Way and a span guy cable crossing over SR 97 from Pole 5/48 to a stub pole on the south side of the highway. The placement of the transmission line or span guy cables on poles across active roadways would temporarily disrupt existing transportation and traffic patterns in the vicinity of the crossings. Impacts would include direct disruption of traffic flows and street operations.

Prior to stringing conductor, temporary guard structures are proposed to be installed along the road crossings for public protection. The purpose of the guard structures would be to prevent the conductor from being lowered or falling into traffic. The use of guard structures during transmission line stringing or span guy cable installation activities over roadways would be at the discretion of the regulatory agency with permit authority of the roadway. For example, for the SR 97 span guy crossing, Caltrans may require other or additional safety measures as part of its encroachment permit requirements. In addition to transmission line stringing activities over public roads, the Mackintosh/ALJ Variation A alternative would cross private roads, potentially resulting in short-term (e.g., a couple of hours) restrictions to private property access.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service on any of the roadways in the vicinity of the Mackintosh/ALJ Variation A alternative. Because not all construction-related trips would be assigned to the same construction location, these project-generated trips would not result in substantial traffic. Therefore, this short-term

increase in vehicle trips would not significantly affect level of service and traffic flow on roadways. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles.

**Mitigation Measure TRA-VAR/A-1:** Implement Mitigation Measures TRA-PPWS-1a, TRA-PPWS-1b, and TRA-PPWS-1c.

As specified under Mitigation Measure TRA-PPWS-1a (see above), PacifiCorp shall obtain all necessary local road encroachment permits (i.e., Caltrans and Siskiyou County) and coordinate all private road crossings with applicable property owners prior to construction. Mitigation Measure TRA-PPWS-1b, which requires the contractor to prepare a traffic management plan in accordance with professional engineering standards prior to construction, and Mitigation Measure TRA-PPWS-1c, which requires PacifiCorp to coordinate with agencies (i.e., Caltrans and City of Weed) to minimize the cumulative effect of simultaneous construction activities. Implementation of Mitigation Measure TRA-VAR/A-1 would ensure that potential impacts associated with temporary road and lane closures, and increases in construction traffic, would be less than significant.

**Significance after Mitigation:** Less than significant.

### ***Operations***

Once constructed, the transmission lines would require routine maintenance trips, inspection, and vegetation management activities. Vegetation management in the transmission line corridors could include control of noxious weeds and trimming of shrubs or trees for safety upkeep and would be limited to seasonal and yearly traffic. Maintenance activities would not increase above existing levels that are employed to maintain the existing transmission line ROWs and therefore, would not result in an increase in traffic in the study area (Class III).

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- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). *Less than significant with mitigation* (Class II).**

**Impact TRA-VAR/A-2:** Project construction activities could increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. *Less than significant with mitigation* (Class II).

The Mackintosh/ALJ Variation A alternative would not change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. However, heavy equipment operating adjacent to or within a road ROW could increase the risk of accidents. Construction related trucks on local and State roadways would interact with other vehicles. Potential conflicts could also

occur between construction traffic and alternative modes of transportation (e.g., bicyclists and buses).

**Mitigation Measure TRA-VAR/A-2: Implement Mitigation Measure TRA- PPWS -1b.**

Implementation of Mitigation Measure TRA- PPWS -1b requires PacifiCorp to prepare a Traffic Management Plan in accordance with professional engineering standards prior to construction, including compliance with roadside safety protocols to reduce the risk of accidents. Thus, implementation of Mitigation Measure TRA- PPWS -1b would ensure temporary increases in the potential for accidents would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

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e) **Result in inadequate emergency access. Less than significant with mitigation (Class II).**

**Impact TRA-VAR/A-3: Construction activities could result in delays for emergency vehicles on study area roadways. *Less than significant with mitigation (Class II).***

Construction of the Mackintosh/ALJ Variation A alternative would have temporary effects on traffic flow, particularly where the line would be constructed over roadways. Transmission line pole installation across roads and the temporary reduction in travel lanes could result in delays for emergency vehicles passing through the vicinity of an Mackintosh/ALJ Variation A alternative work areas.

