2.3 Community Impacts

2.3.1 Community Character and Cohesion

2.3.1.1 Regulatory Setting

NEPA established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 USC 4331[b][2]). The 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 considering adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under 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. Because 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

This section is based on information from the census tract information available from the U.S. Census Bureau: the 2010 Census and the 2013-2017 American Community Survey (ACS) 5-year Estimates. The study area for community character and cohesion includes census tracts located adjacent to the project alignment traversing through the cities of Anaheim, Orange, Santa Ana, and Tustin, and unincorporated areas in the County of Orange. Specifically, 17 census tracts are adjacent to the project alignment (Census Tracts 762.02, 219.15, 758.13, 758.11, 758.12, 758.05, 758.15, 758.16, 758.06, 758.07, 758.08, 757.01, 754.03, 755.04, 755.05, 744.08, and 755.14), shown on Figure 2.3–1.

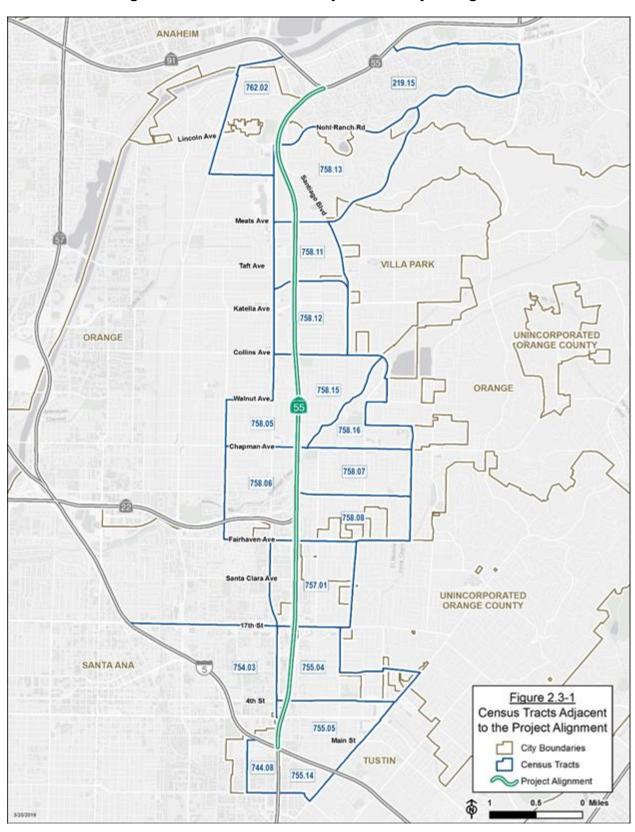


Figure 2.3-1. Census Tracts Adjacent to Project Alignment

Community character consists of the social and economic characteristics, attributes, and assets that contribute to the authenticity and uniqueness of an area that fosters a sense of place for its residents. The southern portion of the study area between McFadden Avenue and Fairhaven Avenue consists of commercial uses, activity centers (parks, schools, a senior center, medical and health facilities, religious institutions), single-family and multi-family residential properties (including mobile home parks), a small number of business parks and numerous planned developments of various uses. By contrast, the northern and central portions of the study area that extend from Fairhaven Avenue to SR-91 mainly consist of single-family residential properties, a smaller number of multifamily residences (including mobile home parks), commercial properties, and activity centers (schools, park and recreational facilities, medical and health facilities, religious institutions). Commercial uses adjacent to SR-55 have been developed to take advantage of proximity to the freeway.

Community cohesion is the degree to which residents have a sense of belonging to their neighborhoods, a commitment to the community, and/or a strong attachment to neighbors, groups, and institutions, usually because of continued association over time. Demographic data compiled by the U.S. Census Bureau, including the 2010 Census and the 2013-2017 ACS may be used to measure community-level cohesion. The following demographic indicators that tend to correlate with a higher degree of community cohesion were used to determine the degree of community-level cohesion for the 17 census tracts in the study area:

- Ethnicity: In general, homogeneity of the population contributes to higher levels of community cohesion. Communities that are ethnically homogenous 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.
- Household Size: In general, communities with a higher percentage of families with children are more cohesive than communities comprised of largely 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. Although the Census Bureau does not provide specific data regarding the number of children present in each household, the Census Bureau provides data regarding the persons per household, which can serve as a proxy for households with children.
- **Age:** 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 because they have more time available for volunteering and participating in social organizations.
- Housing Occupancy: Communities with a higher percentage of owner-occupied residences are typically more cohesive because their population tends 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.
- **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 with the community.

• 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 interactions with each other more frequently than residents who travel by automobile.

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

Ethnicity

Table 2.3-1 provides the racial and ethnic composition of the County, the cities of Anaheim, Orange, Santa Ana, and Tustin, and the 17 census tracts in the study area as reported in the 2010 Census. As shown in this section, the racial composition of the study area census tracts varies. With the exception of Census Tracts 754.03, 744.08, and 755.14, those identifying as white account for 60 to 80 percent of the study area census tracts, which is greater than the population of the cities of Anaheim, Santa Ana, and Tustin, but is generally consistent with the City and County of Orange overall. Census Tracts 758.16, 754.03, 744.08, and 755.14 have lower percentages of populations identified as White, which are consistent with the cities of Anaheim, Santa Ana, and Tustin. The Caltrans Environmental Handbook Volume 4 (Community Impact Assessment) states that minority individuals are defined as members of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black, or Hispanic. Three of the census tracts include substantial minority populations of Hispanics and Latinos (exceeding 50 percent of the census tract population). Between 3 and 45 percent of the population in the study area census tracts identify as some other race. Although all 17 study area census tracts contain substantial Hispanic or Latino populations, racial or ethnic homogeneity does not appear to be evident in any of the census tracts in the study area.

