DOCKETED	
Docket Number:	26-OPT-01
Project Title:	Vaca Dixon Power Center Project
TN #:	268151
Document Title:	Section 5-4_Traffic and Transportation_VDPC
Description:	This section discusses the potential effect on traffic and transportation from the Project. This section relies on information from the Transportation Impact Study prepared for the Project (Appendix L).
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Submitter Role:	Applicant Consultant
Submission Date:	1/6/2026 12:41:20 PM
Docketed Date:	1/16/2026

5.4 Traffic and Transportation

This section discusses the potential effect on traffic and transportation from the Vaca Dixon Power Center Project (Project). Section 5.4.1 describes nearby transportation facilities that might be affected by the Project, including roads, public transportation, rail, air, bicycle, and pedestrian facilities. Section 5.4.2 describes the regulatory setting of the Project in terms of traffic and transportation. Section 5.4.3 presents the impact analysis and Section 5.4.4 presents the cumulative impacts of the Project with respect to traffic and transportation. Section 5.4.5 describes the laws, ordinances, regulations, and standards (LORS) applicable to traffic and transportation for the Project. Section 5.4.6 presents the agencies that have jurisdiction over traffic and transportation and specifies the relevant agency contacts. Section 5.4.7 describes the permits required for traffic and transportation and a schedule for obtaining the permits. Section 5.4.8 provides the references used to prepare this subsection.

5.4.1 Environmental Setting

The Project Site is located in the City of Vacaville in Solano County. Main access to the Project BESS facilities would be provided from Kilkenny Road (County Road 393) on the south end of the Project Site. To the east of the BESS Project Area, Kilkenny Road connects to Byrnes Road, where Project traffic would transfer to Weber Road to access Interstate 80 (I-80). To the south of the Project, Kilkenny Road connects to Willow Road, Walnut Road, Orange Drive, and Leisure Town Road where Project traffic would access I-80 and Vaca Valley Parkway. The primary access to the gen-tie routes on the PG&E parcel would be via Quinn Road and the private plant access road to the Vaca Dixon Peaker Plant. Construction of the gen-tie would require minimal vehicle trips to deliver materials and equipment. Gen-tie construction would also require a short-term, temporary closure of Quinn Road and portions of I-80 to install the overhead crossing. For purposes of the analysis, the "Transportation Study Area" refers to the roadway network expected to experience Project-related traffic, as defined in the Project Transportation Impact Study (TIS) prepared for the Project in October 2025 by VRPA Technologies Inc. (Appendix L). As Quinn Road and I-80 will result in short-term impacts from gen-tie installation, they were not included in the overall TIS but are incorporated in the impact analysis including in Section 5.4.3. Therefore, the Transportation Study Area includes the following segments:

- Vaca Valley Parkway, I-80 to Orange Drive
- Orange Drive, Vaca Valley Parkway to Walnut Road
- Walnut Road, Orange Drive to Willow Road
- Willow Road, Walnut Road to Kilkenny Road/BESS Project Area
- Kilkenny Road/BESS Project Area, Willow Road to Byrnes Road
- Byrnes Road, Kilkenny Road to Weber Road
- Weber Road, Byrnes Road to I-80

The following subsections provide an overview of regional and local transportation facilities within the Project Site vicinity, including roadway, pedestrian, bicycle, public transport, rail, and air facilities. Figure 5.4-2 presents a regional overview of major transportation facilities and the Project Site, and Figure 5.4-3provides a localized context of transportation facilities within the Project Site vicinity. In accordance with the California Energy Commission's (CEC) requirements for Opt-In Applications (Title 20, California Code of Regulations, Section 1704, Appendix B), transportation facilities shown include existing roads, transit bus routes, railroads, pipelines, canals/ditches, canal-related artificial paths, schools, and bus stops.

5.4.1.1 Existing Regional and Local Transportation Facilities

Roadways

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. The description below is based on information included in the Solano County General Plan (Solano County 2008) and the City of Vacaville General Plan (City of Vacaville 2015).

The current hierarchical system of roadways in the Transportation Study Area consists of the following classifications:

- **Arterials** are four- to six-lane divided roadways, with somewhat limited access to abutting properties, and with the primary purpose of moving traffic within and between community plan areas and to and from freeways and expressways.
  - **Vaca Valley Parkway** is a four/six-lane divided arterial. The portion of Vaca Valley Parkway within the Transportation Study Area runs between Orange Drive and I-80.
- **Collectors** are two to four-lane undivided roadways, with the primary function of connecting local streets and arterials and neighborhood traffic generators and providing access to abutting properties.
  - The portions of Orange Drive, Walnut Road, Willow Road, and Weber Road within the Transportation Study Area are two to four-lane undivided collectors.
- **Local Streets** are two- to three-lane public or private roadways designed to provide direct access to properties while discouraging through traffic between major streets. They are intended to carry low volumes of traffic and support unrestricted on-street parking.
  - Kilkenny Road and Byrnes Road are designated as Local Streets within the Transportation Study Area (City of Vacaville 2015).

There are no planned changes to the roadway system within the Transportation Study Area.

Pedestrian

The BESS Project Area is located on private land, currently used for agriculture. The Project Site is bordered by I-80 to the north and west, Kilkenny Road to the south, and additional agricultural parcels. There are no pedestrian facilities, including sidewalks, trails, or other walking areas within the Transportation Study Area.

Figure 5.4-1 Study Area Roadways

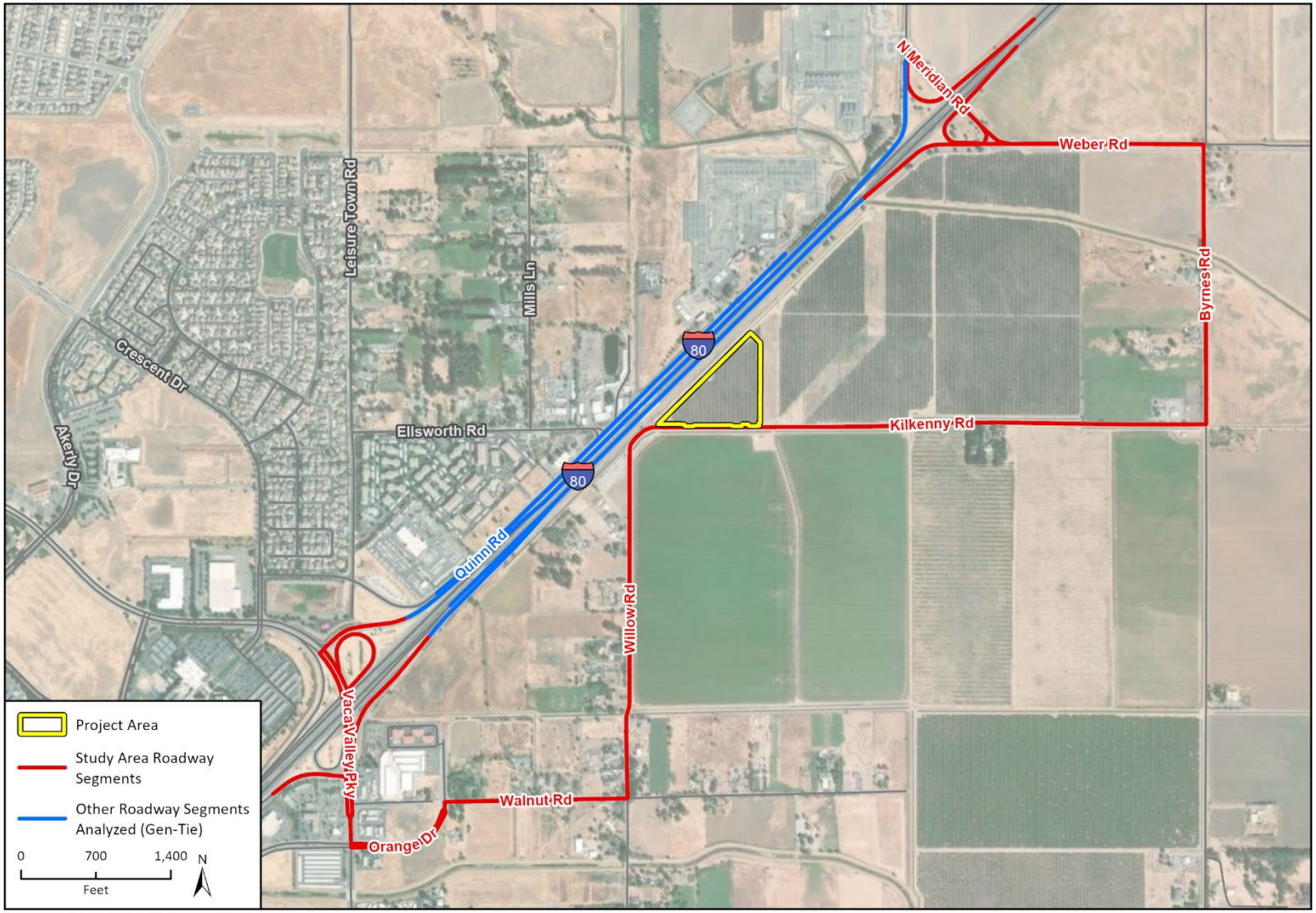
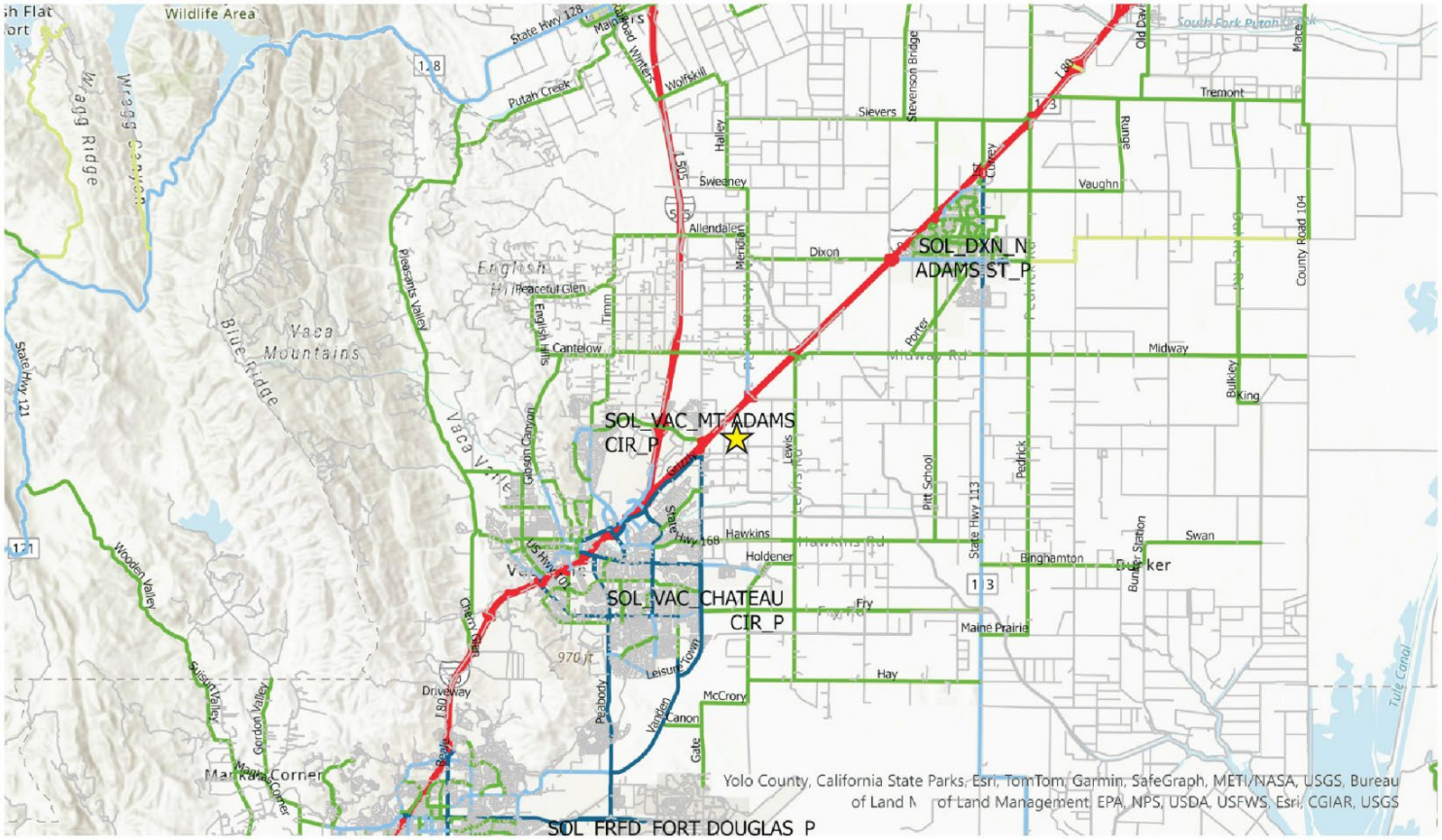


