

2.3 Community Impacts

2.3.1 Community Character and Cohesion

2.3.1.1 Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this Project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the Project's effects.

2.3.1.2 Affected Environment

The information in this section is based on the *Community Impact Assessment* prepared for the proposed Project (May 2023).

Please refer to Section 2.1, Land Use, for the definitions and figures of the “Study Area” and “Project Area.”

As shown on Figure 2.3-1, the Project Area includes areas along the Interstate (I) 5 corridor where improvements are proposed, as well as portions of State Route (SR) 91, SR-57, SR-55, and SR-22 where advance signage would be required. Most of the proposed improvements would be built within the Caltrans existing right-of-way (ROW) of the Project limits, and the installation of advance signage within State and local (City arterials leading to I-5) ROW is not likely to result in community impacts. Thus, the Study Area does not include the portions of the Project Area that include advance signage.

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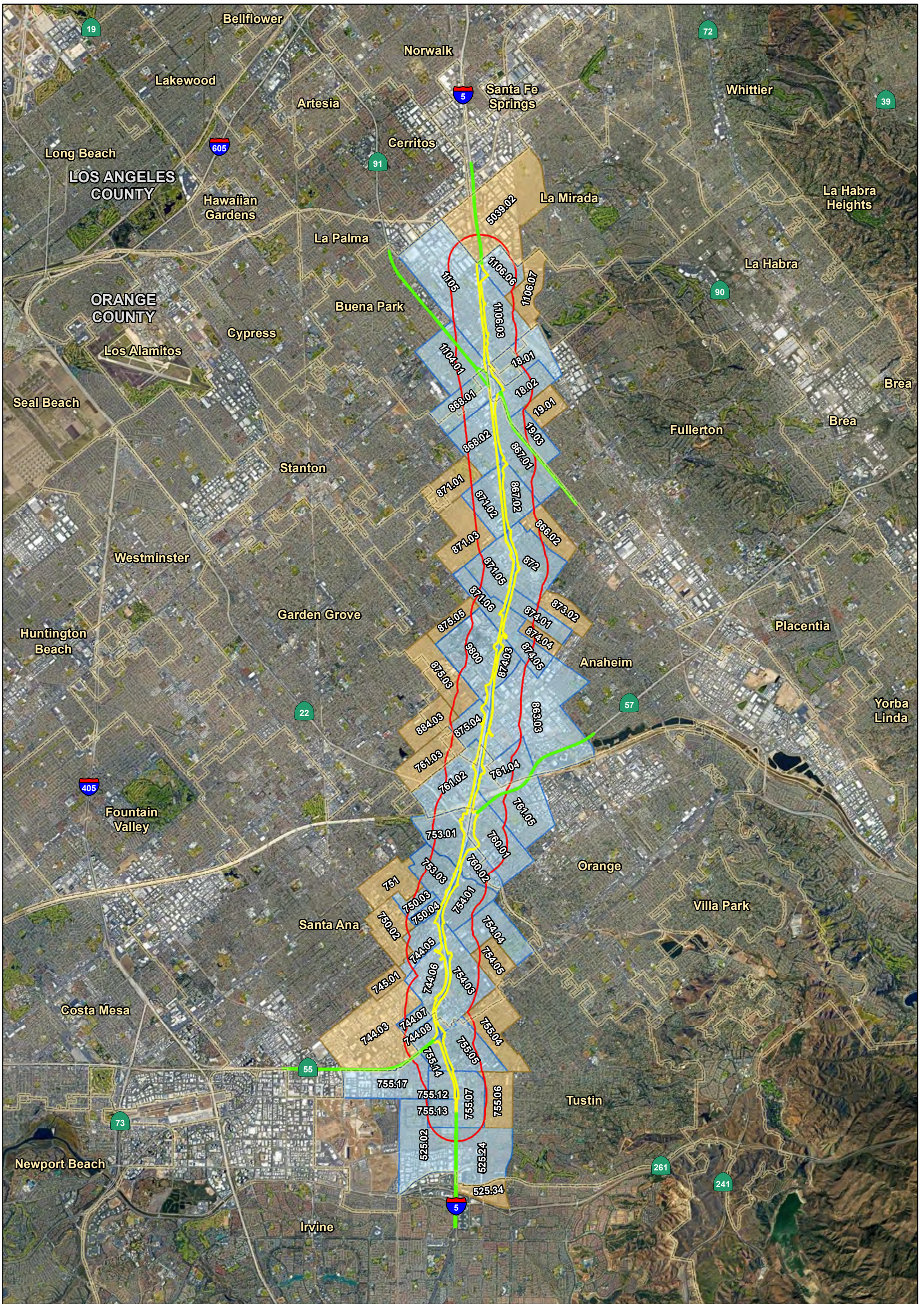
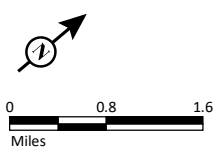


FIGURE 2.3-1

LEGEND

- Project Area
- Advance Signage Only
- Study Area
- City Boundary
- Study Area (2020) Census Tracts
- Other Census Tracts*

* Although portions of these census tracts are within 0.5 mile of the Study Area, the majority of their residential populations are not. Therefore, Census data for these census tracts is not included in this EIR/EA.



SOURCE: Google (2022); U.S. Census Bureau (2020)

I:\WSP2203.07\GIS\MXD\EIR_EA\CommImpactAssessStudyArea.mxd (5/10/2023)

I-5 Managed Lanes Project
(Red Hill Avenue to Orange County/Los Angeles County Line)

Study Area

EA No. 0Q950

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The Study Area Census tracts are listed below in Table 2.3.1.

Table 2.3.1: Study Area Census Tracts

County	City	Census Tract
Orange County	Anaheim	19.03
		761.02
		761.04
		863.03
		867.01
		867.02
		868.01
		868.02
		871.02
		871.05
		871.06
		872
		874.01
		874.03
	1104.01	
	9800	
	Buena Park	18.01
		18.02
		868.01
		1104.01
		1105
		1106.03
	1106.06	
	Fullerton	18.01
		18.02
		19.03
		867.01
		868.01
		868.02
		1104.01
	1105	
	1106.03	
	La Mirada	1105
		1106.06
	Orange	525.02
		753.01
		754.04
		760.01
		760.02
		761.02
		761.04
		761.05
		863.03
744.05		
744.06		
744.07		
750.03		

Table 2.3.1: Study Area Census Tracts

County	City	Census Tract	
Orange County (cont.)	Orange (cont.)	750.04	
		753.01	
		753.03	
		754.01	
		754.03	
		754.04	
		755.05	
		755.17	
		760.01	
		760.02	
		761.02	
		Tustin	525.24
			744.06
	744.07		
	744.08		
	754.03		
	755.04		
	755.05		
	755.07		
	755.12		
	755.13		
	755.14		
	755.17		

Source: Community Impact Assessment (May 2023).

Data presented in this section is from the United States Census Bureau (U.S. Census Bureau), the 2020 Census, and the 2016–2020 American Community Survey (ACS).¹ The Study Area cities have varying degrees of buildout within their respective spheres of influence, although redevelopment and infill development continue to occur where opportunity exists. Census tracts within Cerritos, Garden Grove, Irvine, La Palma, Norwalk, and Santa Fe Springs are not included in the environmental analysis as those areas would not experience impacts from the implementation of the proposed Project. In addition, Census Tracts 19.01, 525.34, 744.03, 745.01, 750.02, 751, 754.05, 755.04, 755.06, 761.03, 866.02, 871.01, 871.03, 873.02, 874.04, 875.03, 875.05, 884.03, 1106.07, and 5039.02 were not considered in this analysis because the bulk of the population within those census tracts is more than 0.5 mile from the

¹ The ACS is an ongoing survey conducted by the U.S. Census Bureau that provides data every year, supplying communities with current information they need to plan investments and services. ACS data are estimates derived from a sampling of the population, rather than population totals collected for the Decennial Census.

Project Area. The description of the Study Area is necessarily detailed enough to allow the demographic, economic, and community-based implications of the proposed Project to be accurately ascertained.

Community character encompasses many attributes, including social and economic characteristics, and assets that make a community unique and that establish a sense of place for its residents. As described in Chapter 2.1, Land Use, the Study Area consists of varying densities of residential uses, commercial land uses, mixed-use areas consisting of retail/housing, open space, public and institutional land uses, and I-5.

Community cohesion is the degree to which residents have a sense of belonging to their neighborhood, a level of commitment to the community, or a strong attachment to neighbors, groups, and institutions, usually due to continued association over time.

Demographic data compiled by the U.S. Census Bureau, including the 2016-2020 ACS 5-year estimates and the 2020 Decennial Census, may be used to measure a community's level of cohesion. The following demographic indicators tend to correlate with a higher degree of community cohesion and are used to determine the degree of community cohesion in the Study Area cities and census tracts:

- **Ethnicity:** In general, homogeneity of the population contributes to higher levels of community cohesion. Communities that are ethnically homogeneous often speak the same language, hold similar beliefs, and share a common culture and, therefore, are more likely to engage in social interaction on a routine basis. The U.S. Census Bureau compiles limited data regarding ethnicity. While the U.S. Census Bureau provides data regarding Hispanic/Latino origin, the language spoken at home, and ancestry, it does not provide data regarding religion. Although the Census data provides an incomplete picture of ethnic identity, Table B16001 of the 2011–2015 ACS,¹ which provides data regarding the primary language spoken at home by residents 5 years and over, can be used to

¹ Prior to 2016, Table B16001 provided data points for 42 non-English-language categories. Since 2016, geographic restrictions have been placed on the 5-year estimates to protect the privacy of speakers of smaller languages (County and census tract-level data are no longer available for Table B16001). Thus, the 2011-2015 ACS was utilized for the purpose of this analysis.

isolate discernable ethnically homogenous communities¹ within the general population by identifying large groups of people that share a common language and, presumably, many shared cultural characteristics.

- **Housing Occupancy:** Communities with a high percentage of owner-occupied residences are typically more cohesive because their populations tend to be less mobile. Because they have a financial stake in their community, homeowners often take a greater interest in what is happening in their community than renters do. This means they often have a stronger sense of belonging to their community. Table B07013 of the 2016-2020 ACS 5-Year Estimates provide data regarding the number of housing units in the Study Area that are owner-occupied.
- **Household Size:** In general, communities with a high percentage of families with children are more cohesive than communities consisting largely of single people. This appears to be because children tend to establish friendships with other children in their community. The social networks of children often lead to the establishment of friendships and affiliations among parents in the community. Table S1101 of the 2016-2020 ACS 5-Year Estimates provides data regarding the average household sizes across different household characteristics.
- **Elderly Residents:** In general, communities with a high percentage of elderly residents (65 years or older) tend to demonstrate a greater social commitment to their community. This is because the elderly population, which includes retirees, often tends to be more active in the community since they have more time available for volunteering and participating in social organizations. Table B01001 of the 2016-2020 ACS 5-Year Estimates provides data regarding the age of the population in the Study Area.
- **Transit-Dependent Population:** Communities with a high percentage of residents who are dependent on public transportation typically tend to be more cohesive than communities that are dependent on automobiles for transportation. This is because residents who tend to walk or use public transportation for travel tend to engage in social interaction with each other more frequently than residents

¹ An ethnically homogenous community is a geographic area with a high population concentration of a particular ethnic group. Ethnically homogenous communities often possess a strong cultural identity, are frequently home to places of worship and other cultural institutions that reflect local ethnic traditions, and feature a cluster of businesses that cater to the local ethnic group by providing familiar goods and services. Due to their shared cultural background, residents of ethnically homogenous communities often demonstrate a strong sense of community cohesion.

- who travel by automobile. Although the U.S. Census Bureau does not provide specific data regarding the percentage of the population that is dependent on public transportation for travel, the 2016-2020 ACS 5-Year Estimates do provide a series of demographic data that can be used to serve as a proxy for the transit-dependent population. For purposes of this analysis, the transit-dependent population was calculated by taking the number of residents aged 15 and over (as reported in Table B01001 of the 2016-2020 ACS 5-Year Estimate data), subtracting the number of persons living in group quarters (e.g., college residence halls, skilled nursing facilities, correctional facilities, and other group living environments where driving is not typically required, as reported in Table B26001 of the 2016-2020 ACS 5-Year Estimate data), subtracting the number of vehicles available (as reported in Table B25046 of the 2016-2020 ACS 5-Year Estimate data), and then dividing the difference by the population aged 15 and over.
- **Housing Tenure:** Communities with a high percentage of long-term residents are typically more cohesive because a greater proportion of the population has had time to establish social networks and develop an identity within the community. Tables B07013 and B25026 of the 2016-2020 ACS 5-Year Estimate data provide data regarding the year that each householder in the Study Area moved into their current housing unit, as well as owner or renter household data. For this analysis, those households that moved into their current residence in 2014 or earlier are considered long-term residents since they have lived in their current residence for more than 8 years.

These indicators of community character and cohesion in the Study Area and the applicable local jurisdictions are described in greater detail below.

