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5.12 Traffic and Transportation

This section addresses the potential effects of the Stanton Energy Reliability Center (SERC) on traffic and transportation. Section 5.12.1 describes the affected environment of the local and regional traffic and transportation routes surrounding the project site. Section 5.12.2 presents the environmental analysis of the project's effects on local traffic volumes and patterns. Section 5.12.3 evaluates potential cumulative effects on traffic and transportation because of other, simultaneous projects. Section 5.12.4 describes mitigation measures for the project. Section 5.12.5 describes applicable laws, ordinances, regulations, and standards (LORS). Section 5.12.6 lists the applicable regulatory agencies and contacts. Section 5.12-7 discusses traffic and transportation permits required. Section 5.12.8 lists the references used to prepare this section.

5.12.1 Affected Environment

SERC will be located in the City of Stanton in Orange County, California. The project is bordered on the north by an electrical transmission line corridor and a light industrial complex followed by West Cerritos Avenue, the Union Pacific Railroad (UPRR) train tracks on the south, and Dale Avenue and the Barre Peaker power plant on the east. Primary access to the site is from Beach Boulevard (State Route 39) from either the north or south, to West Cerritos Avenue or Katella Avenue, and to Dale Avenue. The project site is on the western side of Dale Avenue.

Temporary construction facilities will include a 2.89-acre worker parking area at the Bethel Romanian Pentecostal Church, 350 feet south of the SERC site along Dale Avenue. Construction laydown for the facility will occur on Parcel 2, site of the battery storage system, which in turn will be constructed as space becomes available during construction.

5.12.1.1 Existing Regional and Local Transportation Facilities

The surrounding regional and local roadway networks are shown on Figures 5.12-1 and 5.12-2. The roadway network that serves the City of Stanton is essentially a grid system of north-south and east-west roads. Smaller collector and local streets connect neighborhoods and other land uses to the arterial street system. Regional access to the site is provided from Interstate (I)-5, State Route (SR) 91, Beach Boulevard (SR 39), SR 22, and I-405.

Locally, the SERC site can be accessed via the interchanges at I-5/Beach Boulevard (SR 39) (to the north) or via the interchanges at I-405 and Beach Boulevard (SR 39) and SR 22 and Beach Boulevard (SR 39) to the south. Construction workers and SERC employees traveling to the site will use the roadways described below.

5.12.1.1.1 I-5

I-5 provides north-south regional circulation, extending from Los Angeles County, through Orange County, and into San Diego County. In the vicinity of SERC, I-5 is eight to 10 lanes, with High Occupancy Vehicle lanes in both directions. Access to and from I-5 to the SERC site from the north is provided via the interchange at Beach Boulevard (SR-39) and from the southeast at Katella Avenue. Annual average daily traffic (AADT) volumes on I-5 are 167,400 vehicles per day near Beach Boulevard (SR-39) (California Department of Transportation [Caltrans], 2015a), of which approximately 9.3 percent are trucks, and 264,700 vehicles per day near Katella Avenue (Caltrans, 2015a), of which approximately 9.6 percent are trucks (Caltrans, 2015b).

5.12.1.1.2 I-405

I-405 is a north-south freeway, running along the western and southern parts of the greater Los Angeles area from Irvine in the south to near San Fernando in the north. I-405 is heavily traveled by commuters and freight haulers along its entire length. Traffic volumes along I-405 near Beach Boulevard (SR 39) average between 263,000 and 377,000 vehicles per day (Caltrans, 2015a), of which approximately 3.0 to 3.5 percent are trucks.

5.12.1.1.3 SR 22

SR 22 is an east-west highway, beginning in the City of Long Beach and terminating in the City of Orange. Within the project study area, SR 22 has six to eight lanes, including two high occupancy vehicle lanes. AADT volumes on SR 22 are 158,400 west of Beach Boulevard (SR 39) and 183,000 east of Beach Boulevard (SR 39). Trucks represent approximately 4.9 percent of the total traffic (Caltrans, 2015b).

5.12.1.1.4 Beach Boulevard (SR-39)

Beach Boulevard (SR-39) is a state highway and a regionally significant north-south corridor that extends through and beyond the City of Stanton. SR-39 originates at Pacific Coast Highway in the City of Huntington Beach, and extends north through the Cities of Westminster, Garden Grove, Anaheim, and Buena Park, terminating at Whittier Boulevard in the City of La Habra. Beach Boulevard (SR 39) has full interchanges with I-405, SR 22, SR 91, and I-5. Beach Boulevard (SR 39) generally consists of three to four through lanes in each direction through the city and is generally separated by a raised, landscaped median. On-street parking is prohibited on Beach Boulevard (SR-39).

5.12.1.1.5 West Cerritos Avenue

West Cerritos Avenue runs east-west and varies from a four-lane undivided roadway to a four-lane divided roadway with a continuous left-turn lane. The posted speed limit on West Cerritos Avenue is 40 miles per hour.

5.12.1.1.6 Dale Avenue

Dale Avenue is a north-south roadway, varying from a two-lane undivided roadway to a four-lane divided roadway with a continuous left-turn lane. The posted speed limit on Dale Avenue is 35 miles per hour. SERC is located on the western side of Dale Avenue, just north of the UPRR tracks, and between West Cerritos and Katella Avenues.

5.12.1.1.7 Katella Avenue

Katella Avenue is a regionally significant east-west corridor that extends through and beyond the City of Stanton. Katella Avenue provides access to the northern portion of the city and varies from a four-lane divided roadway with a raised median to a six-lane divided roadway with a raised median. A full-access interchange is provided at I-5 and Katella Avenue.

5.12.1.2 Existing Traffic Conditions and Level of Service Analysis

The traffic analysis for SERC was conducted according to the methodologies and procedures outlined in the Highway Capacity Manual (Transportation Research Board, 2010), and applicable provisions from the California Environmental Quality Act. AADT volumes were used to assess the level of service (LOS) for the project area roadways. AADT data for 2014 were obtained from the Caltrans Traffic Data Branch (Caltrans, 2015a) for I-5, I-405, SR 22, and Beach Boulevard (SR 39); and average daily trip (ADT) data were obtained from the Orange County Transportation Authority for the local study roadways.

