Goodman Logistics Center Fullerton

CEQA Support

Traffic Analysis

City of Fullerton

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TABLE OF CONTENTS

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APPENDICES

APPENDIX 2.1 AVERAGE DAILY TRAFFIC VOLUMES

LIST OF EXHIBITS

TABLES

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1 INTRODUCTION

This report presents transportation and circulation information to support the Environmental Impact Report (EIR) for the proposed Goodman Logistics Center Fullerton development ("Project"), which is located at the northeast corner of Acacia Avenue and Orangethorpe Avenue in the City of Fullerton as shown on Exhibit 1-1.

It should be noted that a vehicle miles traveled (VMT) analysis is required by changes to the California Environmental Quality Act (CEQA) adopted in December 2018 that require lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as of July 1, 2020.

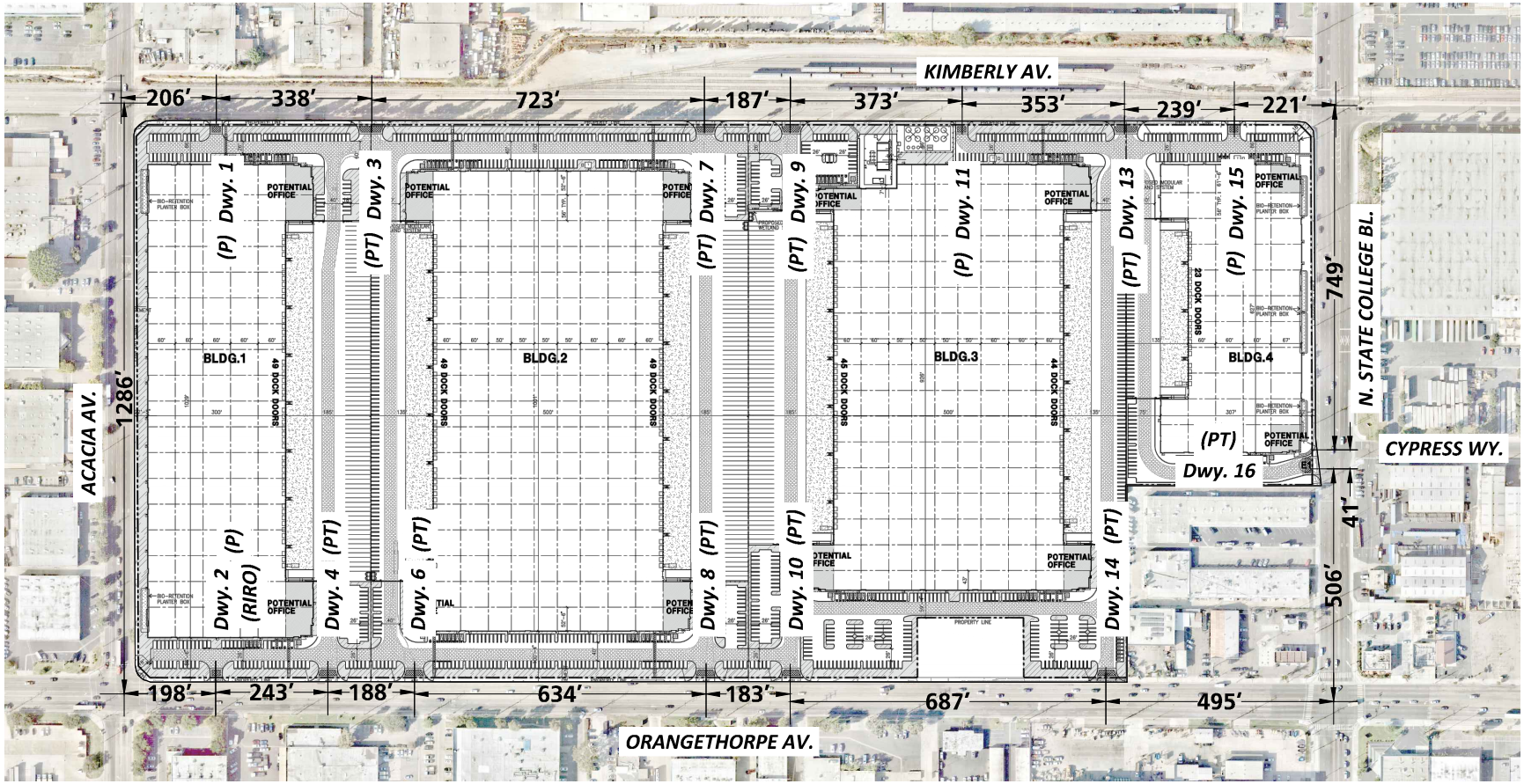
1.1 PROJECT OVERVIEW

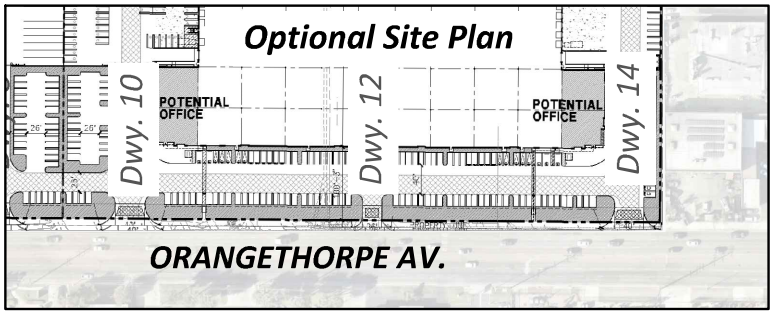
The proposed Project involves the demolition of all existing structures on the Project site, and the redevelopment of the Project site with four buildings totaling 1,561,522 square feet (sf). This includes 1,456,522 sf of high-cube warehouse space – expected to be used for fulfillment center and cold storage uses – and approximately 105,000 sf of office space (ground floor and mezzanine) (refer to the conceptual site plan provided on Exhibit 1-1). Note that due to a conflict with an existing utility pole on Kimberly Avenue, Driveway 3, and Driveway 5 (as noted on a previous site plan) were combined as a shared driveway (reflected as Driveway 3 on Exhibit 1-1). The Project Applicant may pursue the acquisition of an off-site property located north of E. Orangethorpe Avenue that abuts the southern boundary of the Project site (2301 E. Orangethorpe Avenue). In the event this property is acquired, the two existing buildings on that property would also be demolished and a maximum of approximately 1,609,384 sf of high-cube warehouse space would be provided on the Project site. The larger Project (Optional Site Plan) is the basis for analysis in this report and assumes 804,692 sf of high-cube fulfillment center use and 804,692 sf of high-cube cold storage warehouse use (see inset on Exhibit 1-1). The Project is anticipated to be operational by the year 2022.

As shown on Exhibit 1-1, which presents both the proposed and Optional Site Plan, vehicular access will be provided via the following driveways:

- Driveway 1 & Kimberly Av.: Passenger cars only
- Driveway 2 & Orangethorpe Av.: Passenger cars only
- Driveway 3 & Kimberly Av.: Passenger cars and trucks
- Driveway 4 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 6 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 7 & Kimberly Av.: Passenger cars and trucks
- Driveway 8 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 9 & Kimberly Av.: Passenger cars and trucks
- Driveway 10 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 11 & Kimberly Av.: Passenger cars only
- Driveway 12 & Orangethorpe Av.: Passenger cars only (Optional Site Plan only)
- Driveway 13 & Kimberly Av.: Passenger cars and trucks
- Driveway 14 & Orangethorpe Av.: Passenger cars and trucks

EXHIBIT 1-1: PRELIMINARY SITE PLAN





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LEGEND:

RIRO	= RIGHT-IN/RIGHT-OUT ONLY ACCESS
P	= PASSENGER CARS ONLY
PT	= PASSENGER CARS AND TRUCKS

NOTE: UNLESS NOTED, ALL DRIVEWAYS ARE ASSUMED TO BE FULL ACCESS.

URBAN CROSSROADS

- Driveway 15 & Kimberly Av.: Passenger cars only
- N. State College Bl. & Driveway 16: Passenger cars and trucks

All Project driveways are proposed to allow for full access with the exception of the passenger car driveway (Driveway 2) on Orangethorpe Avenue, which will be restricted to right-in/right-out access only. The Optional Site Plan is consistent with the proposed Project site plan with the exception of an additional driveway on Orangethorpe Avenue (Driveway 12) which is proposed to serve passenger cars only. Trips generated by the Project (Optional Site Plan) have been calculated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) as presented in ITE's most current edition of Trip Generation Manual (10th Edition, 2017) for the proposed high-cube cold storage warehouse use (ITE Land Use Code 157) and the High Cube Warehouse Trip Generation Study (WSP, January 2019) for the proposed high-cube fulfillment center warehouse use. [1] [2] The Project is calculated to generate a total of approximately 3,422 trip-ends per day with 187 AM peak hour trips and 228 PM peak hour trips. With the credit for the trips generated by the existing Kimberly-Clark facility, the Project is calculated to generate a net total of approximately 2,692 trip-ends per day with 185 AM peak hour trips and 226 PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in detail in Section 4.1 *Project Trip Generation* of this report.

1.2 SENATE BILL 743 – VEHICLE MILES TRAVELED (VMT)

Senate Bill 743 (SB 743), approved in 2013, changes the way transportation impacts are evaluated in CEQA documents. The Office of Planning and Research (OPR) recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based LOS. In December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT).

Per the City's TAPP, "the City has selected the Origin/Destination VMT methodology to provide a more complete capture of all travel (car and truck trips) within the study area, including trips that may begin or end outside of the study area. VMT per service population is utilized to normalize VMT into a standard unit for comparison purposes while accounting for the population and/or employment in a given area. To determine whether or not there is a potentially significant impact, the analysis shall compare the project generated VMT to the VMT that is forecast to be generated from approved general plan growth and other transportation network modifications. The City has chosen General Plan Buildout as the basis for this threshold because the General Plan was adopted through a public process to reflect the goals and values of the City. The Fullerton Plan, adopted in 2012, implementation of the Fullerton Plan reduces the citywide VMT per service population from 29.9 to 29.41. Therefore, when a project generates a VMT per service population that exceeds the General Plan Buildout VMT in either the baseline or Horizon Year, a significant impact occurs."

[1] Source: Fehr & Peers

The revised Caltrans traffic impact analysis guidelines are set to be available in Summer 2020, however, Caltrans acknowledges automobile delay will no longer be considered a CEQA impact for development projects and VMT will be the metric for determining impacts on the State Highway System (SHS).

The required VMT analysis to support the CEQA document for the Project has been prepared under separate cover.

2 AREA CONDITIONS

This section provides a summary of the existing circulation network, The Fullerton Plan Mobility Element Network and a review of existing peak hour intersection operations, traffic signal warrant, and freeway facility analyses.

2.1 EXISTING CIRCULATION NETWORK

The study area includes a total of 32 existing and future intersections. Exhibit 2-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

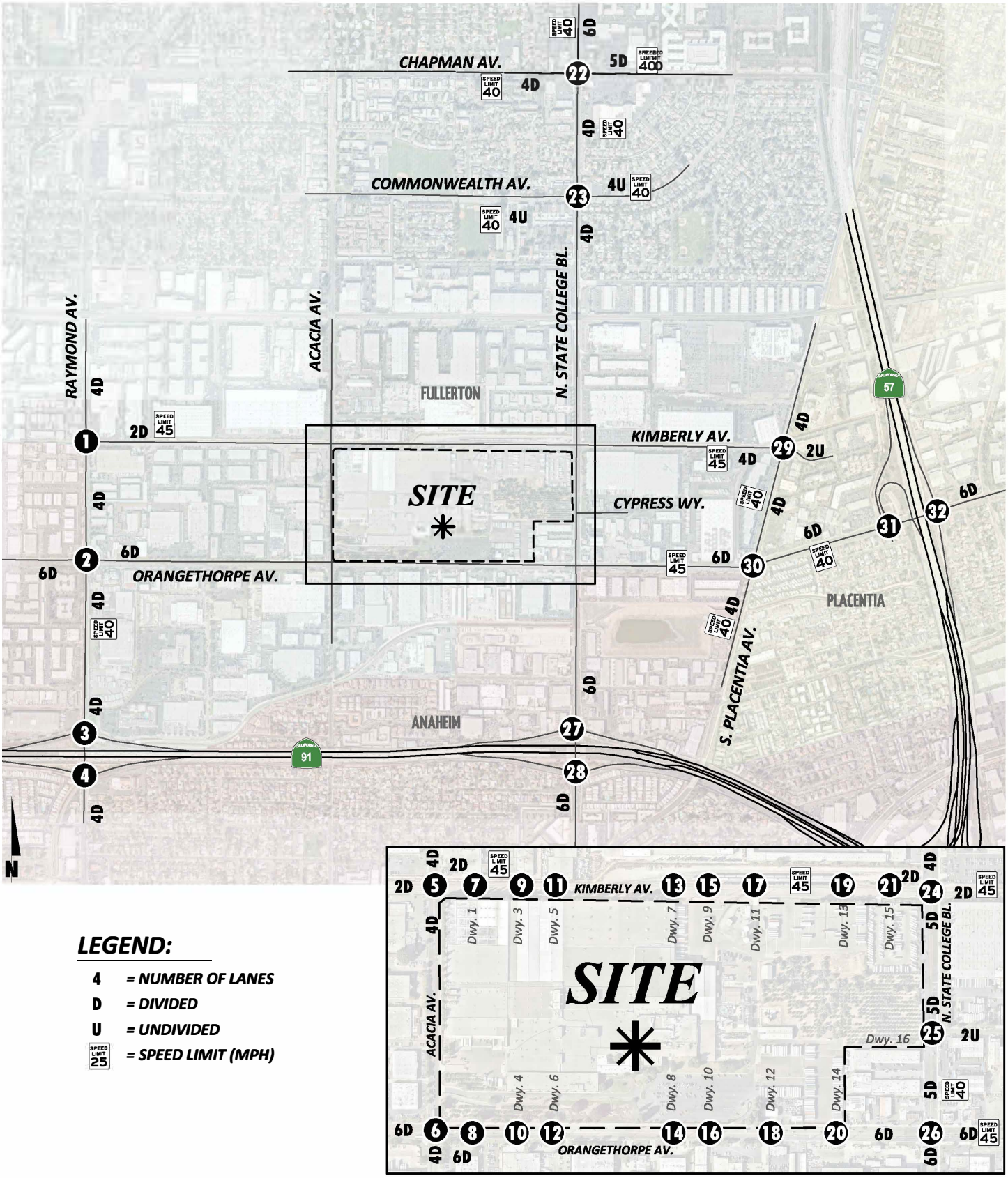
2.2 CITY OF FULLERTON CIRCULATION NETWORK

As previously noted, the Project site is located within the City of Fullerton. Exhibit 2-2 shows street classification network, as identified on The Fullerton Plan: The Fullerton Built Environment. [3] The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area per the City of Fullerton Engineering Department. State College Boulevard, Orangethorpe Avenue, and Chapman Avenue (east of State College Boulevard) are classified as a Major Arterial Highway. Raymond Avenue, Placentia Avenue, Commonwealth Avenue, and Chapman Avenue (west of State College Boulevard) are classified as Primary Arterial Highways. Lastly, Acacia Avenue is classified as a Secondary Arterial Street within the study area. The roadway cross-sections for each of these classifications are defined on Exhibit 2-3. Existing average daily traffic (ADT) volume data is provided in Appendix 2.1.

2.3 TRUCK ROUTES

The City of Fullerton designated truck route map is shown on Exhibit 2-7. Kimberly Avenue, Acacia Avenue, Raymond Avenue, Orangethorpe Avenue, and N. State College Boulevard are identified as truck routes within the study area. The City of Anaheim truck routes are shown on Exhibit 2-8 and also identify Orangethorpe Avenue and State College Boulevard as truck routes. Lastly, City of Placentia truck routes are identified on Exhibit 2-9 which identify Placentia Avenue and Orangethorpe Avenue as truck routes. The designated truck route maps have been utilized to route truck traffic from both the proposed Project and applicable future cumulative development projects throughout the study area.