Table 2.3-1: Racial and Ethnic Demographics

Area	White	Black	American Indian/ Alaska Native	Asian	Hawaiian/ Pacific Islanders	Other	Hispanic/ Latino
County							
Orange	1,830,758	50,744	18,132	537,804	9,354	435,641	1,012,973
County	(60.8%)	(1.7%)	(0.6%)	(17.9%)	(0.3%)	(14.5%)	(33.7%)
Cities							
City of	177,237	9,347	2,648	49,857	1,607	80,705	177,467
Anaheim	(52.7%)	(2.8%)	(0.8%)	(14.8%)	(0.5%)	(24.0%)	(52.8%)
City of	91,522	2,227	993	15,350	352	20,567	52,014
Orange	(67.1%)	(1.6%)	(0.7%)	(11.3%)	(0.3%)	(15.1%)	(38.1%)
City of	148,838	4,856	3,260	34,138	976	120,789	253,928
Santa Ana	(45.9%)	(1.5%)	(1.0%)	(10.5%)	(0.3%)	(37.2%)	(78.2%)
City of	39,729	1,722	442	15,299	268	14,499	30,024
Tustin	(52.6%)	(2.3%)	(0.6%)	(20.3%)	(0.4%)	(19.2%)	(39.7%)

Area	White	Black	American Indian/ Alaska Native	Asian	Hawaiian/ Pacific Islanders	Other	Hispanic/ Latino
Census Trac	cts		ı		1	l	
762.02	3,953	127	77	439	36	898	2,246
	(68.0%)	(2.2%)	(1.3%)	(7.6%)	(0.6%)	(15.5%)	(38.6%)
219.15	2,820 (70.8%)	46 (1.2%)	8 (0.2%)	804 (20.2%)	0	136 (3.4%)	567 (14.2%)
758.13	3,396	30	38	757	8	615	1,268
	(67%)	(0.6%)	(0.7%)	(14.9%)	(0.2%)	(12.1%)	(25%)
758.11	2,025	38	12	194	7	940	1,919
	(60.8%)	(1.1%)	(0.4%)	(5.8%)	(0.2%)	(28.2%)	(57.6%)
758.12	4,761	75	43	28	14	1,016	3,474
	(72.4%)	(1.1%)	(0.7%)	(0.4%)	(0.2%)	(15.5%)	(52.9%)
758.15	3,609	54	29	313	20	1,001	2,147
	(69.7%)	(1.0%)	(0.6%)	(6%)	(0.4%)	(19.3%)	(41.5%)
758.05	2,926	48	45	201	7	848	2,061
	(69.5%)	(1.1%)	(1.1%)	(4.8%)	(0.2%)	(20.1%)	(48.9%)
758.16	2,195	100	19	539	11	670	1,643
	(59.2%)	(2.7%)	(0.5%)	(14.5%)	(0.3%)	(18.1%)	(44.3%)
758.06	3,794	96	47	428	17	1,522	2,945
	(62%)	(1.6%)	(0.8%)	(7.0%)	(0.3%)	(24.9%)	(48.1%)
758.07	2,894	67	57	428	11	718	1,754
	(66.9%)	(1.5%)	(1.3%)	(9.9%)	(0.3%)	(16.6%)	(40.6%)
758.08	2,738	32	15	167	10	299	802
	(80.4%)	(0.9%)	(0.4%)	(4.9%)	(0.3%)	(8.8%)	(23.6%)
757.01	4,438	181	57	492	62	1,389	3,031
	(64.5%)	(2.6%)	(0.8%)	(7.2%)	(0.9%)	(20.2%)	(44.1%)
755.04	3,058	64	30	304	15	425	1,155
	(75.7%)	(1.6%)	(0.7%)	(7.5%)	(0.4%)	(10.5%)	(28.6%)
754.03	3,988	213	54	457	16	2,056	4,583
	(56.3%)	(3.0%)	(0.8%)	(6.5%)	(0.2%)	(29.0%)	(64.7%)
755.05	2,255	71	36	416	22	651	1,478
	(62.7%)	(2.0%)	(1.0%)	(11.6%)	(0.6%)	(18.1%)	(41.1%)
744.08	2,211	176	50	322	43	2,400	4,212
	(41.0%)	(3.3%)	(0.9%)	(6.0%)	(0.8%)	(44.5%)	(78.0%)
755.14	1,553	88	34	513	4	1,379	2,455
	(41.9%)	(2.4%)	(0.9%)	(13.9%)	(0.1%)	(37.2%)	(66.3%)

Source: 2010 Census

Notes: Percentages do not add up to 100 percent. The United States Census Bureau included five race categories in the 2010 Census: White, Black or African-American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander. Respondents who were unable to identify with any of these five categories were able to identify as Some Other Race on the 2010 Census questionnaire. In addition, respondents are able to identify as more than one race or write-in detailed information about their race. According to the United States Census Bureau, persons who identify their origin as Hispanic or Latino may be of any race.