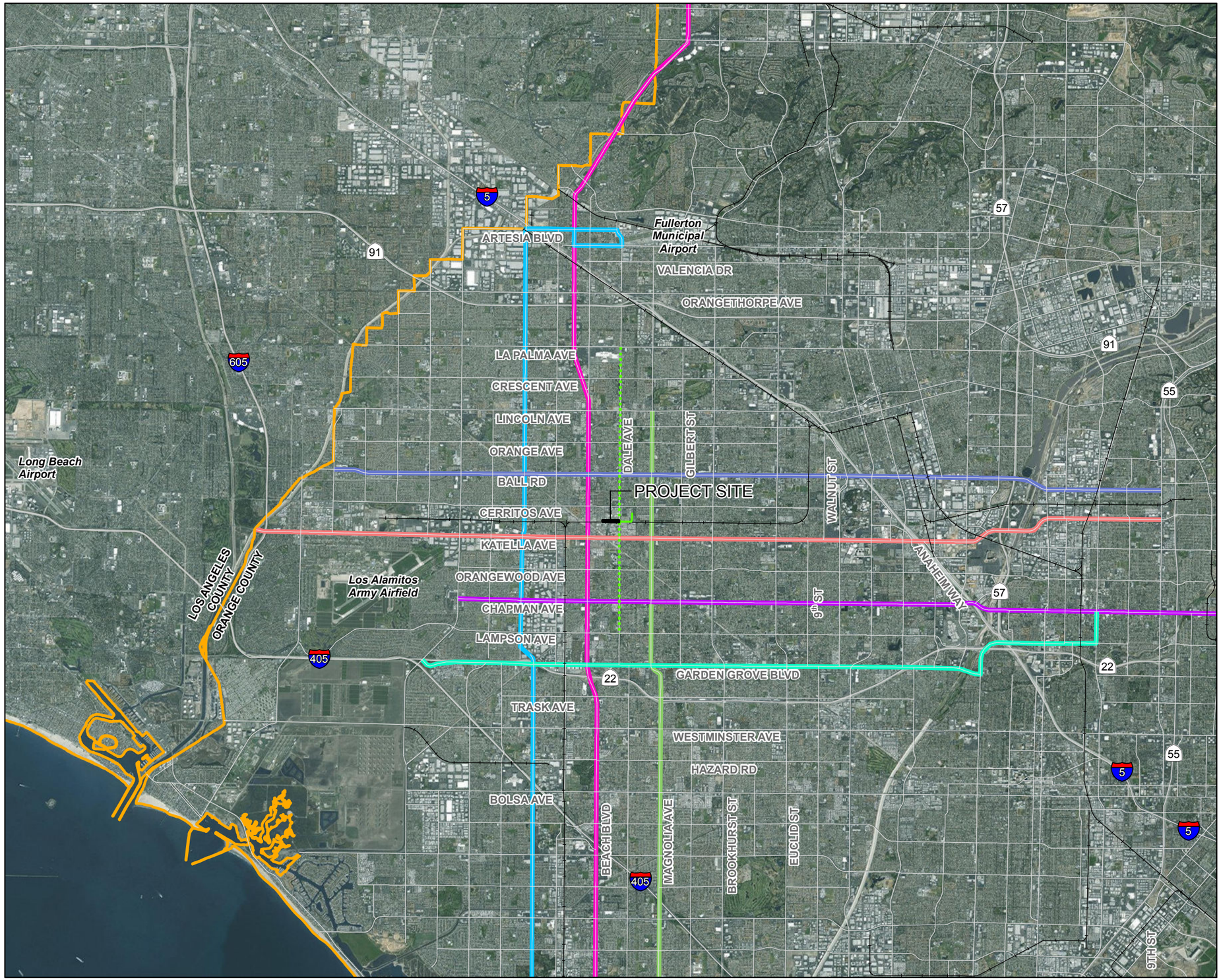
Source: Esri World Terrain Imagery

LEGEND

Project Site

Proposed Natural Gas Pipeline Route Alternatives

FIGURE 5.12-1
Regional Road Network
Stanton Energy Reliability Center AFC
Stanton, California



LEGEND

- Project Site
- Generator Tie-Line
- Proposed Natural Gas Pipeline Route Alternatives
- OCbus Route 25
- OCbus Route 29
- OCbus Route 33
- OCbus Route 46
- OCbus Route 50
- OCbus Route 54
- OCbus Route 56
- Railroad

Source:
ESRI Base Data
OCbus (2016)
Orange County GIS

0 2,500 5,000 10,000
Feet

N

Figure 5.12-2
Local Road Network
Stanton Energy Reliability Center AFC
Stanton, California

Table 5.12-1 is a summary of roadway capacities by roadway classification as defined by the City of Stanton General Plan (City of Stanton, 2008).

Table 5.12-1. Road Lanes and Capacity

Arterial Type	Number of Lanes	Daily Capacity
Principal	8 lanes	75,000
Major	6 lanes	56,300
Primary	4 lanes	37,500

Sources: City of Stanton, 2008; OCTA, 2015

The volume/capacity (V/C) ratio is an indicator of traffic conditions, speeds, and driver maneuverability, and the resulting V/C is expressed using LOS, where LOS A represents free-flow activity and LOS F represents overcapacity conditions (congestion). Table 5.12-2 is a summary of the LOS grades, traffic flow characteristics, and corresponding V/C ratios for local roadways.

Table 5.12-2. LOS Criteria for Local Roadways

LOS	Local Roadway	Traffic Flow Characteristics
A	0.00 to 0.60	Free flow; insignificant delays
B	0.61 to 0.70	Stable operation; minimal delays
C	0.71 to 0.80	Stable operation; acceptable delays
D	0.81 to 0.90	Approaching unstable flow; queues develop rapidly but no excessive delays
E	0.91 to 1.00	Unstable operation; significant delays
F	> 1.00	Forced flow; jammed conditions

Source: Transportation Research Board, 2010.

The City of Stanton's goal for roadway segment operation is LOS D or better. For consistency with the Orange County Congestion Management Program (CMP) (Orange County Transportation Authority, 2015), LOS E is considered acceptable for Beach Boulevard (SR 39) and Katella Avenue.

Caltrans has identified a target LOS at the transition between LOS C and LOS D on state highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. For this analysis, mitigation measures should be considered when traffic conditions are forecasted at LOS D or worse on freeway ramp terminal intersections.

In 1991, the Orange County Transportation Authority (OCTA) implemented an Intersection Capacity Utilization (ICU) monitoring method, developed with technical staff members from local and State agencies, for measuring the LOS at CMP Highway System intersections. Table 5.12-3 is a summary of traffic flow characteristics for LOS at signalized intersections based on the ICU method.

Table 5.12-3. LOS Criteria for Signalized Intersection Operations

LOS	ICU	Traffic Flow Characteristics
A	0.00 to 0.60	Insignificant delays
B	0.61 to 0.70	Stable operation; minimal delays
C	0.71 to 0.80	Stable operation; acceptable delays
D	0.81 to 0.90	Below average operating conditions
E	0.91 to 1.00	At-capacity
F	> 1.00	Over-capacity, forced flow

Sources: Transportation Research Board, 2010; Orange County Public Works Department, 2005

5.12.1.2.1 Existing Roadway Conditions

Existing roadway conditions were evaluated for the following roadways, where data were available:

- Beach Boulevard (SR 39)
- West Cerritos Avenue
- Dale Avenue
- Katella Avenue

Table 5.12-4 is a summary of the daily traffic volumes and V/C ratios for existing conditions. With the exception of one segment of Beach Boulevard (SR 39), all segments studied operate at an acceptable LOS. Beach Boulevard between Lampson Avenue and Chapman Avenue currently operates at LOS F.