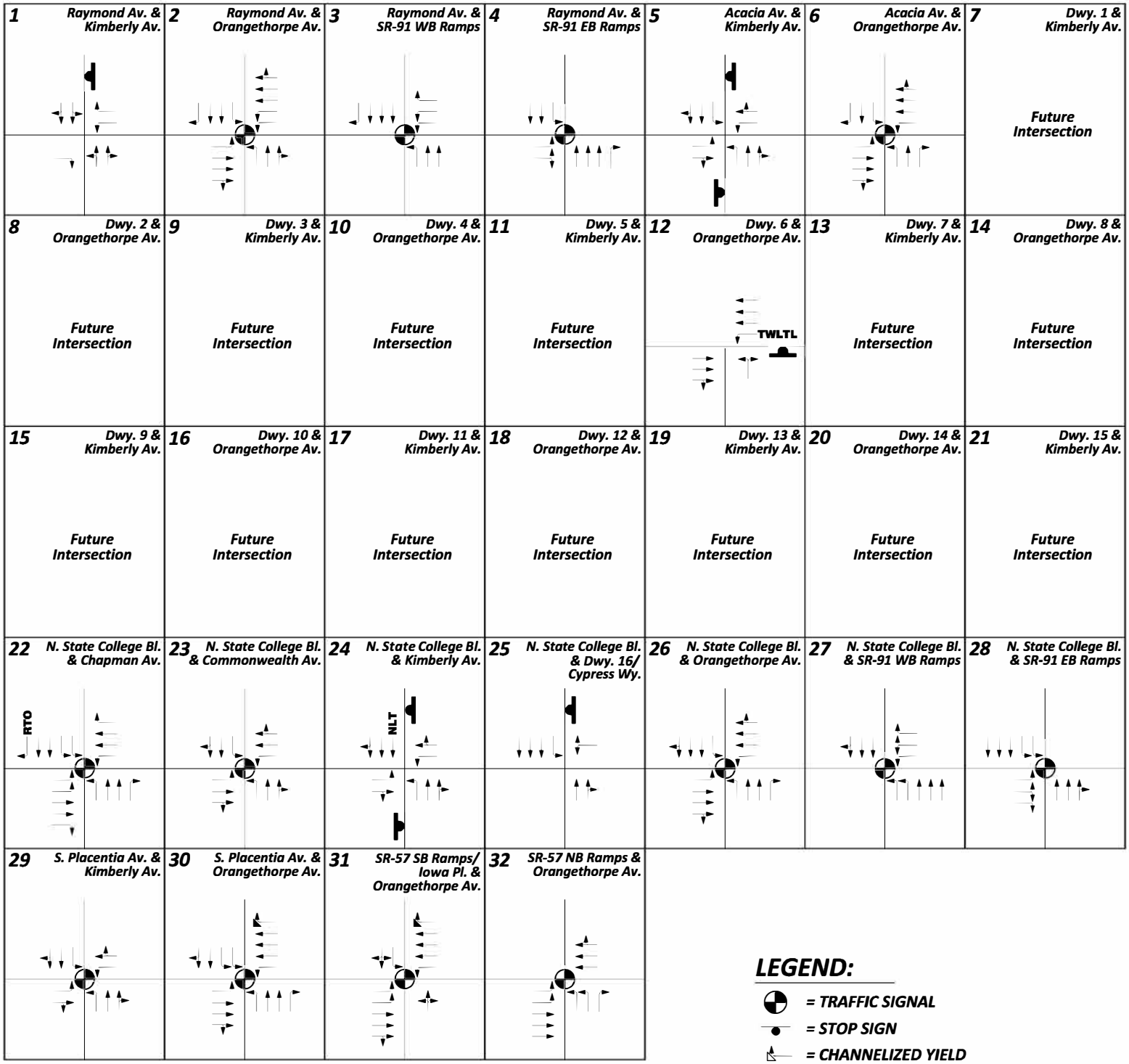
EXHIBIT 2-1 (1OF2): EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



LEGEND:

- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- SPEED LIMIT 25 = SPEED LIMIT (MPH)

EXHIBIT 2-1 (2OF2): EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



LEGEND:

- = TRAFFIC SIGNAL
- = STOP SIGN
- = CHANNELIZED YIELD
- RTO = RIGHT TURN OVERLAP
- NLT = NO LEFT TURN
- TWLTL = TWO WAY LEFT TURN LANE

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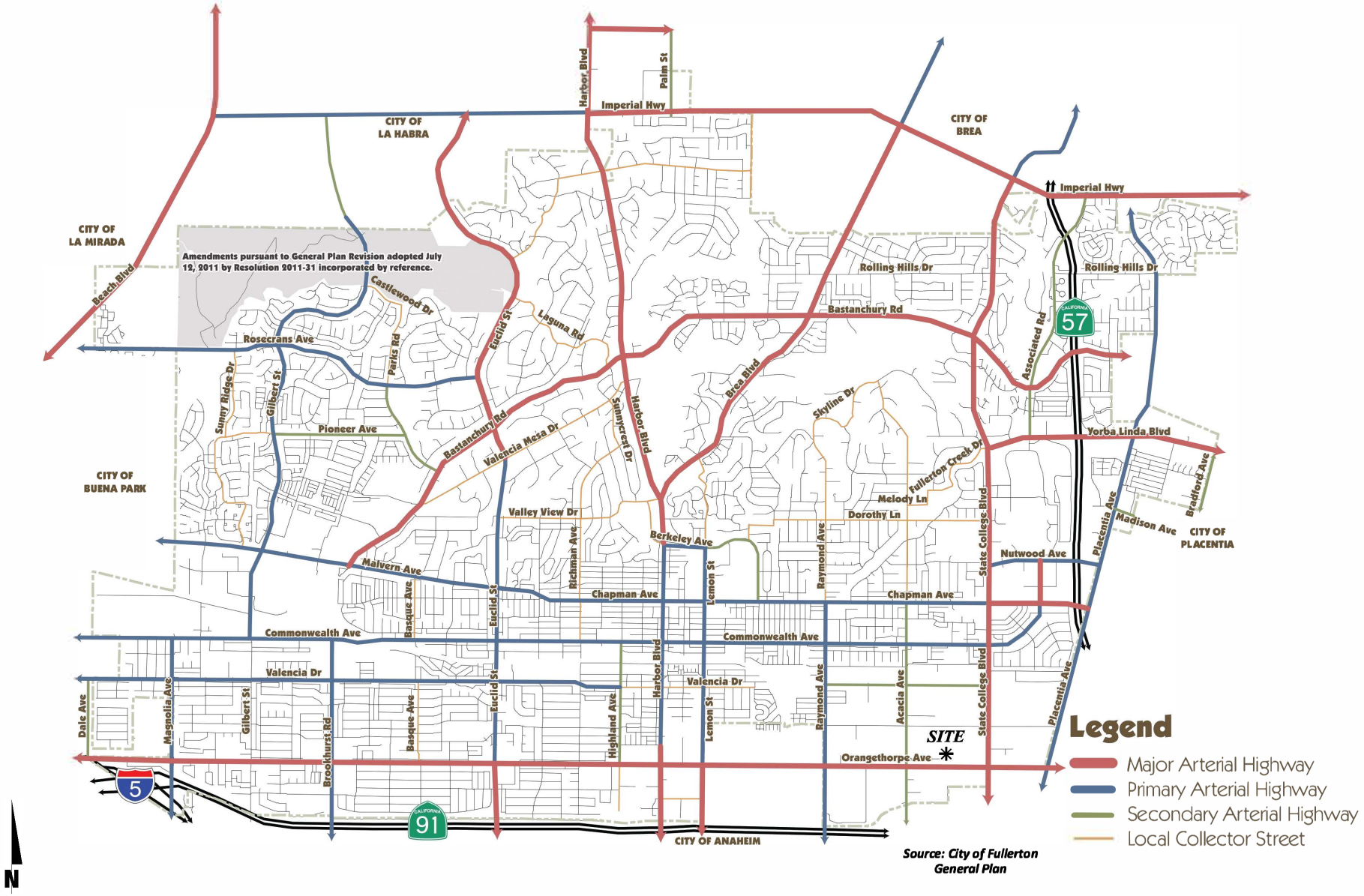
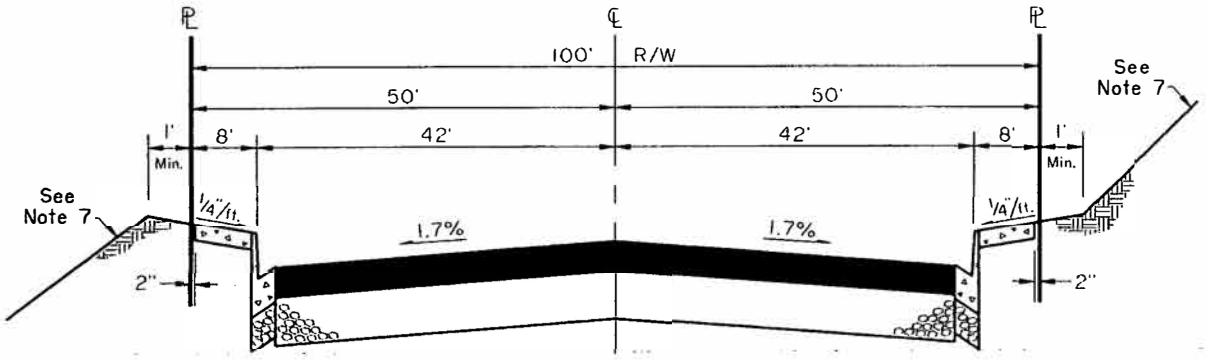
EXHIBIT 2-2: THE FULLERTON PLAN ROADWAY CLASSIFICATIONS



Source: City of Fullerton General Plan

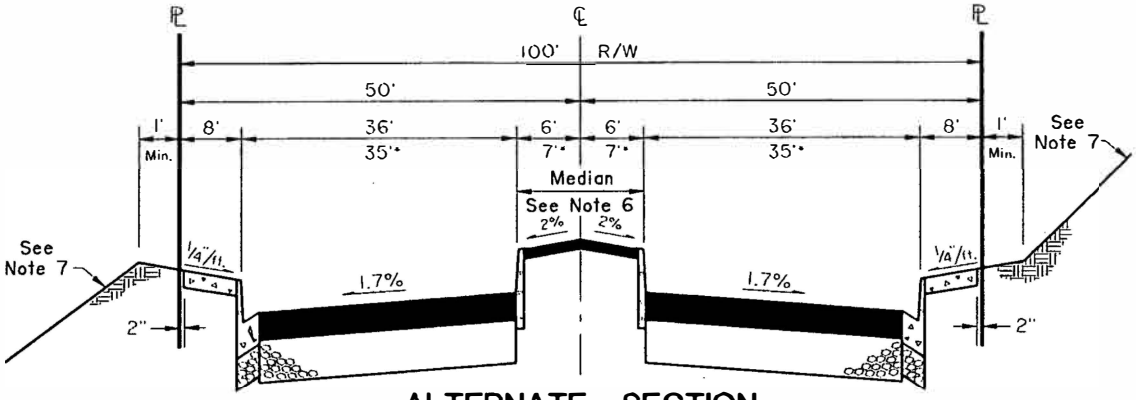
URBAN CROSSROADS

EXHIBIT 2-3: CITY OF FULLERTON GENERAL PLAN ROADWAY CROSS-SECTION

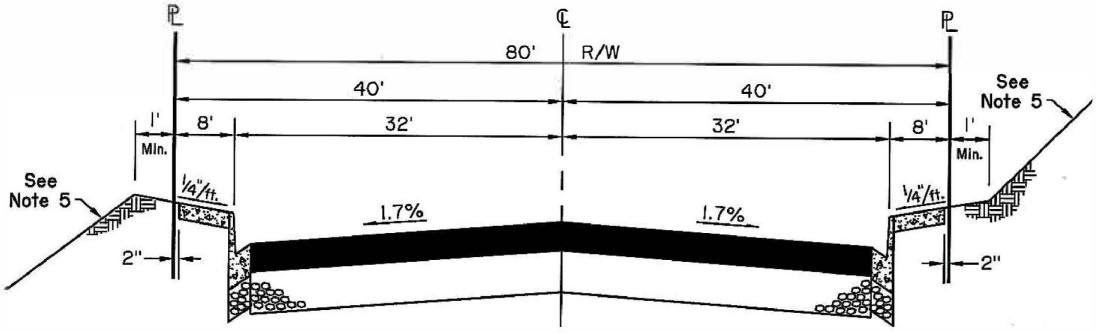


NORMAL SECTION

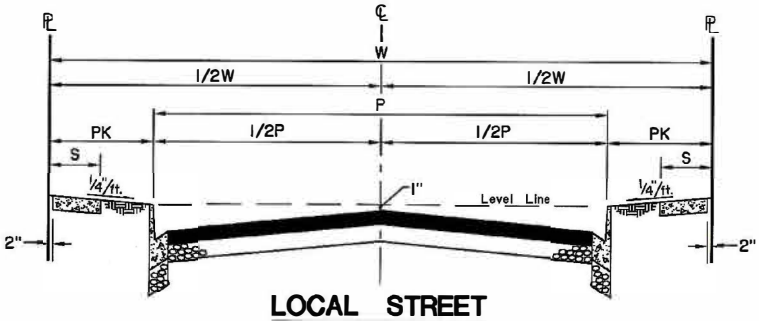
MAJOR HIGHWAY



ALTERNATE SECTION



TYPICAL SECTION PRIMARY/SECONDRY HIGHWAY



LOCAL STREET

Source: City of Fullerton Engineering Department Typical Cross Section Standards

2.4 BICYCLE & PEDESTRIAN FACILITIES

The City of Fullerton's existing bike network is shown on Exhibit 2-4. Class II bikeways are on-road, striped bike routes. There are Class II bike lanes currently along Acacia Avenue, Orangethorpe Avenue (west of N. State College Boulevard), and Commonwealth Avenue (west of N. State College Boulevard) within the study area. Commonwealth Avenue currently has Class III route between Acacia Avenue and N. State College Boulevard (signed, but unstriped, on-road bike route).

Exhibit 2-5 shows the existing and planned bicycle facilities within the City of Anaheim. As shown, Class II bike lanes are proposed along Orangethorpe Avenue west of Raymond Avenue and east of N. State College Boulevard. Exhibit 2-6 shows the existing and planned bicycle facilities within the City of Placentia. As shown, Class II bike lanes are proposed along Orangethorpe Avenue. Exhibit 2-6 also shows a planned Class I (off-road bike path) that runs south of and parallel to Orangethorpe Avenue.

Exhibit 2-7 shows the City of Fullerton trails; there are no existing or planned trails in the vicinity of the Project site. Existing pedestrian facilities (sidewalk and crosswalk) and bus stop locations within the study area are shown on Exhibit 2-8.

2.5 TRANSIT SERVICE

The study area is currently served by the Orange County Transportation Authority (OCTA), a municipal transit agency serving the City of Fullerton and surrounding Orange County communities. OCTA existing transit routes in the study area are shown on Exhibit 2-9. The existing OCTA Route 30 would likely serve the proposed Project. OCTA Route 57 also identifies a portion that runs along the Project's frontage along N. State College Boulevard, however, OCTA identifies there is no service on some trips along the portion north of Orangethorpe Avenue. There are existing bus stops along Orangethorpe Avenue and N. State College Boulevard, which adjacent to the site or are less than ½ a mile from the site. The transit frequency at these stops are approximately every 10-minutes. As such, the Project is located within a Transit Priority Area.