Ethnicity

Table 2.3.2 provides data regarding the language spoken in residences in the Study Area counties, cities, and census tracts as reported in the 2011-2015 ACS from Table B16001. Prior to 2016, Table B16001 provided data points for 42 non-English-language categories. Since 2016, geographic restrictions have been placed on the 5-year estimates to protect the privacy of speakers of smaller languages (County and census tract-level data are no longer available for Table B16001). For the Study Area, the ACS estimates now reflect more generalized language data by collapsing 42 language groups that had 200,000 or more speakers nationwide in 2016 into 4 broad language categories (Spanish, Other Indo-European languages, Asian and Pacific Island languages, and all other languages). To appropriately identify the likelihood

Table 2.3.2: Language Spoken at Home

Area	Jurisdiction	Total:	Speak Only English ¹	Spanish or Spanish Creole ²	Armenian:	Persian:	Chinese:	Japanese:	Korean:	Vietnamese:	Tagalog:	Arabic:	Other and Unspecified Languages ³	Ethnically Homogenous Communities ⁴
Orange County	N/A	2,924,969	1,587,426	770,012	3,396	31,593	71,112	15,440	76,934	172,876	48,176	21,792	126,212	N/A
Los Angeles County	N/A	9,396,753	4,062,062	3,703,685	171,297	74,136	364,931	52,243	183,717	80,051	230,956	43,908	429,767	N/A
Cities														
Anaheim	Orange County	320,603	124,319	*141,145	416	2,116	3,946	823	*5,807	*15,454	*9,087	3,831	13,659	4
Buena Park	Orange County	77,102	35,186	*20,932	61	92	1,177	167	*8,225	1,034	*5,348	400	4,480	3
Fullerton	Orange County	130,239	67,986	*32,704	51	498	4,692	489	*13,510	1,635	2,219	536	5,919	2
La Mirada	Los Angeles County	46,474	26,316	*11,789	16	54	448	98	3,726	222	1,942	104	1,759	1
Orange	Orange County	131,147	78,090	*36,615	152	654	1,926	543	1,622	3,423	2,283	928	4,911	1
Santa Ana	Orange County	306,235	53,954	*219,778	49	321	2,132	399	688	*21,888	1,928	330	4,768	2
Tustin	Orange County	72,787	33,911	*24,411	160	775	2,634	269	1,946	3,053	1,432	229	3,967	1
Census Tracts														
18.01	Buena Park/ Fullerton	4,451	1,508	*2,194	0	1	98	0	263	142	136	0	109	1
18.02	Buena Park/ Fullerton	7,540	3,046	*3,759	0	0	43	24	471	1	23	31	142	1
19.03	Fullerton/ Anaheim	3,240	1,367	*1,417	0	0	34	35	78	64	152	0	93	1
525.02	Irvine/Tustin	6,004	3,479	*1,198	78	7	94	19	149	336	167	55	422	1
525.24	Irvine/Tustin	8,379	4,371	*2,160	69	179	299	13	*500	373	67	73	275	2
744.05	Santa Ana	5,284	521	*4,571	0	5	4	17	14	83	45	0	24	1
744.06	Santa Ana/ Tustin	3,110	387	*2,688	0	0	0	0	0	5	4	0	26	1
744.07	Santa Ana/ Tustin	5,710	836	*4,588	0	42	0	0	42	28	10	31	133	1

Table 2.3.2: Language Spoken at Home

Area	Jurisdiction	Total:	Speak Only English ¹	Spanish or Spanish Creole ²	Armenian:	Persian:	Chinese:	Japanese:	Korean:	Vietnamese:	Tagalog:	Arabic:	Other and Unspecified Languages ³	Ethnically Homogenous Communities ⁴
744.08	Tustin	5,149	965	*3,963	0	0	15	0	92	41	44	0	29	1
750.03	Santa Ana	6,430	274	*6,026	0	0	0	0	0	84	0	0	46	1
750.04	Santa Ana	4,569	383	*4,158	0	0	0	0	0	28	0	0	0	1
753.01	Santa Ana/ Orange	5,788	2,094	*3,138	0	0	20	0	11	461	19	0	45	1
753.03	Santa Ana	3,035	1,629	*1,119	0	0	0	0	0	92	139	0	56	1
754.01	Santa Ana	3,618	1,764	*1,493	0	0	0	0	0	165	56	32	108	1
754.03	Santa Ana/ Tustin	7,084	2,532	*3,910	0	49	47	16	18	119	115	0	278	1
754.04	Santa Ana/ Orange	5,733	1,893	*3,498	0	0	182	0	0	124	16	0	20	1
755.05	Santa Ana/ Tustin	3,396	1,963	*1,017	0	10	141	0	128	30	10	0	97	1
755.07	Tustin	5,314	2,547	*1,720	0	37	82	7	178	71	99	0	573	1
755.12	Tustin	3,559	1,164	*1,695	0	27	119	0	14	99	55	12	374	1
755.13	Tustin	5,343	1,421	*2,766	0	7	9	0	73	237	250	0	580	1
755.14	Tustin	3,660	817	*2,258	0	0	21	7	0	276	100	0	181	1
761.02	Santa Ana/ Orange/ Anaheim	7,489	2,955	*3,179	0	25	50	7	462	314	138	97	262	1
863.03	Anaheim/ Orange	6,257	2,994	*1,898	0	0	39	0	144	138	170	171	703	1
867.01	Anaheim/ Fullerton	8,402	3,116	*3,381	0	0	61	21	245	*671	286	0	621	2
867.02	Anaheim	6,294	1,749	*3,528	0	111	31	0	50	110	204	122	389	1
868.01	Anaheim/ Fullerton/ Buena Park	3,342	1,710	*1,096	0	9	0	23	5	77	140	7	275	1
868.02	Anaheim/ Fullerton	5,596	1,415	*2,934	0	14	105	70	82	404	240	8	324	1
871.02	Anaheim	5,030	1,826	*2,442	0	0	8	0	246	123	101	99	185	1

Table 2.3.2: Language Spoken at Home

Area	Jurisdiction	Total:	Speak Only English ¹	Spanish or Spanish Creole ²	Armenian:	Persian:	Chinese:	Japanese:	Korean:	Vietnamese:	Tagalog:	Arabic:	Other and Unspecified Languages ³	Ethnically Homogenous Communities ⁴
871.05	Anaheim	4,090	1,634	*1,394	0	0	179	4	72	368	137	122	180	1
871.06	Anaheim	4,867	1,641	*2,752	0	0	0	0	82	202	59	0	131	1
872	Anaheim	7,914	3,430	*3,947	0	11	63	0	49	75	183	39	117	1
874.01	Anaheim	3,919	1,397	*2,016	0	0	87	16	137	170	90	0	6	1
874.03	Anaheim	2,833	342	*2,374	0	0	0	5	14	43	26	0	29	1
874.05	Anaheim	5,447	822	*4,334	0	14	40	0	19	34	134	50	0	1
875.04	Anaheim	7,111	1,113	*5,377	0	0	0	11	56	375	80	47	52	1
1104.01	Buena Park/ Anaheim/ Fullerton	4,993	2,410	*1,377	0	19	80	0	32	0	*709	37	329	2
1105	Buena Park/ Cerritos/ Fullerton/La Mirada	7,759	2,992	*3,477	0	0	43	0	*581	22	440	74	130	2
1106.03	Buena Park/ Fullerton	8,214	2,944	*3,993	0	1	101	0	*905	0	129	0	141	2
1106.06	Buena Park/ La Mirada	4,274	1,190	*2,096	0	0	26	0	248	2	480	0	232	1
9800	Anaheim	30	21	9	0	0	0	0	0	0	0	0	0	0

Source: United States Census Bureau, ACS 2015 5-year Estimates; Table B16001. *Community Impact Assessment* (May 2023).

Source Note: In the 5 years that have passed since the 2011–2015 ACS sample data were collected, population sizes have slightly increased, but not substantially (please refer to Section 3.1 for a detailed discussion of population growth). Therefore, the 2011–2015 ACS data provided here likely reflect the current general demographics of the Study Area and represent the best available information regarding demographics in that area.

Note: **Bold numbers** indicate the values are higher than the total for Orange County as a whole.

Numbers marked with an asterisk (*) indicate the likely presence of an ethnically homogenous community.

¹ English only.

² Includes Spanish Creole.

³ Includes French (Patois, Cajun), French Creole, Italian, Portuguese or Portuguese Creole, German, Yiddish, Other West Germanic Languages, Scandinavian Languages, Greek, Russian, Polish, Serbo-Croatian, Other Slavic Languages, Gujarati, Hindi, Urdu, Other Indic Languages, Other Indo-European Languages, Mon-Khmer, Cambodian, Hmong, Thai, Laotian, Other Asian Languages, Other Pacific Island Languages, Navajo, Other Native North American Languages, Hungarian, Hebrew, and African Languages.

⁴ An ethnically homogenous community is likely to exist in a city when 2,000 or more residents speak a language other than English at home. Ethnically homogenous communities are likely to exist in a census tract when both of the following criteria are met: (1) 500 or more residents speak a language other than English at home; and (2) at least 5 percent of the population in that census tract speaks that language at home.

ACS = American Community Survey

that an ethnically homogenous community may exist, more detailed data is required than the four broad language categories provided in the most recent 2016-2020 ACS. Therefore, Table 2.3.2 relies on the version of Table B16001 compiled with 2011-2015 ACS data, which provides data regarding all 42 languages. The data was then reorganized to report only the languages that could potentially identify an ethnically homogenous community.

Additionally, the U.S. Census Bureau redetermined census tract boundaries in 2020. At the time of the 2011-2015 ACS, the census tracts included in Table 2.3.2 occupied the same geographical area as those identified on Figure 2.3-11 (2016-2020 ACS).

Table 2.3.2 identifies whether ethnically homogenous communities are likely to exist in the Study Area. Ethnically homogenous communities were identified in cities when 2,000 or more residents speak a language other than English at home. This criterion was developed based on a reasonable estimate of the minimum number of residents required before ethnic places of worship, cultural institutions, and/or business districts were established in the community. Ethnically homogenous communities were identified in a census tract when both of the following criteria were met: (1) 500 or more residents speak a language other than English at home; *and* (2) at least 5 percent of the population in that census tract speaks that language at home). Similar to the criteria developed for the cities, these criteria were based on a reasonable estimate of the minimum number of residents required before ethnic places of worship, cultural institutions, and/or business districts are established in close proximity to the census tract.

Many Study Area cities reported Spanish or Spanish Creole as the most spoken language at home. As shown in Table 2.3.2, at least one potentially ethnically homogenous community was identified in most Study Area cities. Communities speaking Spanish or Spanish Creole at home were the most often reported potentially ethnically homogenous community; Korean was the second most often reported, and Vietnamese was the third. The Study Area city with the most potential ethnically homogenous communities was Anaheim, which includes four ethnically homogenous communities.

Household Size

Table 2.3.3 provides a summary of the community cohesion indicators for the Study Area counties, cities, and census tracts based on 2016-2020 ACS data, including the average household size. Census Tract 744.06 reported the largest average household

Table 2.3.3: Community Cohesion Indicators

Area	Jurisdiction	Average Household Size (persons) ¹	Owner-Occupied Residences ²	Elderly Residents (>64 years old) ³	Long-Term Residents (Moved in 2014 or Earlier) ⁴	Ethnically Homogenous Communities	Transit-Dependent Population (%) ⁴
Orange County	N/A	3.0	57.1%	14.8%	68.7%	N/A	0.2%
Los Angeles County	N/A	3.0	49.3%	13.7%	73.0%	N/A	0.2%
Cities							
Anaheim	Orange County	3.4	45.0%	11.8%	69.8%	4	0.7%
Buena Park	Orange County	3.5	58.0%	14.2%	71.5%	3	0.0%
Fullerton	Orange County	3.1	52.8%	13.2%	66.0%	2	0.6%
La Mirada	Los Angeles County	3.1	79.7%	19.2%	81.3%	1	N/A
Orange	Orange County	3.0	58.6%	13.8%	71.2%	1	N/A
Santa Ana	Orange County	4.2	46.2%	9.8%	75.1%	2	N/A
Tustin	Orange County	3.0	49.1%	12.3%	61.9%	1	N/A
Census Tracts							
18.01	Buena Park/Fullerton	3.4	19.4%	6.6%	60.3%	1	0.2%
18.02	Buena Park/Fullerton	3.5	32.3%	7.6%	71.1%	1	0.2%
19.03	Fullerton/Anaheim	3.6	55.5%	11.1%	69.7%	1	0.6%
525.02	Irvine/Tustin	3.0	83.7%	20.6%	83.8%	1	0.5%
525.24	Irvine/Tustin	2.9	51.4%	7.4%	53.4%	2	0.5%
744.05	Santa Ana	3.8	13.4%	8.0%	70.8%	1	0.5%
744.06	Santa Ana/Tustin	4.5	45.2%	5.0%	81.1%	1	0.3%
744.07	Santa Ana/Tustin	3.8	16.2%	5.8%	56.7%	1	0.2%
744.08	Tustin	3.9	26.1%	6.5%	45.9%	1	0.5%
750.03	Santa Ana	4.3	2.5%	3.4%	73.2%	1	0.4%
750.04	Santa Ana	3.9	4.9%	3.4%	74.9%	1	0.0%
753.01	Santa Ana/Orange	3.5	55.8%	14.0%	68.6%	1	0.1%
753.03	Santa Ana	2.9	80.2%	20.4%	62.7%	1	0.1%
754.04	Santa Ana/Orange	3.1	44.5%	10.8%	48.6%	1	-0.02%
755.05	Santa Ana/Tustin	2.5	43.9%	17.4%	67.6%	1	0.6%
755.07	Tustin	2.7	22.8%	7.8%	51.8%	1	0.5%
755.12	Tustin	3.4	33.4%	3.6%	40.7%	1	0.4%
755.13	Tustin	3.4	35.2%	9.8%	68.0%	1	0.4%
755.14	Tustin	3.8	23.3%	8.4%	61.3%	1	0.0%
755.17	Santa Ana/Tustin	3.92	12.9%	6.3%	67.6%	N/A	0.0%