Table 5.12-4. Existing Roadway Segment LOS Analysis Summary

Roadway	Segment		ADT	Number of Lanes	Capacity	V/C	LOS
	Between	And					
Beach Boulevard	SR 22	Lampson Avenue	74,600	8	75,000	0.99	E
	Lampson Avenue	Chapman Avenue	77,600	8	75,000	**1.03**	**F**
	Chapman Avenue	Katella Avenue	71,600	8	75,000	0.95	E
	Katella Avenue	W. Cerritos Avenue	64,500	8	75,000	0.86	D
	W. Cerritos Avenue	Ball Road	65,100	8	75,000	0.87	D
	Ball Road	Lincoln Avenue	62,400	8	75,000	0.83	D
	Lincoln Avenue	SR 91	66,600	8	75,000	0.89	D
	SR 91	Artesia Boulevard	57,800	8	75,000	0.77	C
W. Cerritos Avenue	Beach Boulevard	Dale Avenue	14,000	4	37,500	0.37	A
Dale Avenue	W. Cerritos Avenue	Katella Avenue	12,000	4	37,500	0.32	A
Katella Avenue	Beach Boulevard	Dale Avenue	26,000	6	56,300	0.46	A
	Dale Avenue	Magnolia Avenue	25,000	6	56,300	0.44	A
	Magnolia Avenue	Gilbert Street	26,000	6	56,300	0.46	A
	Gilbert Street	Barclay Drive	29,000	6	56,300	0.52	A
	Barclay Drive	Euclid Street	28,000	6	56,300	0.50	A
	Euclid Street	9th Street	32,000	6	56,300	0.57	A
	9th Street	Walnut Street	29,000	6	56,300	0.52	A
	Walnut Street	Anaheim Way	39,000	6	56,300	0.69	B

Sources: OCTA, 2014; Caltrans, 2015a

5.12.1.2.2 Existing Intersection Conditions

Turning movement counts are not readily available for any of the local intersections; however, the 2015 CMP contains existing peak hour intersection LOS for the CMP system. The LOS information was reviewed to assess the general operating conditions in the study area where data were available. LOS was obtained for the following Beach Boulevard intersections:

- Edinger Avenue/I-450 Southbound Ramps
- Bolsa Avenue
- SR 22 Eastbound Ramps
- SR 22 Westbound Off Ramp
- Katella Avenue

- SR 91 Eastbound Ramps
- SR 91 Westbound Ramps
- I-5 Southbound Ramps

The existing intersection LOS is summarized in Table 5.12-5. As shown in the table, the study intersections operate at LOS D or better during both peak hours.

Table 5.12-5. Existing (2015) Intersection LOS Summary*

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	ICU	LOS	ICU	LOS
Beach Blvd./Edinger Ave./I-450 Southbound Ramps	0.67	B	0.76	C
Beach Blvd./Bolsa Ave.	0.82	D	0.78	C
Beach Blvd./SR 22 Eastbound Ramps	0.55	A	0.51	A
Beach Blvd./SR 22 Westbound Off Ramp	0.73	C	0.69	B
Beach Blvd./Katella Avenue	0.71	C	0.68	B
Beach Blvd./SR 91 Eastbound Ramps	0.47	A	0.55	A
Beach Blvd./SR 91 Westbound Ramps	0.51	A	0.59	A
Beach Blvd./I-5 Southbound Ramps	0.61	B	0.65	B

*The LOS results were obtained from the 2015 CMP and are based on traffic counts collected in 2015.

5.12.1.3 Truck Routes—Weight and Load Limitations

Large and heavy components for SERC will be transported to the site by truck. California Vehicle Code (CVC) Sections 35550–35559 regulate the use of trucks on state facilities, including I-5, SR 39, I-405, and SR 22 (see Section 5.12.5.2). The City of Stanton regulates the use of trucks on city roadways. Transportation permits will be obtained for all heavy and oversize loads, as required by each agency. The truck route is illustrated on Figure 5.12-3.

Trucks will enter the City of Stanton via SR-39, and will proceed to the SERC site via a route best suited for each individual load and its designated offload location at the project. SR 39 (between the southern and northern city limits) and Katella Avenue (between the western and eastern city limits) are city-designated truck routes.

Trucks will enter the City of Stanton from either the north (routing connects to either SR 91 or I-5) or the south (routing connects to either SR 22 or I-405). Trucks will exit Beach Boulevard (SR 39) and travel eastbound at either Katella Avenue or West Cerritos Avenue.

Trucks utilizing Katella Avenue (eastbound) will then turn left onto Dale Avenue (northward), and then turn left into the SERC driveway on Dale Avenue.

Trucks utilizing West Cerritos Avenue (eastbound) will turn right (southbound) onto either Fern Avenue or Dale Avenue. Trucks utilizing Fern Avenue will turn right and then continue due south to the SERC driveway located at the southeastern corner of the intersection of Fern Avenue and Pacific Street. Trucks utilizing Dale Avenue will turn right (southbound) and then turn right into the SERC driveway on Dale Avenue.

5.12.1.4 Other Projects

5.12.1.4.1 Future Plans and Projects

The city's Capital Improvement Program (CIP) includes the following programs:

- Citywide Sidewalk Repair
- Pavement Maintenance
- Pedestrian Accessibility
- Slurry Seal
- Street and Crosswalk Improvement
- Street Sign Programs
- Street Light installation
- Sewer Line Replacement
- Local Paving
- Red Curb Painting

Based on a review of OCTA's Seven Year CIP for Fiscal Years 2015/2016 through 2021/2022, there are no major roadway projects scheduled within the vicinity of the SERC site.

5.12.1.5 Pedestrian/Bicycle Facilities

There are limited bicycle facilities within city limits. A Class II bike lane (on-street striped lane) is provided on both sides of Western Avenue, between the northern city limits and Orangewood Avenue and on the western side of Knott Avenue between Cerritos Avenue and Jonathan Avenue. Class II bike lanes are proposed on Western Avenue, north of Cerritos Avenue, on Cerritos Avenue between Knott Avenue and Magnolia Avenue, on Dale Avenue and Magnolia Avenue between the northern and southern city limits, on Orangewood Avenue between Western Avenue and the eastern city limits, and on Lampson Avenue between the western and eastern city limits.

5.12.1.6 Public Transportation

Figure 5.12-2 shows the transit routes operating in the vicinity of the SERC site. Public transportation is available to Stanton's residents through the OCTA bus service. OCTA operates the following bus routes serving the City of Stanton (OCTA, 2016):