Household Size

Table 2.3-2 provides household characteristics for the study area census tracts, the cities of Anaheim, Orange, Santa Ana, and Tustin, and the County, as reported in the 2013-2017 ACS 5-Year Estimates. As shown below, the median household income in the study area census tracts varies widely. Census Tracts 744.08 and 755.14 are characterized by less affluent residents, with a lower median household income than the four cities and the County. Census Tracts 762.02,

758.11, 758.12, 758.15, 758.05, 758.06, 758.07, 758.08, 757.01, and 755.05 are all generally consistent with the County's median household income level and near the median household income levels for the cities of Anaheim, Orange, and Tustin. Census Tracts 219.15, 758.06, 755.04, 754.03, and 755.05 have smaller average household sizes than the County and the four cities. Census Tracts 762.02, 758.13, 758.15, 758.05, 758.16, 757.01, and 755.14 have larger average household sizes than the County and the cities of Orange and Tustin but smaller than the cities of Anaheim and Santa Ana. Census Tract 758.11 reported the largest average household size at 4.23 persons, and Census Tract 755.05 reported the smallest average household size at 2.57 persons.

Table 2.3-2: Household Income and Size

Area	Median Household Income	Persons per Household
County		
Orange County	\$81,851	2.99
Study Area Cities		
Anaheim	\$65,313	3.38
Orange	\$83,500	3
Santa Ana	\$57,151	4.37
Tustin	\$73,567	2.98
Study Area Census Tracts		
Census Tract 762.02	\$82,805	3.03
Census Tract 219.15	\$118,438	2.72
Census Tract 758.13	\$117,813	3.01
Census Tract 758.11	\$73,357	4.23
Census Tract 758.12	\$70,250	3.52
Census Tract 758.15	\$78,351	3.24
Census Tract 758.05	\$75,159	3.17
Census Tract 758.16	\$64,048	3.11
Census Tract 758.06	\$77,546	2.94
Census Tract 758.07	\$90,868	3.51
Census Tract 758.08	\$77,546	2.98
Census Tract 757.01	\$82,591	3.23
Census Tract 755.04	\$66,797	2.62
Census Tract 754.03	\$66,532	2.93
Census Tract 755.05	\$70,938	2.57
Census Tract 744.08	\$45,245	3.54
Census Tract 755.14	\$42,708	3.33

Source: 2013-2017 ACS 5-Year Estimates (2017)

Age of Population

Table 2.3-3 shows the age distribution, including the median age, of the population in the County, the cities of Anaheim, Orange, Santa Ana, and Tustin, and the study area census tracts, as reported in the 2010 Census. A higher median age is often characteristic of a more mature and affluent community, while a lower median age is often characteristic of a less mature, less affluent community. The majority of the study area census tracts reported median ages lower

than the County and the study area cities of Anaheim, Santa Ana, and Tustin, with the exception of Census Tracts 219.15, 758.13, 758.07, 758.08, 755.04, and 755.05, which have higher median ages than that of the County.

Table 2.3-3: Age Distribution

Area	Median Age	Population is < 15 Years Old	Population is 15-64 Years Old	Population is > 64 Years Old
County				
Orange County	36.2	20%	68.60%	11.60%
Study Area Cities				
Anaheim	32.4	22.60%	68.10%	9.30%
Orange	34.8	19.10%	70.30%	10.60%
Santa Ana	29.1	25.60%	67.60%	6.80%
Tustin	33.4	22.40%	69.20%	8.40%
Study Area Census Tr	acts			
Census Tract 762.02	35.8	20.70%	68.90%	10.40%
Census Tract 219.15	49	13.70%	64.90%	21.40%
Census Tract 758.13	43	17%	68.40%	14.60%
Census Tract 758.11	29.5	24.80%	66.70%	8.50%
Census Tract 758.12	31.3	25.10%	65.40%	9.50%
Census Tract 758.15	33.9	20.80%	68.30%	10.90%
Census Tract 758.05	32.4	20.80%	49.50%	28.70%
Census Tract 758.16	32.2	23.50%	68.70%	7.80%
Census Tract 758.06	35.1	21.30%	66.40%	12.30%
Census Tract 758.07	36.7	19.80%	66.70%	13.50%
Census Tract 758.08	43.9	16.90%	65%	18.10%
Census Tract 757.01	34.9	21%	67%	12%
Census Tract 755.04	39.9	18.60%	64.90%	16.50%
Census Tract 754.03	33.7	19.70%	70.70%	9.60%
Census Tract 755.05	37.3	18.60%	68.70%	12.70%
Census Tract 744.08	28.3	28.40%	67.10%	4.50%
Census Tract 755.14	29.5	24%	69.70%	6.30%

Source: 2010 Census

Housing Occupancy

Table 2.3-4 provides the number of housing units in the study area census tracts, the cities of Anaheim, Orange, Santa Ana, and Tustin, and the County in 2010, as reported in the 2010 Census. As shown in Table 2.3-4, the percentage of owner-occupied residences in Census Tracts 219.15 (89.7 percent), 758.13 (88.6 percent), 758.11 (63.6 percent), 758.15 (66.8 percent), 758.07 (72.2 percent), 758.08 (91%), and 755.04 (63.7 percent) are higher than Orange County overall (61 percent). Anaheim, Orange, Santa Ana, and Tustin each have a lower percentage of owner-occupied residences compared to Orange County overall.