The Project will construct a new concrete bus pad for a bus stop on the north side of E. Orangethorpe Avenue. The bus stop is expected to be located south of Building 2, but the final location of the bus stop would be determined in coordination with OCTA.

2.6 EXISTING TRAFFIC COUNTS

Manual weekday AM and PM peak hour turning movement counts were conducted in March 2020, prior to the closures of schools and local businesses related to the currently ongoing COVID-19 pandemic. The traffic counts collected in March 2020 include the following vehicle classifications: passenger cars, 2-Axle trucks, 3-Axle trucks, and 4 or more axle trucks.

EXHIBIT 2-4: CITY OF FULLERTON EXISTING BIKE NETWORK

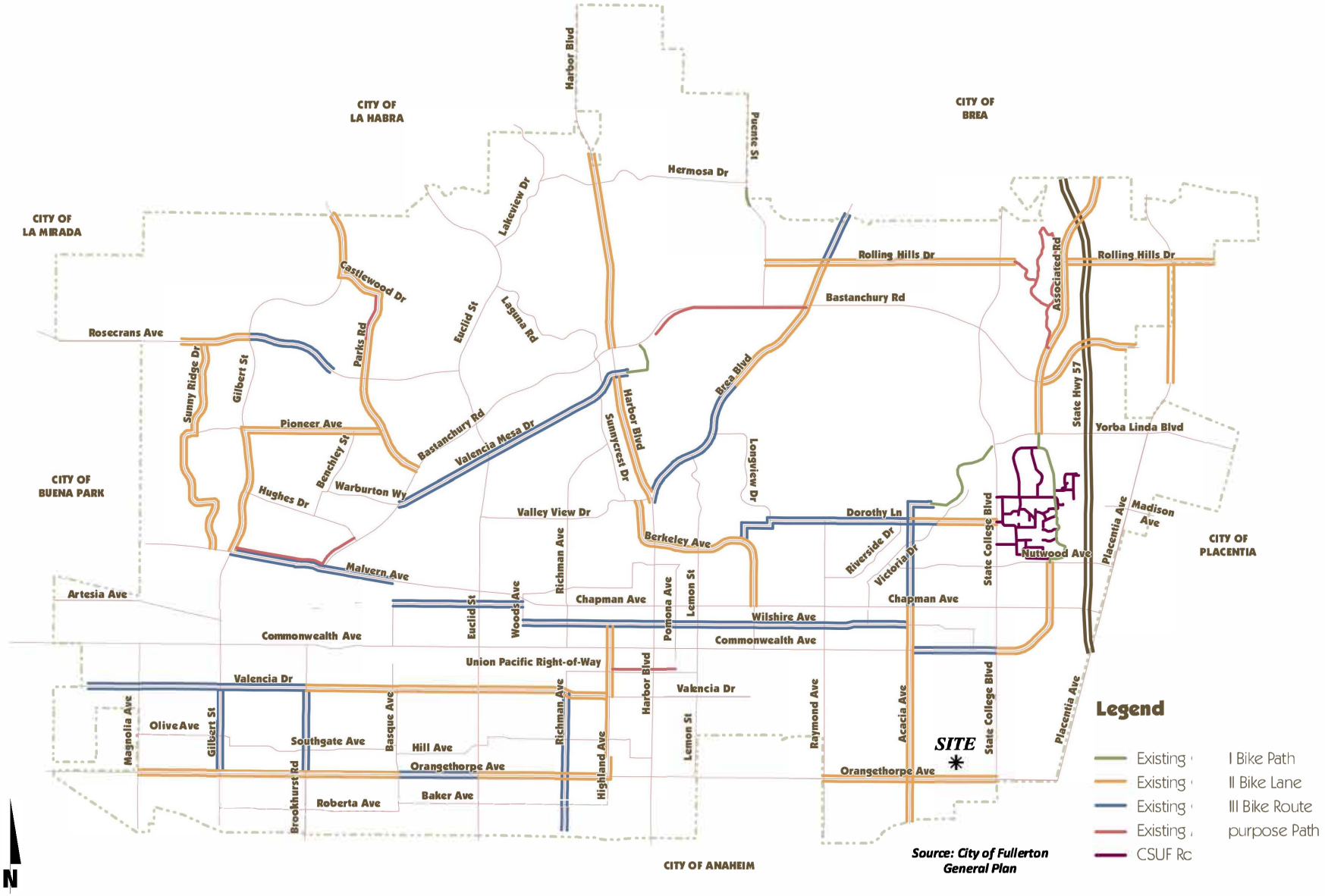
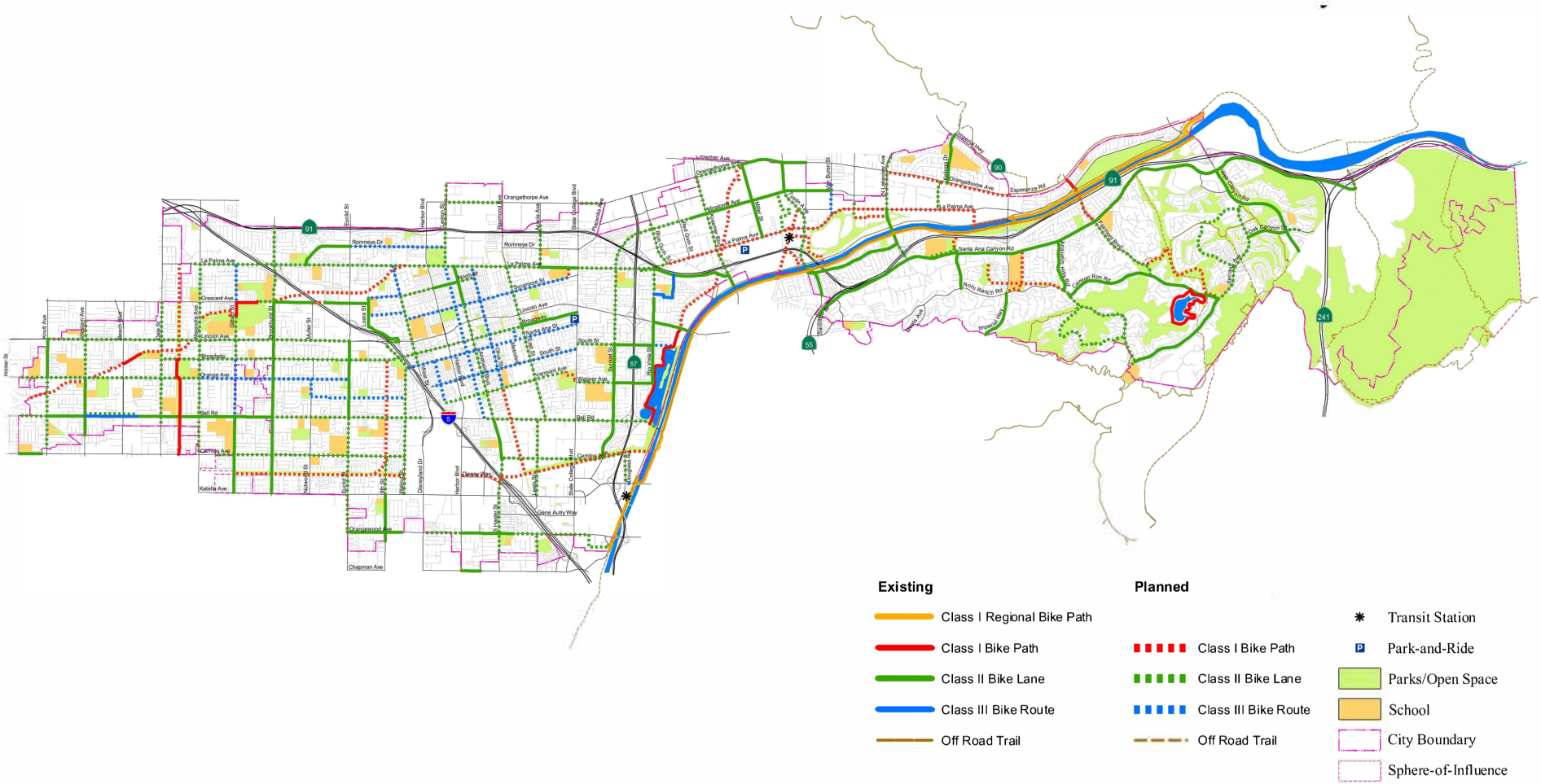
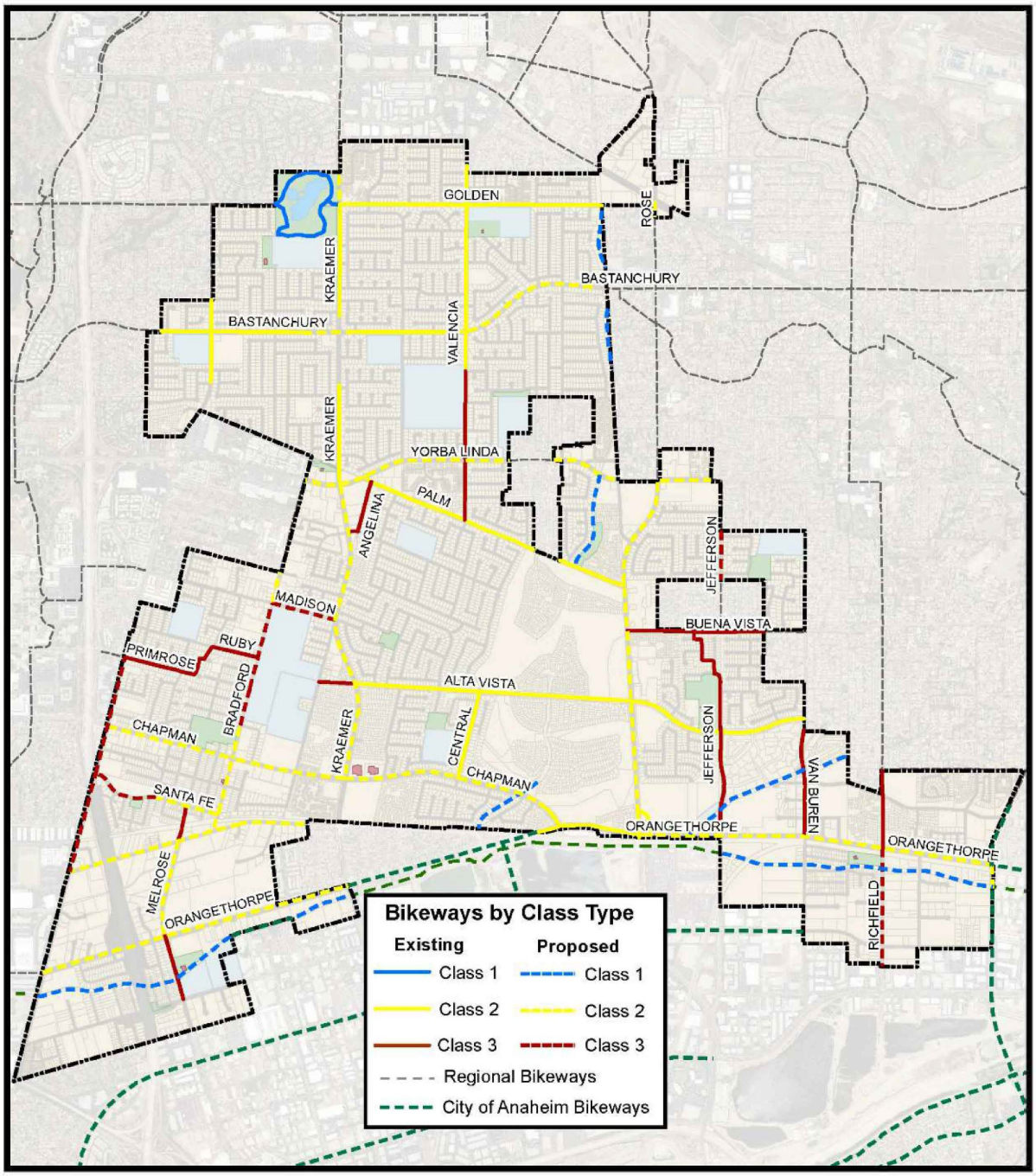