Table 2.3.3: Community Cohesion Indicators

Area	Jurisdiction	Average Household Size (persons) ¹	Owner-Occupied Residences ²	Elderly Residents (>64 years old) ³	Long-Term Residents (Moved in 2014 or Earlier) ⁴	Ethnically Homogenous Communities	Transit-Dependent Population (%) ⁴
760.01	Santa Ana/Orange	2.8	50.0%	14.0%	68.4%	N/A	0.0%
760.02	Santa Ana/Orange	2.0	37.1%	24.3%	42.4%	N/A	0.2%
761.02	Santa Ana/Orange/Anaheim	2.8	12.3%	8.3%	41.9%	N/A	0.4%
761.04	Anaheim/Orange	2.2	7.3%	7.2%	30.7%	1	0.6%
761.05	Orange	3.2	59.8%	13.6%	77.4%	N/A	0.5%
863.03	Anaheim/Orange	2.8	24.0%	10.6%	39.1%	1	0.03%
867.01	Anaheim/Fullerton	4.0	66.3%	15.4%	75.0%	2	0.02%
867.02	Anaheim	3.8	35.1%	6.7%	59.6%	1	0.3%
868.01	Anaheim/Fullerton/Buena Park	3.4	66.1%	14.0%	82.2%	1	0.6%
868.02	Anaheim/Fullerton	3.8	37.8%	14.4%	61.9%	1	0.4%
871.02	Anaheim	3.9	14.1%	4.1%	54.1%	1	0.4%
871.05	Anaheim	3.0	47.4%	20.0%	60.6%	1	0.0%
871.06	Anaheim	3.2	34.3%	20.5%	70.4%	1	0.0%
872	Anaheim	2.7	48.2%	12.2%	74.8%	1	0.4%
874.01	Anaheim	3.1	86.1%	7.0%	68.4%	1	0.0%
874.03	Anaheim	4.2	33.8%	6.8%	77.4%	1	0.0%
874.05	Anaheim	4.2	19.5%	6.2%	86.8%	1	0.4%
875.04	Anaheim	4.4	15.5%	6.8%	76.5%	1	N/A
1104.01	Buena Park/Anaheim/Fullerton	3.5	78.1%	12.4%	74.0%	2	N/A
1105	Buena Park/Cerritos/Fullerton/La Mirada	3.7	29.9%	11.8%	68.1%	2	0.0%
1106.03	Buena Park/Fullerton	3.5	14.5%	9.2%	58.8%	2	0.0%
1106.06	Buena Park/La Mirada	3.4	28.1%	12.6%	67.7%	1	0.0%
9800	Anaheim	N/A	N/A	0.0%	N/A	0	0.0%

Source: *Community Impact Assessment* (May 2023).

Note: **Bolding** indicates the value is higher than the Orange County average.

¹ U.S. Census. 2016—2020 American Community Survey, Table S1101.

² U.S. Census. 2016—2020 American Community Survey, Table B07013.

³ U.S. Census. 2016—2020 American Community Survey, Table DP05.

⁴ U.S. Census. 2016—2020 American Community Survey, Table B25026.

ACS = American Community Survey

U.S. Census = United States Census Bureau

N/A = Not Available

size within the entire study area (4.5 persons) and Census Tract 760.02 reported the smallest average household size (2.0 persons).

Elderly Residents

Table 2.3.3 also provides the percentage of the population that is elderly (65 years or older) in the Study Area counties, cities, and census tracts based on 2016-2020 ACS data. Census Tract 760.02 reported the highest percentage of elderly residents (24.3 percent). Census Tracts 750.03 and 750.04 reported the smallest percentage of elderly residents (3.4 percent).

Housing Tenure

Table 2.3.3 also provides the percentage of the population that moved into their current residences in 2014 or earlier in the Study Area counties, cities, and census tracts. Of the Study Area census tracts, Census Tract 874.05 (86.8 percent) has the highest percentage of long-term residents. Census Tract 761.04 reported the lowest percentage of long-term residents (30.7 percent).

Transit Dependent Population

Table 2.3.3 shows the percentage of the population that is transit-dependent in the Study Area cities and census tracts. As shown in Table 2.3.3, the transit-dependent population comprises a very small portion of the Study Area cities and census tracts, which can be attributed to the combination of the built environment and the essential need of nontransit options to travel within the Study Area.

Community Cohesion Summary

As shown in Table 2.3.3, most of the Study Area census tracts appear to have at least one ethnically homogenous community (primarily Spanish, Korean, or Vietnamese-speaking).

As shown in Table 2.3.3, about half of the Study Area census tracts reported a higher average household size than Orange County. Few of the Study Area census tracts reported higher percentages of residents who own their homes than Orange County, and few Study Area census tracts reported higher rates of long-term residents than Orange County. Very few Study Area census tracts reported a higher percentage of elderly residents than Orange County.

Almost all of the Study Area census tracts exhibit at least one to three community cohesion indicators in comparison to the overall Orange County population. Four of the Study Area census tracts did not show any community cohesion indicators

compared to the general Orange County population (Census Tracts 525.24, 755.07, 761.02, and 761.04). The Study Area exhibits low to moderate community cohesion based on these factors.

Other Demographics

Employment

Table 2.3.4 provides demographic characteristics for the Study Area counties, cities, and census tracts related to income level, educational attainment, and employment, as reported in the 2016-2020 ACS and the 2020 Census. As shown in Table 2.3.4, Fullerton and La Mirada reported a lower employed civilian labor force percentage compared to Orange County and the other Study Area cities.

Educational Attainment

As shown in Table 2.3.4, the cities of Fullerton, La Mirada, Orange, Tustin, and nine of the Study Area census tracts reported a higher percentage of residents who are high school graduates or higher than Orange County overall (86 percent). The City of Fullerton, the City of Tustin, and six Study Area census tracts reported a higher percentage of residents who are college graduates or higher than Orange County (41.2 percent).

Income and Poverty Status

To determine the income and poverty characteristics for the Study Area, data was obtained from the 2016-2020 ACS for the Study Area counties, cities, and census tracts.

Table 2.3.5 provides income and poverty level characteristics for the Study Area counties, cities, and census tracts, as reported in the 2016–2020 ACS. The U.S. Census Bureau determines the number of persons living below poverty based on its poverty thresholds, which differ slightly from the poverty guidelines defined by the United States Department of Health and Human Services (HHS). For 2021, the U.S. Census Bureau’s preliminary weighted average poverty threshold for a family of four was \$27,741 (U.S. Census Bureau 2022). For 2023, the HHS established a poverty guideline of \$30,000 for a family of four (HHS 2023). Therefore, because the available census data related to persons living below the poverty level are based on the U.S. Census Bureau’s poverty thresholds, as recommended in the Council on Environmental Quality (CEQ) guidance, the U.S. Census Bureau’s poverty thresholds rather than the HHS poverty guidelines were utilized. The year 2020 was used here to

Table 2.3.4: Employment, Income, and Education

Area	Jurisdiction	Total Population ¹	Median Household Income ²	Persons Living in Poverty (%) ²	High School Graduate or Higher Over Age 25 (%) ²	Bachelor's Degree or Higher Over Age 25 (%) ²	Employed Civilian Labor Force (%) ²
Orange County	N/A	3,186,989	\$94,441	10.1%	86.0%	41.2%	62.3%
Los Angeles County	N/A	10,014,009	\$71,358	14.2%	79.8%	33.5%	60.5%
Cities							
Anaheim	Orange County	346,824	\$76,723	13.8%	77.9%	26.6%	63.5%
Buena Park	Orange County	84,034	\$84,680	10.3%	85.2%	30.5%	64.3%
Fullerton	Orange County	143,617	\$85,471	12.7%	89.7%	42.9%	60.9%
La Mirada	Los Angeles County	48,008	\$92,493	5.1%	90.0%	36.0%	57.4%
Orange	Orange County	139,911	\$96,605	10.3%	87.2%	38.9%	62.8%
Santa Ana	Orange County	310,227	\$72,406	13.4%	61.3%	16.8%	64.3%
Tustin	Orange County	80,276	\$88,386	10.9%	87.8%	44.8%	66.5%
Census Tracts							
18.01	Buena Park/Fullerton	5,275	\$54,750	11.5%	77.9%	21.1%	65.3%
18.02	Buena Park/Fullerton	7,488	\$55,144	20.1%	75.9%	13.6%	68.4%
19.03	Fullerton/Anaheim	3,539	\$86,685	10.4%	77.5%	25.3%	63.1%
525.02	Irvine/Tustin	6,132	\$116,083	5.9%	93.3%	48.2%	62.4%
525.24	Irvine/Tustin	8,020	\$112,014	3.1%	94.3%	66.4%	76.4%
744.05	Santa Ana	6,091	\$47,425	18.7%	62.5%	19.5%	66.5%
744.06	Santa Ana/Tustin	3,789	\$54,948	18.0%	54.8%	7.2%	59.8%
744.07	Santa Ana/Tustin	6,024	\$50,969	15.2%	55.7%	12.9%	63.6%
744.08	Tustin	5,453	\$54,988	6.8%	68.4%	16.0%	61.8%
750.03	Santa Ana	6,493	\$40,183	29.1%	44.4%	6.2%	64.3%
750.04	Santa Ana	4,765	\$45,288	25.3%	47.2%	4.0%	62.2%
753.01	Santa Ana/Orange	5,512	\$76,147	10.3%	75.9%	28.2%	61.2%
753.03	Santa Ana	3,357	\$123,654	2.2%	83.7%	51.3%	65.1%
754.01	Santa Ana	3,859	\$80,651	8.0%	77.4%	32.4%	61.1%
754.03	Santa Ana/Tustin	7,707	\$73,194	6.6%	78.4%	25.1%	72.1%
754.04	Santa Ana/Orange	6,362	\$95,851	14.4%	87.8%	31.6%	76.2%

Table 2.3.4: Employment, Income, and Education

Area	Jurisdiction	Total Population ¹	Median Household Income ²	Persons Living in Poverty (%) ²	High School Graduate or Higher Over Age 25 (%) ²	Bachelor's Degree or Higher Over Age 25 (%) ²	Employed Civilian Labor Force (%) ²
755.05	Santa Ana/Tustin	3,763	\$71,667	12.8%	88.6%	31.9%	63.5%
755.07	Tustin	5,476	\$66,628	15.6%	88.1%	37.4%	71.5%
755.12	Tustin	3,719	\$82,656	7.3%	84.7%	33.0%	78.0%
755.13	Tustin	5,071	\$76,588	8.6%	76.4%	20.2%	72.4%
755.14	Tustin	3,553	\$56,375	23.7%	69.5%	18.3%	72.4%
755.17	Santa Ana/Tustin	6,809	\$71,389	15.3%	79.7%	32.9%	73.7%
760.01	Santa Ana/Orange	7,901	\$65,814	13.1%	88.2%	29.5%	63.7%
760.02	Santa Ana/Orange	1,994	\$89,281	4.9%	98.3%	57.4%	62.2%
761.02	Santa Ana/Orange/Anaheim	8,150	\$60,365	14.5%	78.4%	23.6%	34.1%
761.04	Anaheim/Orange	6,189	\$90,000	12.2%	92.8%	54.2%	81.7%
761.05	Orange	4,697	\$92,434	15.0%	84.0%	32.8%	67.7%
863.03	Anaheim/Orange	11,758	\$76,641	12.0%	87.7%	39.8%	66.3%
867.01	Anaheim/Fullerton	8,776	\$86,922	13.4%	74.1%	20.2%	62.7%
867.02	Anaheim	7,200	\$63,429	14.1%	68.8%	10.2%	65.9%
868.01	Anaheim/Fullerton/Buena Park	3,593	\$85,246	8.5%	78.7%	19.5%	63.3%
868.02	Anaheim/Fullerton	5,640	\$92,628	12.0%	80.8%	32.2%	62.1%
871.02	Anaheim	6,613	\$64,621	20.4%	81.2%	20.1%	66.9%
871.05	Anaheim	4,729	\$100,088	10.5%	78.4%	23.1%	65.5%
871.06	Anaheim	4,793	\$45,327	11.4%	63.1%	14.7%	50.1%
872	Anaheim	7,538	\$66,154	19.5%	76.3%	28.6%	62.5%
874.01	Anaheim	5,110	\$120,375	4.6%	84.0%	43.0%	76.7%
874.03	Anaheim	3,144	\$56,063	17.1%	54.6%	8.1%	58.2%
874.05	Anaheim	5,509	\$51,763	28.1%	60.6%	16.7%	58.9%
875.04	Anaheim	7,109	\$53,904	23.4%	56.4%	9.2%	61.8%
1104.01	Buena Park/Anaheim/Fullerton	5,704	\$99,875	12.1%	89.8%	29.2%	68.8%
1105	Buena Park/Cerritos/Fullerton/La Mirada	8,557	\$60,801	14.2%	68.9%	17.8%	60.8%
1106.03	Buena Park/Fullerton	8,556	\$56,563	20.5%	69.4%	12.2%	67.8%

Table 2.3.4: Employment, Income, and Education

Area	Jurisdiction	Total Population ¹	Median Household Income ²	Persons Living in Poverty (%) ²	High School Graduate or Higher Over Age 25 (%) ²	Bachelor's Degree or Higher Over Age 25 (%) ²	Employed Civilian Labor Force (%) ²
1106.06	Buena Park/La Mirada	4,991	\$65,682	13.8%	81.5%	26.7%	66.8%
9800	Anaheim	30	N/A	N/A	N/A	N/A	22.9%

Source: *Community Impact Assessment* (May 2023).

Note: **Bolding** indicates the value is higher than the Orange County.

¹ United States Census Bureau. 2020. Table P1.

² United States Census Bureau. 2016–2020 American Community Survey, Tables DP03, S1701, and S1501.