Table 2.3-4: Housing Profile

Area	Total Housing Units	Housing Units Occupied	Owner-Occupied Housing Units	Renter-Occupied Housing Units
County				
Orange County	1,042,254	984,503 (95%)	599,032 (61%)	385,471 (39%)
Study Area Cities				
Anaheim	104,237	98,294 (94.3%)	47,677 (48.5%)	50,617 (51.5%)
Orange	45,111	43,367 (96.1%)	36,319 (60.7%)	17,048 (39.3%)
Santa Ana	77,796	74,381 (96%)	36,613 (49%)	37,768 (51%)
Tustin	26,335	24,839 (94%)	13,109 (53%)	11,730 (47%)
Study Area Census Tra	cts			
Census Tract 762.02	2,005	1,919 (95.7%)	1,151 (60%)	768 (40%)
Census Tract 219.15	1,494	1,458 (97.6%)	1,308 (89.7%)	150 (10.3%)
Census Tract 758.13	1,746	1,677 (96%)	1,486 (88.6%)	19 (11.4%)
Census Tract 758.11	810	788 (97.3%)	501 (63.6%)	287 (36.4%)
Census Tract 758.12	1,911	1,855 (97.1%)	974 (52.5%)	881 (47.5%)
Census Tract 758.15	1,635	1,598 (97.7%)	1,068 (66.8%)	530 (33.2%)
Census Tract 758.05	1,374	1,328 (96.7%)	640 (48.2%)	688 (51.8%)
Census Tract 758.16	1,232	1,180 (95.8%)	592 (50.2%)	588 (49.8%)
Census Tract 758.06	2,146	2,065 (96.2%)	947 (45.9%)	1,118 (54.1%)
Census Tract 758.07	1,253	1,218 (97.2%)	879 (72.2%)	339 (27.8%)
Census Tract 758.08	1,153	1,132 (98.2%)	1.030 (91%)	102 (9%)
Census Tract 757.01	2,181	2,094 (96%)	1,187 (56.7%)	907 (43.3%)
Census Tract 755.04	1,590	1,533 (96.4%)	976 (63.7%)	557 (36.3%)
Census Tract 754.03	2,500	2,373 (94.9%)	1,369 (57.7%)	1,004 (42.3%)
Census Tract 755.05	1,474	1,387 (94.1%)	584 (42.1%)	803 (57.9%)
Census Tract 744.08	1,640	1,527 (93.1%)	375 (24.6%)	1,152 (75.4%)
Census Tract 755.14	1,184	1,109 (93.7%)	179 (16.1%)	930 (83.9%)

Source: 2010 Census

Housing Tenure

Housing tenure is shown in Table 2.3-5. As shown in the table, 28.4 percent of the County's residents have lived in their current residences for more than 10 years and therefore can be considered long-term residents. Similar to the County, a large percentage (29.6 and 27.9 percent, respectively) of the population in the cities of Orange and Santa Ana consist of long-term residents. By comparison, the cities of Anaheim and Tustin have relatively lower percentages of long-term residents (25.5 percent and 19.6 percent, respectively).

Table 2.3-5: Housing Tenure

Area	Householder Moved into Unit 2010 or Later	Householder Moved into Unit	Householder Moved into Unit Moved in 1999 or Earlier (Long-Term Residents)
County			
Orange County	451,876	281,732	291,368
	(44.1%)	(27.5%)	(28.4%)
Study Area Cities			
Anaheim	47,242	27,487	25,551
	(47.1%)	(27.4%)	(25.5%)
Orange	17,623	12,363	12,639
	(41.3%)	(29%)	(29.6%)
Santa Ana	32,024	22,779	21,177
	(42.2%)	(30%)	(27.9%)
Tustin	13,745	7,291	5,149
	(52.5%)	(27.8%)	(19.6%)
Study Area Census Tra	acts		
Census Tract 762.02	866	393	645
	(46.1%)	(20.4%)	(33.5%)
Census Tract 219.15	445	375	563
	(32.2%)	(27.1%)	(40.7%)
Census Tract 758.13	455	577	650
	(27%)	(34.3%)	(38.7%)
Census Tract 758.11	262	271	281
	(32.2%)	(33.3%)	(34.5%)
Census Tract 758.12	880	471	504
	(47.4%)	(25.4%)	(27.2%)
Census Tract 758.15	476	522	584
	(30.1%)	(33%)	(36.9%)
Census Tract 758.05	534	309	398
	(43.1%)	(24.9%)	(32.1%)
Census Tract 758.16	522	492	208
	(42.7%)	(40.3%)	(17.1%)
Census Tract 758.06	980	530	543
	(47.8%)	(25.8%)	(26.4%)
Census Tract 758.07	408	303	468
	(34.6%)	(25.7%)	(39.7%)
Census Tract 758.08	233	329	537
	(21.2%)	(29.9%)	(48.8%)
Census Tract 757.01	934	453	749
	(43.7%)	(21.2%)	(35.1%)

Area	Householder Moved into Unit 2010 or Later	Householder Moved into Unit	Householder Moved into Unit Moved in 1999 or Earlier (Long-Term Residents)
Census Tract 755.04	614	360	547
	(40.4%)	(23.7%)	(35.9%)
Census Tract 754.03	1,074	838	557
	(43.5%)	(33.9%)	(22.5%)
Census Tract 755.05	582	347	335
	(46%)	(27.5%)	(26.6%)
Census Tract 744.08	910	620	89
	(56.2%)	(38.3%)	(5.5%)
Census Tract 755.14	667	394	117
	(56.6%)	(33.4%)	(9.9%)