Figure 5.4-2 Regional Transportation Facilities

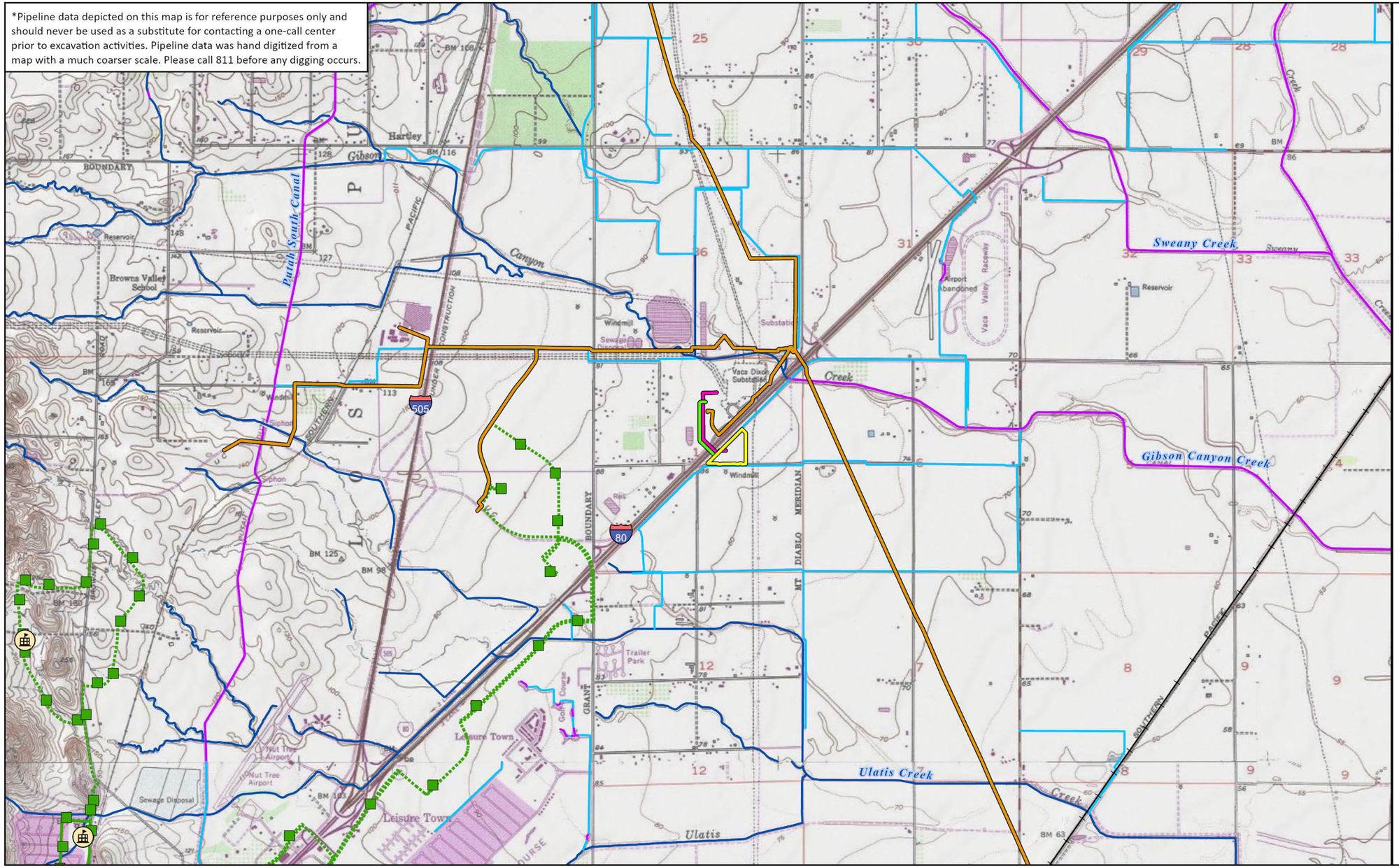


Yolo County, California State Parks, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS, Esri, CGIAR, USGS

Source: Vaca Dixon Power Cente, 2025.

Figure 5.4-3 Local Transportation Facilities Overview

*Pipeline data depicted on this map is for reference purposes only and should never be used as a substitute for contacting a one-call center prior to excavation activities. Pipeline data was hand digitized from a map with a much coarser scale. Please call 811 before any digging occurs.



Vaca Dixon Power Center Project

Solano County, California

- BESS Project Area
- 115 kV Overhead Gen-tie
- 13.8 kV Overhead Gen-tie
- Canal/Ditch
- Stream/River
- Artificial Path
- Transit Bus Route
- Gas Transmission Pipeline*
- Railroad
- Bus Stop
- School

0 0.25 0.5 Miles N

RINCON CONSULTANTS

Imagery provided by ESRI, National Geographic Society, and their licensors © 2025.
Additional data provided by the U.S. Geological Survey National Hydrography dataset, 2025, the National Pipeline Mapping System, 2025, and Solano County, 2025.

25-17851 EPS
Fig 5.4-2 Local and Regional Transportation Facilities

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Bicycle Facilities

Bicycle facilities are typically categorized into four classes as follows:

- **Class I facilities** are bike paths or trails with an exclusive right-of-way (ROW) for bicycles separate from vehicles.
- **Class II facilities** are bike lanes with an exclusive ROW for bicycles designated by roadway striping and signs.
- **Class III facilities** are bike routes signed for shared travel with motorized vehicles, without any striping. In addition, a shared lane marking or sharrow is a street marking placed in the center of a travel lane to indicate that a bicyclist may use the full travel lane.
- **Class IV facilities**, also known as cycle tracks or separated bikeways, are bikeways for the exclusive use of bicycles and include a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Within the Transportation Study Area, there are no designated or planned bicycle routes.

Public Transportation

Vacaville City Coach provides public transportation within the City of Vacaville. While there are no bus routes or bus stops within or adjacent to the Project Site, there are several stops along City Coach Route 4, which is within one mile of the Project Site along Crescent Drive and Vaca Valley Parkway. These stops are marked with green squares on Figure 5.4-3. The nearest stop is approximately 0.7 mile from the Project Site and is located at the intersection of Crescent Drive and Parkside Drive.