N/A = Not Applicable

Table 2.3.5: Income and Poverty Level

Area	Jurisdiction	Total Population for Whom Poverty Status is Determined	Median Household Income (dollars)	Persons Living in Poverty (%)
Orange County	N/A	317,682	\$94,441	10.1%
Los Angeles County	N/A	1,401,656	\$71,358	14.2%
Cities				
Anaheim	Orange County	48,347	\$76,723	13.8%
Buena Park	Orange County	8,400	\$84,680	10.3%
Fullerton	Orange County	17,473	\$85,471	12.7%
La Mirada	Los Angeles County	2,307	\$92,493	5.1%
Orange	Orange County	13,641	\$96,605	10.3%
Santa Ana	Orange County	43,975	\$72,406	13.4%
Tustin	Orange County	8,750	\$88,386	10.9%
Census Tract				
18.01	Buena Park/Fullerton	617	\$54,750	11.5%
18.02	Buena Park/Fullerton	1,516	\$55,144	20.1%
19.03	Fullerton/Anaheim	331	\$86,685	10.4%
525.02	Irvine/Tustin	336	\$116,083	5.9%
525.24	Irvine/Tustin	239	\$112,014	3.1%
744.05	Santa Ana	1,271	\$47,425	18.7%
744.06	Santa Ana/Tustin	655	\$54,948	18.0%
744.07	Santa Ana/Tustin	1,046	\$50,969	15.2%
744.08	Tustin	389	\$54,988	6.8%
750.03	Santa Ana	2,079	\$40,183	29.1%
750.04	Santa Ana	1,272	\$45,288	25.3%
753.01	Santa Ana/Orange	552	\$76,147	10.3%
753.03	Santa Ana	80	\$123,654	2.2%
754.01	Santa Ana	417	\$80,651	8.0%
754.03	Santa Ana/Tustin	535	\$73,194	6.6%
754.04	Santa Ana/Orange	1,050	\$95,851	14.4%
755.05	Santa Ana/Tustin	423	\$71,667	12.8%
755.07	Tustin	801	\$66,628	15.6%
755.12	Tustin	267	\$82,656	7.3%
755.13	Tustin	423	\$76,588	8.6%
755.14	Tustin	969	\$56,375	23.7%
755.17	Santa Ana/Tustin	933	\$71,389	15.3%
760.01	Santa Ana/Orange	985	\$65,814	13.1%
760.02	Santa Ana/Orange	55	\$89,281	4.9%
761.02	Santa Ana/Orange/ Anaheim	710	\$60,365	14.5%
761.04	Anaheim/Orange	623	\$90,000	12.2%
761.05	Orange	626	\$92,434	15.0%
863.03	Anaheim/Orange	1,085	\$76,641	12.0%
867.01	Anaheim/Fullerton	1,215	\$86,922	13.4%
867.02	Anaheim	1,166	\$63,429	14.1%
868.01	Anaheim/Fullerton/ Buena Park	287	\$85,246	8.5%
868.02	Anaheim/Fullerton	687	\$92,628	12.0%
871.02	Anaheim	1,408	\$64,621	20.4%

Table 2.3.5: Income and Poverty Level

Area	Jurisdiction	Total Population for Whom Poverty Status is Determined	Median Household Income (dollars)	Persons Living in Poverty (%)
871.05	Anaheim	622	\$100,088	10.5%
871.06	Anaheim	543	\$45,327	11.4%
872	Anaheim	1,493	\$66,154	19.5%
874.01	Anaheim	244	\$120,375	4.6%
874.03	Anaheim	508	\$56,063	17.1%
874.05	Anaheim	1,410	\$51,763	28.1%
875.04	Anaheim	1,733	\$53,904	23.4%
1104.01	Buena Park/Anaheim/ Fullerton	566	\$99,875	12.1%
1105	Buena Park/Cerritos/ Fullerton/La Mirada	1,185	\$60,801	14.2%
1106.03	Buena Park/Fullerton	1,595	\$56,563	20.5%
1106.06	Buena Park/La Mirada	538	\$65,682	13.8%
9800	Anaheim	0	N/A	N/A

Sources: United States Census Bureau. 2016-2020 American Community Survey. Tables S1701 and DP03. *Community Impact Assessment* (May 2023).

Note: **Bolding** indicates the value is higher than the Orange County average.

“Persons living in poverty” percentage is based on United States Census Bureau thresholds rather than United States Department of Health and Human Services guidelines. In 2020, the poverty threshold for a household of four people was \$26,496.

N/A = Not Applicable

correspond with the ACS 2016-2020 5-year estimates. As shown in Table 2.3.5, Orange County reported a median household income of \$94,441, which is notably higher than Los Angeles County. Table 2.3.5 also shows that Census Tract 750.03 reported a median household income of \$40,183, which is notably lower than the other census tracts in the Study Area. By comparison, Census Tract 753.03 reported the highest median household income, \$123,654.

As shown in Table 2.3.5, Census Tract 750.03 has a higher percentage of residents living below the poverty level (29.1 percent) than Orange County and the Study Area cities. It is important to note here that Orange County has a lower percentage of persons living in poverty compared to the State of California (12.6 percent) as a whole; however, Los Angeles County has a higher percentage of persons living in poverty (14.2 percent).¹ Thus, Census Tract 750.03 has a higher percentage of persons living in poverty than the State. Census Tract 753.03 reported a percentage of persons living in poverty (2.2 percent) lower than Orange County and the State.

¹ United States Census Bureau. 2016-2020 American Community Survey. Table S1701.

Community Facilities

Accessibility of community facilities and services enhances the quality of life in the community and contributes to the sense of community cohesion. Below is a discussion regarding the community facilities within the Study Area.

Community Centers

Community centers in the Study Area are listed below in Table 2.3.6.

Table 2.3.6: Community Centers in the Study Area

Facility Name	Address	Distance from Proposed Project Area (miles)
Anaheim		
Brookhurst Community Center	2271 W. Crescent Ave., Anaheim	0.35
Ponderosa Park Family Resource Center	2100 S. Haster St., Anaheim	0.43
Buena Park		
Buena Park Community Center	6688 Beach Blvd., Buena Park	0.18
Fullerton		
Gilbert Neighborhood Center	2120 W. Orangethorpe Ave., Fullerton	0.29
Santa Ana		
Garfield Community Center	501 N. Lacy St., Santa Ana	0.48
Jack Fisher Park Log Cabin	2501 N. Flower St., Santa Ana	0.25
Logan Center	1009 N. Custer St., Santa Ana	0.24
Roosevelt/Walker Community Center	816 E. Chestnut Ave., Santa Ana	0.84
Santiago Park Log Cabin	2535 N. Main St., Santa Ana	0.18
Tustin		
Clifton C. Miller Community Center	300 Centennial Wy., Tustin	0.43
The Market Place Community Center	2961 El Camino Real, Tustin	0.33
Tustin Family and Youth Center	14722 Newport Ave., Tustin	0.25

Source: *Community Impact Assessment* (May 2023).

Note: Facility distance measurement using ruler tool in Google Earth.

Senior Centers

The Tustin Area Senior Center is the only senior center located in the Study Area and is approximately 0.44 mile northeast of the I-5/SR-55 interchange at 200 South C Street in Tustin.

Libraries

The following libraries are located in the Study Area:

- The Tustin Library is approximately 0.37 mile northeast of the I-5/Newport Avenue interchange at 345 East Main Street in Tustin.

- The Central Library is approximately 0.55 mile northeast of the I-5/West Broadway interchange at 500 West Broadway in Anaheim.
- The Ponderosa Joint-Use Branch is approximately 0.39 mile southwest of the I-5/Gene Autry Way interchange at 240 East Orangewood Avenue in Anaheim.
- A self-service book vending machine (Books on the Go!) maintained by the Anaheim Public Library is located approximately 0.24 mile southeast of the SR-57/Katella Avenue interchange inside the Anaheim Regional Transportation Intermodal Center (ARTIC) at 2626 East Katella Avenue in Anaheim.

While not a library facility, the Anaheim Public Library identifies Founders' Park among its library locations. Founders' Park is approximately 0.26 mile northeast of the I-5/Lincoln Avenue interchange at 400 North West Street in Anaheim.

Hospitals

The following hospitals are located within the Study Area:

- The UCI Medical Center is adjacent to I-5 at 101 The City Drive South in Orange.
- The Providence St. Joseph Hospital Orange is approximately 0.45 mile east of the I-5/SR-22 interchange at 1100 West Stewart Drive in Orange.
- The Orange County Global Medical Center is approximately 0.5 mile north of the I-5/Fourth Street interchange at 1001 North Tustin Avenue in Santa Ana.
- The Foothill Regional Medical Center is approximately 0.25 mile east of the SR-55/McFadden Avenue interchange at 14662 Newport Avenue in Tustin.
- The Children's Hospital of Orange is approximately 0.36 mile east of the SR-22/I-5 interchange at 1201 West La Veta Avenue in Orange.
- The Anaheim Regional Medical Center is approximately 0.57 mile southeast of the SR-91/Euclid Street interchange at 1111 West La Palma Avenue in Anaheim.
- The Anaheim Global Medical Center is approximately 0.37 mile east of the I-5/Ball Road interchange at 1025 South Anaheim Boulevard in Anaheim.

Schools

The public school districts and associated schools within the Study Area are listed below in Table 2.3.7. There are no public schools in La Mirada, Orange, and Fullerton that are located within the Study Area; thus, those facilities and their associated public school districts are excluded.

Table 2.3.7: Public Schools in the Study Area

Facility Name	Address	Distance from Proposed Project Area (miles)
Anaheim Elementary School District (AESD)		
Adelaide Price Elementary School	1516 W. North St., Anaheim	0.33
Benjamin Franklin Elementary School	521 W. Water St., Anaheim	0.36
Betsy Ross Elementary School	535 S. Walnut St., Anaheim	0.06
Gauer Elementary School	810 N. Gilbert St., Anaheim	0.37
John Marshall Elementary School	2066 W. Falmouth Ave., Anaheim	0.25
Loara Elementary School	1601 W. Broadway, Anaheim	0.28
Orange Grove Elementary School	1000 S. Harbor Blvd., Anaheim	0.21
Paul Revere Elementary School	140 W. Guinida Ln., Anaheim	0.19
Westmont Elementary School	1525 W. Westmont Dr., Anaheim	0.23
Anaheim Union High School District (AUHSD)		
Anaheim High School	811 W. Lincoln Ave., Anaheim	0.28
Brookhurst Junior High School	601 N. Brookhurst St., Anaheim	0.24
Buena Park School District (BPSD)		
Carl E. Gilbert Elementary School	7255 8 th St., Buena Park	0.14
Mabel L. Pendleton Elementary School	7101 Stanton Ave., Buena Park	0.1
Santa Ana Unified School District (SAUSD)		
Davis Elementary School	1405 French St., Santa Ana	0.1
Garfield Elementary School	850 Brown St., Santa Ana	0.5
Sierra Preparatory Academy	2021 N. Grand Ave., Santa Ana	0.5
Tustin Unified School District (TUSD)		
Benjamin Beswick Elementary School	1362 Mitchell Ave., Tustin	0.29
Robert P. Heideman Elementary School	15571 Williams St., Tustin	0.5
Tustin Connect High School (Online)	1151 San Juan St., Tustin	0.31
*Tustin High School	1171 El Camino Real, Tustin	0.03
Utt Middle School	13601 Browning Ave., Tustin	0.25
W.R. Nelson Elementary School	14392 Browning Ave., Tustin	0.39

Source: *Community Impact Assessment* (May 2023).

Note: School distance measurement with ruler tool in Google Earth.

Section 4(f) facilities are marked with an asterisk (*).

According to the California Department of Education, the following private schools are within the Study Area and are listed below in Table 2.3.8. There are no private schools in La Mirada, Orange, and Fullerton that are located within the Study Area; thus, those facilities are excluded.

Table 2.3.8: Private Schools in the Study Area

Facility Name	Address	Distance from Proposed Project Area (miles)
Anaheim		
Acaciawood Preparatory Academy	2530 W. La Palma Ave., Anaheim	0.39
digiTIES	1136 N. Brookhurst St., Anaheim	0.13
Fairmont Historic Anaheim	1575 W. Mable St., Anaheim	0.17
Fairmont Preparatory Academy	2200 W. Sequoia Ave., Anaheim	0.05
Guide Academy	121 S. Citron St., Anaheim	0.46
Islamic Education School	1136 N. Brookhurst St., Anaheim	0.13
Montessori Education Center	1658 W. Broadway, Anaheim	0.37
Servite High School	1952 W. La Palma Ave., Anaheim	0.3
Buena Park		
Buena Park Christian Learning Center	7142 Thomas St., Buena Park	0.01
St. Pius V Catholic School	7691 Orangethorpe Ave., Buena Park	0.25
Santa Ana		
Irvine Hebrew Day School	1500 E. 17 th St., Santa Ana	0.4
St. Joseph Catholic School (Santa Ana)	608 E. Civic Center Dr., Santa Ana	0.48
University High School of Business and Leadership International	2130 E. 4 th St., Santa Ana	0.18
Tustin		
Newport Avenue Preschool and Kindergarten	13682 Newport Ave., Tustin	0.36
Saint Jeanne de Lestonnac School	16791 E. Main St., Tustin	0.0

Source: *Community Impact Assessment* (May 2023).
Note: School distance using ruler tool in Google Earth.

Parks and Recreation

Refer to Section 2.1, Land Use, for a list of public parks and recreational resources within 0.5 mile of the Project Area.

Property Tax Base

Property taxes are levied on the assessed value of privately owned property. Property taxes for properties in the Study Area are collected by the respective county assessor/tax collector and apportioned to the incorporated cities. The amount levied is no more than 1 percent of the assessed property value and is divided among each of the local taxing agencies (i.e., cities, the counties, special districts, successor agencies to former redevelopment agencies, school districts, and community college districts) that are authorized to receive a portion of the 1 percent basic property tax levy.