Source: 2013-2017 ACS 5-Year Estimates (2017)

Transit Dependency

The transit-dependent population is typically described as the population that relies on public transportation for travel. The transit-dependent population may include the disabled, the elderly, the young, low-income individuals, and households without vehicles available. Given that transit dependency can be attributed to a combination of factors, including age, income level, and ability to drive, transit-dependent populations are often difficult to identify based on census data because these groups often overlap. In an effort to avoid miscounting such populations, transit dependency was calculated by determining the number of persons in households that are eligible to drive, but do not have access to a vehicle. This number was calculated by taking the number of residents aged 15 and over (the approximate population eligible to drive) within a geographic area, subtracting the number of persons living in group quarters (e.g., college and university dormitories, skilled nursing facilities, correctional facilities, and other group living environments where driving is not typically required), subtracting the number of vehicles available, and then dividing the difference by the number of residents aged 15 and over.

Table 2.3-6 shows the percentage of transit-dependent population in Orange County, the study area cities, and the study area census tracts. As shown in Table 2.3-6, 17.5 percent of the County's population is transit-dependent. The percentage of transit-dependent population in the cities of Orange and Tustin (16.7 percent and 21.4 percent, respectively) are similar to that of the County (17.5 percent); however, in the cities of Anaheim and Santa Ana, the percentage of transit-dependent population is much greater (25.6 percent and 34.4 percent, respectively). Of the 17 census tracts in the study area, 9 exhibit higher transit-dependent populations than the County (17.5 percent) but are generally consistent with the study area cities overall. Census Tracts 762.02 (13.4 percent), 219.15 (3.7 percent), 758.13 (4.7 percent), 758.05 (11.5 percent), 758.06 (15.8 percent), 758.07 (15.2 percent), 758.08 (6.8 percent), and 755.04 (17.5 percent) exhibit transit-dependency percentages that are less than or equal to the County overall.

Table 2.3-6: Transit Dependency

Area	Transit-Dependent Population ¹
County	
Orange County	17.5%
Study Area Cities	
Anaheim	25.6%
Orange	16.7%
Santa Ana	34.4%
Tustin	21.4%
Study Area Census Tracts	·
Census Tract 762.02	13.4%
Census Tract 219.15	3.7%
Census Tract 758.13	4.7%
Census Tract 758.11	25.4%
Census Tract 758.12	21.6%
Census Tract 758.15	20.6%
Census Tract 758.05	11.5%
Census Tract 758.16	26.2%
Census Tract 758.06	15.8%
Census Tract 758.07	15.2%
Census Tract 758.08	6.8%
Census Tract 757.01	22.4%
Census Tract 755.04	17.5%
Census Tract 754.03	22.1%
Census Tract 755.05	18.5%
Census Tract 744.08	32.9%
Census Tract 755.14	38.3%

Source: 2013-2017 ACS 5-Year Estimates (2017)

Community Cohesion Summary

Indicators for a community that has a high degree of cohesion are high rates of ethnic homogeneity and home ownership, and high percentages of elderly residents, long-term residents, households of two or more people, and transit-dependent residents. Census Tract 755.14 has a higher percentage of transit-dependent population (38.3 percent) than the County and the study area cities; however, Census Tract 755.14 also demonstrates low proportion of owner-occupied residences (16.1 percent owner-occupied versus 83.9 percent renter-occupied) and relatively short housing tenure (56.6 percent of householders moved into their units in 2010 or later, higher than the county and study area cities), indicating a highly transient population. Census Tracts 219.15, 758.13, 758.07, 758.08, and 755.04 have a high rate of owner-occupied residences, above-average racial/ethnic homogeneity (more than 67 percent of the population is White), higher percentages of its population over 65 years old (12 percent and more), and higher percentages of long-term residents (more than 30 percent) than the County and the study area cities. Based on these indicators, Census Tracts 219.15, 758.13, 758.07, 758.08, and 755.04 are

¹ The transit-dependent population was calculated by taking the number of residents aged 15 and over, subtracting the number of persons living in group quarters, subtracting the number of vehicles available, and then dividing the difference by the number of residents aged 15 and over.

concluded to have reasonably high levels of community cohesion. Community cohesion is relatively low within the other 12 study area census tracts.

2.3.1.3 Environmental Consequences

2.3.1.3.1 Temporary Impacts

Build Alternative

The proposed project would require two TCEs (see Figure 1.3-1). One TCE will be required from the Village Apartments and would impact a residential carport, which houses fifteen parking spaces and storage cabinets. Use of the effected parking spaces is expected to be maintained through temporary restriping and personal property from the storage cabinets would be temporarily relocated for the duration of the construction. The carport will be removed by the project contractor and the owner will be reimbursed for the cost of a carport replacement. An additional TCE will be required from a small, vacant parcel owned by A-H properties. This TCE is situated along the SR55 right of way between the Village Apartments parcel to the south and the medical office building to the north. No buildings or access would be affected. Construction-related closures would be short-term, and the increased travel times and distances would result in minimal disruption to neighborhoods and businesses adjacent to the project. Access to all nearby neighborhoods and businesses would be maintained during construction. After construction, the TCE would be restored to its original pre-project or better condition.

Temporary impacts during construction activities associated with construction equipment noise and air emissions at residences and businesses adjacent to SR 55 would cease when the construction of the project is complete.

No Build Alternative

The proposed improvements would not be constructed under the No Build Alternative. Therefore, no temporary impacts related to community character and cohesion would occur.