Rail Traffic

The nearest railroad to the Project Site is operated by Amtrak and has connections running to Sacramento, Oakland, and San Francisco. The railroad is approximately 8 miles southwest of the Project Site.

Air Traffic

The Project is approximately 2.5 miles northeast of the Nut Tree Airport. The airport's layout, including its runways, influence area, and the Project's location are shown in Figure 5.4-4. The Project Site lies outside the designated Airport Influence Area (AIA) of the Nut Tree Airport, as defined in the Solano County 1988 Airport Land Use Plan (Solano County 1988).

The Project Site is located approximately 8.7 miles north of Travis Air Force Base (AFB) and falls within the AIA established by the Travis AFB Land Use Compatibility Plan (LUCP), which was adopted by the Solano County Airport Land Use Commission (ALUC) in 2024. Specifically, the Project is located in Compatibility Zone D of the LUCP as shown in Figure 5.4-5 (Solano County 2024).

Pipelines and Canals

As shown in Figure 5.4-3, there are several canals and natural gas pipelines adjacent to the Project Site; however, none of these features cross the Project Site.

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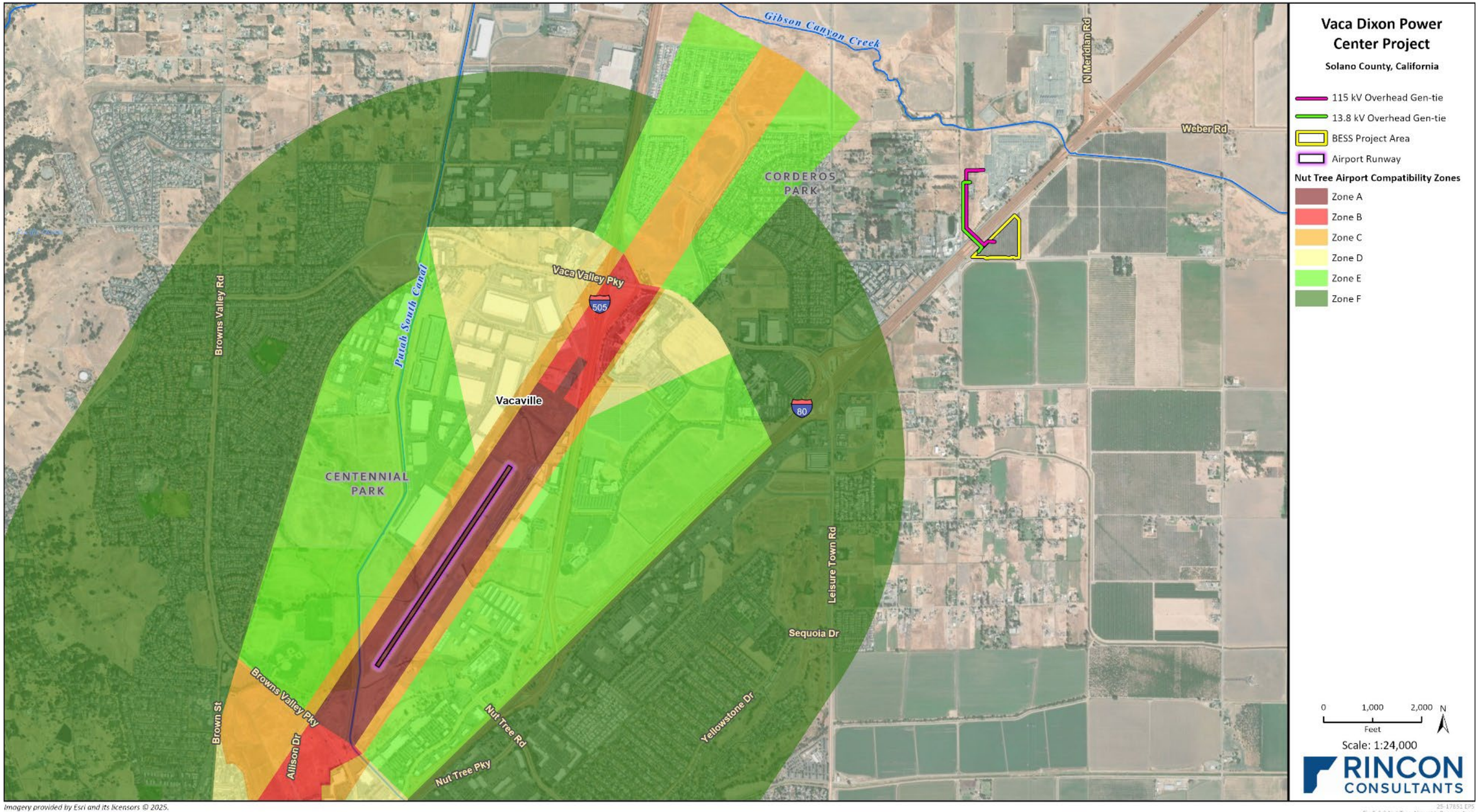
Figure 5.4-4 Nut Tree Airport Influence Area



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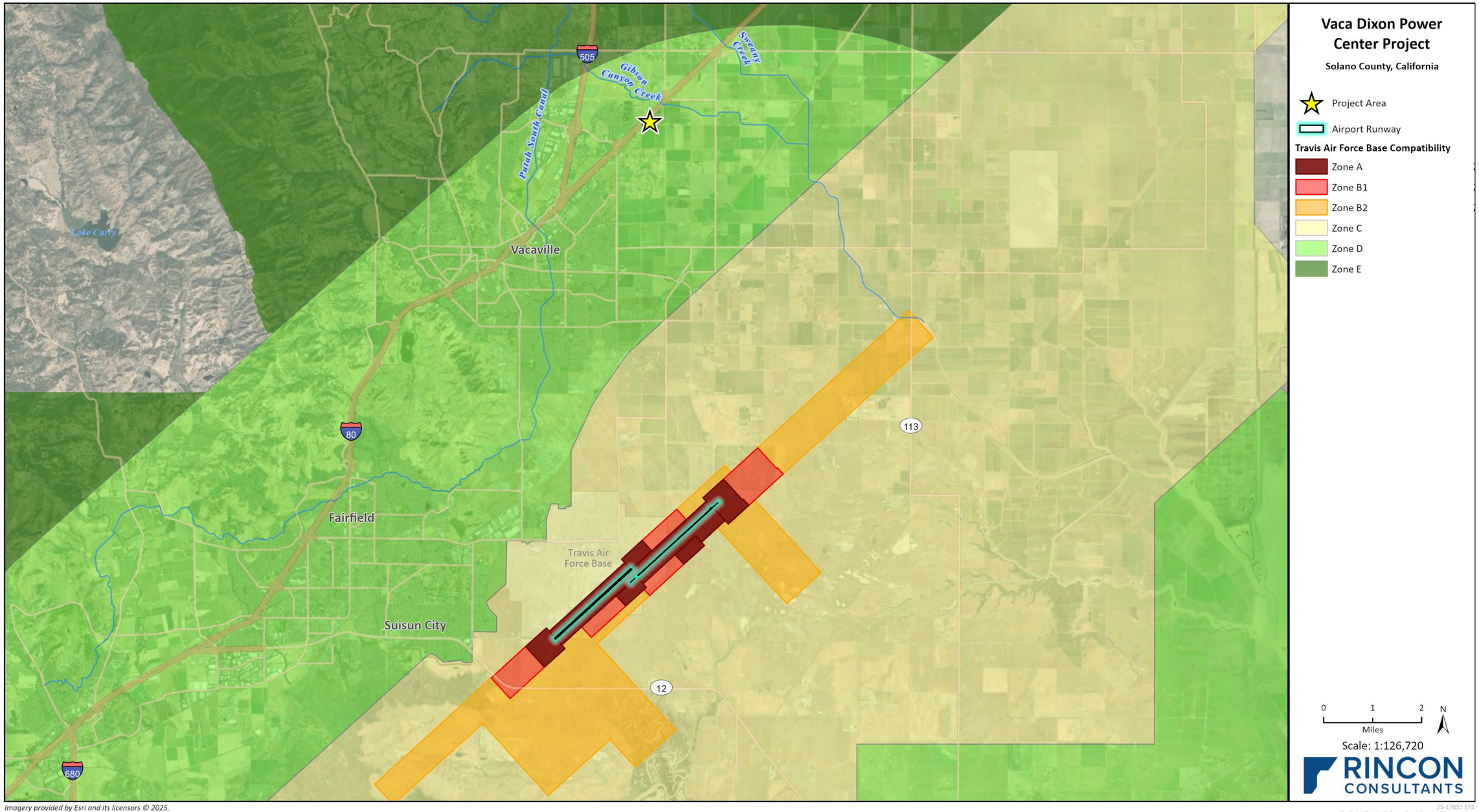
Additional data provided by Solano County, 2025.

25-17851.EPS
Fig 5.4-3 Nut Tree Airport Influence Area

Figure 5.4-5 Travis Air Force Base Airport Influence Area



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Additional data provided by Solano County, 2025.

25-17851 EPS
Fig 5.4-4 Travis Airforce Base Area Influence Area

5.4.1.2 Existing Traffic Conditions and Level of Service

Existing Roadway Conditions

Traffic conditions on roadways are measured in terms of level of service (LOS), which describe operational conditions within a traffic stream and reflect speed, freedom to maneuver, traffic interruptions, and comfort and convenience. Six LOS are defined for each type of facility, ranging from "A" for the best-operating conditions to "F" for the worst, based on a driver's perceptions of those conditions. The following street segments near and adjacent to the Project Site were analyzed to determine LOS:

- Vaca Valley Parkway, I-80 to Orange Drive
- Orange Drive, Vaca Valley Parkway to Walnut Road
- Walnut Road, Orange Drive to Willow Road
- Willow Road, Walnut Road to Kilkenny Road/BESS Project Area
- Kilkenny Road/BESS Project Area, Willow Road to Byrnes Road
- Byrnes Road, Kilkenny Road to Weber Road
- Weber Road, Byrnes Road to I-80

As shown in Table 5.4-1, all roadway segments in the Transportation Study Area currently operate at LOS D or better.