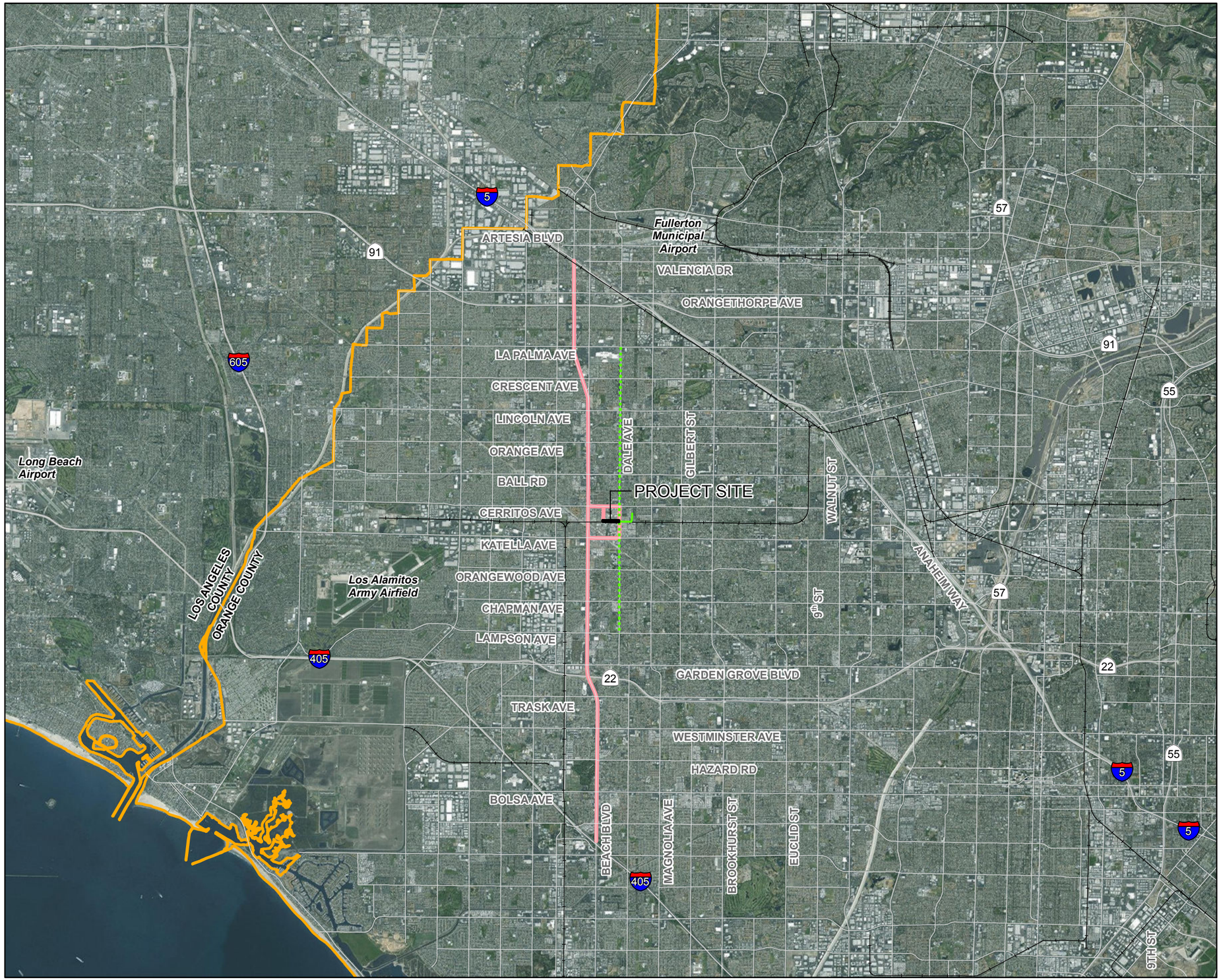
- Route 25 runs along Knott Avenue and connects to Fullerton and Huntington Beach.
- Route 29 runs along Beach Boulevard and connects to La Habra and Huntington Beach.
- Route 33 runs along Magnolia Avenue and connects to Fullerton and Huntington Beach.
- Route 50 runs along Katella Avenue and connects to Long Beach and Orange.
- Route 54 runs along Chapman Avenue and connects to Garden Grove and Orange.

Nearby routes not within the City of Stanton include the following:

- Route 46 runs along Ball Road and connects to Los Alamitos and Orange.
- Route 56 runs along Garden Grove Boulevard and connects to Garden Grove and Orange.

5.12.1.7 Rail Traffic

Historically, multiple railroad lines passed through the City of Stanton including the Santa Ana Branch, the Los Alamitos Branch, and the Huntington Branch lines. Most of the former lines within the city limits have been abandoned. The railway located along the southern boundary of the SERC site is owned and operated by UPRR; this line remains providing limited freight service to UPRR customers.



LEGEND

- Project Site
- Generator Tie-Line
- Proposed Natural Gas Pipeline Route Alternatives
- Railroad
- Truck Route

Source:
ESRI Base Data
OCbus (2016)
Orange County GIS

0 2,500 5,000 10,000
Feet

N

Figure 5.12-3
Truck Route
Stanton Energy Reliability Center AFC
Stanton, California

5.12.1.8 Air Traffic

The closest airport to SERC is the Los Alamitos Army Airfield (SLI), which is located in Los Alamitos approximately 15,500 feet (2.6 nautical miles or 2.9 statute miles) southwest of the SERC site. SERC is located within the Airport Planning Area for Los Alamitos Army Airfield, which is established by the Airport Land Use Commission for Orange County (2015). Los Alamitos Army Airfield is an instrumented, military airfield operated by the California Army National Guard on the 1,400-acre Joint Forces Training Base at Los Alamitos. The airfield at Los Alamitos has two all-weather runways: one at 7,999 feet and one at 5,901 feet. Los Alamitos AAF is the largest Army Airfield operated by the National Guard and can handle almost any aircraft. Currently, there are approximately 30 helicopters of the 40th Aviation Brigade stationed at Los Alamitos AAF. The airfield includes a fully staffed Army Air Traffic control tower, crash rescue/fire department, jet fuel farm with aviation refueling, and an Army Aviation Weather Office. Los Alamitos Army Airfield is one of the most active Department of Defense aviation operations in the continental United States. Over 700 military, civilian, and contract personnel are assigned at Los Alamitos on a full-time basis to support training, operations, and services. Almost 3,000 traditional guardsmen and reservists also conduct training at the base (California Military Department, 2016).

Additional airports within the region include Fullerton Municipal (FUL) (approximately 4 miles north of SERC), Long Beach/Daugherty Field (LGB) (approximately 9 miles west of SERC), and John Wayne Airport-Orange County (SNA) (approximately 11 miles to the southeast of SERC).

5.12.2 Environmental Analysis

This subsection assesses the traffic and transportation effects associated with SERC construction. This analysis primarily examines effects on roadway and intersection LOS expected during the peak construction period. During the peak construction period for SERC, construction will require up to 78 workers. During operations, the project will typically be unmanned, although it will be regularly attended for routine maintenance activities. A quantitative traffic analysis was not conducted for the long-term operations phase because it will generate a low volume of trips that will not have a measurable impact on the study area roadways or intersections.

5.12.2.1 Significance Criteria

The significance criteria have been developed using guidance provided in California Environmental Quality Act Appendix G (Title 14, California Code of Regulations [CCR], Section 15000 et seq.) and relevant local policies. Effects of the proposed project on transportation and circulation will be considered significant if the following criteria are met:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit
- Conflict with an applicable congestion management program, including but not limited to LOS standards and travel demand measures or other standards 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 attributable to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

- Result in inadequate emergency access
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

5.12.2.1.1 City of Stanton Project-Specific Impacts

The City of Stanton does not have specific traffic impact thresholds for roadways or intersections. The city's goal is to maintain LOS D on all city roadways except for Beach Boulevard (SR 39) and Katella Avenue, which have a goal of LOS E.

5.12.2.1.2 Construction Traffic Generation

The construction traffic travelling to SERC was determined based on construction data that included the anticipated number of delivery vehicles, haul vehicles, and workers. The construction trip estimates are presented in Table 5.12-6.