2.3.1.3.2 Permanent Impacts

Build Alternative

The Build Alternative would result in beneficial impacts related to community character and cohesion, as the project improvements would improve access and connectivity and decrease travel times. Furthermore, the Build Alternative would provide operational improvements for emergency services in the four study area cities, as mobility would improve over existing conditions. Improvements associated with the Build Alternative would take place within an existing roadway and Caltrans right-of-way. The Build Alternative would not create any new or exacerbate any existing physical divisions in the study area or in the cities in the study area. Therefore, permanent impacts to community character and cohesion would be minimal.

No Build Alternative

The proposed improvements would not be constructed under the No Build Alternative. Therefore, no permanent impacts related to community character and cohesion would occur. However, traffic congestion on SR 55 would worsen, which may result in impacts to community character and cohesion in the communities directly adjacent to the project limits of SR 55.

2.3.1.4 Avoidance, Minimization, and/or Mitigation Measures

Temporary construction impacts would be minimized by Project Feature PF-T-1 and PF-T-2 as discussed in Section 2.5, Traffic and Transportation/Pedestrian and Bike Facilities. Project Feature T-1 requires development and implementation of a Transportation Management Plan (TMP) by the construction contractor during project construction to address short-term traffic circulation and access effects during project construction. Project Feature T-2 requires the construction contractor to coordinate with OCTA Central Communications to avoid and minimize OCTA bus routes from being affected by construction activities.

Temporary visual impacts would be minimized through the implementation of Project Feature PF-VIS-1, which is discussed in Section 2.6, Visual and Aesthetics. The visual quality of the existing corridor will be slightly altered by the proposed project. PF-VIS-1 requires architectural treatments and features be included in the final project design to minimize the loss of, and improve the visual quality on, the project segment of SR 55.

Temporary air quality impacts would be minimized based on implementation of Project Features AQ-1 through AQ-13, which are provided in Section 2.13, Air Quality. These measures require the control of dust and equipment emissions during construction of the Proposed Project.

Temporary noise impacts would be minimized based on implementation of Project Features N-1 and NOI-1, which are discussed in Section 2.14, Noise. Project Feature N-1 requires that noise from construction activities conform to the Caltrans Standard Specifications, Section 14-8.02, "Noise Control."

Operational noise impacts would be attenuated by noise abatement in the form of a barrier located along an apartment complex along Tustin Avenue on the southbound side of SR 55 between 4th Street and 17th Street, with respective lengths and average heights of 6 to 22 feet. Measure NOI-1 provides the determination of Noise Barrier No. 1.1 to be feasible and reasonable. This measure may change based on input received from the public. If during final design conditions have substantially changed, noise abatement may not be necessary. The final decision on noise abatement will be made upon completion of the project design.

2.3.2 Relocations and Real Property Acquisition

2.3.2.1 Regulatory Setting

The Department's Relocation Assistance Program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and 49 CFR Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced because 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.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex. Please see Appendix B for a copy of the Department's Title VI Policy Statement.

2.3.2.2 Affected Environment

The study area for relocations and real property acquisition includes census tracts located adjacent to the project alignment traversing through the cities of Anaheim, Orange, Santa Ana, Tustin, and unincorporated areas in the County of Orange. Specifically, 17 census tracts are adjacent to the project alignment (Census Tracts 762.02, 219.15, 758.13, 758.11, 758.12, 758.05, 758.15, 758.16, 758.06, 758.07, 758.08, 757.01, 754.03, 755.04, 755.05, 744.08, and 755.14), as shown previously on Figure 2.3-1. As described in Section 2.1, Land Use, the existing land uses in the study area east of SR 55 is dominated by single-family residential land uses, with some education, open space and recreation, and commercial and services land uses, while the western side of SR 55 contains a mix of single and multi-family residential, commercial and services, facilities, general office, and open space and recreation uses.

2.3.2.3 Environmental Consequences

2.3.2.3.1 Temporary Impacts

Build Alternative

The proposed project would require two TCEs (see Figure 1.3-1) described below in Table 2.3-7. One TCE will be required from the Village Apartments and would impact a residential carport, which houses fifteen parking spaces and storage cabinets. Use of the affected parking spaces is expected to be maintained through temporary restriping and personal property from the storage cabinets would be temporarily relocated for the duration of the construction. The carport will be removed by the project contractor and the owner will be reimbursed for the cost of a carport replacement. An additional TCE will be required from a small, vacant parcel owned by A-H properties. This TCE is situated along the SR55 right of way between the Village Apartments parcel to the south and the medical office building to the north. No buildings or access would be affected. Construction-related closures would be short-term, and the increased travel times and distances would result in minimal disruption to neighborhoods and businesses adjacent to the project. Access to all nearby neighborhoods and businesses would be maintained during construction. After construction, the TCE would be restored to its original pre-project or better condition. Therefore, the Build Alternative would not result in adverse impacts to any privately-owned land during construction.

Table 2.3-7: Anticipated Temporary Construction Easements

No.	Owner	APN	Property Type	Current Use	Acquisition Area (square feet)	Acquisition Type
1	A-H Properties	400-021-07	Commercial	Vacant	579	TCE
2	Village Apartments	400-021-10	Multi-Family	Multi-Family	4,209	TCE

No Build Alternative

The proposed improvements would not be constructed under the No Build Alternative. Therefore, no temporary impacts related to relocations and real property acquisition would occur.