EXHIBIT 2-5: CITY OF ANAHEIM EXISTING AND PLANNED BICYCLE FACILITIES



Source: City of Anaheim General Plan

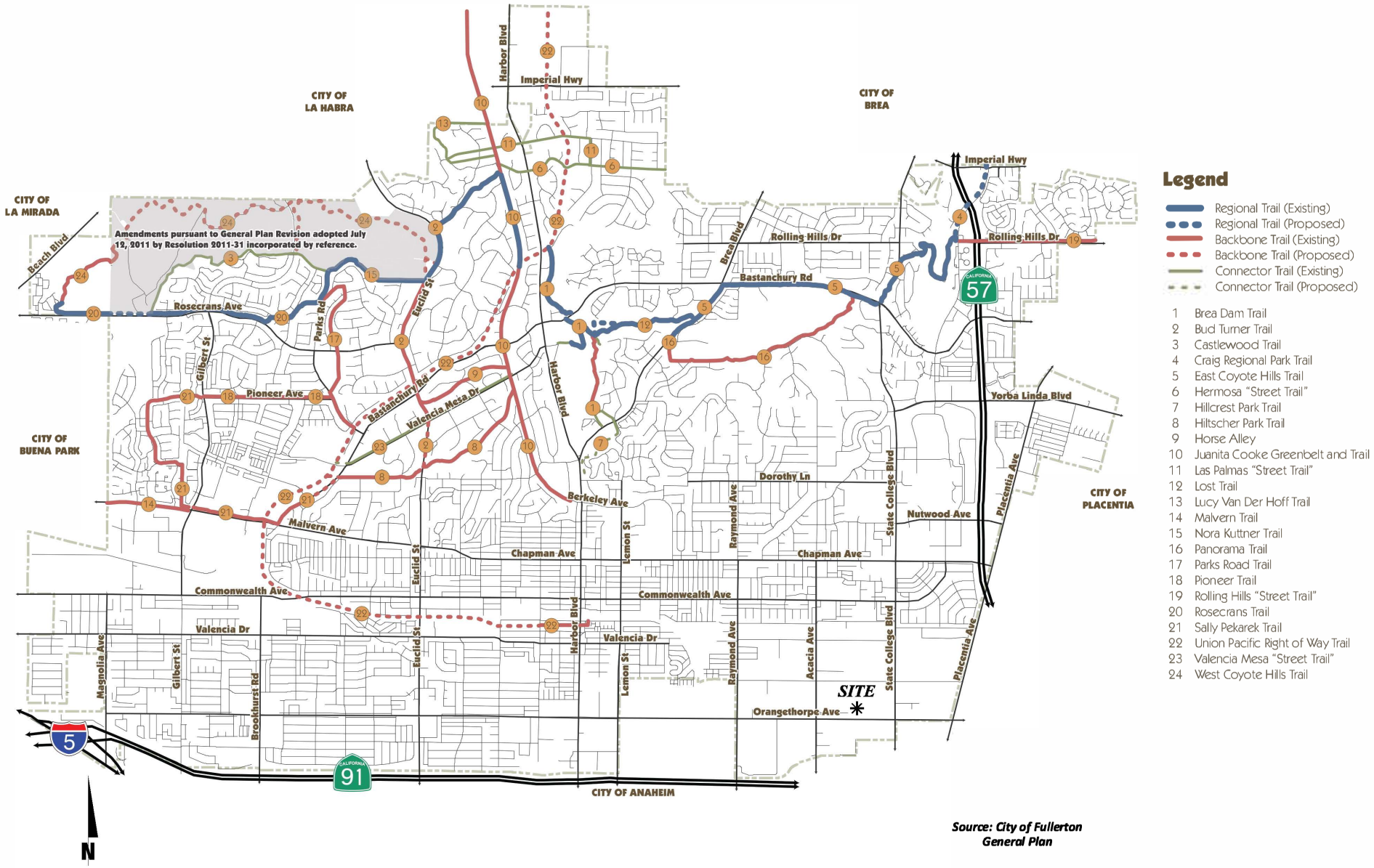
EXHIBIT 2-6: CITY OF PLACENTIA GENERAL PLAN EXISTING AND PROPOSED BIKE NETWORK



N

Source: City of Placentia General Plan

EXHIBIT 2-7: CITY OF FULLERTON TRAILS



Source: City of Fullerton General Plan

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URBAN CROSSROADS

EXHIBIT 2-8: EXISTING PEDESTRIAN FACILITIES

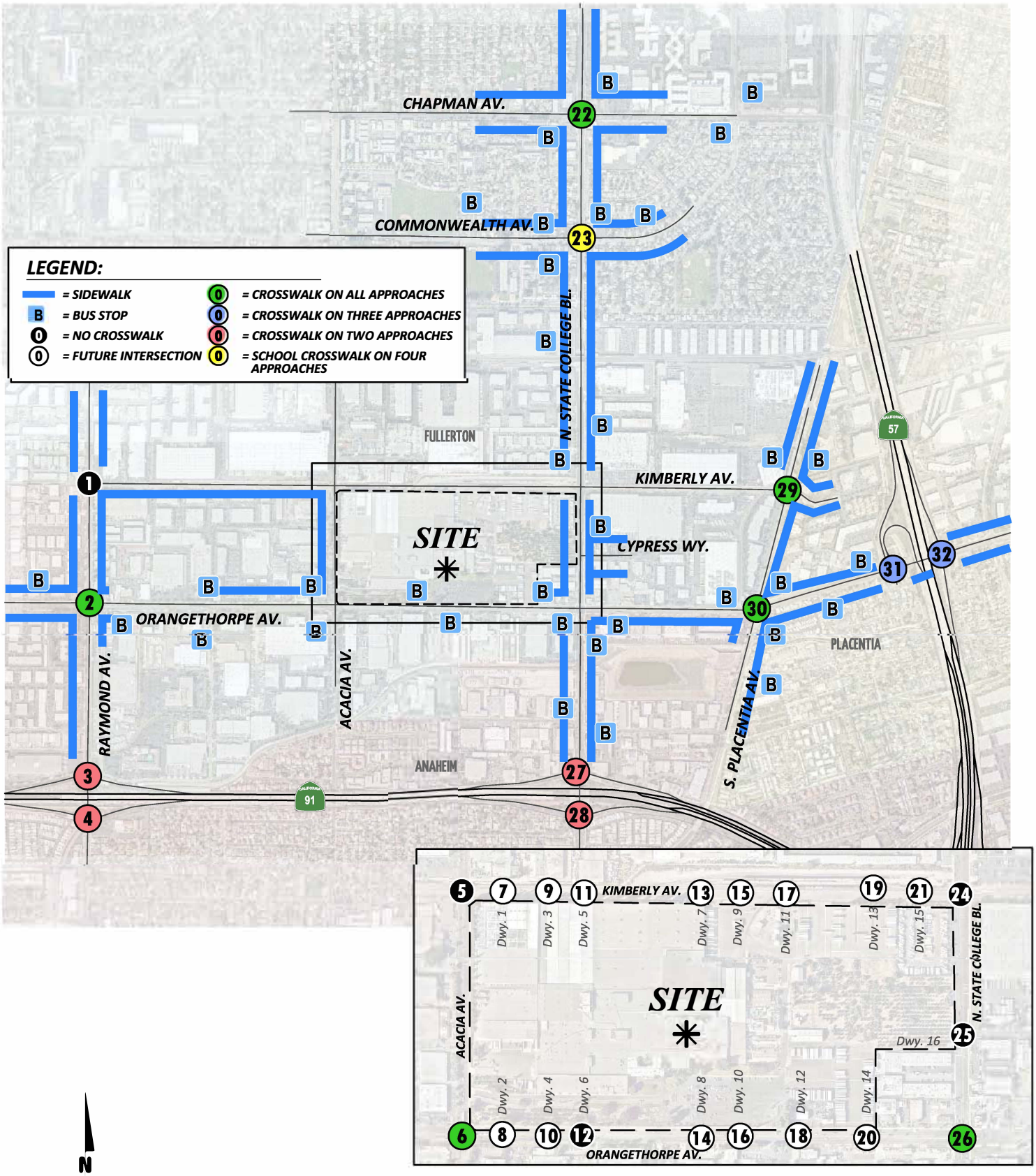
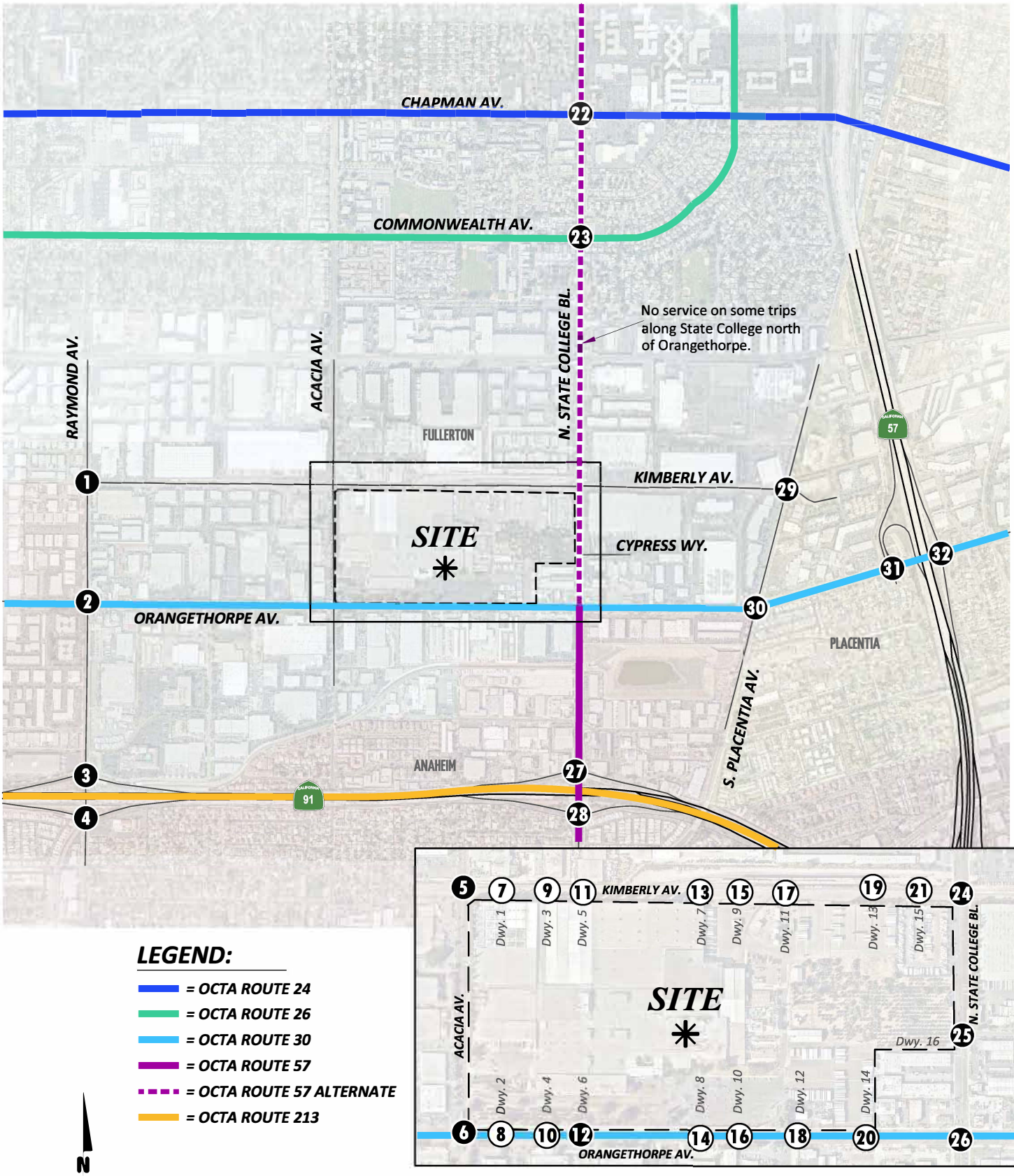


EXHIBIT 2-9: EXISTING TRANSIT ROUTES



Based on a review of historic data versus the March 12, 2020 count data, it appears that growth is observed between the historic count data (2019 or older) and 2020 counts. The City reviewed historic count data from January 2019, which was obtained from OCTA, at the following locations:

- State College Boulevard at Orangethorpe Avenue
- State College Boulevard at SR-91 Westbound Ramps
- State College Boulevard at SR-91 Eastbound Ramps
- SR-57 Southbound Ramps & Orangethorpe Avenue
- SR-57 Northbound Ramps & Orangethorpe Avenue

Based on a review of the data, a comparison of the AM peak hour indicated the March 2020 data could be understated. As such, based on the change between the historic (January 2019) and March 2020 data, the March 2020 AM peak hour volumes have been increased by 5% for baseline traffic conditions. However, March 2020 PM peak hour volumes indicated growth over January 2019 data, as such, no adjustment factor was applied to the March 2020 PM peak hour volumes.

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3 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. For purposes of this TA, the Project with the Optional Site Plan is to consist of four buildings totaling 1,609,384 sf (804,692 sf of high-cube fulfillment center use and 804,692 sf of high-cube cold storage warehouse use). The Project is anticipated to be constructed by the year 2022. Vehicular access will be provided via the following driveways:

- Driveway 1 & Kimberly Av.: Passenger cars only
- Driveway 2 & Orangethorpe Av.: Passenger cars only
- Driveway 3 & Kimberly Av.: Passenger cars and trucks
- Driveway 4 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 6 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 7 & Kimberly Av.: Passenger cars and trucks
- Driveway 8 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 9 & Kimberly Av.: Passenger cars and trucks
- Driveway 10 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 11 & Kimberly Av.: Passenger cars only
- Driveway 12 & Orangethorpe Av.: Passenger cars only (Optional Site Plan only)
- Driveway 13 & Kimberly Av.: Passenger cars and trucks
- Driveway 14 & Orangethorpe Av.: Passenger cars and trucks
- Driveway 15 & Kimberly Av.: Passenger cars only
- N. State College Bl. & Driveway 16: Passenger cars and trucks

All Project driveways are proposed to allow for full access with the exception of the passenger car driveway (Driveway 2) on Orangethorpe Avenue, which will be restricted to right-in/right-out access only.

3.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. The Institute of Transportation Engineers (ITE) Trip Generation Manual is a nationally recognized source for estimating site-specific trip generation. The trip generation rates used for the Project are based upon data collected by ITE in their Trip Generation Manual (10th Edition, 2017) for the proposed high-cube cold storage warehouse use (ITE Land Use Code 157) and the High Cube Warehouse Trip Generation Study (WSP, January 2019) for the proposed high-cube fulfillment center warehouse use. [1] [2]

3.1.1 EXISTING USE

The site located at 2001 E. Orangethorpe Avenue is currently occupied by Kimberly-Clark Worldwide facility, which includes approximately 1,210,720 sf (418,720 sf for manufacturing and 792,000 sf of warehousing space). The following existing data has been supplied by Kimberly-Clark; however, where AM/PM peak hour splits or inbound/outbound splits are unavailable, the splits identified for the high-cube transload and short-term storage warehouse use (ITE Land Use Code 154) from the ITE Trip Generation Manual has been utilized: [1]

- Passenger Cars: Based on a memo provided by Kimberly-Clark (dated October 24, 2019), the historical average of employees (305 employees) and contractors (20 contractors) over the last 5 years has been utilized to calculate the baseline passenger car traffic. As such, the daily passenger car traffic calculation is as follows: (305+20) x 2 (inbound and outbound) = 650 trip-ends/day. The current shifts (6AM-2PM, 2PM-10PM, 10PM-6AM) have employees arriving and departing outside of the typical peak hours (7-9 AM and 4-6 PM). As such, there are no employee trips during the morning and evening peak hours. However, nominal trips are included to account for trips associated with contractors that occur during the peak hours.
- Trucks: As there is no historical data available for trucks, no reductions have been taken to account for existing truck activity during the peak hours. Based on information supplied by Kimberly-Clark Worldwide, typical truck activity ranges between 30-50 inbound and outbound trucks with high-volume traffic days occurring 10-20 percent of time (where there could be as many as 80 inbound/outbound trucks per day). As such, the average of 40 inbound and 40 outbound trucks have been accounted for. The estimate of 80 trucks per day is far lower (therefore more conservative) than the number of trucks that would be typically estimated for 418,720 square feet of manufacturing and 792,000 square feet of warehousing use.

As shown on Table 3-1, the existing site currently generates a total of 730 trip-ends per day with 2 AM peak hour trips and 2 PM peak hour trips.

Table 3-1

Existing Trip Generation Summary

Land Use	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Trip Generation Summary (Actual Vehicles)							
Existing: Kimberly Clark Worldwide							
Passenger Cars:	1	1	2	1	1	2	650
Truck Trips:							
2-axle:	0	0	0	0	0	0	0
3-axle:	0	0	0	0	0	0	0
4+-axle:	0	0	0	0	0	0	80
- Truck Trips (Actual)	0	0	0	0	0	0	80
TOTAL TRIPS (Actual) [1]	**1**	**1**	**2**	**1**	**1**	**2**	**730**
Trip Generation Summary (PCE)							
Existing: Kimberly Clark Worldwide							
Passenger Cars:	1	1	2	1	1	2	650
Truck Trips:							
2-axle (PCE = 1.5):	0	0	0	0	0	0	0
3-axle (PCE = 2.0):	0	0	0	0	0	0	0
4+-axle (PCE = 3.0):	0	0	0	0	0	0	240
- Truck Trips (PCE)	0	0	0	0	0	0	240
TOTAL TRIPS (PCE) [1]	**1**	**1**	**2**	**1**	**1**	**2**	**890**

[1] TOTAL TRIPS = Passenger Cars + Truck Trips.

3.1.2 PROPOSED PROJECT

Trip generation rates for the Project are shown on Table 3-2 illustrating daily and peak hour trip generation estimates based on the ITE Trip Generation Manual and the WSP High Cube Warehouse Trip Generation Study were used to estimate the trip generation. The following ITE land use codes and vehicle mixes will be utilized for the Project:

- ITE land use code 157 (High-Cube Cold Storage Warehouse) has been used to derive site specific trip generation estimates for up to 804,692 sf (50% of the total building square footage). High-cube cold storage warehouses include warehouses characterized by the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. High-cube cold storage warehouses are facilities typified by temperature-controlled environments for frozen food or other perishable products. The High-Cube Cold Storage Warehouse vehicle mix (passenger cars versus trucks) has been obtained from the ITE's Trip Generation Manual Supplement (dated February 2020). This study provides the following vehicle mix: AM Peak Hour: 73.0% passenger cars and 23.0% trucks; PM Peak Hour: 77.0% passenger cars and 23.0% trucks; Weekday Daily: 65.0% passenger cars and 35.0% trucks. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District (SCAQMD) recommended truck mix for cold-storage warehouses: 2-Axle = 34.7%; 3-Axle = 11.0%; 4+-Axle = 54.3%.
- High-Cube Fulfillment Center Warehouse has been used to derive site specific trip generation estimates for up to 804,692 sf (50% of the total building square footage). The ITE Trip Generation Manual Supplement (February 2020) has trip generation rates for high-cube fulfillment center use for both non-sort and sort facilities (ITE land use code 155). While there is sufficient data to support use of the trip generation rates for non-sort facilities, the sort facility rate appears to be unreliable because they are based on limited data (i.e., one to two surveyed sites). The proposed Project is speculative and whether a non-sort or sort facility end-user would occupy the buildings is not known at this time. Lastly, the ITE Trip Generation Manual recommends the use of local data sources where available. Although not specific to Orange County, the best available source for high-cube fulfilment center use would be the trip-generation statistics published in the High-Cube Warehouse Trip Generation Study (WSP, January 29, 2019) which was commissioned by the Western Riverside Council of Governments (WRCOG) in support of the Transportation Uniform Mitigation Fee (TUMF) update in the County of Riverside. The WSP trip generation rates were published in January 2019 and are based on data collected at 11 local high-cube fulfillment center sites located throughout Southern California (specifically Riverside County and San Bernardino County). However, the WSP study does not include a split for inbound and outbound vehicles, as such, the inbound and outbound splits per the ITE Trip Generation Manual for ITE Land Use Code 154 have been utilized. The truck percentages were further broken down by axle type per the WSP Study: 2-4 Axle = 42.1% AM, 52.4% PM, 42.7% Daily and 5+-Axle = 57.9% AM, 47.6% PM, and 57.3% Daily.