Table 5.4-1 Existing Roadway Segment Operations

			Existing	
Street Segment	**Segment Description**	**Target LOS**	**Average Daily Traffic (ADT)**	**Level of Service (LOS)**
Vaca Valley Parkway				
West of I-80	Four lane divided	D	28,800	D
Leisure Town Road				
I-80 to Orange Drive	Six lane divided	D	12,700	A
Leisure Town Road to Walnut Road	Four lane undivided	D	100	A
Walnut Road				
Orange Drive to Willow Road	Two lane undivided	D	100	A
Willow Road				
Walnut Road to Kilkenny Road	Two lane undivided	D	100	A
Kilkenny Road				
Willow Road to Byrnes Road	Two lane undivided	D	100	A
Byrnes Road				
Kilkenny Road to Weber Road	Two lane undivided	D	100	A
Weber Road				
Byrnes Road to I-80	Two lane undivided	D	400	A

Source: Appendix L

5.4.1.3 Other Projects

Future Plans and Projects

Plan Bay Area 2050 is the Bay Area's long-range regional plan adopted by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG), amended and adopted in November 2024. The plan was reviewed to determine whether there were any planned projects relevant to the Project's potential impacts to traffic. The Plan Bay Area 2050 Transportation Project List includes corridor and interchange improvements along Vaca Valley Parkway, I-80, I-505, State Route 37, and State Route 12 in Solano County. The proposed changes to Vaca Valley Parkway include roundabout installations, and new bicycle and pedestrian facilities; however, these are located outside of the Transportation Study Area.

5.4.2 Regulatory Setting

A review of existing relevant LORS was conducted to understand the regulatory context for traffic and transportation surrounding the Project. LORS applicable to traffic and transportation are detailed in Section 5.4.5.

5.4.3 Impact Analysis

The following subsections discuss the potential direct and indirect impacts related to traffic and transportation from construction and operation (including maintenance) of the Project.

5.4.3.1 Methodology

A review of publicly available information was conducted to identify and assess potential impacts related to traffic and transportation, including the:

- Plan Bay Area 2050
- Vacaville General Plan
- Vacaville Code of Ordinances
- Solano County Active Transportation Plan
- Solano Countywide Pedestrian Transportation Plan
- Solano County Multi-Jurisdictional Hazard Mitigation Plan
- Nut Tree Airport Land Use Compatibility Plan
- Travis Airforce Base Land Use Compatibility Plan

Additionally, a Project-specific TIS has been prepared, which includes an analysis of the Project's impacts to LOS on local roadways and is referenced as Appendix L.

Vehicle Miles Traveled Threshold

Pursuant to Senate Bill (SB) 743, evaluating transportation impacts under CEQA has shifted from LOS to vehicle miles traveled (VMT) (California Governor's Office of Land Use and Climate Innovation [LCI] 2018). The intent of SB 743 is to align transportation impacts under CEQA with the State's overall goals of increasing long-term sustainability by reducing greenhouse gas emissions. The VMT analysis focuses on automobile and light-duty truck trips (LCI 2018). An evaluation of VMT related to Project operations was conducted. Construction trips are not analyzed in a VMT analysis because they are temporary and would not impact overall per capita VMT in the region.

City of Vacaville Level of Service Analysis Threshold

The City of Vacaville is currently amending their thresholds to measure traffic impacts using VMT analysis under CEQA. However, the thresholds in place still use "level of service" (LOS) to assess intersection and road segment operations to determine if any improvements are needed. LOS is a qualitative description of traffic flow from a vehicle driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined, ranging from LOS A (free-flow conditions) to LOS F (over-capacity conditions). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result, and the results are designated as LOS F.

Per the Vacaville General Plan, an LOS of "C" or better is considered acceptable and is the target for roadways within the City. LOS "D" is the minimal accepted operational standard on all-way stop control intersections and two-way stop control intersections (City of Vacaville 2015).

5.4.3.2 Impact Evaluation Criteria

The potential for impacts to traffic and transportation were evaluated using the criteria described in the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines). Specific to traffic and transportation, the CEQA Checklist asks, would the Project:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; and/or
- Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and/or
- Result in inadequate emergency access.

In addition, the CEC requirements for Opt-In Applications ask for an evaluation of Project-related hazardous materials to be transported to or from the Project Site during construction and operation as well as applicability with all sections of the current Federal Aviation Regulation Part 77.

Impact TRA-1

Threshold:	Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Project Site does not contain pedestrian, bicycle, public transportation, railway, or airport facilities. There are pedestrian, bicycle, and public transportation facilities along Vaca Valley Parkway and portions of Orange Drive near the Project Site. However, the Project would not include any activities which would conflict with the use of these facilities. Thus, the Project would be consistent with the Solano County Active Transportation Plan, and the Solano Countywide Pedestrian Transportation Plan because no public transportation service or dedicated pedestrian or bicycle facilities exist on roadways that would be used to access the Project Site.

Main access to the Project BESS facilities would be provided from Kilkenny Road (County Road 393) on the south end of the Project Site. To the east of the BESS Project Area, Kilkenny Road connects Byrnes Road where Project traffic would transfer to Weber Road to access eastbound or westbound I-80. To the south of the BESS Project Area, Kilkenny Road connects to Willow Road, Walnut Road, and Orange Drive where traffic would access eastbound or westbound I-80. Approximately 60% of

truck trips would approach the Project Site from westbound I-80, exiting at Exit 59 and continuing east on Weber Road to the Project access road. In addition, an estimated 70% of automobile trips are expected to approach from I-80, exiting at Exit 57 and traveling south on Leisure Town Road to the Project access roads.

Construction

Less than Significant. The TIS prepared for the Project (Appendix L) includes discussion of the distribution of Project construction traffic (Figure 5.4-6), the distribution of existing plus Project construction traffic (Figure 5.4-7), and the near-term (2029) traffic conditions (Figure 5.4-8). As discussed therein, and shown in Table 5.4-2, in the existing plus Project traffic scenario all roadway segments in the traffic analysis Transportation Study Area are expected to operate at LOS D or better, indicating roadway segment operations that will meet City of Vacaville's minimal accepted operational standard on all-way stop control intersections and two-way stop control intersections. In 2029, the year of Project completion, with the addition of Project construction traffic, all roadway segments within the Transportation Study Area are expected to continue operating at a LOS D or better (Table 5.4-3). Traffic levels on these two roadway segments would meet City of Vacaville's minimal standards.

Operation

Less than Significant. During operation, the Project Site would only experience occasional visits for maintenance activities. Traffic impacts associated with operation of the Project would be negligible. As such, the Project would not conflict with established LOS thresholds adopted by the City of Vacaville, nor would it conflict with any other program, plan, ordinance, or policy addressing the circulation system.

Table 5.4-2 Existing Plus Project Construction Roadway Segment Operations

Street Segment	Segment Description	Target LOS	Existing Average Daily Traffic (ADT)	Project ADT	Existing Plus Project ADT	Existing Plus Project Level of Service (LOS)
Vaca Valley Parkway						
West of I-80 (Existing Plus Project)	Four Lane divided	D	28,800	30	23,830	D
Leisure Town Road						
I-80 to Orange Drive	Six Lane divided	D	12,700	70	12,770	A
Orange Drive						
Leisure Town Road to Walnut Road	Four Lane undivided	D	100	70	170	A
Walnut Road						
Orange Drive to Willow Road	Two Lane undivided	D	100	70	170	A
Willow Road						
Walnut Road to Kilkenny Road	Two Lane undivided	D	100	70	170	A
Kilkenny Road						
Willow Road to Byrnes Road	Two Lane undivided	D	100	480	580	A
Byrnes Road						
Kilkenny Road to Weber Road	Two Lane undivided	D	100	480	580	A
Weber Road						
Byrnes Road to I-80	Two Lane undivided	D	400	480	880	A

Appendix L

Table 5.4-3 2029 Plus Project Construction Roadway Segment Operations

Street Segment	Segment Description	Target LOS	Year 2029 Average Daily Traffic (ADT)	Project ADT	Year 2029 Plus Project ADT	Year 2029 Plus Project Level of Service (LOS)
Vaca Valley Parkway						
West of I-80 (Year 2029 Plus Project)	Four Lane divided	D	30,200	30	30,230	D
Leisure Town Road						
I-80 to Orange Drive	Six Lane divided	D	13,300	70	13,370	A
Orange Drive						
Leisure Town Road to Walnut Road	Four Lane undivided	D	200	70	270	A
Walnut Road						
Orange Drive to Willow Road	Two Lane undivided	D	200	70	270	A
Willow Road						
Walnut Road to Kilkenny Road	Two Lane undivided	D	200	70	270	A
Kilkenny Road						
Willow Road to Byrnes Road	Two Lane undivided	D	200	480	680	A
Byrnes Road						
Kilkenny Road to Weber Road	Two Lane undivided	D	200	480	680	A
Weber Road						
Byrnes Road to I-80	Two Lane undivided	D	500	480	980	A