The distribution to each taxing agency is based on allocation factors that are established pursuant to State law (Assembly Bill 8). Table 2.3.9 presents the total revenues received by the Study Area cities and counties in Fiscal Year 2020–2021, which is the most recent year for which such data were available, including a breakout of the property and sales tax revenues received by the jurisdictions.

Table 2.3.9: Local Government Revenues

Jurisdiction	Property Tax Revenue	Sales Tax Revenue	Total Revenue ¹
Orange County	\$1,062,873,000	\$127,791,000 ²	\$5,596,641,000
Los Angeles County	\$7,989,552,000	\$562,628,000	\$31,698,208,000
Cities			
Anaheim	\$90,222,000	\$76,811,000	\$1,174,924,000
Buena Park	\$12,016,000	\$27,472,000	\$93,374,000
Fullerton	\$50,238,000	\$25,571,000	\$203,310,000
La Mirada	\$14,439,302	\$13,820,590	\$47,390,617
Orange	\$48,273,000	\$47,214,000	\$212,764,000
Santa Ana	\$88,100,000	\$57,400,000	\$622,700,000
Tustin	\$29,142,850	\$30,753,042	\$167,902,623

Source: *Community Impact Assessment* (May 2023)

¹ Includes revenues from other sources, such as taxes and miscellaneous revenues.

² Includes all other taxes beyond property taxes.

In fiscal year 2020-2021, the City of Anaheim generated the greatest amount of property tax revenue compared to the other Study Area cities, and the City of Buena Park generated the least amount of property tax revenue compared to the other Study Area cities.

Sales Tax Base

Table 2.3.10 demonstrates the sales tax rate for the cities and counties in the Study Area.

Table 2.3.10: Sales Tax Rate per Jurisdiction

Jurisdiction	Sales Tax Rate
Orange County	7.75%
Los Angeles County	9.5%
Cities	
Anaheim	7.75%
Buena Park	7.75%
Fullerton	7.75%
La Mirada	9.5%
Orange	7.75%
Santa Ana	9.25%
Tustin	7.75%

Source: Department of Tax and Fee Administration (2022).
Community Impact Assessment (May 2023).

Effective October 1, 2022, the sales tax rate in Orange County is 7.75 percent, (California Department of Tax and Fee Administration n.d.), of which 6 percent is allocated to the State, 1 percent is allocated to the City for public services, 0.25 percent is allocated to the county transportation fund, and 0.5 percent is used to fund transportation improvements in Orange County via OC Go (formerly known as Measure M).

Effective October 1, 2022, the sales tax rate in Los Angeles County is 9.5 percent, (California Department of Tax and Fee Administration n.d.), of which 6 percent is allocated to the State, 1 percent is allocated to the City for public services, and 0.25 percent is allocated to the county transportation fund. The remainder of the sales tax revenue is allocated to transportation improvements in Los Angeles County under voter-approved sales tax measures.

The Department of Tax and Fee Administration tabulates sales tax transactions for each city and county in California on a quarterly and yearly basis. As summarized in Table 2.3.10, the City of Anaheim generated the greatest amount of sales tax revenue compared to the other Study Area cities, and the City of La Mirada generated the least amount of sales tax revenue compared to the other Study Area cities.

2.3.1.3 Environmental Consequences

Temporary Impacts

Impacts to community character and cohesion generally depend on whether a project is likely to create a barrier within or disrupt connectivity of a community. Either of these can be a result of disruptions in access or residential and/or business

acquisitions. Temporary impacts to community character and cohesion can occur from the temporary use of land from privately owned properties for use as temporary construction easements (TCEs), short-term air quality and noise effects, and temporary road and ramp closures/detours along and in the immediate vicinity of I-5 within the Project Area.

Build Alternative (Alternative 2)

Alternative 2 does not include roadway improvements, except for the modification of the minimum high-occupancy vehicle (HOV) lane occupancy requirement from two-plus (2+) to three-plus (3+) passengers within the current HOV lanes in each direction between Red Hill Avenue and the Orange County/Los Angeles County (OC/LA) County line. Potential signage replacements and HOV lane repainting may occur, which may result in temporary construction equipment noise and emissions. However, construction activity would be limited to the existing HOV lanes on I-5 and specific local arterials where existing HOV lane signage is located. Alternative 2 also includes the construction of two park-and-ride facilities, but these would be located within the Caltrans existing ROW within the Project limits.

Access would be maintained for residents and businesses in areas where arterial HOV lane signage may require improvements. The I-5 general-purpose (GP) lanes would remain operational, with potential HOV lane restrictions on segments where repainting is required. Application of PF-TR-1 (Transportation Management Plan [TMP]), as described in Section 2.5 of this Environmental Impact Report/Environmental Assessment (EIR/EA), would minimize or reduce temporary impacts to community character and cohesion.

The improvements proposed under Alternative 2 are not anticipated to cause major disruptions to regional business patterns, as I-5 and surrounding local arterials would remain operational during the construction of Alternative 2. Alternative 2 would not cause adverse temporary impacts to the regional economy of Orange County.

Alternative 2 would not result in the temporary use of land, nor would it result in temporary closures of the previously identified community facilities. The existing HOV lane orientation would remain as is except for the increase in the minimum requirement for usage. Construction of two park-and-ride facilities and signage work may result in temporary delays in travel time to and from community facilities but would be minimized through transportation management strategies in PF-TR-1 (TMP). There would be no temporary impacts on community facilities.

Build Alternative (Alternative 3)

Alternative 3 improvements, such as lane repainting, signage work, ramp reconfiguration, and freeway widening, would require several construction staging areas that may be adjacent to residential properties (refer to Figure 1-4 in Chapter 1 of this EIR/EA). Construction activities related to Alternative 3 would result in temporary impacts to businesses and residents in the Study Area, including construction equipment noise and emissions. I-5 serves as a major thoroughfare into and out of California through the Study Area. Temporary lane/ramp restrictions and detours may affect nearby businesses and residents who commute into and out of the Study Area cities for work.

Access would be maintained for residents and businesses affected by Alternative 3 via designated detours for affected roads and intermittent closure scheduling of affected ramps and lanes. Application of PF-TR-1 (TMP) would minimize or reduce temporary impacts to community character and cohesion.

Potential impacts to regional business patterns are anticipated under Alternative 3 due to the temporary ramp closures, congestion, and detours that may temporarily limit access to businesses that rely on pass-by traffic for clientele or discourage visitors to popular attractions such as Disneyland. A ramp closure study was not required as the affected ramps would not be closed for a prolonged period. Passersby or visitors not willing to accommodate potential detour delays and construction-related congestion may instead frequent neighboring counties such as San Diego County and Los Angeles County, or temporarily avoid traveling on I-5 between Red Hill Avenue and the OC/LA County line during Alternative 3 construction.

Businesses near the identified ramp reconstructions of the northbound on-ramp from eastbound 17th Street in Santa Ana and the northbound on-ramp from westbound 17th Street in Santa Ana can be accessed via local roadways from other ramps. All businesses along the freeway and affected ramp facilities identified for improvements would remain accessible via measures identified in PF-TR-1 (TMP).

Conversion of the existing HOV lanes to Express Lanes (ELs) may shift lane capacity that normally would be on the HOV lanes to the GP lanes during ELs conversion, which would temporarily increase congestion frequency and result in additional travel times through the Study Area. Alternative 3 would not result in the temporary use of land, nor would it result in temporary closures of the previously identified community facilities. Adherence to PF-TR-1 (TMP) for Alternative 3 would include the

maintenance of pedestrian and bike traffic access throughout the construction period. Access to nearby community facilities would be maintained throughout the duration of construction. Vehicular traffic detours are anticipated to be needed during construction around emergency access points in construction areas, which may be limited to nighttime or off-peak hours.

Build Alternative (Alternative 4)

Temporary impacts under Alternative 3 would be similar to those for Alternative 4. In addition, Alternative 4 would include construction of ELs between SR-57 and SR-91. Like Alternative 3, staging areas and construction activities may result in temporary access restrictions and detours that may impact nearby businesses and residents who commute into and out of the Study Area cities for work. Application of PF-TR-1 (TMP) would minimize or reduce temporary impacts to community character and cohesion, including the area of additional ELs construction between SR-57 and SR-91.

In addition, temporary impacts to regional business patterns under Alternative 3 would apply under Alternative 4. However, Alternative 4 includes construction of additional ELs on I-5 between SR-57 and SR-91, which would further affect travel times and movement of goods along the I-5 corridor during construction. Like Alternative 3, above, access to local businesses would be maintained by implementation of PF-TR-1 (TMP). Most businesses do not solely rely on pass-by traffic and can be accessed from local arterials and other off-ramps along I-5. Regional truck transport may experience temporary congestion and delay increases during construction activities for the Alternative 4 improvements.

Alternative 4 would not result in the temporary use of land, nor would it result in temporary closures of the previously identified community facilities. Adherence to PF-TR-1 (TMP) for Alternative 4 would include the maintenance of pedestrian and bike traffic access throughout the construction period. Delays in travel time may occur during construction, but access to nearby community facilities would be maintained via implementation of PF-TR-1 (TMP). Vehicular traffic detours are anticipated to be needed during construction around emergency access points, which may be limited to nighttime or off-peak hours

Alternative 1 (No Build Alternative)

The No Build Alternative proposes no improvements to I-5, maintaining the existing four GP lanes throughout the Project Area in the northbound and southbound

directions. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction. However, the existing deficiencies and degraded conditions of the HOV lanes would continue.

Permanent Impacts

Build Alternative (Alternative 2)

Alternative 2's improvements would not create new physical or geographic barriers between communities, as all improvements are located within the Caltrans existing ROW of the Project limits. The existing HOV lane configuration would be maintained with a modification of the minimum HOV-lane occupancy requirement from two-plus (2+) to three-plus (3+) passengers.

Alternative 2 would facilitate travel along the existing HOV lanes through I-5 with updated signage and lane repainting facilitating the flow of travel. Access to businesses and community facilities would return to pre-project conditions or better.

Alternative 2 would not result in land acquisitions or the closure of identified community facilities. For the above reasons, there would be no permanent impacts on community character and cohesion.

Build Alternative (Alternative 3)

Alternative 3 would not result in permanent acquisition of land or the displacement of residents and businesses. Alternative 3 would not divide an existing neighborhood or fragment a cohesive community, as all improvements would occur within the Caltrans existing ROW of the Project limits.

Alternative 3 would positively affect community character and cohesion in the Study Area by improving trip reliability in the I-5 HOV lanes for local residents and commuters, as well as facilitating travel for local residents to reach community facilities and businesses. For the above reasons, there would be no permanent impacts on community character and cohesion.

Build Alternative (Alternative 4)

Although Alternative 4 would include the construction of additional ELs between SR-57 and SR-91, Alternative 4 would not displace any residents or businesses. No permanent acquisitions would occur under Alternative 4.

Alternative 4's improvements would not divide an existing neighborhood or fragment a cohesive community. Alternative 4 would also positively affect community character and cohesion in the Study Area by improving trip reliability in the I-5 HOV lanes for local residents and commuters. The addition of ELs would allow easier accessibility for the public to reach community facilities and businesses in the Study Area.

Alternative 4 would facilitate travel along the I-5 corridor due to the additional length of the ELs between SR-57 and SR-91, in addition to the improvements described as part of Alternative 3. For the above reasons, there would be no permanent impacts on community character and cohesion.

Alternative 1 (No Build Alternative)

The No Build Alternative proposes no improvements to I-5. No new GP lanes or ELs on I-5 and no new connections would occur. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction. Existing access to businesses and community facilities would remain. No permanent acquisitions or displacement of residents or businesses would occur. For the above reasons, there would be no permanent impacts on community character and cohesion.

Although the No Build Alternative would not create a physical or geographic barrier between communities, the continuance or worsening of HOV lane degradation and congestion levels along I-5 could negatively affect the ability of the public to travel easily within Orange and Los Angeles counties and may result in other permanent impacts to community character and cohesion factors. Over time, this continuing or worsening of HOV lane degradation and congestion levels along I-5 may contribute to growth pressures on the regional economy due to worsening traffic conditions on I-5. Increased commute times and unpredictable travel conditions equate to more time spent in traffic, increased noise pollution, driver stress, decreased mental satisfaction, additional transportation costs, additional fuel consumption, and increased vehicle operating costs, all of which negatively affect regional growth and the economy.

2.3.1.4 Avoidance, Minimization, and/or Mitigation Measures

The Build Alternatives will incorporate PF-TR-1 (TMP), as outlined above in Section 2.3.1.3, to help avoid and/or minimize potential impacts. No additional avoidance, minimization, and/or mitigation measures other than the standard Project Feature is required.

2.3.2 Relocations and Real Property Acquisition

2.3.2.1 Regulatory Setting

The California Department of Transportation's (Caltrans) Relocation Assistance Program (RAP) is based on the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex in compliance with Title VI of the Civil Rights Act (42 USC 2000d, et seq.). Please see Appendix B for a copy of Caltrans' Title VI Policy Statement.

2.3.2.2 Affected Environment

The information in this section is summarized from the *Community Impact Assessment* (May 2023). As shown on Figure 2.3-1 and discussed in Section 2.3.1.2, above, the Study Area for the assessment of proposed Project effects related to property acquisition and relocation includes portions of the cities of Tustin, Santa Ana, Orange, Anaheim, Fullerton, Buena Park, and La Mirada, specifically the census tracts shown in Table 2.3.1. This Study Area was selected because it covers the entire Project Area and includes areas in the vicinity of the Project Area that are likely to be considered for the relocation of businesses or residences displaced by the Build Alternatives. As described earlier in Section 2.1, Land Use, the existing land uses in the Study Area include single- and multifamily residential, mobile homes and trailer parks, commercial and service, general office, mixed commercial and industrial, facilities, education, open space and recreation, transportation/communications/utilities, vacant, and water.