Table 5.12-6. Construction Trip Generation

		A.M. Peak Hour			P.M. Peak Hour		
Trip Type	**ADT**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Delivery/Haul Trucks	50	4	4	8	4	4	8
Delivery/Haul Trucks PCE (1.5)	75	6	6	12	6	6	12
Workers (1.5 passengers/car)	132	66	0	66	0	66	66
Total Construction Traffic in PCE	**207**	**72**	**6**	**78**	**6**	**72**	**78**

Based on the construction data, there will be a maximum of 78 construction workers per day during the peak construction period. Based on experience with similar projects, it is estimated that 16 percent of the workforce will carpool (ride with others), resulting in 132 daily trips (66 trips twice per day). As a conservative estimate, it is assumed that all of the workforce trips will arrive during the morning peak hour and all of the workforce trips will depart during the afternoon peak hour.

There will also be a total of 50 delivery/haul truck trips per day. Of these, it is assumed that eight truck trips will arrive and depart the site during the peak hours. The remaining truck trips will occur throughout the day. For purposes of this analysis, the truck trips were converted to passenger car equivalent (PCE) trips at a ratio of 1.5 passenger cars for each truck, consistent with the Highway Capacity Manual 2010 guidelines.

5.12.2.1.3 Construction Traffic Distribution

The project is located in a highly urbanized area with direct access to numerous freeways, highways, and major arterials. As a result, many routes could be used to access the site, and the project trips will likely be widely distributed over the regional road network. In general, the following assumptions were used to distribute construction traffic over the study area network:

- 25 percent of trips will come from points north of the site via I-5 and SR 91.
- 25 percent of trips will come from points south of the site via I-5, I-405, and SR 22.
- 25 percent of trips will come from points east of the site via I-5 and SR 91.
- 25 percent of trips will come from points west of the site via I-405 and SR 22.

5.12.2.1.4 Roadway LOS with Construction Traffic

The daily traffic volumes generated during the SERC peak construction period were added to the existing traffic volumes on each roadway segment, and the V/C ratio was calculated. The roadway segment analysis with the project traffic is summarized in Table 5.12-7. Based on the analysis, all but one roadway segment will continue to operate at an acceptable LOS. Beach Boulevard, between Lampson Avenue and Chapmen Avenue, will operate at LOS F with and without the project.

Table 5.12-7. Construction Roadway Segment LOS Analysis Summary

Roadway	Segment		Existing ADT	Project Trips	Existing + Project ADT	V/C	LOS
	Between	And					
Beach Boulevard	SR 22	Lampson Avenue	74,600	124	74,724	1.00	E
	Lampson Avenue	Chapman Avenue	77,600	124	77,724	**1.04**	**F**
	Chapman Avenue	Katella Avenue	71,600	124	71,724	0.96	E
	Katella Avenue	W. Cerritos Avenue	64,500	0	64,500	0.86	D
	W. Cerritos Avenue	Ball Road	65,100	70	65,170	0.87	D
	Ball Road	Lincoln Avenue	62,400	70	62,470	0.83	D
	Lincoln Avenue	SR 91	66,600	70	66,670	0.89	D
	SR 91	Artesia Boulevard	57,800	70	57,870	0.77	C
W. Cerritos Avenue	Beach Boulevard	Dale Avenue	14,000	70	14,070	0.38	A
Dale Avenue	W. Cerritos Avenue	Katella Avenue	12,000	169	12,169	0.32	A
Katella Avenue	Beach Boulevard	Dale Avenue	26,000	124	26,124	0.46	A
	Dale Avenue	Magnolia Avenue	25,000	13	25,013	0.44	A
	Magnolia Avenue	Gilbert Street	26,000	13	26,013	0.46	A
	Gilbert Street	Barclay Drive	29,000	13	29,013	0.52	A
	Barclay Drive	Euclid Street	28,000	13	28,013	0.50	A
	Euclid Street	9th Street	32,000	13	32,013	0.57	A
	9th Street	Walnut Street	29,000	13	29,013	0.52	A
	Walnut Street	Anaheim Way	39,000	13	39,013	0.69	B

Sources: OCTA, 2014; Caltrans, 2015a

The City of Stanton does not identify specific traffic impact thresholds other than maintaining LOS E for Beach Boulevard. The 2015 CMP states that "CMP statute requires that CMP H(ighway) S(ystem) intersections maintain a LOS grade of E or better, unless the baseline is lower than E; in which case, the ICU rating cannot increase by more than 0.10." For the purposes of this analysis, a threshold of 0.10 has been used.

The V/C for this segment of Beach Boulevard will increase from 1.03 to 1.04 with the project-added traffic, which is less than the 0.10 threshold identified by the 2015 CMP. Therefore, the project would not result in a significant impact.

It should also be noted that the project-related traffic represents 0.13 percent or less of the existing freeway traffic on I-5, I-405, and SR 22. This is a minimal increase in traffic, and no impacts to the freeway operating conditions are anticipated.

5.12.2.1.5 Intersection LOS with Construction Traffic

The project trips would travel through the intersections along Beach Boulevard between I-405 to the south and I-5 to the north. Turning movement counts are not available for any of the local intersections; however, the 2015 CMP contains existing peak hour intersection LOS for local intersections. The existing intersection LOS is presented in Table 5.12-5. These intersections are currently operating at LOS D or better during both peak hours; only one intersection is operating at LOS D during the morning peak hour, and the rest of the intersections are operating at LOS C or better during both peak hours. The project peak-hour trips through the intersections represent a less than 0.2 percent increase in existing volumes, which is not enough to change the intersection from LOS D to LOS F. The study intersections will continue to operate at acceptable LOS with the SERC-added construction traffic during both peak hours.

5.12.2.2 Linear Facility Construction Impacts

Two natural gas pipeline alternative routes are being considered. Natural gas may be provided via an approximately 2.75-mile-long route north along Dale Avenue to La Palma Avenue or via a 1.78-mile-long route south along Dale Avenue to Lampson Avenue. Construction of the pipeline within existing streets (Dale Avenue) will not require complete public road closure, but may require periodic lane closures or may affect the available width of travel lanes. An encroachment permit will be obtained from the city for work that occurs within the public right-of-way. The lane closures could result in a temporary disruption of traffic flows.

The proposed approximate 0.35-mile gen-tie line will be constructed underground to connect to the Southern California Edison Barre Substation located adjacent to SERC on the eastern side of Dale Avenue. The gen-tie line will not be constructed along public roads; any roadway impacts will be limited to one road crossing on Dale Avenue.

SERC construction within or across streets could temporarily affect emergency access and access to local land uses. These impacts are anticipated to be less-than-significant and short term, and will be further reduced with the implementation of the proposed Construction and Demolition Transportation Management Plan. The Transportation Management Plan will address potential street or lane closures.

Work crews associated with gas pipeline construction and materials deliveries will result in a small number of trips and have already been accounted for in the peak construction workforce estimate. The construction crew for the gas pipeline facilities will be staged in appropriate areas adjacent to construction activities. These temporary impacts of this relatively small number of trips are less than significant.

5.12.2.3 Transport of Hazardous Materials

The quantities of hazardous materials that will be onsite during construction are small relative to the quantities used during operation. The construction period hazardous materials will include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, and paint thinner. There are no feasible alternatives to vehicle fuels and oils for operating construction equipment. The types of paint required are dictated by the types of equipment and structures that must be coated and by the manufacturers' requirements for coating.