Source: Appendix L

Figure 5.4-6 Project Construction Average Daily Traffic Distribution

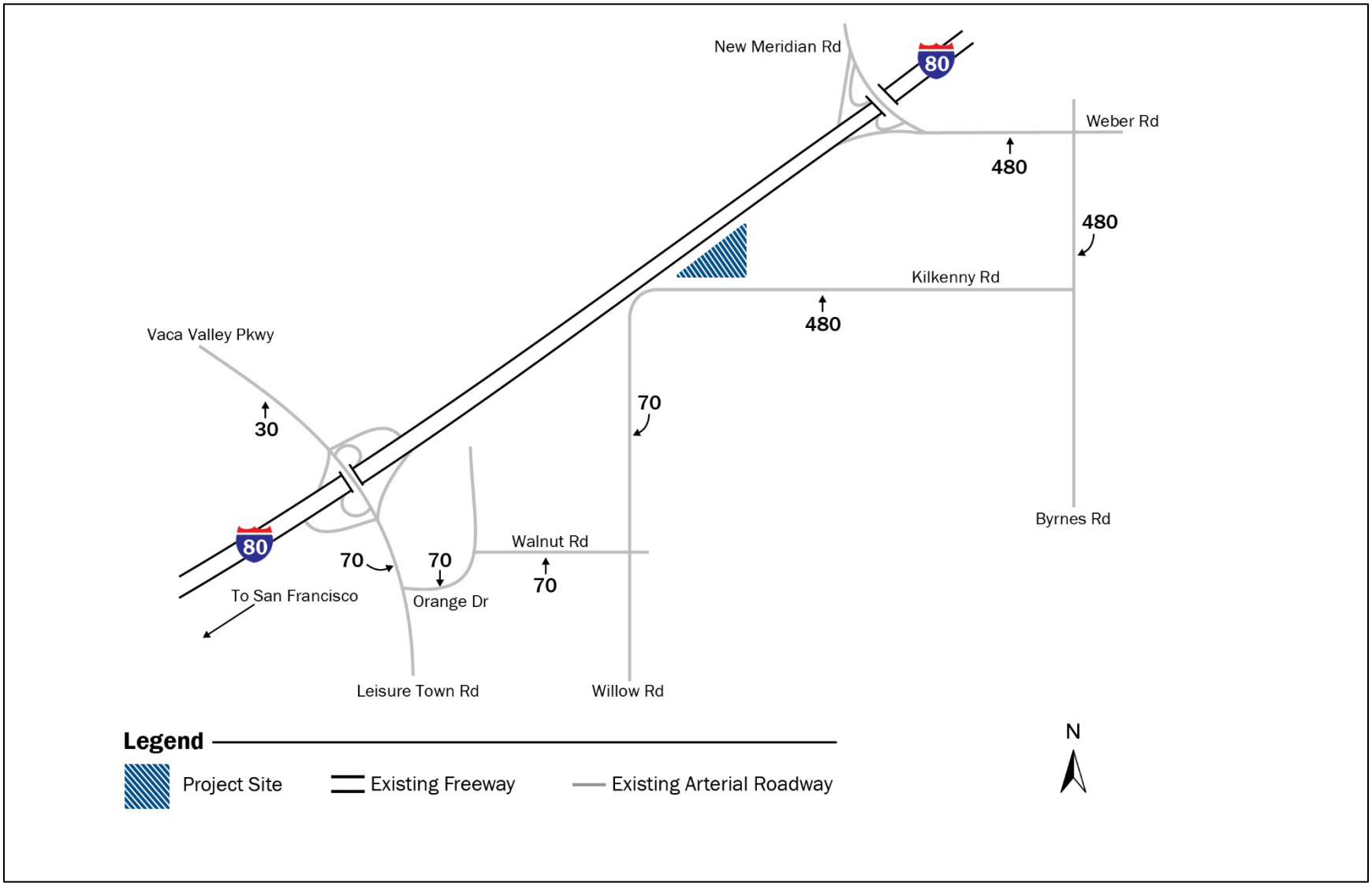


Figure 5.4-7 Existing Plus Project Construction Average Daily Traffic Distribution

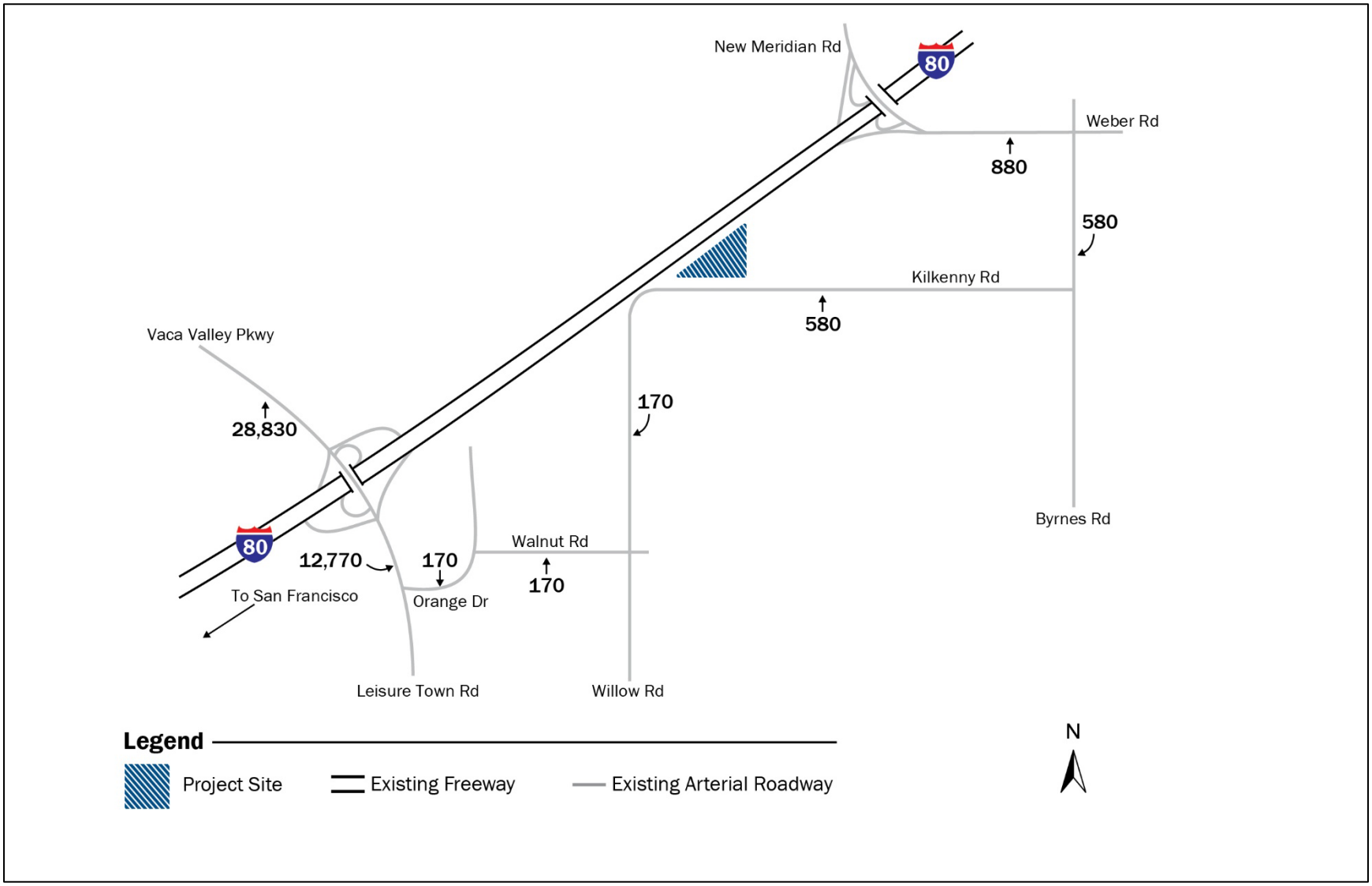
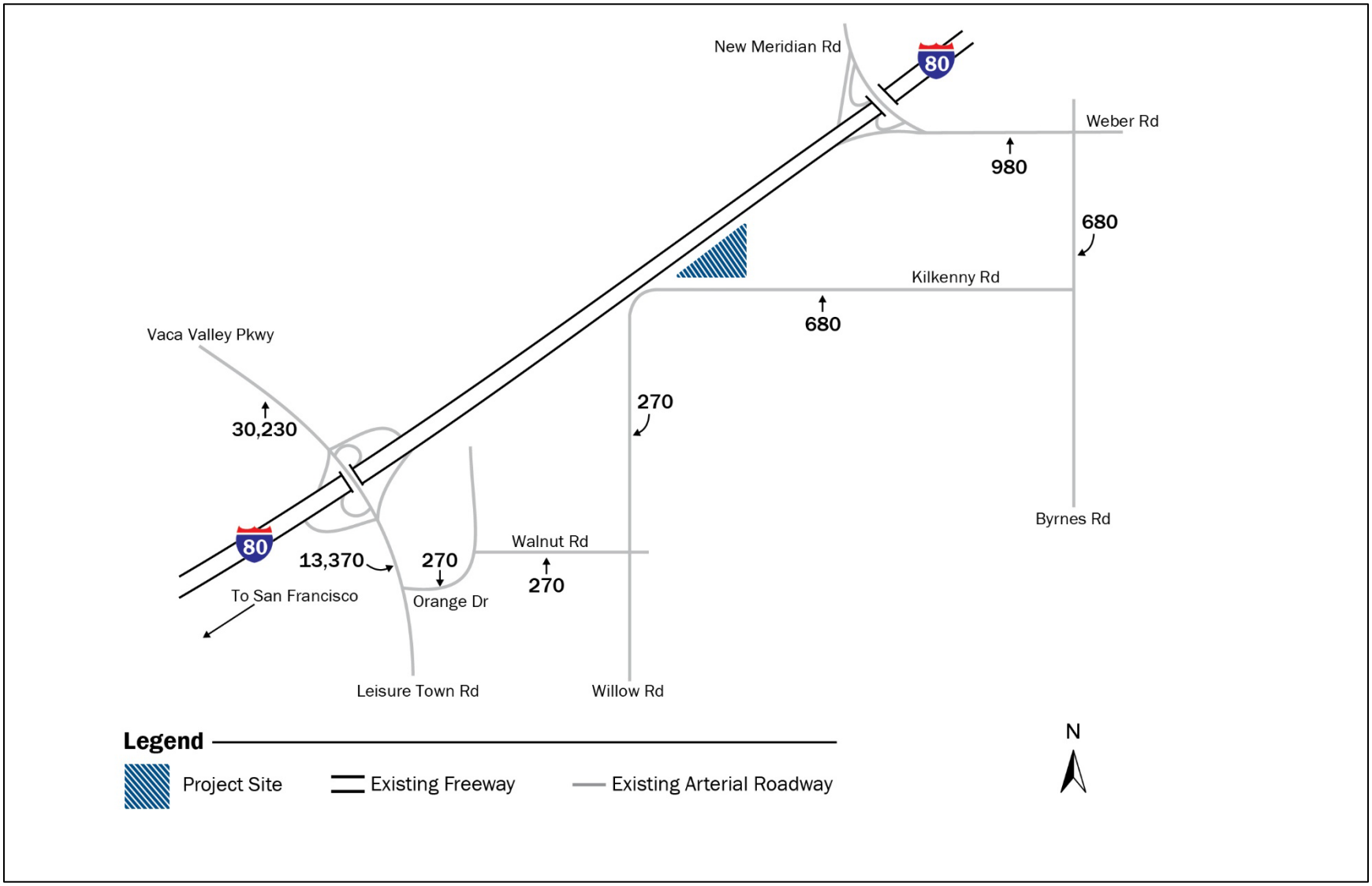