2.3.2.3 Environmental Consequences

Temporary Impacts

Build Alternative (Alternative 2)

Alternative 2 proposes no improvements to the roadway and would preserve the existing lane configuration along this corridor. The freeway facility would remain as is, with only the minimum occupancy to utilize the existing HOV lanes raised from two passengers to three passengers; construction staging areas would be required for

the two park-and-ride facilities within the Caltrans existing ROW of the Project limits. No TCEs are identified for Alternative 2. Therefore, Alternative 2 would not result in temporary impacts related to relocations and real property acquisition.

Build Alternative (Alternative 3)

Alternative 3 would require six construction staging areas, as shown in Table 2.3.11 and Figure 2.3-2. The staging areas include vacant or unused portions of land within the Caltrans existing ROW of the Project limits. No TCEs are identified for Alternative 3. None of the staging areas would displace existing residents or businesses.

Table 2.3.11: Property Easements

APN	Type	Area Impacted (sq ft)	Property Type	Relocation ?	Location
Caltrans ROW	Construction Staging Area	13,328 sq ft	Vacant	No	I-5/Lincoln Ave.
Caltrans ROW	Construction Staging Area	37,109 sq ft	Vacant	No	I-5/W. Ball Rd.
Caltrans ROW	Construction Staging Area	72,390 sq ft	Vacant	No	I-5/SR-22 interchange (above La Veta Ave.)
Caltrans ROW	Construction Staging Area	109,837 sq ft	Vacant	No	I-5/SR-22 interchange (SE portion of the interchange area)
Caltrans ROW	Construction Staging Area	30,185 sq ft	Vacant	No	I-5/1 st St.

Source: *Community Impact Assessment* (May 2023).

APN = Assessor's Parcel Number

Caltrans = California Department of Transportation

I = Interstate

ROW = right-of-way

SE = southeast

sq ft = square feet

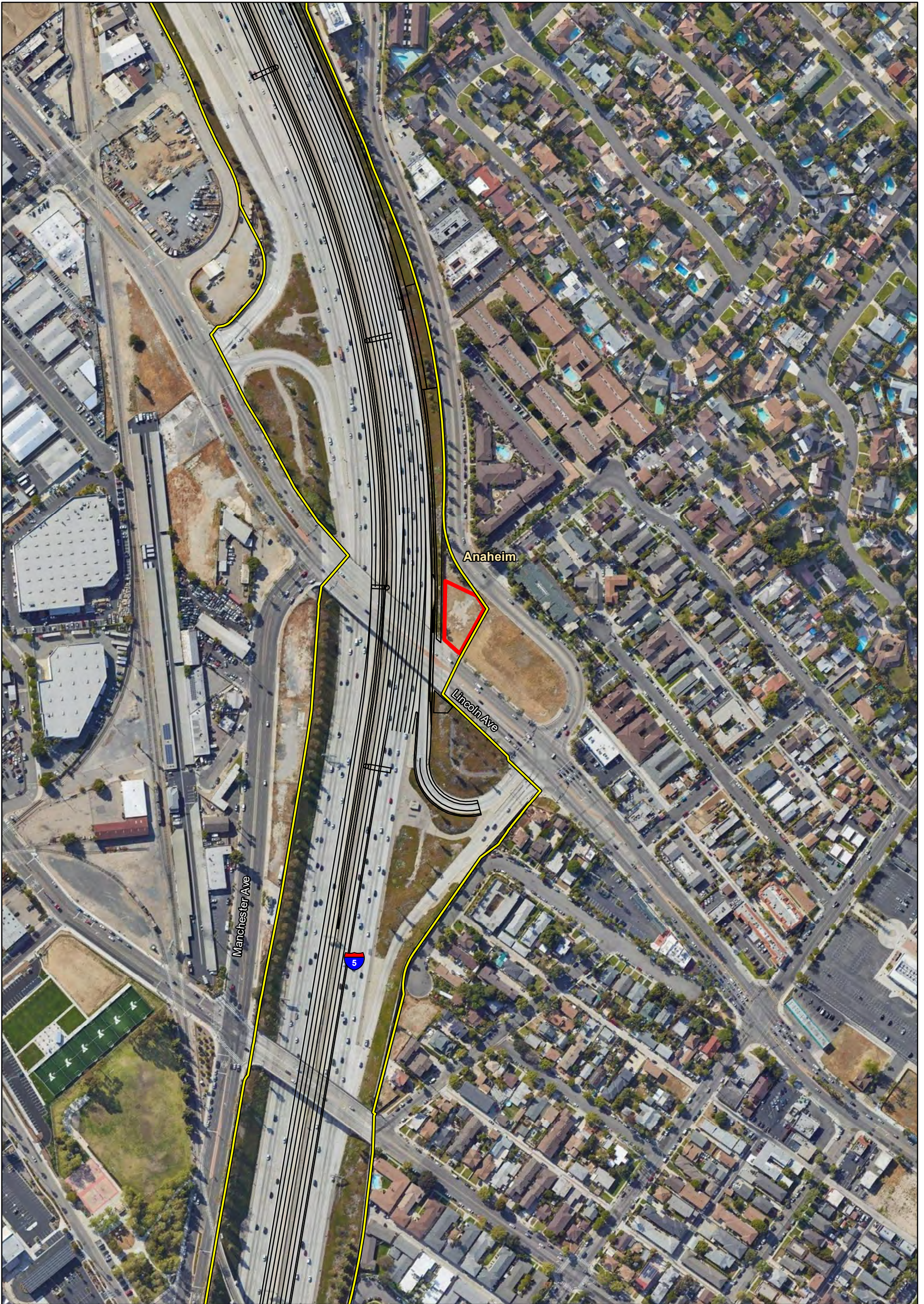
SR = State Route

Build Alternative (Alternative 4)

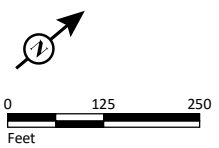
Temporary impacts under Alternative 3 would apply to Alternative 4. Alternative 4 includes the construction of additional ELs between SR-57 and SR-91; however, the same construction staging areas used for Alternative 3 would be used for Alternative 4.

All construction staging areas are located within the Caltrans existing ROW of the Project limits. No TCEs are identified for Alternative 4. Therefore, Alternative 4 would not result in temporary impacts related to relocations and real property acquisition.

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- LEGEND**
- Project Area
 - Advanced Signage Only
 - City Boundary
 - Proposed Plans
 - Construction Staging Area



SOURCE: Google (2022)
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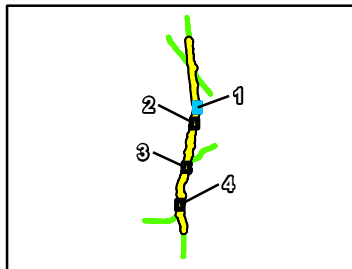
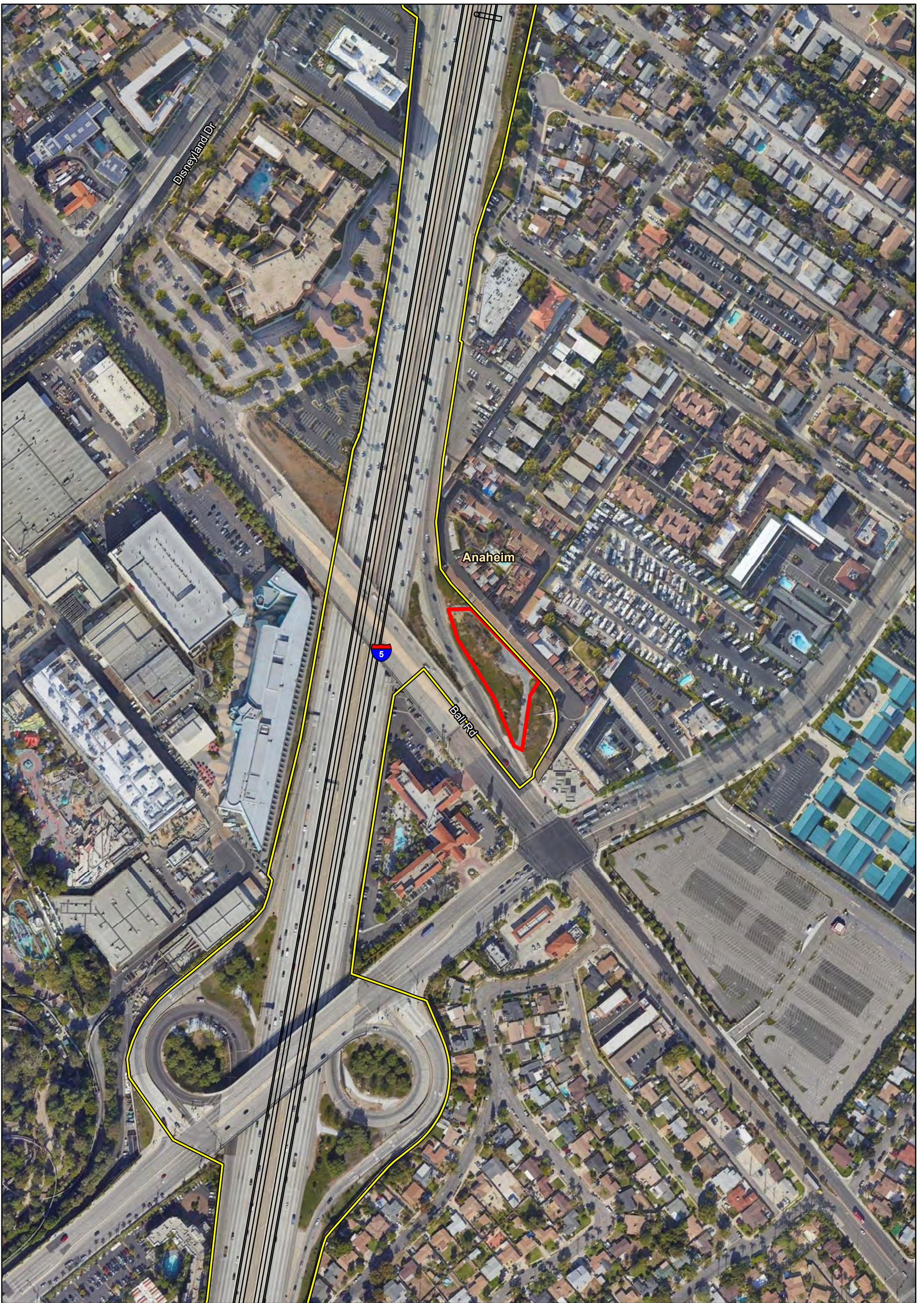


FIGURE 2.3-2
 Sheet 1 of 4

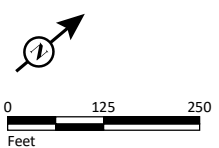
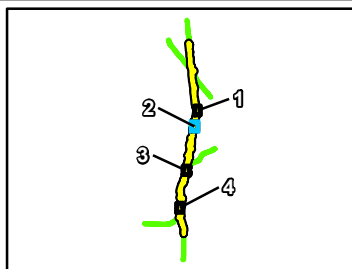
I-5 Managed Lanes Project
 (Red Hill Avenue to Orange County/Los Angeles County Line)
 Construction Staging Areas
 (Alternatives 3 & 4)

EA No. 0Q950

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- LEGEND**
- Project Area
 - Advanced Signage Only
 - City Boundary
 - Proposed Plans
 - Construction Staging Area



SOURCE: Google (2022)

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FIGURE 2.3-2
Sheet 2 of 4

I-5 Managed Lanes Project
(Red Hill Avenue to Orange County/Los Angeles County Line)
Construction Staging Areas
(Alternatives 3 & 4)

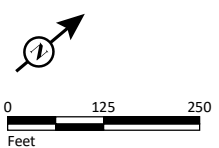
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LEGEND

- Project Area
- Advanced Signage Only
- City Boundary
- Proposed Plans
- Construction Staging Area



SOURCE: Google (2022)