As noted on Table 3-2, refinements to the raw trip generation estimates have been made to provide a more detailed breakdown of trips between passenger cars and trucks. Trip generation for heavy trucks was further broken down by truck type (or axle type). The total truck percentage is comprised of 3 different truck types: 2-axle, 3-axle, and 4+-axle trucks.

Table 3-2

Trip Generation Rates

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center Warehouse[3]	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks			0.006	0.002	0.008	0.003	0.008	0.011	0.162
5+-Axle Trucks			0.008	0.003	0.011	0.003	0.007	0.010	0.217
High-Cube Cold Storage Warehouse[4]	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars (AM-73.0%; PM-77.0%; Daily-65.0%)			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2-Axle Trucks (AM-9.37%; PM-7.98%; Daily-12.15%)			0.008	0.002	0.010	0.003	0.007	0.010	0.257
3-Axle Trucks (AM-2.97%; PM-2.53%; Daily-3.85%)			0.003	0.001	0.003	0.001	0.002	0.003	0.082
4-Axle+ Trucks (AM-14.66%; PM-12.49%; Daily-19.01%)			0.012	0.004	0.016	0.004	0.011	0.015	0.403
Passenger Car Equivalent (PCE) Trip Generation Rates[5]									
High-Cube Fulfillment Center Warehouse[3]	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks (PCE = 2.0)			0.012	0.004	0.016	0.006	0.016	0.022	0.324
5+-Axle Trucks (PCE = 3.0)			0.025	0.008	0.033	0.008	0.022	0.030	0.651
High-Cube Cold Storage Warehouse[4]	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2-Axle Trucks (PCE = 1.5)			0.012	0.004	0.015	0.004	0.010	0.014	0.386
3-Axle Trucks (PCE = 2.0)			0.005	0.002	0.007	0.002	0.004	0.006	0.163
4-Axle+ Trucks (PCE = 3.0)			0.037	0.011	0.048	0.012	0.033	0.045	1.209

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).
High Cube Warehouse Trip Generation Study, WSP, January 29, 2019.

[2] TSF = thousand square feet

[3] Vehicle Mix Source: High Cube Warehouse Trip Generation Study, WSP, January 29, 2019.
Inbound and outbound split source: ITE Trip Generation Manual, Tenth Edition (2017) for ITE Land Use Code 154.

[4] Vehicle Mix Source: ITE Trip Generation Handbook Supplement (2020), Appendix C.
Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

[5] PCE factors are: 1.5 for 2-axle, 2.0 for 3-axle, and 3.0 for 4+-Axle.

PCE factors have been applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). Consistent with standard traffic engineering practice in Southern California, PCE factors have been utilized due to the expected heavy truck component for the proposed Project land use. PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, for the purposes of capacity and level of service analyses. PCE factors are applied to large truck types such as large two-axles, three-axles, 4+-axles. A PCE factor of 1.5 has been applied to large 2-axle trucks, a factor of 2.0 for 3-axle trucks and a factor of 3.0 for 4+-axle trucks.

The Project is estimated to generate a total of 3,422 trip-ends per day with 187 AM peak hour trips and 228 PM peak hour trips as shown on Table 3-3. Considering the trips associated with the existing use, the net new trips are 2,692 trip-ends per day with 185 AM peak hour trips and 226 PM peak hour trips. The net new trips will be evaluated for the purposes of this TA as the existing trips are reflect in the ground counts.

3.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land use and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site. The existing roadway network and location of regional destinations have been reviewed to develop the Project trip distribution pattern. Exhibit 3-1 illustrates the truck trip distribution patterns for the Project and Exhibit 3-2 illustrates the passenger trip distribution patterns for the Project.

3.3 MODAL SPLIT

The traffic reducing potential of public transit, walking or bicycling have not been considered in this TA, in an effort to conduct a conservative analysis.

3.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project AM and PM peak hour traffic volumes are shown on Exhibit 3-3.

Table 3-3

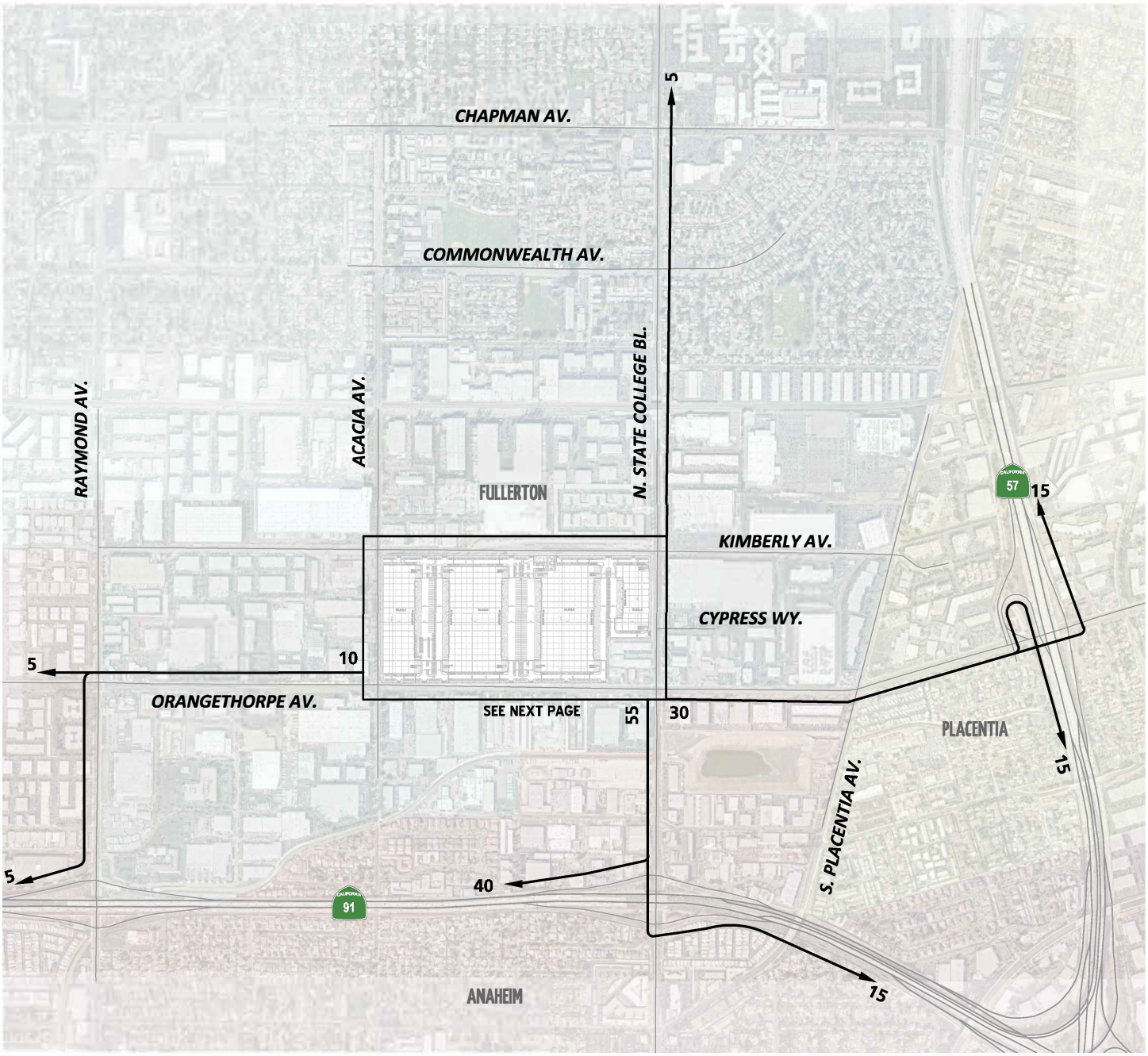
Project Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Trip Generation Summary (Actual Vehicles)									
High-Cube Cold Storage	804.692	TSF							
Passenger Cars:			50	15	65	20	54	74	1,110
Truck Trips:									
2-axle:			6	2	8	2	6	8	208
3-axle:			2	1	3	1	2	3	66
4+-axle:			10	3	13	3	9	12	324
- Truck Trips			18	6	24	6	17	23	598
SUBTOTAL TRIPS (Actual)[2]			68	21	89	26	71	97	1,708
High-Cube Fulfillment	804.692	TSF							
Passenger Cars:			64	19	83	32	83	115	1,408
Truck Trips:									
2-4 axle:			5	1	6	2	6	8	130
5+-axle:			7	2	9	2	6	8	176
- Truck Trips			12	3	15	4	12	16	306
SUBTOTAL TRIPS (Actual)[2]			76	22	98	36	95	131	1,714
Passenger Cars			114	34	148	52	137	189	2,518
Trucks (Actual)			30	9	39	10	29	39	904
Subtotal Trips (Actual)[2]			**144**	**43**	**187**	**62**	**166**	**228**	**3,422**
Existing Trips (See Table 4-1)			**1**	**1**	**2**	**1**	**1**	**2**	**730**
NET NEW TRIPS (Actual)[2]			**143**	**42**	**185**	**61**	**165**	**226**	**2,692**
Project Trip Generation Summary (PCE)									
High-Cube Cold Storage	804.692	TSF							
Passenger Cars:			50	15	65	20	54	74	1,110
Truck Trips:									
2-axle:			10	3	13	3	8	11	311
3-axle:			4	1	5	1	4	5	132
4+-axle:			30	9	39	10	26	36	973
- Truck Trips			44	13	57	14	38	52	1,416
SUBTOTAL TRIPS (PCE)[2]			94	28	122	34	92	126	2,526
High-Cube Fulfillment	804.692	TSF							
Passenger Cars:			64	19	83	32	83	115	1,408
Truck Trips:									
2-4 axle:			10	3	13	5	13	18	262
5+-axle:			20	6	26	7	17	24	524
- Truck Trips			30	9	39	12	30	42	786
SUBTOTAL TRIPS (PCE)[2]			94	28	122	44	113	157	2,194
Passenger Cars			114	34	148	52	137	189	2,518
Trucks (PCE)			74	22	96	26	68	94	2,202
Subtotal Trips (PCE)[2]			**188**	**56**	**244**	**78**	**205**	**283**	**4,720**
Existing Trips (See Table 4-1)			**1**	**1**	**2**	**1**	**1**	**2**	**890**
NET NEW TRIPS (PCE)[2]			**187**	**55**	**242**	**77**	**204**	**281**	**3,830**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

EXHIBIT 3-1 (1OF2): PROJECT (TRUCK) INBOUND AND OUTBOUND TRIP DISTRIBUTION



LEGEND:

10 ***= PERCENT TO/FROM PROJECT***

N

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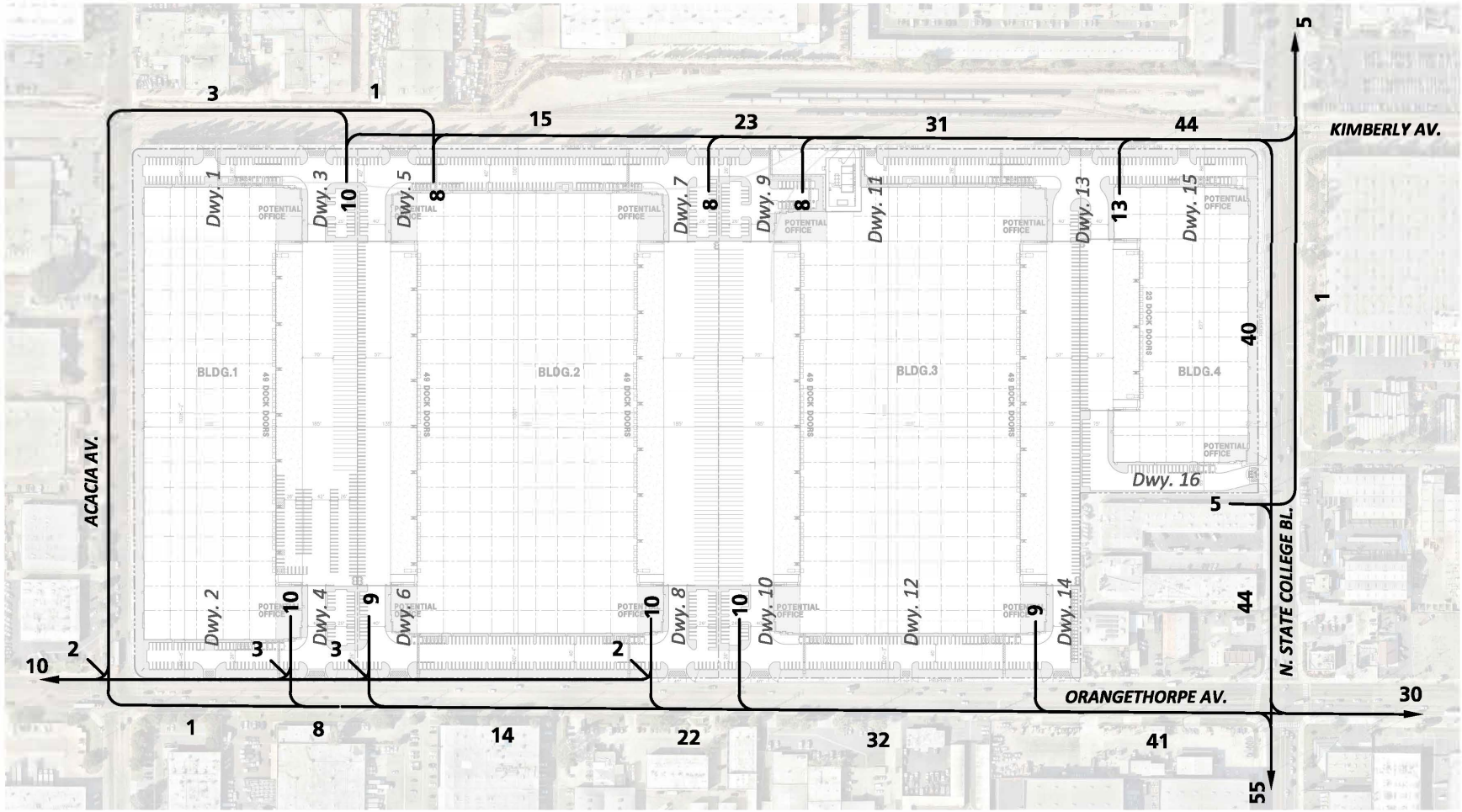
EXHIBIT 3-1 (2OF2): PROJECT (TRUCK) INBOUND AND OUTBOUND TRIP DISTRIBUTION