Figure 5.4-8 2029 plus Project Average Daily Traffic Distribution



Impact TRA-2

Threshold:	Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Overall Project

Construction

Less than Significant Impact. During construction, daily trips made by workers and delivery/haul trucks to and from the Project would result in an increase in VMT. Construction is anticipated to result in a maximum of 50 round trip truck trips (100 one-way trips). Trips generated by Project construction is anticipated to also include 40 round trips made by workers and 10 round trips made by vendors. This increase in VMT would be temporary in nature, only lasting the duration of the construction phase. The Project's effect on VMT during construction would therefore not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) and impacts would be less than significant.

Operation

Less than Significant Impact. Operation of the Project would require only a small number of trips to perform maintenance activities. The traffic analysis focused on construction activity since the number of trips generated by the Project is anticipated to be negligible once the Project is under operation. Therefore, the Project's effect on VMT during operation would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) and impacts would be less than significant.

Impact TRA-3

Threshold:	Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Overall Project

Less than Significant Impact. Construction of the Project would include internal access roads which would connect to Kilkenny Road. These internal asphalt access roads would be approximately 20 feet wide and would be constructed to provide vehicular access within the BESS facilities. None of these proposed roadways would have geometric design features that would be hazardous as they are extensions of existing roadways to provide access to the Project Site. Furthermore, the roads constructed as part of the Project would be private roadways intended to provide access to the Project Site for construction and maintenance and in the case of an emergency. The Project would not modify or reconfigure any existing public roadways near the Project Site, such as Kilkenny Road or Byrnes Road, nor would the Project introduce incompatible uses on any existing roadways. Therefore, impacts would be less than significant.

Impact TRA-4

Threshold:	Would the Project result in inadequate emergency access?

Less than Significant Impact. Construction and operation of the Project would not result in changes to intersections or the existing roadway system. As discussed in Impact TRA-3, the roadways constructed as part of the Project would be private extensions of existing private roadways near the Project Site and the Project would not change any existing public roadways. Additionally, vehicle trips generated by Project construction and operation would not constitute a substantial addition of vehicles to local roadways. As shown in Figure 5.4-7, the addition of construction worker and truck trips to roadways within the Transportation Study Area would not represent a substantial addition of vehicles that would interfere with current LOS targets. In the unlikely event of a thermal runaway event, emergency response could require a temporary closure of I-80 near the aerial gen-tie crossing. Such an event would be managed under established emergency response protocols in coordination with Caltrans and local agencies. Because this event would be coordinated, it would not result in inadequate emergency access. In addition, roadways, including I-80 and Quinn Road, may be closed temporarily during construction of the gen-tie crossing; however, in the event of closure, clear signage (e.g., detour signs) would be provided to ensure vehicles are able to adequately reach their intended destinations safely.

Impact TRA-5

Threshold:	Would the Project result in significantly increased hazards associated with Project-related hazardous materials to be transported to or from the Project site?

CEC requirements for Opt-In Applications (Title 20, California Code of Regulations, Section 1704, Appendix B Traffic and Transportation Requirement [E]) necessitate a discussion of Project-related hazardous materials to be transported to or from the Project Site. The Project would involve the transport of hazardous materials to and from the Project Site during both construction and operation.

Hazardous material transport during Project construction and operation would comply with all applicable federal, state, and local laws and regulations, including Code of Federal Regulations (CFR) Title 49 Parts 172, 173, and 179; CFR Title 49 Part 397.9 (Hazardous Materials Transportation Act of 1974); and the Solano County Multi-Jurisdictional Hazard Mitigation Plan. Division 13, Section 31303 of the California Vehicle Code stipulates that the transportation of regulated substances and hazardous materials is required to be carried out via the most direct route, using state or interstate highways whenever possible. In accordance with this policy, for the Project, subject to Caltrans approval, the recommended route for delivery of regulated or hazardous materials is via I-80 and I-505.

Additionally, the following hazardous waste transportation requirements and procedures would apply during Project construction and operation:

- **Requirements of haulers.** Qualified haulers would be retained to transport hazardous waste from the Project. The selected haulers would be fully licensed and insured to transport hazardous waste. Haulers would follow all applicable requirements in the CFR with regard to loading, unloading, and general handling, based on transport mode.

- **Truck loading operations.** Trucks would be loaded at designated staging areas for transportation to the designated receiving facility. Stray material on vehicles, tires, or the lip of the container, etc., would be removed manually with a brush. The container of the truck would be covered to prevent release of materials from the truck during transport.
- **Transportation.** Hazardous waste haulers would have a valid Department of Toxic Substances Control registration and would satisfy the following requirements:
  - Vehicles would have passed an annual inspection;
  - Vehicle operators would be trained in the safe handling of the material;
  - Haulers would maintain the ability to pay damages caused by their operations through proper insurance coverage;
  - Haulers would have licenses issued by the California Highway Patrol (CHP) for transportation of hazardous waste;
  - Haulers would have a California Environmental Protection Agency identification number;
  - Haulers would comply with the Uniform Hazardous Waste Manifest System; and,
  - Haulers would take certain actions in response to hazardous waste discharges during transport (e.g., covering the load to prevent the discharge of dust/particulates into the atmosphere during hauling).
- **Route.** In accordance with all applicable laws, hazardous waste transportation routes would be limited to arterial streets and freeways approved for truck traffic to minimize potential impacts in local neighborhoods and to sensitive receptors. Transportation, as feasible, would be conducted in accordance with the National Hazardous Material Route Registry – United States Department of Transportation (USDOT) – Federal Motor Carrier Safety Administration Hazardous Materials designated, preferred, or prescribed routes for transportation of hazardous waste in California. Truck routes would be determined in advance of any hauling activity once a receiving facility is selected, as necessary. If off-hauling is required, an appropriate off-site facility would be identified, and a haul route would be determined such that impacts to sensitive receptors are minimized.
- **Traffic control procedures.** Hazardous waste to off-site receiving facilities would be transported in trucks from designated staging areas. Prior to loading, trucks would be staged in a controlled and orderly manner to avoid impacts on the local streets. While at the Project Site, vehicles would be required to maintain slow speeds (e.g., less than five miles per hour) for safety purposes.
- **Receiving facility.** Waste characterization sampling results would be provided to the receiving facility to profile the waste.
- **Shipping documentation and record keeping.** Hazardous waste transportation would comply with all applicable federal, state, and local laws, including, but not limited to, USDOT regulations, California Vehicle Code, CHP Regulations, California State Fire Marshall Regulations, and the California Health and Safety Code, to the extent applicable. These requirements include keeping appropriate records during transportation activities. An authorized representative would be responsible for maintaining a record book of soil management and trucking activities during on-site work. The record book would serve to document observations, on-site personnel, and truck arrival and departure times. The appropriate Uniform Hazardous Waste Manifest would be used to track the movement of hazardous waste, if any, from the point of generation to the receiving facility. Prior to transporting the hazardous waste, if any, off-site, an authorized

representative would sign each manifest. Copies of each manifest for each truckload would be maintained in each truck during transport to the receiving facility, as well as on-site.

- **Contingency Plan.** The hauler would be required to have a contingency plan prepared for emergency situations (vehicle breakdown, accident, diesel spill, fire, explosion, etc.) during transportation of hazardous waste, if any, off-site. Once the hauler is selected, a contingency plan would be reviewed and available on-site.

Construction

Less than Significant Impact. Construction of the Project would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the Project.

During construction, hazardous materials would be transported solely during delivery and removal from the Project Site, on an intermittent basis as needed by construction. All transportation of hazardous substances would occur with USDOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements described above would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Therefore, construction of the Project would result in a less than significant impact involving transport of hazardous materials.