2.3.2.3.2 Permanent Impacts

No Build Alternative

The No Build Alternative would not construct any improvements to SR 55 and therefore would not require the temporary use of any privately owned land for TCEs or staging areas.

Build Alternative

All staging would occur within Caltrans' right-of-way, and no permanent property acquisition or relocations would be required.

2.3.2.4 Avoidance, Minimization, and/or Mitigation Measures

After construction, the TCEs would be restored to their original pre-project or better conditions. The project would not result in any permanent relocations or real property acquisitions. Therefore, no avoidance, minimization, 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 (DHHS) poverty guidelines (DHHS 2019). For 2019, this was \$25,750 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. The California Department of Transportation's 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

This section is based on information from the census tract information available from the U.S. Census Bureau: the 2010 Census and the 2013 - 2017 ACS)¹ The project area includes census tracts located within and adjacent to the project alignment traversing through the cities of Anaheim, Orange, Santa Ana, and Tustin, and unincorporated areas in the County of Orange. Specifically, 17 census tracts are adjacent to the project alignment (Census Tracts 762.02, 219.15, 758.13, 758.11, 758.12, 758.05, 758.15, 758.16, 758.06, 758.07, 758.08, 757.01, 754.03, 755.04, 755.05, 744.08, and 755.14) and shown on Figure 2.3-1.

¹ The ACS is an ongoing survey conducted by the United States Census Bureau that provides data every year, giving communities current information they need to plan investments and services. Information from the survey generates data that help determine how more than \$400 billion in federal and State funds are distributed each year.

"Low-income" is defined based on the DHHS poverty guidelines. For 2019, this was \$25,750 for a family of four. Median household income and the percentages of residents living below the poverty level for the census tracts located adjacent to the project alignment; the County; and the cities of Anaheim, Orange, Santa Ana, and Tustin are summarized in Table 2.3-8. Based on the 2013 - 2017 ACS 5-Year Estimates, the median household income in Orange County was \$81,851 in 2017. The median household income in the city of Orange (\$83,500) is higher than Orange County, while the median household incomes in the cities of Anaheim, Santa Ana, and Tustin (\$65,313, \$57,151, and \$73,567, respectively) are lower than Orange County. As shown in Table 2.3-8, the percentage of persons living below the poverty level was substantially higher in the city of Santa Ana (19.5 percent) than in Orange County (12.1 percent), while the percentages of persons living below the poverty level in the cities of Orange and Tustin (12.5 percent and 13.6 percent, respectively) were similar to that of Orange County. The cities of Anaheim and Santa Ana exhibited a higher percentage of persons living below the poverty level (16.0 percent and 19.5 percent respectively) than Orange County.

Table 2.3-8: Median Household Income and Low-Income Population

Area	Median Household Income	Low-Income Population	Percentage of Population
Orange County	\$81,851	381,854	12.1%
City of Anaheim	\$65,313	55,841	16.0%
City of Orange	\$83,500	17,536	12.5%
City of Santa Ana	\$57,151	65,226	19.5%
City of Tustin	\$73,567	10,881	13.6%
Census Tract 762.02	\$82,805	442	7.4%
Census Tract 219.15	\$118,438	149	3.8%
Census Tract 758.13	\$117,813	273	5.6%
Census Tract 758.11	\$73,357	593	18.1%
Census Tract 758.12	\$70,250	1,067	16.7%
Census Tract 758.05	\$75,159	951	22.7%
Census Tract 758.15	\$78,351	575	10.8%
Census Tract 758.16	\$64,048	683	17.2%
Census Tract 758.06	\$77,546	1,031	15.7%
Census Tract 758.07	\$90,868	283	7.1%
Census Tract 758.08	\$124,813	210	6.2%
Census Tract 757.01	\$82,591	442	6.0%
Census Tract 754.03	\$66,532	539	7.5%
Census Tract 755.04	\$66,797	285	7.0%
Census Tract 755.05	\$70,938	293	8.3%
Census Tract 744.08	\$45,245	936	14.8%
Census Tract 755.14	\$42,708	1,150	29.8%

Source: 2013-2017 American Community Survey (ACS) 5-Year Estimates (2017)

Overall, low-income individuals comprise a similar or higher percentage of the population in seven of the 17 adjacent census tracts (Census Tract 758.11 with 18.1 percent, Census Tract 758.12 with 16.7 percent, Census Tract 758.05 with 22.7 percent, Census Tract 758.16 with

17.2 percent, Census Tract 758.06 with 15.7 percent, Census Tract 744.08 with 14.8 percent, and Census Tract 755.14 with 29.8 percent) compared to Orange County.

The term "minority" is defined as persons who identify themselves as Black/African-American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, or of Hispanic/Latino origin. The population in the census tracts located adjacent to the project alignment; the County; and the cities of Anaheim, Orange, Santa Ana, and Tustin that consist of racial minorities and Hispanics/Latinos residents are summarized in Table 2.3-9.