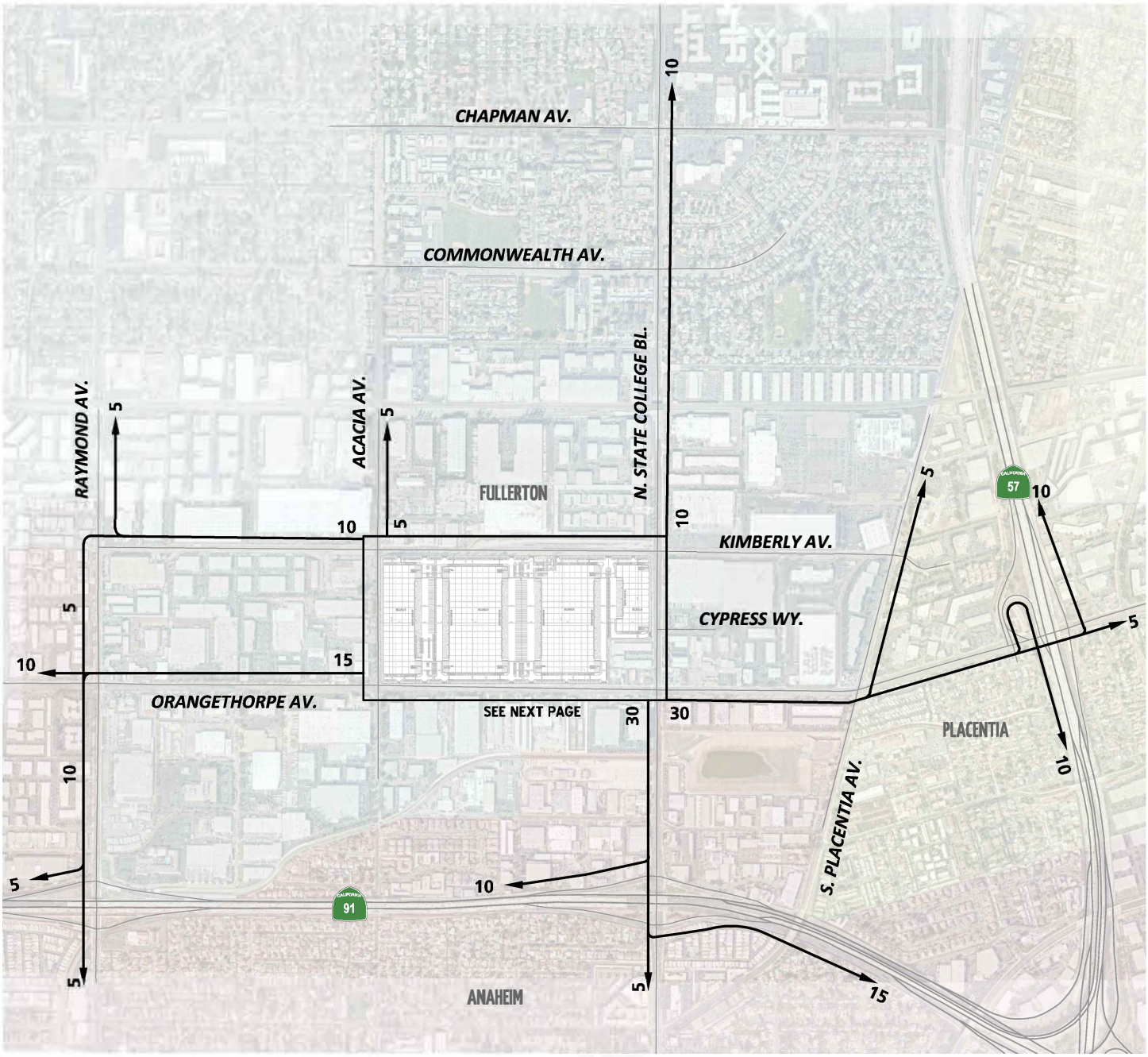


LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 3-2 (1OF3): PROJECT (PASSENGER CAR) INBOUND AND OUTBOUND TRIP DISTRIBUTION

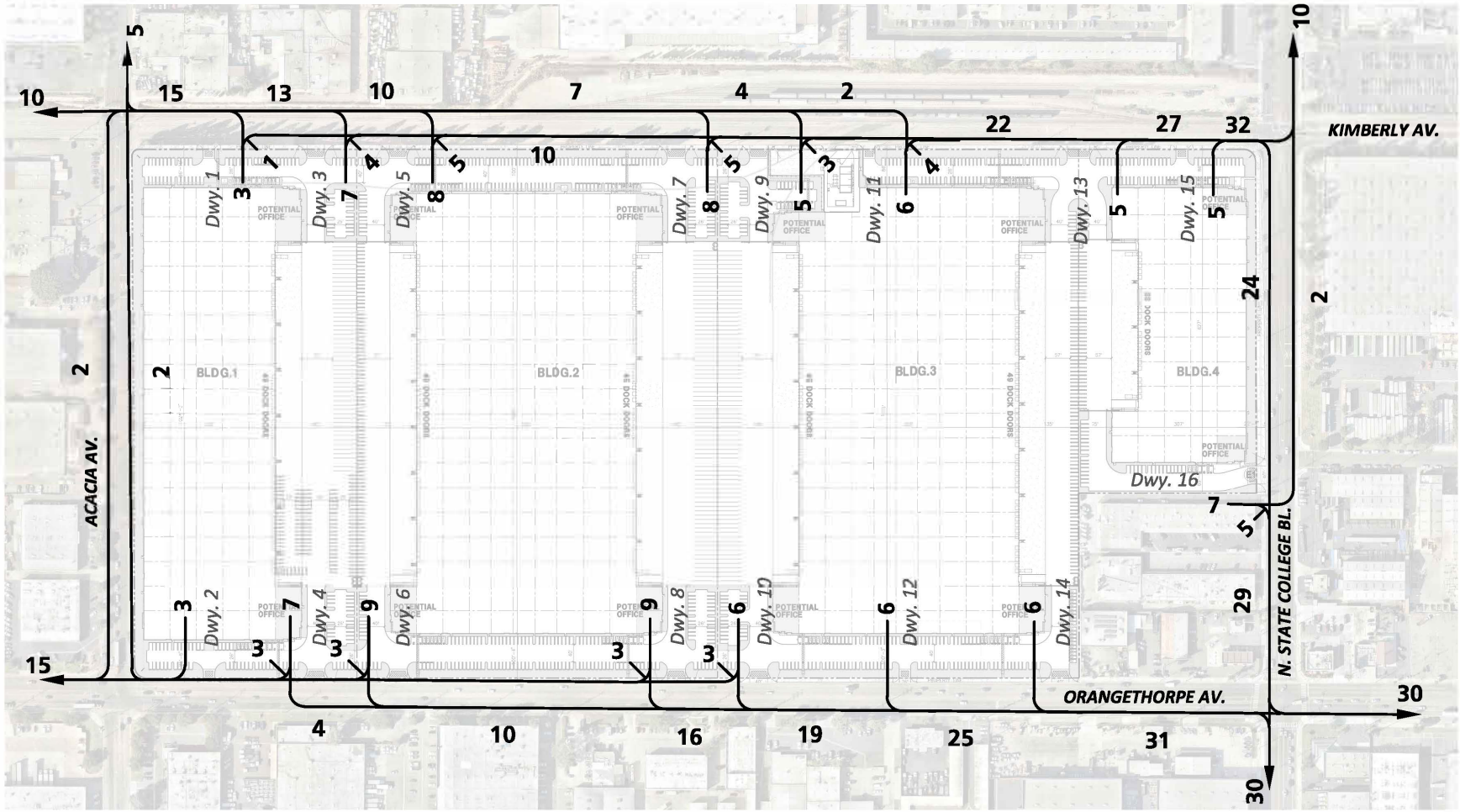


LEGEND:

10 *= PERCENT TO/FROM PROJECT*

N

EXHIBIT 3-2 (2OF3): PROJECT (PASSENGER CAR) OUTBOUND TRIP DISTRIBUTION

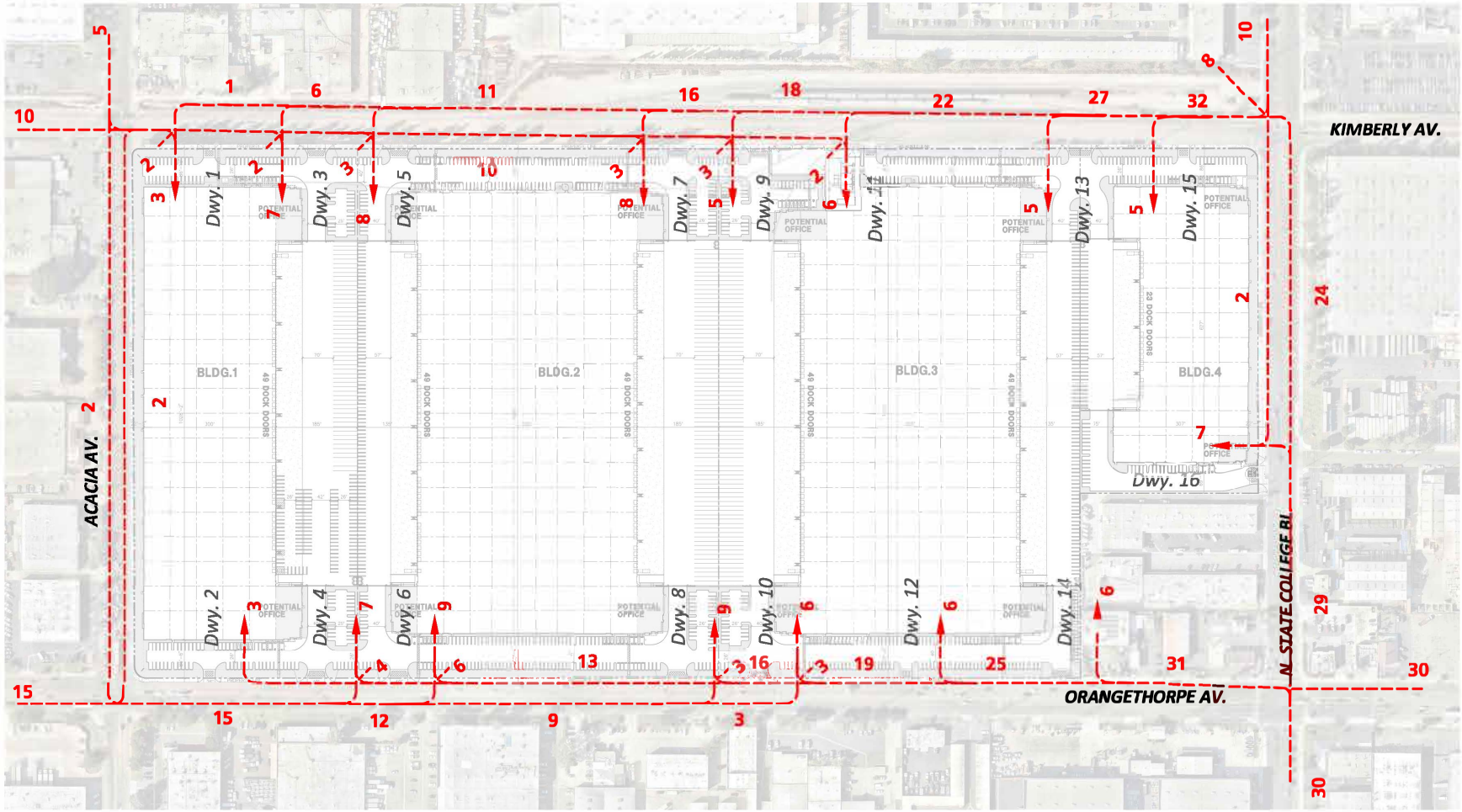


LEGEND:

10 = PERCENT FROM PROJECT

N

EXHIBIT 3-2 (3OF3): PROJECT (PASSENGER CAR) INBOUND TRIP DISTRIBUTION

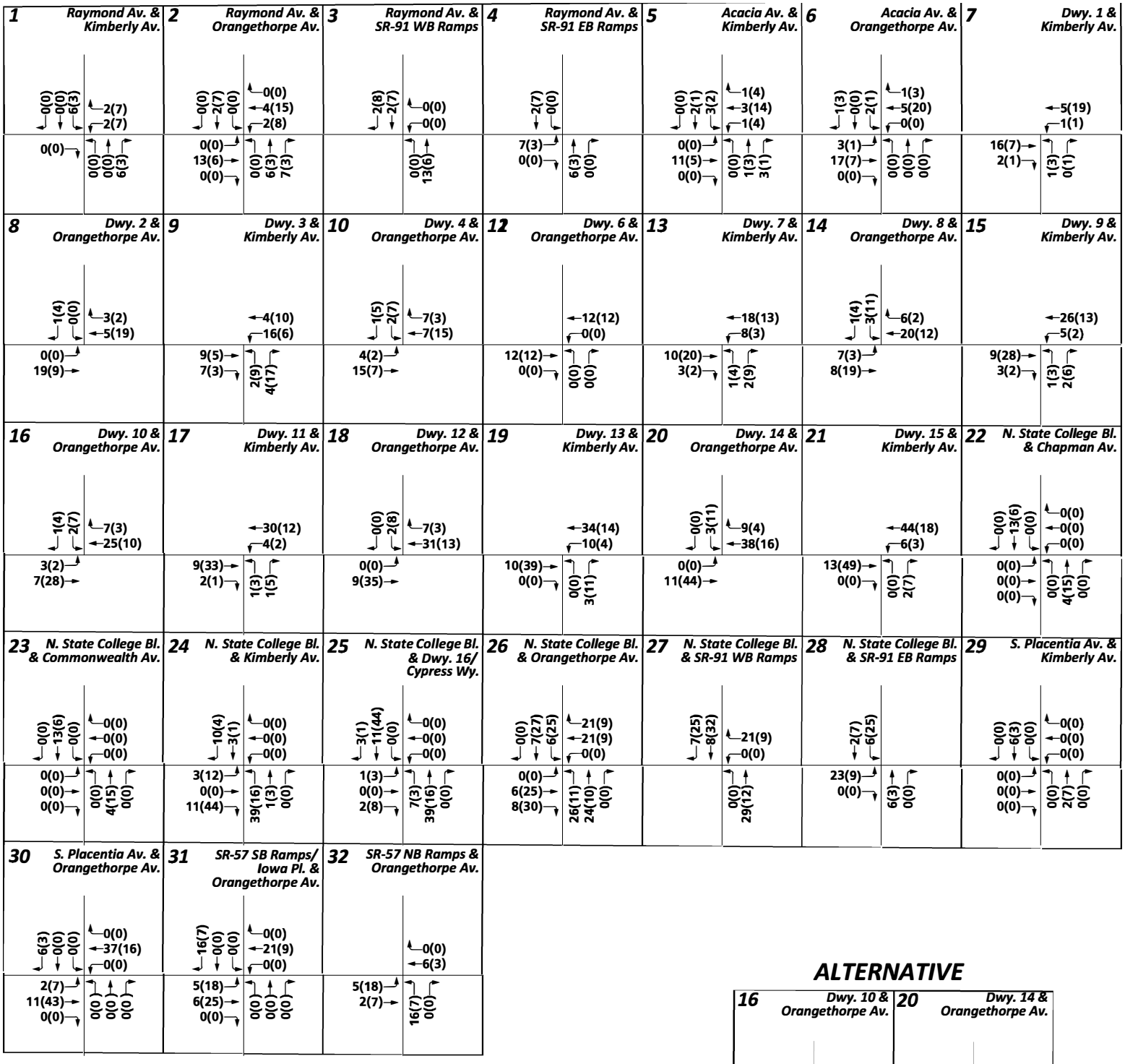


LEGEND:

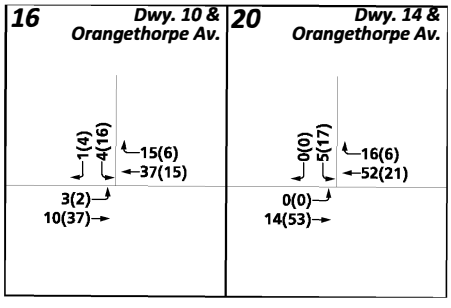
10 = PERCENT TO PROJECT

N

EXHIBIT 3-3: PROJECT ONLY TRAFFIC VOLUMES



ALTERNATIVE



LEGEND:

10(10) *= AM(PM) PEAK HOUR INTERSECTION VOLUMES*

N

3.5 BACKGROUND TRAFFIC

To account for background traffic growth, traffic associated with other known cumulative development projects in conjunction with an ambient growth from Existing (2020) conditions of 2.01% (1.0% per year over two years) is included for Opening Year Cumulative, as well as traffic generated by cumulative projects.

The Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) growth forecasts for the City of Fullerton identifies projected growth in population of 141,900 in 2016 to 158,300 in 2045, or a 11.56% increase over the 29-year period. The change in population equates to roughly a 0.38 percent growth rate compounded annually. Similarly, growth over the same 29-year period in households is projected to increase by 14.0 percent, or 0.45 percent growth rate, compounded annually. Finally, growth in employment over the same 29-year period is projected to increase by 35.1 percent, or a 1.04 percent annual growth rate. The average annual growth rate between population, households, and employment is 0.62 percent per year. The Draft 2020-2045 RTP/SCS is anticipated to be adopted by the Regional Council in September 2020. As such, the 1.0 percent per year ambient growth rate is more conservative than both the current and proposed RTP/SCS data for the City.

3.6 CUMULATIVE DEVELOPMENT TRAFFIC

Exhibit 3-4 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown in Table 3-4. The list of cumulative projects has been developed based on information provided by the Planning Departments for the City of Fullerton, City of Placentia, and City of Anaheim. Cumulative AM and PM peak hour traffic volumes are shown on Exhibit 3-5. Some cumulative projects shown may not have an active application but have been included for disclosure purposes if traffic from the known project is anticipated to contribute traffic to a study area intersection.

The weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2022) Without Project traffic conditions are shown on Exhibit 3-6. The weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2022) With Project traffic conditions are shown on Exhibit 3-7.

EXHIBIT 3-4: CUMULATIVE DEVELOPMENT LOCATION MAP

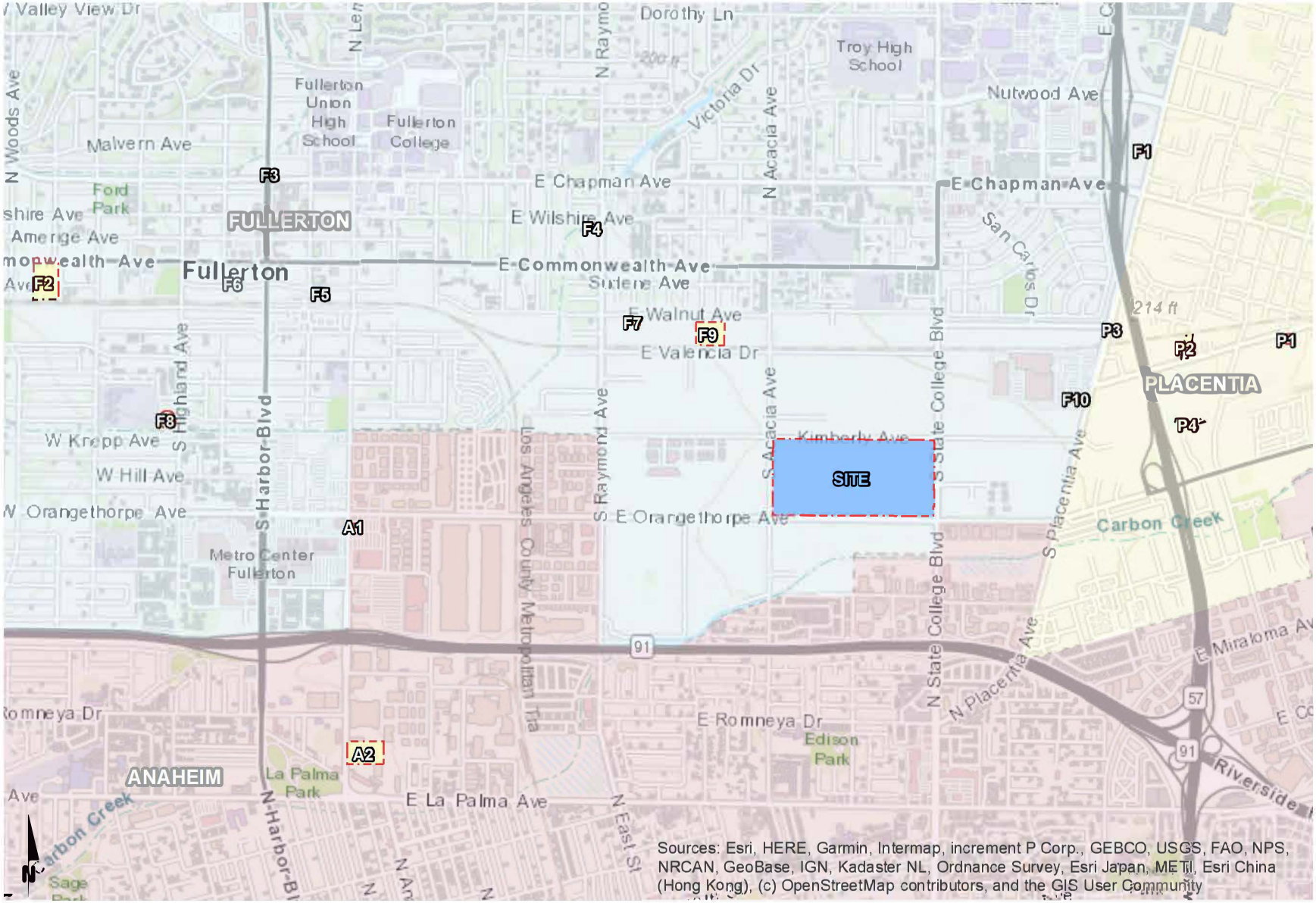


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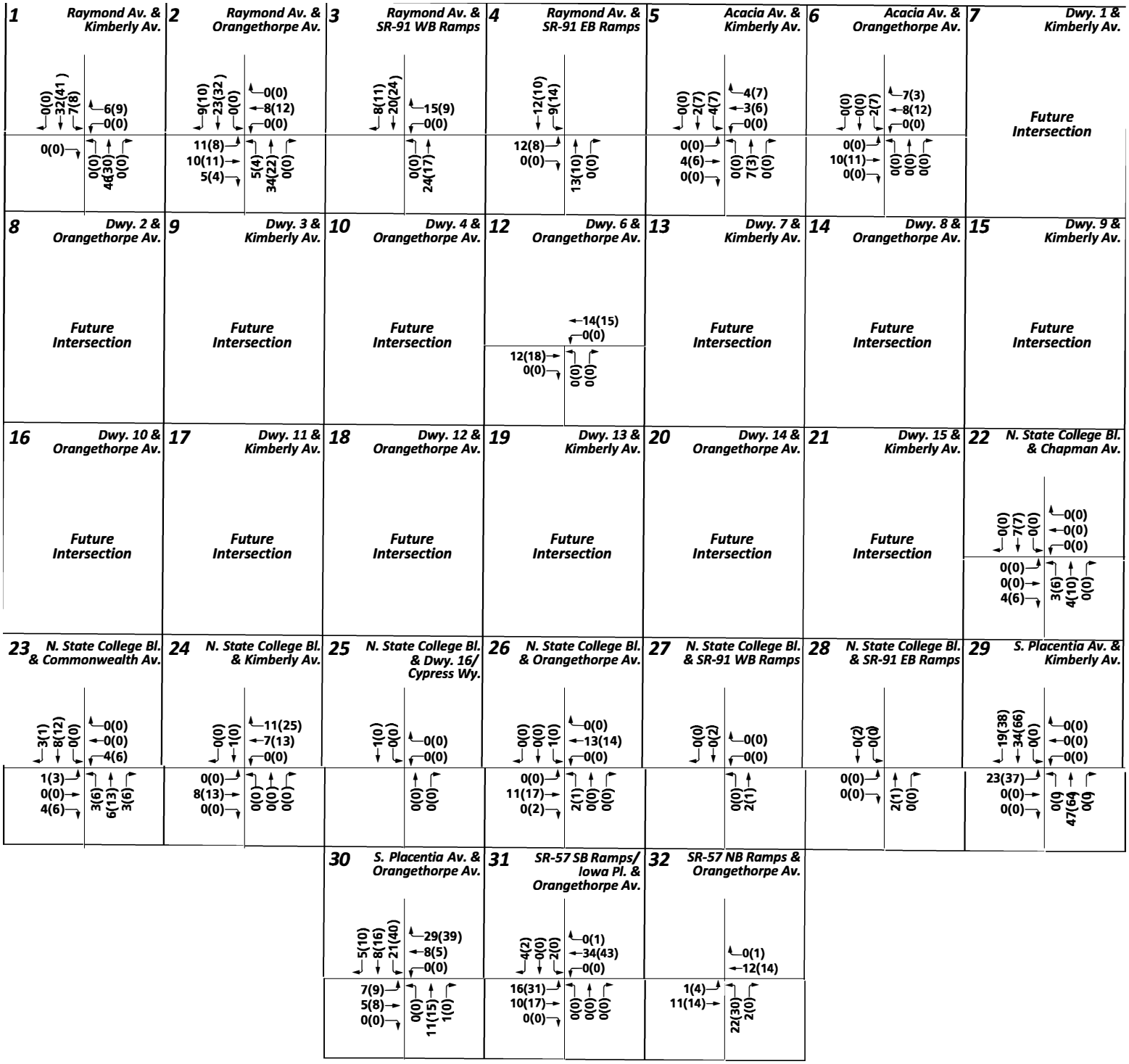
EXHIBIT 3-5: CUMULATIVE ONLY TRAFFIC VOLUMES



LEGEND:

10(10) ***= AM(PM) PEAK HOUR INTERSECTION VOLUMES***

N

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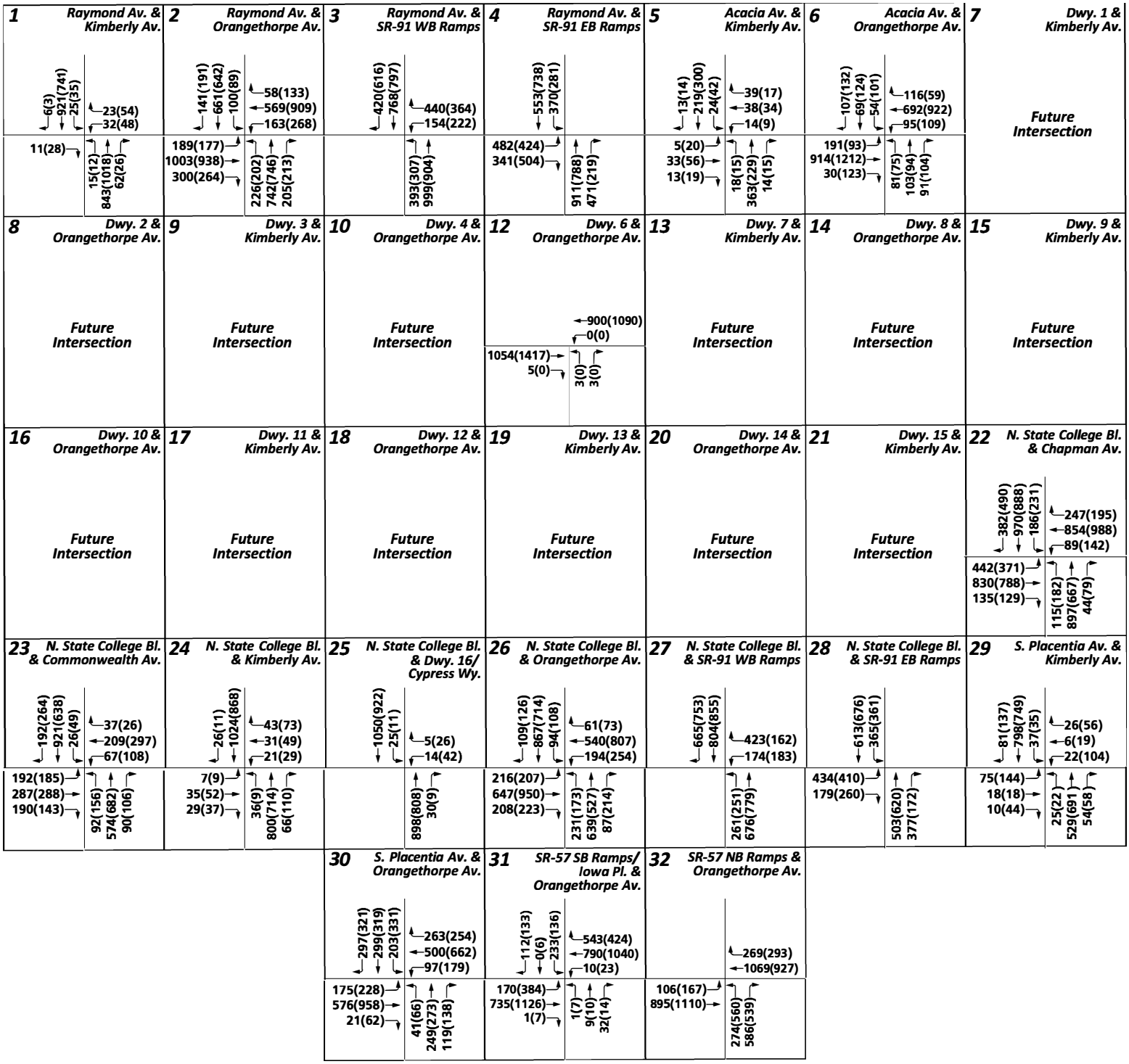
EXHIBIT 3-6: OPENING YEAR CUMULATIVE (2022) WITHOUT PROJECT TRAFFIC VOLUMES