Most of the hazardous substances that will be used by SERC during operations are required for facility maintenance and lubrication of equipment, or will be contained within transformers and electrical switches. Deliveries are expected to occur two times per week.

The only acutely hazardous substance that will be used for SERC is aqueous ammonia. Aqueous ammonia will be delivered five times per year on average, and at a maximum frequency of six deliveries per month for continuous operation. Transport route arrangements will be required with Caltrans officials for permitting and escort, as applicable. Because the transport of hazardous materials will be conducted in accordance with the relevant transportation regulations, no significant impact is expected.

According to Division 13 Section 31303 of the CVC, the transportation of regulated substances and hazardous materials will be on the state or interstate highways that offer the shortest overall transit time possible. Transporters of hazardous or explosive materials must contact the California Highway Patrol (CHP) and apply for a Hazardous Material Transportation License. Upon receiving this license, the shipper will obtain a handbook that will specify the routes approved to ship inhalation hazards or explosive materials. The exact route of the inhalation hazard or explosive material shipment will not be determined until the shipper contacts CHP and applies for a license. Transportation impacts related to hazardous materials associated with the project operations will not be significant because deliveries of hazardous materials will be limited. Delivery of these materials will occur over prearranged routes and will be in compliance with all LORS governing the safe transportation of hazardous materials.

Standards for the transport of hazardous materials are contained in Title 49 of the Code of Federal Regulations (CFR) and are enforced by the U.S. Department of Transportation. Additionally, the State of California has promulgated rules for hazardous waste transport that can be found in CCR, Title 26. Additional regulations for the transportation of hazardous materials are outlined in the CVC (Sections 2500-505, 12804-804.5, 31300, 3400, and 34500-501). The two state agencies with primary responsibility for enforcing federal and state regulations governing the transportation of hazardous wastes are CHP and Caltrans. Transport of hazardous materials to and from the SERC site will comply with all applicable requirements.

The recommended route, subject to Caltrans and City of Stanton approval, is as follows:

- Trucks will enter the City of Stanton from either the north (routing connects to either SR 91 or I-5) or the south (routing connects to either SR 22 or I-405). Trucks will exit Beach Boulevard (SR 39) and travel eastbound at either Katella Avenue or West Cerritos Avenue.
- Trucks using Katella Avenue (eastbound) will then turn left onto Dale Avenue (northward), and then turn left into the SERC driveway on Dale Avenue. Aqueous ammonia delivery trucks will be required to use the Katella Avenue route from SR-39 to avoid passing Robert M. Pyles Elementary School located on West Cerritos Avenue and Dale Avenue.
- Trucks using West Cerritos Avenue (eastbound) will turn right (southbound) onto either Fern Avenue or Dale Avenue. Trucks using Fern Avenue will turn right and then continue due south to the SERC driveway located at the southeastern corner of the intersection of Fern Avenue and Pacific Street. Trucks using Dale Avenue will turn right (southbound) and then turn right into the SERC driveway on Dale Avenue.

Hauling will be carried out in accordance with local, state, and federal regulations that include the Resource Conservation and Recovery Act (42 U.S. Code 6901 et seq.) and the California Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.).

In addition, the federal government prescribes regulations for transporting hazardous materials. These regulations are described in Title 49 CFR, Section 171. These laws and ordinances place requirements on various aspects of hazardous waste hauling, from materials handling to vehicle signs, to ensure public safety.

SERC will comply with these requirements by using licensed hazardous material transportation transporters, as discussed above. As a result, impacts will be less than significant.

5.12.2.4 Public Safety

Truck trips, including delivery of hazardous materials and removal of wastes, pose potential hazards for the public. However, the transporter will be required to obtain a Hazardous Material Transportation License in accordance with CVC Section 32105, and will be required to follow appropriate safety procedures when transporting and handling such materials.

At-grade railroad crossings can be another potential hazard to the public. There are two at-grade rail crossings near the project site: one on Beach Boulevard near Pacific Street and one on Dale Avenue immediately south of the site. At-grade railroad crossings are regulated by federal, state, and local laws. The Federal Motor Carrier Safety Regulations address highway-rail grade crossing safety as it applies to drivers of all types of commercial motor vehicles. The specific requirements for the safe crossing of the railroad will be addressed as part of the project's Construction and Demolition Transportation Management Plan.

5.12.2.5 Air Traffic

The Los Alamitos Army Airfield is located approximately 15,500 feet (2.6 nautical miles or 2.9 statute miles) southwest of the SERC site and has two runways: one at 7,999 feet and one at 5,901 feet. SERC is located within the Airport Planning Area for the Joint Forces Training Bases at the Los Alamitos Airfield (Airport Land Use Commission for Orange County, 2015). The land use compatibility plan intends for the 20-year planning future for Joint Forces Training Base, Los Alamitos, to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport. Specifically, the plan seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable airspace.

Furthermore, Federal Aviation Administration (FAA) Regulations and Title 14 CFR, Part 77 establish standards for determining obstructions in navigable airspace and set forth requirements for notification of proposed construction. These regulations require FAA notification for construction over 200 feet above ground level (AGL). Notification is also required if the obstruction is lower than specified heights but falls within restricted airspace in the approaches to public or military airports and heliports. For airports with runways longer than 3,200 feet, the restricted space extends 20,000 feet (3.3 nautical miles) from the runway. For airports with runways measuring 3,200 feet or less, the restricted space extends 10,000 feet (1.7 nautical miles). For consistency with the FAA regulations, the land use compatibility plan also requires notification of all such proposals.

An Obstruction Evaluation and Airspace Analysis is being conducted for SERC to identify obstacle clearance surfaces established by the FAA that could result in determination of hazards for the 70-foot-high exhaust stacks proposed by SERC.

The project is not anticipated to conflict with the safety or land use compatibility measures outlined in the land use compatibility plan. In compliance with the plan for the Joint Forces Training Bases at the Los Alamitos Airfield, SERC will notify the Airport Land Use Commission for Orange County of the proposed project and provide the findings of the FAA Determination.

5.12.2.6 Emergency Vehicle Access

Emergency vehicles will be able to access the SERC site through the entrance off Dale Avenue. Secondary access will be from the secondary entrance on Fern Avenue. There will be no impacts to emergency vehicle access.

5.12.2.7 Parking

Construction workers will park at the temporary construction facilities to be located within the parking area at the Bethel Romanian Pentecostal Church, 350 feet south of the SERC site along Dale Avenue. No on-street parking is anticipated. Parking spaces will also be provided to employees during operations.

5.12.3 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (Public Resources Code Section 21083; Title 14 CCR, Sections 15064[h], 15065[c], 15130, and 15355).

The project will have a less-than-significant effect on the roadways and intersections in the immediate vicinity of the project site; and with the exception of one roadway segment, the project's potential impacts to the study roadways are considerably below the city's thresholds. The project will include a Construction and Demolition Transportation Management Plan to address the movement of workers, vehicles, and materials, including arrival and departure schedules and designated workforce and delivery routes. The project owner shall consult with all applicable local jurisdictions, including but not limited to Caltrans and the City of Stanton in the preparation and implementation of the Transportation Management Plan. As part of the Transportation Management Plan, the project will be required to coordinate traffic flows with other major projects through the study intersections. Projects that could result in a cumulative impact also would be required to comply with applicable federal, state, and local LORS, and it is reasonable to assume that they would also include mitigation measures to reduce any cumulative traffic impacts to a less-than-significant level. Although it is unlikely that the peak construction period for the project, as well as the construction of multiple projects, would coincide with the project's travel through the area roadways and intersections, it is possible that the construction traffic could overlap. However, a definitive construction schedule for other possible projects in the area is unknown. Cumulative traffic impacts would be reduced with the implementation of the project's traffic management plan strategies. The proposed project is unlikely, therefore, to result in cumulative impacts on traffic in combination with other closely related past, present, and reasonably foreseeable future projects.

