

## **14.0 TRANSPORTATION AND TRAFFIC**

### **14.1 INTRODUCTION AND METHODOLOGY**

This chapter describes the existing conditions, and potential project-related impacts for transportation and circulation issues. In summary, the project will not conflict with adopted transportation policies. Although existing traffic conditions will be temporarily affected during project construction, all impacts will be less than significant, due in part to the proposed overhead configuration, which obviates the need for trenching operations in busy city streets.

This analysis relied on the collection of best available traffic data and other transportation system information. Traffic data and other transportation system information were obtained from site visits, maps, literature searches, aerial photographs, and personal communications with state and local government personnel. Impacts to transportation and traffic were then determined based on the project construction plan and anticipated operation procedures. Lastly, measures to mitigate potential impacts were identified based on existing and projected future conditions.

### **14.2 REGULATORY FRAMEWORK**

The development and regulation of the project area transportation network primarily involves state and local jurisdictions. All roads within the project area are under the jurisdiction of state and local agencies. State jurisdiction includes permitting and regulation of the use of all state roads, while local jurisdiction includes implementation of state permitting, policies, and regulations, as well as management and regulation of local roads. Construction work will require encroachment permits prior to construction from all jurisdictions that manage or maintain roadways. Applicable state and local laws and regulations related to traffic and transportation issues are discussed below.

#### **14.2.1 State Regulations**

The California Department of Transportation (Caltrans) manages interregional transportation, including management and construction of the California Highway System. In addition, Caltrans is responsible for permitting and regulation of the use of state roadways. The project area includes several roadways that fall under Caltrans' jurisdiction, as shown in Table 14-1.

Caltrans' Construction Manual requires temporary traffic control planning "during any time the normal function of a roadway is suspended" (Caltrans 2001). In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance. Project construction will include the installation of transmission poles immediately adjacent to roadways, as well as the transportation of construction crews and transmission equipment throughout the project area.

**Table I4-1  
Local and County Roads**

<b>Road</b>	<b>Segment(s)</b>	<b>Description</b>
5 <sup>th</sup> Street West	17	Two-way residential street.
Adobe Road	1	Two-lane road with shoulder; turning and acceleration lanes at intersections; receives high commuter traffic during peak am and pm hours.
Arnold Drive	2	Two-lane road with shoulder; turning and acceleration lanes at intersections; receives high commuter traffic during peak am and pm hours.
Felder Road	1	Two-lane road with no shoulder or narrow shoulder; trees close to road on both sides for some of length within project area; road is narrow and winding in some sections within project area.
Frates Road	1	Two-lane road with shoulder; turning and acceleration lanes at intersections; receives high commuter traffic during peak am and pm hours.
Leveroni Road	17	Two-lane road with no shoulder or narrow shoulder; trees close to road on both sides for much of length within project area; roadway widens at intersections, with turn lanes at most intersection.
Napa Road	17	Two-lane road with turning lane at intersection near project area (SR 12); becomes Leveroni Road in the project area.

Prior to project construction, all necessary transportation and/or encroachment permits will be obtained from Caltrans in accordance with the Caltrans Transportation Permit Manual and Encroachment Permit Manual. In addition, construction activities in, along, and crossing roadways will follow Caltrans' Best Management Practices to minimize impacts to traffic and transportation in the project area, as detailed in Caltrans' Manual on Uniform Traffic Control Devices, Flaggers Instruction Handbook, Manual of Traffic Controls for Maintenance and Work Zones, and Traffic Manual.

#### 14.2.1.1 Sonoma County

Several of the roads that parallel or cross the transmission route are under the jurisdiction of Sonoma County. County policies and regulations regarding the design, use, or obstruction of roadways are detailed in the Circulation and Transit Element of the Sonoma County General Plan. The majority of these goals and policy guidelines in the Plan pertain to the development and planning of roadways and transit systems and therefore are not relevant to the proposed project. These goals and policies strive to limit or reduce the number of vehicle miles traveled during peak periods in order to reduce emissions.