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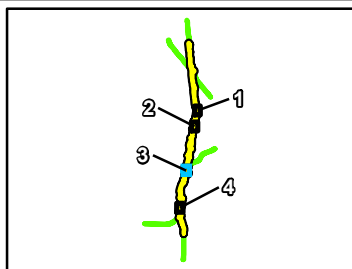
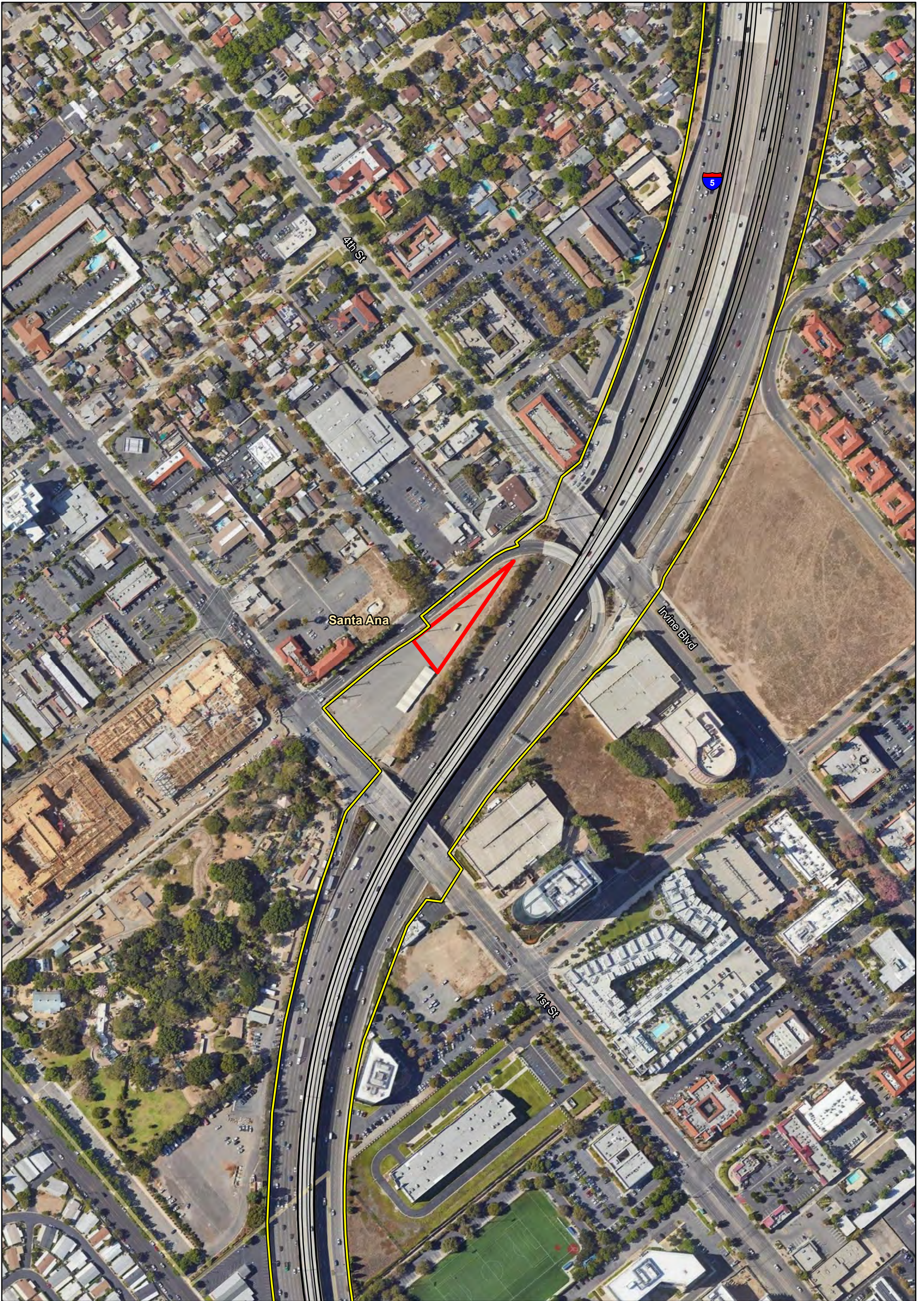


FIGURE 2.3-2
Sheet 3 of 4






I-5 Managed Lanes Project
(Red Hill Avenue to Orange County/Los Angeles County Line)
Construction Staging Areas
(Alternatives 3 & 4)

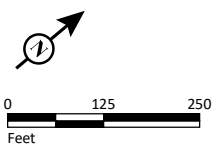
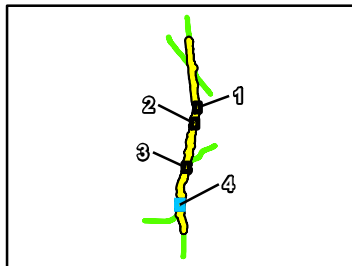
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LEGEND

-  Project Area
-  Advanced Signage Only
-  City Boundary
-  Proposed Plans
-  Construction Staging Area



SOURCE: Google (2022)

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FIGURE 2.3-2
Sheet 4 of 4

I-5 Managed Lanes Project
(Red Hill Avenue to Orange County/Los Angeles County Line)
Construction Staging Areas
(Alternatives 3 & 4)

EA No. 0Q950

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No Build Alternative (Alternative 1)

The No Build Alternative proposes no improvements to I-5 and would preserve the existing lane configuration along this corridor. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction. Therefore, the No Build Alternative would not require construction staging areas. No temporary impacts related to relocations and real property acquisition would occur.

Permanent Impacts

Build Alternatives (Alternative 2, 3, and 4)

No partial or full property acquisitions would occur under the Build Alternatives. Therefore, no relocations of residential or commercial properties or property or sales tax revenue losses would occur under the Build Alternatives.

No Build Alternative (Alternative 1)

No partial or full property acquisitions would occur under Alternative 1. Therefore, no relocations of residential or commercial properties or property or sales tax revenue losses would occur under Alternative 1.

2.3.2.4 Avoidance, Minimization, and/or Mitigation Measures

The Build Alternatives would not result in any relocations or property acquisitions. All construction staging areas are identified within the Caltrans existing ROW of the Project limits. Therefore, no avoidance, minimization, and or mitigation measures are required.

2.3.3 Environmental Justice

2.3.3.1 Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2023, this was \$30,000 for a family of four (HHS 2023).

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this Project. Caltrans' commitment to upholding the

mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document.

2.3.3.2 Affected Environment

The information in this section is summarized from the *Community Impact Assessment* (May 2023). As shown on Figure 2.3-1 and discussed in Section 2.3.1.2, above, the Study Area for the assessment of proposed Project effects related to environmental justice includes portions of the cities of Tustin, Santa Ana, Orange, Anaheim, Fullerton, Buena Park, and La Mirada, specifically the census tracts shown in Table 2.3.1.

Identification of low-income and minority populations in Orange County was determined based on guidance from the CEQ, an advisory body that has oversight of the federal government's compliance with EO 12898 and NEPA; Caltrans' *Desk Guide, Environmental Justice in Transportation Planning and Investments* (Desk Guide), which provides information and examples of ways to promote environmental justice to those involved in making decisions about California's transportation system (Caltrans 2003); and thresholds and guidelines from the U.S. Census Bureau and the HHS:

- Census tracts are considered to have meaningfully greater racial minority populations if the percentage of racial minority residents within them is more than 10 percentage points higher than the county as a whole (i.e., 52.4 percent or higher).
- Census tracts are considered to have meaningfully greater low-income populations if the percentage of residents within them who are living below the U.S. Census Bureau's defined poverty threshold is more than 5 percentage points higher than the county as a whole (i.e., 15.1 percent or higher).

The environmental justice analysis was conducted using demographic information from the 2016–2020 ACS. The following populations were considered in assessing whether the proposed Project would result in disproportionate impacts to environmental justice populations in accordance with the provisions of EO 12898 and whether those alternatives would result in benefits for those populations.

- **Racial Minority Population:** The racial minority population is defined as individuals who identify themselves as Black/African American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, Some Other Race, or Two or More Races. Study Area census tracts are considered to have

meaningfully greater racial minority populations than the county if the aggregated percentage of racial minority residents within them is 52.4 percent or higher.

- **Low-Income Population:** Pursuant to the methodology outlined above, low-income populations are those persons living below the poverty level as defined as the U.S. Census Bureau’s poverty threshold. The U.S. Census Bureau’s preliminary weighted average poverty threshold for a family of four was \$27,741 for 2021. Study Area census tracts are considered to have meaningfully greater low-income populations than the county if the percentage of persons living below the poverty level within them is 15.1 percent or higher.

The percentages of the racial minority and low-income populations in the Study Area census tracts; the cities of Tustin, Santa Ana, Orange, Anaheim, Fullerton, Buena Park, and La Mirada; and Orange County are provided in Table 2.3.12.

Table 2.3.12: Minority and Low-Income Demographics

Jurisdiction/Area	Percentage		Median Household Income ²
	Minority Population ¹	Below Poverty Level ²	
Orange County (Reference Community)	42.4%	10.1%	\$94,441.00
Cities			
City of Anaheim	40.0%	13.8%	\$76,723.00
City of Buena Park	54.5%	10.3%	\$84,680.00
City of Fullerton	43.8%	12.7%	\$85,471.00
City of La Mirada	49.4%	5.1%	\$92,493.00
City of Orange	31.3%	10.3%	\$96,605.00
City of Santa Ana	64.3%	13.4%	\$72,406.00
City of Tustin	52.6%	10.9%	\$88,386.00
Census Tracts			
18.01	40.3%	11.5%	\$54,750.00
18.02	39.5%	20.1%	\$55,144.00
19.03	53.0%	10.4%	\$86,685.00
525.02	36.8%	5.9%	\$116,083.00
525.24	58.0%	3.1%	\$112,014.00
744.05	68.7%	18.7%	\$47,425.00
744.06	76.4%	18.0%	\$54,948.00
744.07	60.3%	15.2%	\$50,969.00
744.08	59.8%	6.8%	\$54,988.00
745.01	83.3%	24.7%	\$41,745.00
750.02	73.6%	26.9%	\$38,190.00
750.03	79.8%	29.1%	\$40,183.00
750.04	79.7%	25.3%	\$45,288.00
753.01	58.9%	10.3%	\$76,147.00
753.03	34.2%	2.2%	\$123,654.00
754.01	40.2%	8.0%	\$80,651.00
754.03	52.2%	6.6%	\$73,194.00
754.04	46.4%	14.4%	\$95,851.00
755.05	29.5%	12.8%	\$71,667.00
755.07	48.5%	15.6%	\$66,628.00
755.12	71.5%	7.3%	\$82,656.00

Table 2.3.12: Minority and Low-Income Demographics

Jurisdiction/Area	Percentage		Median Household Income ²
	Minority Population ¹	Below Poverty Level ²	
755.13	48.8%	8.6%	\$76,588.00
755.14	63.2%	23.7%	\$56,375.00
755.17	64.4%	15.3%	\$71,389.00
760.01	37.6%	13.1%	\$65,814.00
760.02	17.4%	4.9%	\$89,281.00
761.02	41.9%	14.5%	\$60,365.00
761.04	39.7%	12.2%	\$90,000.00
761.05	32.7%	15.0%	\$92,434.00
863.03	54.3%	12.0%	\$76,641.00
867.01	43.5%	13.4%	\$86,922.00
867.02	55.6%	14.1%	\$63,429.00
868.01	33.5%	8.5%	\$85,246.00
868.02	49.5%	12.0%	\$92,628.00
871.02	41.3%	20.4%	\$64,621.00
871.05	41.9%	10.5%	\$100,088.00
871.06	46.8%	11.4%	\$45,327.00
872	30.4%	19.5%	\$66,154.00
874.01	44.3%	4.6%	\$120,375.00
874.03	23.2%	17.1%	\$56,063.00
874.05	15.3%	28.1%	\$51,763.00
875.04	39.4%	23.4%	\$53,904.00
875.05	39.4%	21.3%	\$56,319.00
1104.01	58.4%	12.1%	\$99,875.00
1105	63.4%	14.2%	\$60,801.00
1106.03	54.2%	20.5%	\$56,563.00
1106.06	64.3%	13.8%	\$65,682.00
9800	40.0%	N/A	N/A

Source: Community Impact Assessment (May 2023).

Note: **Bold italicized** numbers indicate that values are meaningfully greater than those for Orange County. For minority populations, “meaningfully greater” means 10 percentage points higher than the percentage for the county (i.e., 52.4% or higher). For low-income populations, “meaningfully greater” means the poverty level is 5 percentage points higher than the percentage for the county (i.e., 15.1% or higher).

¹ United States Census Bureau, 2016–2020 American Community Survey, Table B03002. Minorities include individuals who identify themselves as Black/African American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, Some Other Race, or two or more races on the American Community Survey. The Hispanic population is not considered a race but rather an ethnicity; therefore, Hispanics can be of any race.

² United States Census Bureau, 2016–2020 American Community Survey, Table S1701, DP03.

As identified in Table 2.3.12, the cities of Buena Park, Santa Ana, and Tustin, as well as 20 of the 48 Study Area census tracts, have meaningfully greater minority populations than the county. Eighteen of the 48 Study Area census tracts have meaningfully greater low-income population percentage than the county. The Study Area contains environmental justice populations (27 individual census tracts).

2.3.3.1 Environmental Consequences

Temporary Impacts

Build Alternative (Alternative 2)

Alternative 2 would include construction activities for two park-and-ride facilities within the I-5 ROW, signage changes, and potential lane restriping; however, the existing HOV facilities would remain. The passenger minimum changes are not a physical improvement and would not result in temporary adverse effects. Temporary construction activities associated with the construction of the park-and-ride facilities, signage changes, and potential lane restriping would affect all populations traveling through the Study Area. Construction of the improvements would also include compliance with PF-TR-1 (TMP), Caltrans Standard Specifications Section 14-9 (PF-AQ-1), and Caltrans Standard Specifications Section 14-8.02 (PF-N-1). For the above reasons, construction of the Alternative 2 improvements would not disproportionately affect environmental justice populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required.

Build Alternative (Alternative 3)

Construction activities associated with Alternative 3 would temporarily affect low-income and racial minority population groups in the Study Area, particularly in the communities of Buena Park, Santa Ana, and communities between Fullerton and Anaheim. Those impacts would include temporary disruptions of local traffic patterns, delay times, congestion, noise levels, vibration, and dust. Population groups that reside near the Project Area would experience more temporary impacts than those that live farther away. However, impacts from dust and air pollution resulting from construction activities would be substantially minimized through applicable Caltrans and regional regulations to control excessive fugitive dust emissions, control emissions from construction vehicles, and adhere to Caltrans Standard Specification Section 14-9 (PF-AQ-1) for reducing air pollution during construction. Noise resulting from construction activities would be substantially minimized through compliance with Caltrans Standard Specifications Section 14-8.02 (PF-N-1). Construction-related closures could temporarily impede movement in the Study Area, which would result in temporary impacts to all population groups, including environmental justice communities.