**Mitigation Measure TRA-VAR/A-3: Implement Mitigation Measures TRA-PPWS-1b and PS-PPWS-2.**

Implementation of Mitigation Measure TRA-PPWS-1b requires the construction contractor to coordinate all construction activities with emergency service providers in the study area to minimize disruption to emergency vehicle access to land uses along the corridor. Specific requirements shall be included in the Traffic Management Plan identified under Mitigation Measure TRA-PPWS-1b and PS-PPWS-2 (See Section 4.10, *Public Services*). Implementation of these measures would ensure potential impacts associated with temporary effects on emergency access would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

**f) Result in inadequate parking capacity: *Less than significant (Class III).***

Construction vehicles associated with the Mackintosh/ALJ Variation A alternative that would transport materials and workers on a daily basis to and from the staging area would be parked overnight at the staging area. Other vehicles would be parked at the various construction sites within the transmission corridor if space is available and some workers would park near that day's construction site. Vehicles would also be parked at the Weed Substation. Nonetheless, given the dispersed nature and small size of the proposed construction workforce, the Mackintosh/ALJ Variation A alternative would not generate a substantial number of parked vehicles along the project corridors at any one location and impacts would be relatively brief; therefore, impacts would be less than significant.

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## **Mackintosh/ALJ Variation B Alternative**

**a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections). *Less than significant with mitigation (Class II). See response to b.***

**b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. *Less than significant with mitigation (Class II).***

**Impact TRA-VAR/B-1: Construction activities could adversely affect traffic and transportation conditions in the study area. *Less than significant with mitigation (Class II).***

The Mackintosh/ALJ Variation B alternative would not introduce any new uses to the study area that would generate long-term changes in traffic. Thus, potential traffic and transportation effects would be confined to construction of the Mackintosh/ALJ Variation B alternative.

Construction activities would consist of replacing existing wood poles with new wood poles and one steel pole, installing new 115 kV conductor, and reinstalling the existing 69 kV and distribution conductors between Poles 19/45 and 14/48. The Mackintosh/ALJ Variation B alternative would require approximately 12 additional new poles and 33 temporary poles, require disturbance of approximately 1.5 additional acres of access road work, and would require more vegetation clearing compared to the Proposed Project and Weed Segment. Portions of the Mackintosh/ALJ Variation B alternative and Weed Segment construction activities are expected to overlap, and would require a total of

approximately nine months to complete. Daily vehicle trips would be generated associated with the arrival and departure of construction workers. Heavy truck trips would be required for hauling equipment and materials to and from the construction sites. It is estimated that several construction crews would operate concurrently each day, with a total of up to 35 workers associated with each the Mackintosh/ALJ Variation B alternative and the Weed Segment.

Installation of the Mackintosh/ALJ Variation B alternative would require overhead crossings of several private roadways and two public roadways, including a transmission line crossing of Rainbow Way and a span guy cable crossing over SR 97 from Pole 5/48 to a stub pole on the south side of the highway. The placement of the transmission line or span guy cables on poles across active roadways would temporarily disrupt existing transportation and traffic patterns in the vicinity of the crossings. Impacts would include direct disruption of traffic flows and street operations.

Prior to stringing conductor, temporary guard structures are proposed to be installed along the road crossings for public protection. The purpose of the guard structures would be to prevent the conductor from being lowered or falling into traffic. The use of guard structures during transmission line stringing or span guy cable installation activities over roadways would be at the discretion of the regulatory agency with permit authority of the roadway. For example, for the SR 97 span guy crossing, Caltrans may require other or additional safety measures as part of its encroachment permit requirements. In addition to transmission line stringing activities over public roads, the Mackintosh/ALJ Variation B alternative would cross private roads, potentially resulting in short-term (e.g., a couple of hours) restrictions to private property access.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service on any of the roadways in the vicinity of the Mackintosh/ALJ Variation B alternative. Because not all construction-related trips would be assigned to the same construction location, these project-generated trips would not result in substantial traffic. Therefore, this short-term increase in vehicle trips would not significantly affect level of service and traffic flow on roadways. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles.

**Mitigation Measure TRA-VAR/B-1: Implement Mitigation Measures TRA-PPWS-1a, TRA-PPWS-1b, and TRA-PPWS-1c.**

As specified under Mitigation Measure TRA-PPWS-1a (see above), PacifiCorp shall obtain all necessary local road encroachment permits (i.e. Caltrans and City of Weed) and coordinate all private road crossings with applicable property owners prior to construction. Mitigation Measure TRA-PPWS-1b, which requires the contractor to prepare a traffic management plan in accordance with professional engineering standards prior to construction, and Mitigation Measure TRA-PPWS-1c, which requires PacifiCorp

to coordinate with agencies (i.e., Caltrans and City of Weed) to minimize the cumulative effect of simultaneous construction activities. Implementation of Mitigation Measure TRA-VAR/B-1 would ensure that potential impacts associated with temporary road and lane closures, and increases in construction traffic, would be less than significant.

**Significance after Mitigation:** Less than significant.

### ***Operations***

Once constructed, the transmission lines would require routine maintenance trips, inspection, and vegetation management activities. Vegetation management in the transmission line corridors could include control of noxious weeds and trimming of shrubs or trees for safety upkeep and would be limited to seasonal and yearly traffic. Maintenance activities would not increase above existing levels that are employed to maintain the existing transmission line ROWs and therefore, would not result in an increase in traffic in the study area (Class III).