In addition to the Sonoma County General Plan, the 2001 Countywide Transportation Plan for Sonoma County provides further guidance for transportation planning and associated goals and

policies. This plan is currently being updated and is available in draft form. Nevertheless, this plan again focuses on the design and implementation of improvements to the county circulation system, including roadways, bikeways, and rail service. The plan does not include policies relevant to the proposed project.

#### 14.2.1.2 City of Sonoma

Similar to the Sonoma County General Plan, the Circulation Element of the City of Sonoma General Plan promotes alternative modes of transportation, roadway improvements, and traffic improvements throughout the planning area. As the plan focuses on the design and implementation of circulation system improvements, policies in this element do not directly relate to the proposed project.

In addition to the City's general plan, the Chapter 10.08 of the City of Sonoma Municipal Code details the City's regulations regarding the use of roads and the construction of utilities infrastructure, including encroachments. Numerous regulations are applicable to the proposed construction, including regulations detailing the use of roadways, the type of vehicles and load sizes allowable on given roadways, encroachment on private property, and the construction of utilities infrastructure. The municipal code applies to all roads within the City's jurisdiction, and project construction must adhere to all ministerial regulations presented in the Code.

### **14.3 EXISTING CONDITIONS**

Sonoma County is primarily considered a rural, low-density region, and major trip attractors are dispersed throughout the County and therefore, the dominant mode of transportation is the private automobile (SCTA 2001). The roadway network that will be affected by the project is located in southeastern Sonoma County, in and immediately southwest of the City of Sonoma. The transportation system in the project region is composed of an interconnected network of Federal, state, city, and county roads; local transit systems; local bikeways; and rail right-of-ways. Table 14-1 summarizes the characteristics of project area roadways, including all roadways used to access the project's transmission line route and substation sites and all roads crossed or potentially impacted by the project. Major project area roadways are described in detail below.

#### **14.3.1 Interstate and State Highways**

The project area includes two state highways—State Route 12 and State Route 116—each of which would be used to transport construction materials, equipment, and workers to and throughout the project area.

#### 14.3.1.1 State Route 12

State Route 12 is a two-lane highway that passes along the eastern edge of the project area. SR 12 widens to include turning lanes in both directions at its intersection with Watmaugh Road, and widens to four lanes plus turning lanes in both directions at its intersection with Leveroni Road. The current travel pattern within the City of Sonoma is dominated by State Route 12, which passes through downtown Sonoma and includes portions of Broadway, West Napa Street, and the Sonoma Highway. Traffic volumes are highest along SR 12 at West Napa Street (from Broadway to the Sonoma Highway), though traffic volumes on SR 12 are generally high within the project area as well. At Leveroni Road, southbound SR 12 has an annual average daily trip (ADT) total of 15,400 and a peak month ADT of 16,600 and northbound SR 12 has an annual ADT of 10,700 and a peak month ADT of 11,700 (Caltrans 2002).

#### 14.3.1.2 State Route 116

State Route 116 is a two lane highway that traverses the southern border of the project area and provides access to the area from areas south of Sonoma and areas southeast of the project site. At Arnold Drive, westbound SR 116 has an annual ADT of 15,400 and a peak month ADT of 17,000 and eastbound SR 116 has an annual ADT of 17,800 and a peak month ADT of 18,900 (Caltrans 2002).

In addition to the above state roadways, the project area is approximately 25 miles northwest of Interstate 80, the nearest interstate highway, and approximately 10 miles east of U.S. Highway 101. Interstate 80 serves as a major route connecting the southern Sonoma region with the San Francisco Bay Area and the Central Valley. Highway 101 also serves as a major route connecting the Sonoma region to the San Francisco Bay Area.

### **14.3.2 Other Roadways**

The majority of the project area is not directly accessible by interstate and state highways. The roadways shown in Table 14-1 may be used to access the project area during construction. Several of these roads have the potential to be impacted during project construction. Some will only be affected by a single transverse crossing, generally between intersections, though others will be used for access throughout project construction. Table 14-1 describes the local and county roads that border, cross, or may be used to access the proposed transmission route.