Table 2.3-9: Racial Minority and Hispanic/Latino Populations

Area	Racial Minorities	Percentage of Racial Minorities	Hispanic/Latino Residents	Percentage of Hispanic/Latino Residents
Orange County	1,179,474	39.2%	1,012,973	33.7%
City of Anaheim	159,028	47.3%	177,467(52.8%
City of Orange	44,894	33.0%	52,014	38.1%
City of Santa Ana	175,690	54.1%	253,928	78.2%
City of Tustin	35,811	47.4%	30,024	39.7%
Census Tract 762.02	1,859	32.1%	2,246	38.6%
Census Tract 219.15	1,165	29.3%	567	14.2%
Census Tract 758.13	1,673	32.9%	1,268	25.0%
Census Tract 758.11	1,307	39.2%	1,919	57.6%
Census Tract 758.12	1,812	27.6%	3,474	52.9%
Census Tract 758.05	1,287	30.6%	2,061	48.9%
Census Tract 758.15	1,567	30.2%	2,147	41.5%
Census Tract 758.16	1,514	40.8%	1,643	44.3%
Census Tract 758.06	2,327	38.1%	2,945	48.1%
Census Tract 758.07	1,430	33.0%	1,754	40.6%
Census Tract 758.08	666	19.5%	802	23.6%
Census Tract 757.01	2,441	35.5%	3,031	44.1%
Census Tract 754.03	3,093	43.7%	4,583	64.7%
Census Tract 755.04	983	24.3%	1,155	28.6%
Census Tract 755.05	1,344	37.4%	1,478	41.1%
Census Tract 744.08	3,188	59.0%	4,212	78.0%
Census Tract 755.14	2,150	58.1%	2,455	66.3%

Source: 2010 Census

The racial minority population percentages in the census tracts adjacent to the project alignment; Orange County; and the cities of Anaheim, Orange, Santa Ana, and Tustin were calculated by determining the number of Black/African-American, Asian, American Indian/Native Alaskan, and Hawaiian/Pacific Islander populations of one race only and two or more as identified by the 2010 Census. As shown in Table 2.3-9, racial minorities comprise approximately 39 percent of the population in Orange County. Racial minorities in the project area cities range from approximately 33 percent of the population in Orange to approximately 54 percent of the population in Santa Ana. Overall, racial minorities comprise a similar or higher percentage of the

population in five of the 17 adjacent census tracts (Census Tracts 758.11 with 39.2 percent, 758.16 with 40.8 percent, 754.03 with 43.7 percent, 744.08 with 59 percent, and 755.14 with 58.1 percent, respectively) compared to Orange County. As shown in Table 2.3-9, Hispanics/Latinos represent approximately 34 percent of the County population. Hispanics/Latinos in the project area cities range from approximately 38 percent of the population in Orange to approximately 78 percent of the population in Santa Ana. Overall, Hispanics/Latinos comprise a similar or higher percentage of the population in 13 of the 17 adjacent census tracts compared to Orange County.

2.3.3.3 Environmental Consequences

2.3.3.3.1 Temporary Impacts

Build Alternative

Construction activities associated with the Build Alternative would temporarily affect residents and businesses throughout the entire project area. Although construction impacts would also affect low-income and minority populations, the impacts would not be considered disproportionate and would affect all people within and adjacent to the project area. Impacts would include temporary disruptions of local traffic patterns and increased traffic congestion, noise levels, and dust. Access to all nearby neighborhoods and businesses would be maintained during construction. As noted in Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities, the project would include a Transportation Management Plan (TMP) under PF-T-1 to address ramp and/or lane closures and associated detour routes.

As discussed in Section 2.12, Hazardous Waste Materials, the implementation of PF-HAZ-1 through PF-HAZ-6 would avoid and/or minimize potential effects related to hazardous materials and hazardous wastes during construction of the Build Alternative; and the surrounding community, including environmental justice populations, would not be disproportionately impacted.

The project construction activities would also provide jobs that would benefit local economies, including low-income and minority populations.

No Build Alternative

Under the No Build Alternative, the temporary construction-related adverse effects on all populations, including low-income and minority (environmental justice) populations, during construction of the Build Alternative, would not occur. No additional jobs would be created under the No Build Alternative. No indirect or secondary impacts on communities and minority populations would result from implementation of the No Build Alternative.

2.3.3.3.2 Permanent Impacts

Build Alternative

The Build Alternative would not require the permanent acquisition of residential or business properties or the displacement of residents or businesses. Indirect or secondary impacts are not anticipated to occur. Therefore, the Build Alternative would not result in adverse effects on

minority and low-income populations related to the acquisition of residential or business uses and/or the displacement of residents or businesses.

The Build Alternative would result in improvements to an existing major freeway corridor and include noise levels consistent with the current noise levels associated with SR 55.

The Build Alternative would directly benefit all study area residents, including low-income and minority populations, by improving mobility and circulation throughout the study area and central Orange County. Another direct impact from the Build Alternative would improve traffic patterns and mobility for all residents, including low-income and minority persons. Transit-dependent populations, including low-income and minority individuals, would also benefit from improved travel speeds for bus routes operating on SR 55.

The Build Alternative would not cause disproportionately high and adverse effects on any minority or low-income populations per EO 12898 regarding environmental justice.

No Build Alternative

No improvements to SR 55 other than routine maintenance are proposed under the No Build Alternative. Therefore, the No Build Alternative would not result in property acquisition or permanent increases in noise levels that would impact populations in the area, including low-income and minority populations. However, the No Build Alternative would also not provide transportation benefits to populations in the area, including low-income and minority populations, that would occur under the Build Alternative. Potential indirect impacts to the project area populations and communities could result from the continued degradation of traffic flow and capacity associated with congestion on SR 55.

2.3.3.4 Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, the Build Alternative will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. No further environmental justice analysis or avoidance, minimization and/or mitigation measures are required.

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