During operations, SERC will generate a negligible increase in traffic. There will be no be no significant cumulative impact.

5.12.4 Mitigation Measures

The addition of SERC-related construction or operations-related traffic will not result in any significant traffic impacts. No mitigation is required.

5.12.5 Laws, Ordinances, Regulations, and Standards

LORS related to traffic and transportation are summarized in the following subsections. Table 5.12-8 summarizes all applicable federal, state, and local LORS and administering agencies, and describes how the applicant will comply with all LORS pertaining to traffic and transportation impacts.

Table 5.12-8. Laws, Ordinances, Regulations, and Standards for Traffic and Transportation

LORS	Requirements/Applicability	Administering Agency	AFC Sections Explaining Conformance
Title 49 CFR, Sections 171–177 and 350–399	Requires proper handling and storage of hazardous materials during transportation.	U.S. Department of Transportation and Caltrans	SERC and transportation will comply with all standards for the transportation of hazardous materials (Sections 5.12.2.2 and 5.12.5.1).
Title 14 CFR, Section 77.13(2)(i), 77.17, 77.21, 77.23, and 77.25	Requires an applicant to notify the FAA of the construction or alterations of structures within a certain distance from an airport in order to avoid air navigation conflicts.	U.S. Department of Transportation and FAA	SERC will conform by filing FAA 7460 Notices of Construction for the exhaust stacks and transmission towers, as applicable (Sections 5.12.2.5 and 5.12.5.1).
CVC Sections 13369, 15275, and 15278	Addresses the licensing of drivers and classifications of licenses required for the operation of particular types of vehicles. In addition, certificates permitting the operation of vehicles transporting hazardous materials are required.	Caltrans	SERC will conform to these sections in the CVC (Section 5.12.5.2).
CVC Section 25160 et seq.	Addresses the safe transport of hazardous materials.	Caltrans	SERC will conform to these sections in the CVC (Section 5.12.5.2).
CVC Sections 2500–2505	Authorizes the issuance of licenses by the Commissioner of the CHP for the transportation of hazardous materials including explosives.	Caltrans	SERC will conform to these sections in the CVC (Section 5.12.5.2).
CVC Section 31300 et seq.	Requires transporters to meet proper storage and handling standards for transporting hazardous materials on public roads.	Caltrans	Transporters will comply with standards for transportation of hazardous materials on state highways during construction and operations. SERC will conform to CVC Section 31303 by requiring that shippers of hazardous materials use the shortest route possible to and from the site (Section 5.12.5.2).
CVC Sections 31600–31620	Regulates the transportation of explosive materials.	Caltrans	SERC will conform to CVC Sections 31600–31620 (Section 5.12.5.2).
CVC Sections 32000–32053	Regulates the licensing of carriers of hazardous materials and includes noticing requirements.	Caltrans	SERC will conform to CVC Sections 32000–32053 (Section 5.12.5.2).
CVC Sections 32100–32109 and 32105	Establishes special requirements for the transportation of substances presenting inhalation hazards and poisonous gases. Requires that shippers of inhalation or explosive materials contact the CHP and apply for a Hazardous Material Transportation License.	Caltrans	SERC will conform by requiring shippers of inhalation or explosive materials to contact the CHP and obtain a Hazardous Materials Transportation License (Section 5.12.2.2 and Section 5.12.5.2).
CVC Sections 34000–34121	Establishes special requirements for the transportation of flammable and combustible liquids over public roads and highways.	Caltrans	SERC will conform to CVC Sections 34000–34121 (Section 5.12.2.2 and Section 5.12.5.2).

Table 5.12-8. Laws, Ordinances, Regulations, and Standards for Traffic and Transportation

LORS	Requirements/Applicability	Administering Agency	AFC Sections Explaining Conformance
CVC Sections 34500, 34501, 34501.2, 34501.3, 34501.4, 34501.10, 34505.5–7, 34506, 34507.5 and 34510–11	Regulates the safe operation of vehicles, including those used to transport hazardous materials.	Caltrans	SERC will conform to these sections in the CVC (Section 5.12.2.2 and Section 5.12.5.2).
S&HC Sections 660, 670, 1450, 1460 et seq., 1470, and 1480	Regulates right-of-way encroachment and the granting of permits for encroachments on state and county roads.	Caltrans	SERC will conform to these sections in the S&HC (Section 5.12.5.2).
S&HC Sections 117, 660–711	Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery.	Caltrans	Encroachment permits will be obtained by transporters, as required (Section 5.12.6).
CVC Sections 35780; S&HC Sections 660–711	Requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.	Caltrans	Transportation permits will be obtained by transporters for all overloads, as required (Section 5.12.7).
CVC Sections 35550–35559	Regulates weight and load limitations.	Caltrans	SERC will conform to these sections in the CVC (Section 5.12.6).
California State Planning Law, Government Code Section 65302	SERC must conform to the General Plan.	City of Stanton	SERC will comply with the City of Stanton's General Plan (Section 5.12.5.3).
City of Stanton General Plan Infrastructure and Community Services Element	Identifies the strengths, opportunities, and key issues of the city's infrastructure and public services system; establishes goals, strategies, and actions affecting infrastructure and public services; provides a framework for determining appropriate infrastructure improvements and expansion of public services; and provides a framework for providing sufficient infrastructure and public services to meet the existing and future needs of the City of Stanton.	City of Stanton	SERC will have no significant impact on the city's traffic and transportation infrastructure (Section 5.12.5.3).

Note:

S&HC = California Streets and Highways Code

5.12.5.1 Federal LORS

- Title 49 CFR 171–177 governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles.
- Title 49 CFR 350-399 and Appendices A-G, Federal Motor Carrier Safety Regulations, address safety considerations for the transport of goods, materials, and substances over public highways.
- Title 49 CFR 397.9, the Hazardous Materials Transportation Act of 1974, directs the U.S. Department of Transportation to establish criteria and regulations for the safe transportation of hazardous materials.
- Title 14 CFR 77.9 requires an applicant to notify the FAA of the construction of structures exceeding 200 feet AGL 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.