### **14.3.3 Public Transit**

Several fixed-route bus systems serve areas throughout Sonoma County, including the cities of Santa Rosa, Petaluma, Healdsburg, Cloverdale, and Sonoma. In addition, Sonoma County Transit and Golden Gate Transit provide service throughout Sonoma County. The project area is served by

several Sonoma County Transit bus routes which provide service throughout City of Sonoma and between the City of Sonoma and the surrounding cities (SCTA 2001).

In addition to fixed-route transit services, four paratransit services operate within Sonoma County. Three of these—Sonoma County Paratransit, Petaluma People Services, and Whistlestop Wheels—provide service in the project area. Paratransit services operate on demand and provide curb-to-curb transportation for individuals with disabilities (SCTA 2001).

#### **14.3.4 Rail Service**

Currently there is no rail service in Sonoma County. However, the recently formed Sonoma/Marin Area Rail Transit Commission (SMART) is in the process of developing a passenger rail operation on the existing public railroad right of way from southern Marin County to northern Sonoma County (SCTA 2001). Planning and environmental analysis are currently underway, and \$65 Million in state and Federal funds have been set aside to begin finalizing rail planning, develop corridor designs, acquire vehicles, and construct facilities for passenger train service (SMART 2003).

#### **14.3.5 Bicycle and Pedestrian Transportation**

Bicycling, hiking, and walking are common throughout Sonoma County. The Countywide Bicycle Advisory Committee (CBAC) and Sonoma Bicycle Advisory Committee (SBAC) support bicycle- and pedestrian-related development in the project area and surrounding vicinity. Class II and III bikeways currently exist in the City of Sonoma, currently Arnold Drive is north of the project is a class II bikeway (SCTA 2001). However, based on Sonoma County Transportation Authority's draft Comprehensive Transportation Plan, (SCTA 2004) Arnold Drive's class II designation will extend south to include Leveroni Road, encompassing Leveroni Road to a class II bikeway as well.

### **14.4 POTENTIAL IMPACTS AND MITIGATION MEASURES**

This section presents an analysis of the potential impacts to traffic, transportation, and circulation associated with project construction and operation. This project would have negligible impacts to transportation once it is completed. However, impacts associated with construction will result in short-term traffic disruption due to occasional temporary lane closures and slower driving speeds as a consequence of construction activities. No road closures are expected. With mitigation, these temporary impacts will be less than significant. There also would be a slight increase in vehicular traffic from trucks or light-duty vehicles transporting equipment or personnel, but these impacts would also be insignificant.

#### **14.4.1 Significance Criteria**

Standards of significance were developed from Appendix G of the CEQA Guidelines. As such, traffic- and transportation-related impacts were determined to be significant if the project will:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system, including but not limited to a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections;
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature, such as a sharp curve or dangerous intersection, or incompatible uses, such as farm equipment;
- Result in inadequate emergency access;
- Result in inadequate parking capacity;
- Conflict with adopted policies, plans, or programs supporting alternative transportation, such as bus turnouts or bicycle racks.

#### **14.4.2 Construction Impacts**

Virtually all traffic, transportation, and circulation-related impacts will occur during project construction. Though project construction would involve the transportation of construction crews, their equipment, and transmission equipment, it would not generate a substantial number of vehicle trips within the project area or region. Typical truck traffic would include concrete trucks, and periodic delivery of poles, conductor spools, hardware and equipment. Construction will include the transportation of oversize loads, such as pole trucks. Safety measures as described in the encroachment permits will be implemented during the transportation of large or oversize loads. No impacts are anticipated and no mitigation is recommended.

Project construction could include temporary closure of one lane of traffic on Frates Road, Adobe Road, and Leveroni Road. (Frates Road may be wide enough to place cones to create a 3-lane pattern with the north shoulder / lane closed.) Lane closures could occur when poles along Frates Road and Adobe are being “topped” (tops cut off and only distribution lines remain). Installation of new poles along segment 17 would also require the temporary closure of one lane of traffic on Leveroni Road. Lane closures will require a Traffic Control Plan (TCP) from Sonoma County. These lane closures will be subject to TCP permitting from the County. The TCP will follow the

Caltrans Encroachment Permit Handbook for lane closure design, necessary warning signs, flag personnel and limitations on closure times dependent upon the traffic volume and time of day. Once the permit is issued, PG&E may be required to provide notice of lane closures in advance of the actual work, dependant upon the requirements of the TCP.