Operation

Less than Significant Impact. Operation of the Project would involve the use of hazardous materials. Hazardous materials disposed of during operation and maintenance activities would include small amounts of used oil, solvents, fuels, oily rags/sorbents, and spent batteries. As described in Section 2, *Project Description*, hazardous waste and electronic waste would not be placed in a landfill but rather would accumulate on-site to be transported to a treatment, storage, and/or disposal facility by a licensed hazardous waste transporter. Waste lubricating oil would be recovered and recycled by a waste oil recycling contractor. Spent lubrication oil filters would either be recycled or disposed of in a Class I landfill. Additionally, no chemicals or hazardous materials would be stored on-site. Personnel would use approved personal protective equipment during chemical spill containment and cleanup activities, would be properly trained in the handling of these chemicals, and would be instructed in the procedures to follow in case of a chemical spill or accidental release. Adequate supplies of emergency response equipment including absorbent material would be stored on-site for spill cleanup. Therefore, impacts would be less than significant.

Impact TRA-6

Threshold:	Would the Project be applicable with all sections of the current Federal Aviation Regulation Part 77?

CEC requirements for Opt-In Applications (Title 20, California Code of Regulations, Section 1704, Appendix B Traffic and Transportation Requirement [B]) necessitate a discussion of Project applicability with Federal Aviation Regulation Part 77 - Safe, Efficient Use, and Preservation of the Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the Project during construction or operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height.

Overall Project

Less than Significant Impact. The Project is located approximately 2.5 miles northeast of the Nut Tree Airport but outside of the designated airport AIA. The Project Site is also situated approximately 8.7 miles north of Travis AFB and falls within the AIA established by the Travis AFB, specifically in Compatibility Zone D.

According to Travis AFB LUCP, Compatibility Zone D prohibits only those uses that pose a risk to aircraft operations, such as tall structures, visual obstructions, or electronic interference. The only compatibility considerations for this zone are limitations on structure height and the requirement to notify residents of potential aircraft overflights. ALUC review is only necessary for structures exceeding 200 feet in height. Because the Project does not propose any structures taller than 200 feet, ALUC review is not required.

Additionally, the Project is not expected to generate glare, attract birds, or otherwise interfere with aviation safety, and therefore does not conflict with the Travis AFB LUCP. The Applicant has also submitted an Informal Review Request to the Department of Defense Siting Clearinghouse to verify that the Project will not impact Travis AFB operations (Appendix K). As a result, the Project is not anticipated to affect airport operations or pose safety risks to nearby residents or workers, and potential impacts are considered less than significant.

The Project's elevated structures were also assessed for potential Federal Aviation Administration (FAA) notification requirements under Title 14, Part 77 of the Code of Federal Regulations (FAA 2010), using the FAA's online Notice Criteria Tool. Based on results of the Notice Criteria Tool, FAA review is not required for any of the proposed gen-tie structures (Appendix M).

5.4.4 Cumulative Impacts

The geographic scope for cumulative transportation impacts includes the regional and local roadways that may be used to access the Project Site, or that could otherwise be impacted by construction of the Project. As discussed in Section 5, *Environmental Analysis*, there are several projects that are within three miles of the Project Site. Some of these projects may use roadways around the Project Site such as Vaca Valley Parkway and Orange Drive.[1] This could result in a temporary significant cumulative impact related to inconsistency with an adopted transportation policy or plan, specifically the LOS standards included as policies within the Vacaville General Plan, or impacts associated with emergency access. As discussed under Impact TRA-1 and shown in Figure 5.4-8, the 2029 plus Project traffic scenario, which includes traffic from nearby projects in year 2029, would be less than significant. Due to the temporary nature of Project construction, the Project would not contribute to a cumulatively considerable impact.

Additionally, the Project would not create any inconsistency or conflict with an applicable plan, ordinance or policy that establishes measures of effectiveness, and therefore would not contribute to a cumulatively considerable impact in this regard.

The Project would not conflict or be inconsistent with CEQA Guidelines section 15065.3, subdivision (b), and therefore would not contribute to any cumulatively considerable VMT-related impact.

The Project would not introduce incompatible uses or design features, such as changes to public roads or intersections. Transportation of hazardous substances would occur with USDOT-approved

[1] One such project is the Corby BESS project currently under review by the California Energy Commission, which is projected to complete construction by April 2027, before Project construction would start in July 2027. Therefore, the construction phases are not anticipated to overlap.

personnel and trucking/transport equipment, and the Project would implement hazardous waste transportation requirements that would minimize the potential for an accidental release of hazardous materials to occur. Therefore, the Project would not contribute to any cumulatively considerable impact involving hazards due to a design feature or incompatible uses or transport of hazardous materials.

Project construction activities would occur largely on private roadways within the Project Site and would not result in inadequate emergency access. Therefore, the Project would have no contribution to cumulatively considerable impacts related to people walking, biking, driving, or taking public transit, walking or biking accessibility, or public transit delay.

5.4.5 Laws, Ordinances, Regulations, and Standards

Transportation for the Project would be governed by federal, state, and local laws. Applicable laws and regulations address roadway circulation standards and hazardous material transportation requirements. Table 5.4-4 presents a summary of the LORS applicable to Project traffic and transportation.

Table 5.4-4 LORS Applicable to Traffic and Transportation

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	Code of Federal Regulations (CFR) Title 49, Parts 172, 173, and 179.	Provide standards for the identification, packaging, and transportation of hazardous materials.	Impact TRA-5	The Project would comply with these requirements by appropriately labelling, packaging, and transporting hazardous materials.
Federal	CFR Title 49, Part 397.9 (Hazardous Materials Transportation Act of 1974)	Directs the USDOT to establish criteria and regulations for the safe transportation of hazardous materials.	Impact TRA-5	The Project would comply with this requirement by adhering to all applicable federal regulations involving the transportation of hazardous materials.
Federal	CFR Title 49, Parts 350-399 (Federal Motor Carrier Safety Regulations)	Addresses safety considerations for transportation over public highways, including the transportation of hazardous materials.	Impact TRA-5	The Project would comply with this requirement by adhering to all applicable federal regulations involving materials transport.
Federal	CFR Title 14, Part 77.9	Requires the Applicant to notify the Federal Aviation Association (FAA) of the construction of structures within 20,000 feet of the nearest point of the nearest runway of an airport with at least one runway longer than 3,200 feet.	Section 5.4.5.1	The Project would not trigger this requirement; thus, the Project would comply and would not need to notify the FAA.
Federal	Federal Highway Administration	Review is required for any project that uses or affects the Interstate right-of-way.	Throughout this Opt-In Application	Federal Highway Administration Review is anticipated to be conducted during Caltrans permitting efforts.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
State	CEQA	Requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible	Throughout this Opt-In Application	The Project would comply with CEQA, as required by the CEC's Opt-In Application process.
State	California Streets and Highways Code, Sections 660–711, 670–695.	Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery, and for the aerial gen-tie crossing over I-80; includes regulations for the care and protection of state and county highways and provisions for the issuance of written permits; and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.	Section 5.4.7	The Project applicant would obtain all necessary permits from Caltrans prior to construction and would thus comply with this requirement.
Local	Vacaville General Plan Policy TR-P5.2	Provide LOS requirements for roadways near the Project Site.	Impact TRA-1	The Project would maintain acceptable LOS for nearby roadways with implementation of mitigation measure TRA-1.
Local	Solano County Multi-Jurisdictional Hazard Mitigation Plan	Provides policies that minimize the risk of loss of life, injury, serious illness, and damage to property resulting from the transport of hazardous materials and hazardous wastes.	Impact TRA-3	The Project would conform with this requirement by adhering to all applicable federal, state, and local regulations involving hazardous materials transport.
Local	Solano Countywide Pedestrian Transportation Plan.	Establishes planning and design requirements to encourage the creation of a regional pedestrian network throughout Solano County	Impact TRA-1	The Project would not adversely impact bicycle and recreational transportation facilities and would thus conform with this requirement.
Local	Solano County Regional Active Transportation Plan	Outlines the vision for biking, walking, and other human-powered transportation in Solano County.	Impact TRA-1	The Project would not adversely impact bicycle and recreational transportation facilities and would thus conform with this requirement.
Local	Plan Bay Area 2050	Establishes goals, policies, and actions intended to guide development of transportation systems in the Bay Area through 2050.	Impact TRA-1	The Project would not increase LOS on local roadways that would conflict with Regional Transportation Plan policies and would thus conform with this requirement.

Source: Solano Transportation Authority 2012, 2020, MTC 2024

5.4.5.1 Federal LORS

Code of Federal Regulations

Title 49, Parts 172, 173, and 179

CFR Title 49, Part 172 primarily deals with the labeling, marking, and placarding of hazardous materials for transportation. It establishes standards for how hazardous materials must be labeled and marked on packages, containers, and vehicles to communicate their contents and associated risks effectively.

CFR Title 49, Part 173 focuses on the general requirements for the shipping of hazardous materials. It includes regulations for packaging, including specifications for various types of containers, as well as rules for classifying, describing, and documenting hazardous materials. Section 173 also covers the conditions and exceptions under which certain hazardous materials can be transported and provides guidelines for emergency response information and training.

CFR Title 49, Part 179 pertains to the transportation of hazardous materials in the United States. This section outlines design, construction, and testing standards for portable tanks, as well as operational and maintenance procedures to ensure the safe transport of hazardous materials.

The Project would appropriately label, package, and transport hazardous materials in accordance with CFR Title 49, Parts 172, 173, and 179. Therefore, the Project would comply with these requirements.