However, these temporary construction effects would be minimized through implementation of PF-TR-1 (TMP), PF-AQ-1, and PF-N-1. Therefore, Alternative 3 would not result in any temporary adverse effects on the overall population in the Study Area (environmental justice and non-environmental justice populations).

Build Alternative (Alternative 4)

The same temporary impacts to low-income and racial minority population groups that would occur under Alternative 3 would also occur under Alternative 4, in the same communities discussed above. In addition, Alternative 4 would include construction of ELs between SR-57 and SR-91; however, impacts from dust and air pollution resulting from construction activities would be substantially minimized through applicable Caltrans and regional regulations to control excessive fugitive dust emissions, control emissions from construction vehicles, and adhere to Caltrans standard specifications for reducing air pollution (Caltrans Standard Specification Section 14-9 [[PF-AQ-1]]) during construction. Noise resulting from construction activities would be substantially minimized through compliance with Caltrans Standard Specifications Section 14-8.02 (PF-N-1). Construction-related closures could temporarily impede movement in the Study Area, which would result in temporary effects to the Study Area population. However, these temporary construction effects would be minimized through implementation of PF-TR-1 (TMP). Therefore, Alternative 4 would not result in any temporary adverse effects on the overall population in the Study Area (environmental justice and non-environmental justice populations).

No Build Alternative (Alternative 1)

The No Build Alternative proposes no improvements to I-5. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction. Therefore, the No Build Alternative would not result in temporary adverse effects on the overall population in the Study Area (environmental justice and non-environmental justice populations).

Permanent Impacts

Build Alternative (Alternative 2)

Alternative 2 would raise passenger minimum requirements to access the existing HOV lane facilities in the Study Area from a two-passenger minimum to three. No other improvements besides potential signage, HOV lane repainting, and two park-and-ride facilities are proposed. All travelers in the Project Area would be affected by the raised passenger minimums, which would not disproportionately affect environmental justice populations in implementing Alternative 2. Individuals from environmental justice populations who continue to carpool with three passengers at minimum would not be affected by the change in passenger minimums. Individuals who are not able to travel with three occupants in a vehicle may explore other carpooling options.

Build Alternative (Alternative 3)

The analyses conducted for the impacts on relocations (Section 2.3), traffic (Section 2.5), archaeological resources (Section 2.7), water quality (Section 2.9), air quality/greenhouse gas (Section 2.13), and noise (Section 2.14) determined that impacts related to Alternative 3 on the overall Study Area population, including minority and low-income populations, would not be adverse with compliance with Caltrans Standard Specification Section 14-9 [PF-AQ-1]), Caltrans Standard Specifications Section 14-8.02 (PF-N-1), State and federal regulations, and PF-TR-1 (TMP). No disproportionate impacts on the overall population, including minority and low-income groups, are identified from the environmental issues referenced above.

Completion of Alternative 3 would contribute to improving trip reliability and EL operation along I-5 within the Study Area; however, those benefits would not extend to those unable to obtain a FasTrak transponder. Low-income and racial minority population groups may experience difficulty in obtaining a FasTrak transponder due to the limited locations where they can purchase a transponder. Limited income may further discourage such population groups from obtaining and maintaining the transponder. In recognition of the challenges that low-income and minority motorists may face in accessing these benefits, Caltrans would implement an Equity Assistance Plan (EAP) as part of Alternative 3 (Measure EQ-1) to provide assistance to individuals who meet certain income and demographic characteristics by providing them with free or low-cost FasTrak transponders and/or FasTrak account credits to assist with covering the cost of tolls incurred through use of the I-5 ELs. With implementation of the EAP, Alternative 3 would not result in disproportionate adverse effects to environmental justice populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required.

Alternative 3 would benefit travelers who are able to obtain a FasTrak transponder and utilize the ELs facility. Such travelers would benefit from the potential improvement in trip reliability within the I-5 corridor. The northern Orange County region and the southeastern Los Angeles County region would benefit from this corridor improvement as it would improve HOV/EL travel conditions along the I-5 corridor, which connects the two counties. Improvements to I-5 would reduce HOV/EL degradation. As discussed above, implementation of the EAP (Measure EQ-1) would address the barriers that low-income and minority motorists may face in using the ELs, thereby allowing them to also share in the transportation benefits that the new ELs would provide.

Build Alternative (Alternative 4)

The same permanent effects under Alternative 3 would also occur under Alternative 4, which includes the additional ELs between SR-57 and SR-91. As with Alternative 3, Caltrans would implement an EAP as part of Alternative 4. With implementation of the EAP, Alternative 4 would not result in disproportionate adverse effects to environmental justice populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required. The same benefits under Alternative 3 would also occur under Alternative 4.

No Build Alternative (Alternative 1)

The No Build Alternative proposes no improvements to I-5. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction. However, existing operation and capacity constraints on the current I-5 mainline and its HOV lanes would remain, which may affect the overall population in the Study Area, including environmental justice population groups.

2.3.3.2 Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, Alternatives 3 and 4 may result in disproportionately high and adverse effects on any minority or low-income populations per EO 12898. Measure EQ-1 would be implemented as part of Alternatives 3 and 4 in recognition of the challenges that low-income and minority motorists may face in accessing the benefits that Alternatives 3 and 4 would provide.

Measure EQ-1

Equity Assistance Plan (EAP). Caltrans will implement an EAP as part of Alternatives 3 and 4. The EAP would provide assistance to individuals who meet certain income and demographic characteristics by providing them with free or low-cost FasTrak transponders and/or FasTrak account credits to assist with covering the cost of tolls incurred through the use of the I-5 Express Lanes. Details on the EAP (e.g., eligibility requirements, implementation, etc.) will be developed in the future phases of the Project.

2.3.4 Equity

2.3.4.1 Regulatory Setting

Per EO 13985 (2021), federal agencies are required to conduct an equity assessment to determine whether underserved communities and their members face systemic barriers in accessing the benefits and opportunities available pursuant to applicable policies and programs. Caltrans acknowledges that communities of color and underserved communities experience fewer benefits and a greater share of negative impacts associated with the State's transportation system.

2.3.4.2 Affected Environment

Please refer to Section 2.3.3.2 for identification of low-income and minority populations in the Study Area.

Equity, as defined in the USDOT Equity Action Plan (January 2022), means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.

The *Draft Equity Study* (May 2023) prepared for the proposed Project included a brief literature review, including case studies, academic research, and federal equity guidance. Most of the available literature examined equity through the lens of affordability and low-income pricing programs, as well as approaches to public engagement. The *Draft Equity Study* was supplemented by information gleaned from other recent projects in California that involved the conversion of free HOV facilities to tolled facilities, including projects in San Mateo County (U.S. Route 101) and Los Angeles County (I-10 and I-110).

The Draft Equity Study summarizes the existing mobility, affordability, and environmental exposure of the Study Area population as it pertains to equity-related issues.

Mobility

Communities that have a higher concentration of low single-occupancy vehicle drivers, higher rates of zero-car households, and high transit ridership are concentrated in transportation corridor-adjacent communities such as Anaheim, Santa

Ana, and Fullerton. Although ELs can support longer-distance trips and provide communities access to opportunities like employment, it would be speculative to quantify the extent ELs investments can support or elevate the quality of life for those with limited mobility options.

Affordability

EL pricing models can impact affordability. For example, a traditional pay-per-trip model that charges based on distance can disproportionately impact equity communities who live farther away from their destinations, especially places of employment, due to rises in cost of living that draw them to areas with more affordable housing. Many of the communities in Orange County susceptible to displacement due to financial burdens are concentrated in proximity to the Project Area in the cities of Buena Park, Anaheim, and Santa Ana, and along the SR-91 corridor in the cities of Fullerton and Anaheim.

Environmental Exposure and Resiliency

While regional air quality issues cannot be solely attributed to I-5, vehicle emissions from the highway are a contributing factor. There is a social element of car culture as well, where the dominant transportation mode is driving, infrastructure is designed to prioritize this mode, and there is a perceived notion that car ownership creates a level of comfort, perceived ease, and increased social status for the owner. As described in the *Draft Equity Study*, Study Area census tracts immediately adjacent to I-5 experience poorer air quality; however, these census tracts do not have disproportionate concentrations of low-income households or minority populations.

2.3.4.3 Environmental Consequences

Temporary Impacts

Build Alternative (Alternative 2)

The temporary impacts discussed under Alternative 2 in Section 2.3.1.3, above, would not result in disproportionately burdened, temporary adverse effects on underserved population groups.

Build Alternative (Alternative 3)

Construction activities associated with Alternative 3 would temporarily affect residents and businesses in the Study Area. Such impacts may include temporary disruption of local traffic patterns, delay times, congestion, noise levels, vibration, and dust. However, impacts from dust and air pollution resulting from construction activities would be substantially minimized through PF-AQ-1 during construction.

Noise resulting from construction activities would be substantially minimized through compliance with PF-N-1. Construction-related closures could temporarily impede movement in the Study Area, which would result in temporary effects to community character and cohesion for communities in the immediate vicinity of the proposed Project. However, these temporary construction effects would be minimized through implementation of PF-TR-1 (TMP).

Build Alternative (Alternative 4)

The same temporary impacts that would occur under Alternative 3 would also occur under Alternative 4. In addition, Alternative 4 includes construction of ELs between SR-57 and SR-91; however, from dust and air pollution resulting from construction activities would be substantially minimized through compliance with PF-AQ-1 during construction. Noise resulting from construction activities would be substantially minimized through compliance with PF-N-1. Construction-related closures could temporarily impede movement in the Study Area, which would result in temporary effects to the Study Area population. However, these temporary construction effects would be minimized through implementation of PF-TR-1 (TMP).

No Build Alternative (Alternative 1)

The No Build Alternative proposes no improvements to I-5. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction. Therefore, the No Build Alternative would not result in temporary adverse effects on the overall population in the Study Area (including underserved population groups).

Permanent Impacts

Build Alternative (Alternative 2)

The raised passenger occupancy minimums would affect current HOV lane users by requiring, at minimum, three occupants to utilize the HOV facility. Current HOV lane users, including individuals from low-income and racial minority population groups who are unable to accommodate to the raised passenger minimums, would not be eligible to utilize the HOV lanes, thus potentially subjecting them to increased travel times and/or reduced trip reliability. Current HOV lane users, including those from low-income and racial minority population groups who are able to meet the raised passenger minimums, would benefit from the improved trip reliability provided by Alternative 2. The additional two park-and-ride facilities would not negatively affect current HOV users, who may utilize such facilities as part of their commute travel.

Over time, low-income and minority population groups may utilize alternative means of travel that may entail the use of the updated HOV lanes, such as carpooling or alternative routes of travel.

Build Alternative (Alternative 3)

Under Alternative 3, the existing free HOV lanes would be converted to paid ELs, requiring existing carpoolers to purchase/obtain a FasTrak transponder and maintain funding in a FasTrak account in order to use the ELs.

Current HOV lane users would be unable to utilize the ELs without opening and procuring a FasTrak account and transponder, and maintaining adequate toll funds in their account balance. Current HOV lane users who are constrained by budget and other factors may be priced out from being able to utilize the ELs or unable to utilize the ELs to the fullest extent possible (low toll credits, violations, etc.). Although EL tolls can be waived with minimum passenger occupancy during various times of the day (morning and afternoon rush hours), an account and a transponder are needed. Communities and population groups who are not native English speakers may face communication difficulties in procuring and setting up a FasTrak account and transponder, and linking a valid banking account to maintain toll credits. Those current HOV lane users who are able to set up a FasTrak account, obtain a transponder, and link their bank accounts would benefit from the improved trip reliability provided by Alternative 3. As discussed above, certain underserved motorists may face challenges in accessing these benefits. Therefore, Caltrans would implement an EAP as part of Alternative 3 (Measure EQ-1) to provide assistance to individuals who meet certain income and demographic characteristics by providing them with free or low-cost FasTrak transponders and/or FasTrak account credits to assist with covering the cost of tolls incurred through the use of the I-5 ELs.

The ELs implementation under Alternative 3 is a means to improve the current HOV lane degradation, alleviate existing HOV capacity issues, and address operational deficiencies on the HOV lanes. The improvements would result in more predictable travel and commute time for EL users. The northern Orange County region and the southeastern Los Angeles County region would benefit from this corridor improvement as it would improve travel conditions for all population groups along the I-5 corridor, including underserved population groups that travel between the two counties.

Build Alternative (Alternative 4)

The same permanent impacts under Alternative 3 would also occur under Alternative 4. Current HOV lane users would be unable to utilize the longer length of the ELs without opening and procuring a FasTrak account and transponder, and maintaining adequate toll funds in their account balance. As noted above, those current HOV lane users who are able to set up a FasTrak account, obtain a transponder, and link their bank accounts would benefit from the improved trip reliability provided by Alternative 4. Implementation of the EAP (Measure EQ-1) would ensure that Alternative 4 would deliver transportation benefits to all populations, including traditionally underserved populations.

The same benefits described above for Alternative 3 are applicable to Alternative 4. All population groups, including underserved population groups, would benefit from reliable and predictable travel times on the I-5 ELs between Los Angeles and Orange counties.

No Build Alternative (Alternative 1)

The No Build Alternative proposes no improvements to I-5. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction. However, existing operation and capacity constraints on the current I-5 mainline and its HOV lanes would remain, which may affect the overall population, including underserved population groups, in the Study Area through increased congestion. Current HOV lane users would continue to utilize the facility under the existing passenger minimums without tolls.

2.3.4.4 Avoidance, Minimization, and/or Mitigation Measures

The Build Alternatives would potentially result in equity burdens to underserved Study Area communities as a result of HOV lane changes and ELs implementation. Implementation of the EAP (Measure EQ-1) would minimize such burdens to underserved Study Area communities as a result of proposed improvements.

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