Construction as planned would occur over a period of approximately 19 months, and lane closures would occur as needed along Frates Road (possibly), Leveroni Road, and Adobe Road. At locations of lane closures or lane width reductions, PG&E will develop traffic diversion plans in compliance with the Caltrans' manual and Sonoma County to prevent excessive congestion or traffic hazards. PG&E will also follow the traffic diversion plans as prescribed by the encroachment permits. Because closures would abide by city and county regulations and would be temporary in nature, impacts associated with temporary lane closure would be less than significant and mitigation is not required.

Prior to transmission line construction, two staging areas will be prepared for materials delivery, storage, and preparation prior to construction. One staging area will be located off of Adobe Road near the Lakeville substation, as shown in the Figure 2-4(a). The other will be near the Sonoma substation, as shown in Figure 2-4(d). The sites will also be used as helicopter landing areas.

While traffic to and from the staging areas will increase during the project construction, it is not anticipated to disrupt traffic to residential or commercial developments. However, because commuter traffic is heavy, a Traffic Control Plan will be prepared according to Caltrans Manual requirements and submitted for approval by the Sonoma County Transportation and Public Works Department. Additionally, helicopter traffic to and from the staging areas may cause temporary distractions for drivers. It is possible where helicopter landing areas are near roads (e.g., Adobe and Leveroni Roads) traffic must be stopped when a loaded helicopter is within a specified distance of a roadway, which would cause traffic disruptions. To minimize impacts to less than significant, helicopter work will be performed according to the FAA Lift Plan (see Chapter 13 Public Health and Safety, and Hazardous Materials) and encroachment permits from Caltrans and in coordination with Sonoma County. PG&E will also follow its standard safety practices and those outlined in the pertinent permits. No impacts are expected and no mitigation is required.

Installation of transmission lines (conductors) will include removal of existing conductors and installation of new conductors. Prior to stringing conductors, temporary clearance structures will be installed at 11 road crossings and other locations where the new conductors could accidentally come into contact with electrical or communication facilities, other power lines, and/or vehicular traffic during installation (Please see section 2.4.1.10 and Figure 2-11 in Chapter 2). Traffic control will be provided where necessary during installation and removal of these temporary clearance structures. The structures consist of a wood pole with a frame at the top that resembles a "Y" placed on each side of the road or power line being crossed; installation and removal of clearance structures is

similar to that of wood poles, though less excavation is required and no foundation is required. This will not require grading and will prevent the conductor from being lowered or falling into traffic or onto another power line. No impacts associated with installation of conductors are anticipated; therefore, mitigation is not required.

#### **14.4.3 Operation Impacts**

During project operation, routine maintenance trips, inspection, as well as occasional vegetation management activities will continue to occur along transmission routes and at substations in the project area. Vegetation management in the right-of-way may include control of noxious weeds and trimming of shrubs or trees for safety upkeep and would be limited to seasonal and yearly traffic and would not increase traffic in the project area. There will be no increase in these activities above existing operations, and thus no additional traffic impacts.

There are no airports within two miles of the project, so there will be no impacts on airport take-offs and landings. No emergency response plan staging areas are located along the project corridor. The project does parallel Adobe and Leveroni Roads, which are major thoroughfares, and could be used as evacuation routes under some emergency scenarios. PG&E would halt and remove maintenance activities and equipment from these roads in the event of an emergency. Impacts to traffic and transportation in the project area associated with project operation will be negligible, and no mitigation will be required.

#### **14.5 REFERENCES**

California Department of Transportation (Caltrans). 2001. Construction Manual. Website accessed July 19, 2004. <http://www.dot.ca.gov/hq/construc/manual2001>.

Caltrans. 2002. Traffic Estimates.

City of Sonoma website accessed July 8, 2004. [www.sonomacity.org](http://www.sonomacity.org).

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SCTA. 2001. Countywide Transportation Plan of Sonoma County.