5.12.5.2 State LORS

- Title 14 CFR 77.13 through 77.23 outline the criteria used by the FAA to determine whether an obstruction would create an air navigation conflict, when applicable.
- CVC Sections 13369, 15275, and 15278 address the licensing of drivers and classifications of licenses required to operate particular types of vehicles. In addition, certificates permitting the operation of vehicles transporting hazardous materials are addressed.
- CVC Sections 25160 et seq. address the safe transport of hazardous materials.
- CVC Sections 2500–2505 authorize the issuance of licenses by the Commissioner of the CHP to transport hazardous materials, including explosives.
- CVC Sections 31300 et seq. regulate the highway transportation of hazardous materials, routes used, and restrictions. CVC Section 31303 requires hazardous materials to be transported on state or interstate highways that offer the shortest overall transit time possible.
- CVC Sections 31600–31620 regulate the transportation of explosive materials.
- CVC Sections 32000–32053 regulate the licensing of carriers of hazardous materials and include noticing requirements.
- CVC Sections 32100–32109 establish special requirements for the transportation of substances presenting inhalation hazards and poisonous gases. CVC Section 32105 requires shippers of inhalation hazards or explosive materials to contact the CHP and apply for a Hazardous Material Transportation License. Upon receiving this license, the shipper will obtain a handbook specifying approved routes.
- CVC Sections 34000–34121 establish special requirements for transporting flammable and combustible liquids over public roads and highways.
- CVC Sections 34500, 34501, 34501.2, 34501.3, 34501.4, 34501.10, 34505.5–7, 34506, 34507.5, and 34510–11 regulate the safe operation of vehicles, including those used to transport hazardous materials.
- California S&HC, Sections 660, 670, 1450, 1460 et seq. 1470, and 1480 regulate right-of-way encroachment and granting of permits for encroachments on state and county roads.
- S&HC Sections 117 and 660–711 and CVC Sections 35780 et seq. require permits to transport oversized loads on county roads. S&HC Sections 117 and 660 to 711 require permits for any

construction, maintenance, or repair involving encroachment on state highway rights-of-way. CVC Section 35780 requires approval for a permit to transport oversized or excessive loads over state highways.

- Caltrans weight and load limitations for state highways apply to all state and local roadways. The weight and load limitations are specified in CVC Sections 35550 to 35559. The following provisions from the CVC apply to all roadways and are therefore applicable to SERC:
  - **General Provisions**
    - The gross weight imposed upon the highway by the wheels on any axle of a vehicle shall not exceed 20,000 pounds; and the gross weight upon any one wheel, or wheels, supporting one end of an axle, and resting upon the roadway, shall not exceed 10,500 pounds.
    - The maximum wheel load is the lesser of the load limit established by the tire manufacturer, or a load of 620 pounds per lateral inch of tire width, as determined by the manufacturer's rated tire width.
  - **Vehicles with Trailers or Semi-trailers**
    - The gross weight imposed upon the highway by the wheels on any one axle of a vehicle shall not exceed 18,000 pounds; and the gross weight upon any one wheel, or wheels, supporting one end of an axle and resting upon the roadway, shall not exceed 9,500 pounds, except that the gross weight imposed upon the highway by the wheels on any front steering axle of a motor vehicle shall not exceed 12,500 pounds.
- California State Planning Law, Government Code Section 65302, requires each city and county to adopt a General Plan, consisting of seven mandatory elements, to guide its physical development. Section 65302(b) requires that a circulation element be one of the mandatory elements.

5.12.5.3 Local LORS

This section reviews compliance with all relevant local LORS without regard to their applicability as a matter of law. These LORS include the following:

- City of Stanton's General Plan Infrastructure and Community Services Element sets LOS standards for local roadways within the city.
- The City of Stanton requires a permit before operating any oversized/overweight vehicles within the city. The project will comply with the transportation permit requirements by obtaining the permit from the Public Works Department before operating any oversized vehicles within the unincorporated parts of the county.

5.12.6 Agencies and Agency Contacts

Table 5.12-9 lists the agency contacts related to traffic and transportation.

Table 5.12-9. 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 http://www.dot.ca.gov/hq/traffops/permits/

Table 5.12-9. Agency Contacts for Traffic and Transportation

Issue	Agency	Contact
Transportation Permit for Oversized or Overweight Loads	City of Stanton	City of Stanton Public Works Department Engineering Division 7800 Katella Avenue Stanton, CA 90680 (714) 379-9222 x205 acruz@ci.stanton.ca.us
Hazardous Material Transportation License	CHP	Hazardous Material Licensing P.O. Box 942898 Sacramento, CA 942898-0001 (916) 843-3400 Email form available at: http://www.chp.ca.gov/prog/email.cgi
Safety Permits	Federal Motor Carrier Safety Administration	California Office (916) 930-2760 Specialist: Don Tomlinson (909) 217-8776 donald.tomlinson@dot.gov

5.12.7 Permits and Permit Schedule

Table 5.12-10 lists the permits related to traffic and transportation and the permit schedule. The vehicles used to transport heavy equipment and construction materials will 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 State Highway Code, and Sections 1411.1 to 1411.6 of the CCRs. Affected vehicles will be required to obtain transportation permits from Caltrans and Orange County, 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 SERC will be conducted in accordance with CVC Section 31303.

Table 5.12-10. Permits and Permit Schedule for Traffic and Transportation

Permit	Agency Contact	Schedule
Single/annual-trip transportation permit for oversized loads and oversized vehicles	Permit Officer on Duty Transportation Permits Issuance Branch (916) 322-4958	Obtain when necessary, 2-hour processing time (single trip) to 2 weeks (annual trip).
Hazardous materials transportation license	CHP Hazardous Material Licensing Program (916) 327-5039	Obtain when necessary, approximately 2-week processing time.
Single/annual transportation permit for oversize and overweight loads through the City of Stanton	City of Stanton Public Works Department Engineering Division (714) 379-9222 x205	Obtain when necessary, permit time varies.
FAA Determination of No Hazard	Karen McDonald Western-Pacific Region System Obstruction Specialist (310) 725-6557	File 7460-1 for each applicable structure no less than 45 days prior to construction.

5.12.8 References

Airport Land Use Commission for Orange County. 2015. *Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos*.

California Department of Transportation. (Caltrans). 2015a. Traffic Data Branch. 2014 Traffic Volumes on the California State Highway System. Available online: http://traffic-counts.dot.ca.gov/2014all/.

California Department of Transportation. (Caltrans). 2015b. Traffic Data Branch. 2013 Annual Average Daily Truck Traffic on the California State Highway System.

Capital Airspace Group. 2016. Stanton Energy Reliability Center. Obstruction Evaluation and Airspace Analysis. August 15.

California Military Department. 2016. Los Alamitos Army Airfield (KSLI). Available online: http://www.calguard.ca.gov/AA-LosAl/Pages/Airfield-History.aspx.

City of Stanton. 2008. *City of Stanton General Plan and Update Environmental Impact Report*. September.

Orange County Public Works Department. 2005. *Orange County Highway Design Manual.* Available online: http://ocroad.com/faq/refmaterials.

Orange County Transportation Authority (OCTA). 2015. *Master Plan of Arterial Highways.* Available online: http://www.octa.net/freeways-and-streets/streets/master-road-plan/overview/.

Orange County Transportation Authority (OCTA). 2014. 2013/14 Traffic Flow Map, Orange County, California. September 1.

Orange County Transportation Authority (OCTA). 2015. Congestion Management Program (CMP). Available online: http://www.octa.net/Projects-and-Programs/Plans-and-Studies/Congestion-Management-Program/Overview/.

Orange County Transportation Authority (OCTA). 2016. Available online: www.octa.net/Bus/Routes-and-Schedules/Overview/.

Transportation Research Board. 2010. *Highway Capacity Manual*.