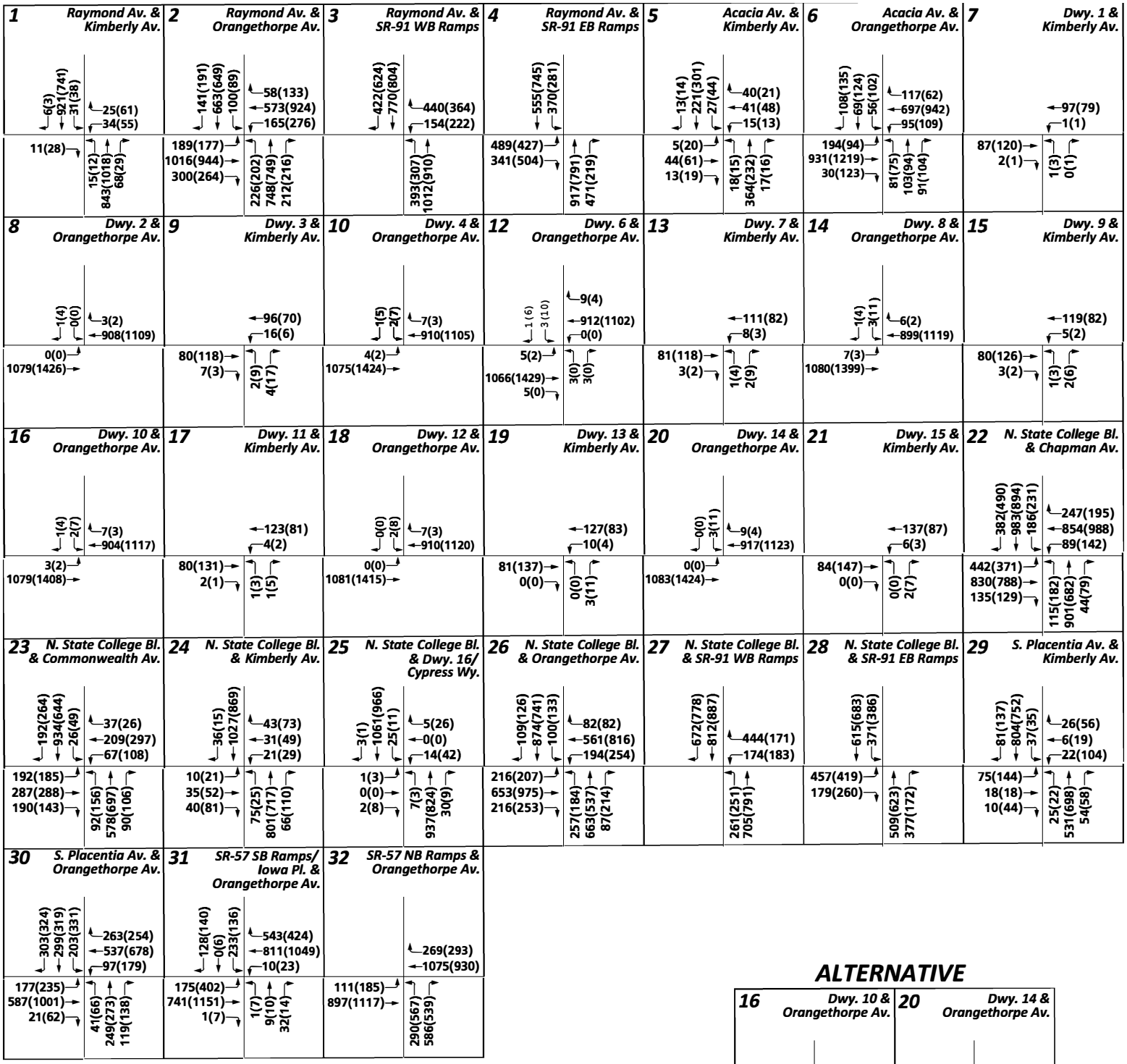


LEGEND:

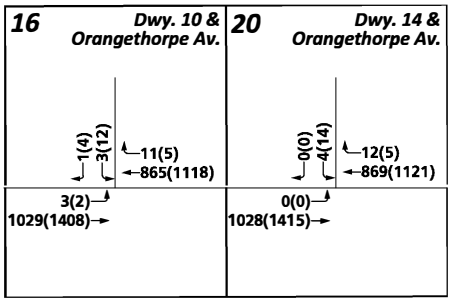
10(10) *= AM(PM) PEAK HOUR INTERSECTION VOLUMES*

N

EXHIBIT 3-7: OPENING YEAR CUMULATIVE (2022) WITH PROJECT TRAFFIC VOLUMES



ALTERNATIVE



LEGEND:

10(10) *= AM(PM) PEAK HOUR INTERSECTION VOLUMES*

N

Table 3-4

Cumulative Development Land Use Summary

#	Project/Location	Land Use	Quantity	Units[1]
City of Fullerton				
F1	Fullerton Crossings: 601-629 S. Placentia Av.	Major Retail & Shops	85.758	TSF
F2	Amplifi Apartments: 600 W. Commonwealth Av.	Multifamily (Mid-Rise) Residential	290	DU
F3	Fox Block Mixed-Use: N Harbor Bl. & W. Chapman Av.	Fox Tea Room Retail, Alley, Mixed-Use (office, residential), Public Parking	4.440	Acres
F4	Convenience Store: 181 N. Raymond Av.	Convenience Store	4.060	TSF
F5	Parkwest Hotel: 212 E. Santa Fe Av.	Hotel	125	Rooms
F6	139-147 W. Santa Fe Av.	Restaurant	20.938	TSF
F7	1250 E. Walnut Av.	Warehouse	36.750	TSF
F8	Melia Homes: 805-807 S. Highland Av.	Multifamily (Low-Rise) Residential	19	DU
F9	1500 E. Walnut Av.	Warehouse	79.800	TSF
		Manufacturing	40.000	TSF
F10	Farmer Boys: 663 S. Placentia Av.	Fast-Food Restaurant w/ Drive-Thru	3.207	TSF
City of Placentia				
P1	VTM 18118: 110-132 E. Crowther Av.	Multifamily (Mid-Rise) Residential	215	DU
P2	DPR 2018-04: 505 W. Crowther Av.	Multifamily (Mid-Rise) Residential	418	DU
P3	DPR 2018-06: 380 S. Placentia Av.	Hotel	116	Rooms
P4	DPR 2019-01: 719 1/2 Monroe Wy.	General Light Industrial	7.600	TSF
City of Anaheim				
A1	7-11 (DEV 2020-00081): 30 E. Orangethorpe Av.	Convenience Store	3.060	TSF
A2	The Renaissance: 1122 N. Anaheim Bl.	Multifamily (Mid-Rise) Residential	269	DU

[1] TSF = Thousand Square Feet; DU = Dwelling Units

4 REFERENCES

[1] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition ed., 2017.

[2] WSP, "TUMF High-Cube Warehouse Trip Generation Study," County of Riverside, January 29, 2019.

[3] City of Fullerton, "The Fullerton Plan," City of Fullerton, Adopted May 1, 2012.

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APPENDIX 2.1

AVERAGE DAILY TRAFFIC VOLUMES

Volume Development

1: Raymond Av. & Kimberly Av.

	PHF: 0.928			4:45					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		23,511			23,031			586			1,890		
Project ADT (Actual):		94			94			0			188		
Other ADT (Actual):		878			1,086			0			208		
2022 NP ADT (Actual):		24,861			24,580			598			2,136		
2022 WP ADT (Actual):		24,955			24,674			598			2,324		

2: Raymond Av. & Orangethorpe Av.

	PHF: 0.964			4:30					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		29,674			24,868			34,347			32,976		
Project ADT (Actual):		228			94			228			362		
Other ADT (Actual):		766			876			632			290		
2022 NP ADT (Actual):		31,037			26,244			35,670			33,929		
2022 WP ADT (Actual):		31,265			26,338			35,898			34,291		

3: Raymond Av. & SR-91 Westbound Ramps

	PHF: 0.916			4:30					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		28,583			34,201			11,902			7,535		
Project ADT (Actual):		160			227			67			0		
Other ADT (Actual):		527			768			116			125		
2022 NP ADT (Actual):		29,684			35,656			12,257			7,812		
2022 WP ADT (Actual):		29,844			35,883			12,324			7,812		

4: Raymond Av. & SR-91 Eastbound Ramps

	PHF: 0.957			4:15					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		29,102			28,583			12,048			6,390		
Project ADT (Actual):		94			161			67			0		
Other ADT (Actual):		286			527			116			125		
2022 NP ADT (Actual):		29,973			29,684			12,406			6,644		
2022 WP ADT (Actual):		30,067			29,845			12,473			6,644		

5: Acacia Av. & Kimberly Av.

	PHF: 0.846			4:00					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		7,548			7,815			1,917			1,917		
Project ADT (Actual):		100			94			186			304		
Other ADT (Actual):		72			216			130			274		
2022 NP ADT (Actual):		7,772			8,188			2,086			2,230		
2022 WP ADT (Actual):		7,872			8,282			2,272			2,534		

6: Acacia Av. & Orangethorpe Av.

	PHF: 0.921			4:30					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		8,227			7,735			33,069			32,284		
Project ADT (Actual):		0			100			362			354		
Other ADT (Actual):		0			72			290			362		
2022 NP ADT (Actual):		8,393			7,962			34,024			33,295		
2022 WP ADT (Actual):		8,393			8,062			34,386			33,649		

Volume Development

7: Driveway 1 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,917			1,917		
Project ADT (Actual):		56			0			306			286		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,230			2,230		
2022 WP ADT (Actual):		56			0			2,536			2,516		

8: Driveway 2 & Orangethorpe Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			32,284			32,284		
Project ADT (Actual):		0			56			354			354		
Other ADT (Actual):		0			0			362			362		
2022 NP ADT (Actual):		0			0			33,295			33,295		
2022 WP ADT (Actual):		0			56			33,649			33,649		

9: Driveway 3 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,917			1,917		
Project ADT (Actual):		213			0			286			373		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,230			2,230		
2022 WP ADT (Actual):		213			0			2,516			2,603		

10: Driveway 4 & Orangethorpe Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			32,284			32,284		
Project ADT (Actual):		0			210			352			402		
Other ADT (Actual):		0			0			362			362		
2022 NP ADT (Actual):		0			0			33,295			33,295		
2022 WP ADT (Actual):		0			210			33,647			33,697		

11: Driveway 5 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,917			1,917		
Project ADT (Actual):		214			0			372			458		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,230			2,230		
2022 WP ADT (Actual):		214			0			2,602			2,688		

12: Driveway 6 & Orangethorpe Av.

PHF: 0.930 4:30 Count Date: 3/12/2020

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			32,284			32,284		
Project ADT (Actual):		0			258			402			468		
Other ADT (Actual):		0			0			362			362		
2022 NP ADT (Actual):		0			0			33,295			33,295		
2022 WP ADT (Actual):		0			258			33,697			33,763		

Volume Development

13: Driveway 7 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,837			1,837		
Project ADT (Actual):		214			0			459			561		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,148			2,148		
2022 WP ADT (Actual):		214			0			2,607			2,709		

14: Driveway 8 & Orangethorpe Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			32,018			32,018		
Project ADT (Actual):		0			236			470			538		
Other ADT (Actual):		0			0			362			362		
2022 NP ADT (Actual):		0			0			33,023			33,023		
2022 WP ADT (Actual):		0			236			33,493			33,561		

15: Driveway 9 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,837			1,837		
Project ADT (Actual):		160			0			562			628		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,148			2,148		
2022 WP ADT (Actual):		160			0			2,710			2,776		

16: Driveway 10 & Orangethorpe Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			32,018			32,018		
Project ADT (Actual):		0			196			538			622		
Other ADT (Actual):		0			0			362			362		
2022 NP ADT (Actual):		0			0			33,023			33,023		
2022 WP ADT (Actual):		0			196			33,561			33,645		

17: Driveway 11 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,837			1,837		
Project ADT (Actual):		110			0			628			662		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,148			2,148		
2022 WP ADT (Actual):		110			0			2,776			2,810		

18: Driveway 12 & Orangethorpe Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			32,018			32,018		
Project ADT (Actual):		0			112			622			734		
Other ADT (Actual):		0			0			362			362		
2022 NP ADT (Actual):		0			0			33,023			33,023		
2022 WP ADT (Actual):		0			112			33,645			33,757		

Volume Development

19: Driveway 13 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,837			1,837		
Project ADT (Actual):		200			0			664			864		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,148			2,148		
2022 WP ADT (Actual):		200			0			2,812			3,012		

20: Driveway 14 & Orangethorpe Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			32,018			32,018		
Project ADT (Actual):		0			186			734			920		
Other ADT (Actual):		0			0			362			362		
2022 NP ADT (Actual):		0			0			33,023			33,023		
2022 WP ADT (Actual):		0			186			33,757			33,943		

21: Driveway 15 & Kimberly Av.

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		0			0			1,837			1,837		
Project ADT (Actual):		94			0			864			958		
Other ADT (Actual):		0			0			274			274		
2022 NP ADT (Actual):		0			0			2,148			2,148		
2022 WP ADT (Actual):		94			0			3,012			3,106		

22: N. State College Bl. & Chapman Av.

PHF: 0.961 4:30 Count Date: 3/12/2020

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		**25,624**			36,863			38,328			31,605		
Project ADT (Actual):		228			228			0			0		
Other ADT (Actual):		292			162			130			0		
2022 NP ADT (Actual):		26,431			37,766			39,228			32,240		
2022 WP ADT (Actual):		26,659			37,994			39,228			32,240		

23: N. State College Bl. & Commonwealth Av.

PHF: 0.931 5:00 Count Date: 3/12/2020

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		23,284			**25,624**			17,174			11,236		
Project ADT (Actual):		228			228			0			0		
Other ADT (Actual):		524			294			160			130		
2022 NP ADT (Actual):		24,276			26,433			17,679			11,592		
2022 WP ADT (Actual):		24,504			26,661			17,679			11,592		

24: N. State College Bl. & Kimberly Av.

PHF: 0.913 4:30 Count Date: 3/12/2020

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		23,058			21,607			1,837			3,475		
Project ADT (Actual):		822			228			958			0		
Other ADT (Actual):		4			524			274			794		
2022 NP ADT (Actual):		23,525			22,565			2,148			4,339		
2022 WP ADT (Actual):		24,347			22,793			3,106			4,339		

Volume Development

25: N. State College Bl. & Driveway 16/Cypress Wy.

	PHF: 0.919			4:30					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		23,244			23,058			0			1,145		
Project ADT (Actual):		902			822			172			0		
Other ADT (Actual):		4			4			0			0		
2022 NP ADT (Actual):		23,716			23,525			0			1,168		
2022 WP ADT (Actual):		24,618			24,347			172			1,168		

26: N. State College Bl. & Orangethorpe Av.

	PHF: 0.971			4:45					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		27,451			22,925			32,018			31,006		
Project ADT (Actual):		1,014			902			920			808		
Other ADT (Actual):		14			4			362			352		
2022 NP ADT (Actual):		28,017			23,390			33,023			31,981		
2022 WP ADT (Actual):		29,031			24,292			33,943			32,789		

27: N. State College Bl. & SR-91 Westbound Ramps

	PHF: 0.952			4:30					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		26,945			33,229			13,100			4,500		
Project ADT (Actual):		555			1,016			259			202		
Other ADT (Actual):		14			14			0			0		
2022 NP ADT (Actual):		27,501			33,911			13,363			4,590		
2022 WP ADT (Actual):		28,056			34,927			13,622			4,792		

28: N. State College Bl. & SR-91 Eastbound Ramps

	PHF: 0.948			5:00					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		22,525			26,945			8,840			7,056		
Project ADT (Actual):		94			555			259			202		
Other ADT (Actual):		14			14			0			0		
2022 NP ADT (Actual):		22,992			27,501			9,017			7,198		
2022 WP ADT (Actual):		23,086			28,056			9,276			7,400		

29: S. Placentia Av. & Kimberly Av.

	PHF: 0.965			4:30					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		20,089			20,981			4,047			3,794		
Project ADT (Actual):		94			94			0			0		
Other ADT (Actual):		1,542			2,338			796			0		
2022 NP ADT (Actual):		22,035			23,741			4,924			3,870		
2022 WP ADT (Actual):		22,129			23,835			4,924			3,870		

30: S. Placentia Av. & Orangethorpe Av.

	PHF: 0.994			4:30					Count Date: 3/12/2020			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		13,127			20,848			29,568			31,698		
Project ADT (Actual):		0			94			808			714		
Other ADT (Actual):		362			1,542			352			1,084		
2022 NP ADT (Actual):		13,752			22,809			30,514			33,419		
2022 WP ADT (Actual):		13,752			22,903			31,322			34,133		

Volume Development

31: SR-57 Southbound Ramps & Orangethorpe Av.

	PHF: 0.949			4:30				Count Date: 3/12/2020				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		892			13,819			33,975			35,266		
Project ADT (Actual):		0			310			714			404		
Other ADT (Actual):		0			401			1,084			711		
2022 NP ADT (Actual):		910			14,498			35,741			36,686		
2022 WP ADT (Actual):		910			14,808			36,455			37,090		

32: SR-57 Northbound Ramps & Orangethorpe Av.

	PHF: 0.930			4:45				Count Date: 3/12/2020				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2020 ADT (Actual):		13,979			5,964			35,266			37,050		
Project ADT (Actual):		155			155			404			94		
Other ADT (Actual):		372			29			712			339		
2022 NP ADT (Actual):		14,632			6,113			36,687			38,133		
2022 WP ADT (Actual):		14,787			6,268			37,091			38,227		