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- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). *Less than significant with mitigation* (Class II).**

**Impact TRA-VAR/B-2: Project construction activities could increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. *Less than significant with mitigation* (Class II).**

The Mackintosh/ALJ Variation B alternative would not change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. However, heavy equipment operating adjacent to or within a road ROW could increase the risk of accidents. Construction related trucks on local and State roadways would interact with other vehicles. Potential conflicts could also occur between construction traffic and alternative modes of transportation (e.g., bicyclists and buses).

**Mitigation Measure TRA-VAR/B-2:** Implement Mitigation Measure TRA-PPWS-1b.

Implementation of Mitigation Measure TRA-PPWS-1b requires PacifiCorp to prepare a Traffic Management Plan in accordance with professional engineering standards prior to construction, including compliance with roadside safety protocols to reduce the risk of accidents. Thus, implementation of Mitigation Measure TRA-PPWS-1b would ensure temporary increases in the potential for accidents would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

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e) **Result in inadequate emergency access. Less than significant with mitigation (Class II).**

**Impact TRA-VAR/B-3: Construction activities could result in delays for emergency vehicles on study area roadways. *Less than significant with mitigation (Class II).***

Construction of the Mackintosh/ALJ Variation B alternative would have temporary effects on traffic flow, particularly where the line would be constructed over roadways. Transmission line pole installation across roads and the temporary reduction in travel lanes could result in delays for emergency vehicles passing through the vicinity of any Mackintosh/ALJ Variation B alternative work areas.

**Mitigation Measure TRA-VAR/B-3:** Implement Mitigation Measures TRA-PPWS-1b and PS-PPWS-2.

Implementation of Mitigation Measure TRA-PPWS-1b requires the construction contractor to coordinate all construction activities with emergency service providers in the study area to minimize disruption to emergency vehicle access to land uses along the corridor. Specific requirements that shall be included are identified under Mitigation Measure TRA-PPWS-1b and PS-PPWS-2 (see Section 4.10, *Public Services*). Implementation of these measures would ensure potential impacts associated with temporary effects on emergency access would be mitigated to a less than significant level.

**Significance after Mitigation:** Less than significant.

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f) **Result in inadequate parking capacity: *Less than significant (Class III).***

Construction vehicles associated with the Mackintosh/ALJ Variation B alternative that would transport materials and workers on a daily basis to and from the staging area would be parked overnight at the staging area. Other vehicles would be parked at the various construction sites within the transmission corridor if space is available and some workers would park near that day's construction site. Vehicles would also be parked at the Weed Substation. Nonetheless, given the dispersed nature and small size of the proposed construction workforce, the Mackintosh/ALJ Variation B alternative would not generate a substantial number of parked vehicles along the project corridors at any one location and impacts would be relatively brief; therefore, impacts would be less than significant.

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## No Project

For the purposes of this analysis, the No Project Alternative includes the following two assumptions: 1) the project would not be implemented and the existing conditions in the study area would not be changed; and 2) a new transmission line and/or additional power generation would be constructed in or near the study area to supply power to the Weed area. Given the highly speculative nature of the No Project Alternative assumptions, this analysis is qualitative in nature.

- a) **Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections. See discussion under b.**
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- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.**

Construction of a new transmission line and/or a power plant under the No Project scenario would result in impacts similar to those that would occur under the Proposed Project and Weed Segment. Long-term impacts that would be created by a new transmission line under the No Project scenario would be minor, and would be associated with maintenance and inspection activity trips similar to what would occur under the Proposed Project and Weed Segment. Operations of a power plant under the No Project scenario would likely generate long-term daily commute trips associated with the plant workforce. Depending on the location of that development, the additional traffic may impact local traffic and contribute to increased congestion.

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

Construction of a new transmission line and/or a power plant under the No Project scenario would not likely change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. Heavy construction equipment operating adjacent to or within a road ROW could increase the risk of accidents.

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- e) **Result in inadequate emergency access.**

Construction of a transmission line would have temporary effects on traffic flow, particularly where the line would be constructed over roadways or immediately adjacent

to roadways. Transmission line pole installation across roads and the temporary reduction in travel lanes could result in delays for emergency vehicles passing through the project vicinity.

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**f) Result in inadequate parking capacity.**

Construction vehicles would be required to transport materials and workers on a daily basis to and from the project site and/or staging area(s). Other vehicles would be parked at the various construction sites. The No Project scenario would not be likely to generate a substantial number of parked vehicles.

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## References – Transportation and Traffic

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