Title 49, Part 397.9 (Hazardous Materials Transportation Act of 1974)

The Hazardous Materials Transportation Act of 1974 regulates the transportation of hazardous materials in commerce. This act establishes a framework for the safe and secure handling, labeling, packaging, and transportation of hazardous materials. It empowers the USDOT to develop and enforce regulations to minimize the risks associated with transporting hazardous materials on highways, railways, waterways, and in the air. The act also sets penalties for violations and provides funding for research, training, and emergency response planning related to hazardous materials transportation. The Project would transport hazardous materials in accordance with all applicable federal, state, and local regulations, including the Hazardous Materials Transportation Act of 1974, and thus would comply with this requirement.

Title 49, Parts 350-399 (Federal Motor Carrier Safety Regulations)

The Federal Motor Carrier Safety Regulations oversee and regulate commercial motor carriers, drivers, and the safe operation of commercial motor vehicles. Parts 350-399 address various aspects of motor carrier safety, including driver qualifications, hours of service, vehicle inspections and maintenance, and commercial driver's license requirements. Additionally, these parts also regulate hazardous materials transportation, including the classification, packaging, and labeling of hazardous materials, as well as safety standards for transporting these materials. The Project would transport hazardous materials in accordance with all applicable federal, state, and local regulations, including the Federal Motor Carrier Safety Regulations, and thus would comply with this requirement.

Title 14, Part 77.9

CFR Title 14, Part 77.9 requires an applicant to notify the FAA of the construction of structures exceeding 200 feet above-ground level or exceeding defined imaginary surfaces within 20,000 feet of the nearest point of the nearest runway of an airport with at least one runway longer than 3,200 feet or within 10,000 feet of the nearest point of the nearest runway of an airport with the longest runway no more than 3,200 feet. The Project would not trigger this requirement and would thus conform with CFR Title 14, Part 77.9.

Federal Highway Administration (FHWA)

The FHWA is a division of the U.S. Department of Transportation responsible for overseeing the nation's highway system, including the Interstate Highway System. FHWA review is required for any project that uses or affects the Interstate right-of-way, including utility crossings to ensure compliance with federal safety, access, and environmental regulations under Title 23 of the U.S. Code.

5.4.5.2 State LORS

California Environmental Quality Act

CEQA requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible. Appendix G of the CEQA Guidelines includes recommended criteria for evaluating potential impacts related to traffic and transportation.

California Vehicle Code

The California Vehicle Code consists of a comprehensive set of laws and regulations that govern the operation and use of vehicles on the roadways within the state of California. Specifically, the California Vehicle Code addresses traffic regulations, driver's licensing, vehicle registration, vehicle equipment, safety regulations, parking and towing, commercial vehicle standards, environmental regulations, and penalties and enforcement. Project vehicular transportation would comply with all applicable federal, state, and local regulations, including the California Vehicle Code, and thus would conform with this requirement.

California Streets and Highways Code

The California Streets and Highways Code specifically pertains to the planning, construction, maintenance, and regulation of streets and highways within the state of California. Specifically, the California Streets and Highways Code includes highway designation, highway construction, highway maintenance, eminent domain, public transportation, bicycle and pedestrian infrastructure, emergency services, and traffic control. Because the Project includes an aerial gen-tie line crossing I-80, the crossing qualifies as an encroachment under the California Streets and Highways Code. The Project would obtain an Encroachment Permit from Caltrans and comply with utility accommodation policies, an Encroachment Permit, and applicable clearance standards established by the CPUC. Project vehicular transportation would comply with all applicable federal, state, and local regulations, including the California Streets and Highways Code, and thus would conform with this requirement.

5.4.5.3 Local LORS

Vacaville General Plan

The Transportation Element of the Vacaville General Plan includes the following policies which are applicable to the roadways affected by the Project:

- **Policy TR-P5.2:** At signalized and all-way stop control intersections, endeavor to maintain LOS mid-D. At two-way stop control intersections, attempt to maintain LOS D.

Solano County Multi-Jurisdictional Hazard Mitigation Plan

The Solano County Multi-Jurisdictional Hazard Mitigation Plan is intended to improve the resiliency in the community by identifying hazards present in Solano County (including transportation hazards), determining the community's vulnerability to each hazard, and identifying development mitigation strategies to reduce vulnerability before emergency situations develop. Solano County's Multi-Jurisdictional Hazard Mitigation Plan was adopted in 2012 and most recently updated in 2022.

Solano Countywide Pedestrian Transportation Plan

The Solano Countywide Pedestrian Transportation Plan was adopted in 2012. The plan includes educational components for the public as well as planning and design requirements. The main purpose of the plan is to encourage the development of a regional pedestrian system throughout Solano County. The Project would not adversely impact bicycle or pedestrian transportation facilities and would thus conform with this plan.

Solano County Regional Active Transportation Plan

The Solano County Active Transportation Plan was adopted in 2020 as part of Solano Transportation Authority's Comprehensive Transportation Plan. The plan consolidates STA's separate Countywide Bicycle, Pedestrian, Safe Routes to School, and Safe Routes to Transit Plans into one cohesive plan and establishes countywide priorities and provides project lists and program guidance related to biking and walking. The Project would not adversely impact bicycle or pedestrian transportation facilities and would thus conform with this plan.

Plan Bay Area 2050+

Plan Bay Area 2050 was adopted in October 2021 with recent amendments adopted in November 2024. The plan includes a chapter on transportation (Chapter 4) which outlines policies and strategies to improve the regional transportation system within the Bay Area.

Jepson Parkway Concept Plan

The Jepson Parkway Concept Plan was adopted in 2014 by the Solano Transportation Authority in collaboration with the cities of Fairfield, Vacaville, Suisun City, and Solano County. The plan outlines a 12-mile multi-modal transportation corridor intended to improve regional mobility and support coordinated land use development in central Solano County. The Parkway will connect the I-80/Leisure Town Road interchange in Vacaville to the State Route 12/Walters Road intersection in Suisun City, incorporating existing roadways and new segments. The plan emphasizes enhanced transit access, bicycle and pedestrian facilities, and streetscape improvements. The Project Area is included in the Potential Future Growth Area defined in the plan.

5.4.6 Agencies and Agency Contact

Several agencies regulate traffic and transportation and would be involved in regulating transportation, including transportation of hazardous materials, to and from the Project Site. Regulatory agency contacts are shown in Table 5.4-5.

Table 5.4-5 Agency Contacts for Traffic and Transportation

Issue	Agency	Contact
Transportation Permit for Oversized Loads	Caltrans	Caltrans Transportation Permits Issuance Branch 1823 14th Street Sacramento, CA 95814-7119 916-322-4958
District 4 Encroachment Permit	Caltrans	Caltrans 111 Grand Avenue, 6th Floor MS 5E P.O. Box 23660 Oakland, CA 92623-0660 510-286-4401
Airspace Encroachment	Caltrans	Caltrans 111 Grand Avenue, 6th Floor MS 5E P.O. Box 23660 Oakland, CA 92623-0660 (510) 529-5881
Hazardous Material Transportation License	CHP	Hazardous Material Licensing P.O. Box 942898 Sacramento, CA 942898-0001 916-843-3400
Transportation Permit	Solano County	Department of Public Works 301 Brown Street Vacaville, CA 95688 707-784-6765
Safety Permits	Federal Motor Carrier Safety Administration	California Division Office 1325 J Street, Suite 1540 Sacramento, CA 95814-2941 916-930-2760

5.4.7 Permits and Permit Schedule

Table 5.4-6 lists the permits related to traffic and transportation and the permit schedule. The vehicles used to transport heavy equipment and construction materials would require transportation permits when they exceed the size, weight, width, or length thresholds set forth in Section 35780 of the CVC, Sections 117 and 660-711 of the California Streets and Highways Code, and Sections 1411.1 to 1411.6 of the California Code of Regulations. Affected vehicles would be required to obtain transportation permits from Caltrans, Solano County, the City of Vacaville, or from any other affected agency. Transport route arrangements would be required with Caltrans and CHP officials for permitting and escort, as applicable. Transportation of hazardous materials to and from the Project Site would be conducted in accordance with CVC Section 31303.

Table 5.4-6 Permits and Permit Schedule for Traffic and Transportation

Permit	Schedule	Status
Hazardous Material Transportation License	To be obtained prior to transportation of any hazardous materials.	Pending
Transportation Permits	To be obtained prior to the transport of large construction equipment across County roads or Caltrans jurisdiction	Pending
Encroachment Permit	To be obtained prior to installation of the gen-tie line across I-80	Pending

5.4.8 References

California Governor's Office of Land Use and Climate Innovation (LCI). 2018. Transportation Impacts (SB 743). CEQA: Transportation Impacts (SB 743) - Office of Land Use and Climate Innovation. (Accessed March 2025).Metropolitan Transportation Commission. 2024. Plan Bay Area 2050. https://planbayarea.org/finalplan2050. (Accessed February 2025).

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_____. 2008. Solano County General Plan. Transportation Element. https://content.solanocounty.gov/sites/default/files/2025-05/Chapter%207%20-%20Transportation.pdf. (Accessed November 2025).

_____. 2024. Travis Air Force Base Land Use Compatibility Plan. https://content.solanocounty.gov/sites/default/files/2025-05/Travis%20AFB%20LUCP%20%282024%29_0.pdf. (Accessed November 2025).

Vacaville, City of. 2015. City of Vacaville General Plan Transportation Element. https://www.cityofvacaville.gov/home/showpublisheddocument/5415/638371466679570000. (Accessed March 2025).

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