APPENDIX C

TRIP GENERATION AND VEHICLE MILES TRAVELED ANALYSIS

LSA

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: November 10, 2023

TO: Joseph Lambert, Director of Development Services, City of Placentia

FROM: Ken Wilhelm, Principal, LSA

SUBJECT: Trip Generation and Vehicle Miles Traveled Analysis for the Packing House District Transit-Oriented Development Expansion Project for the City of Placentia (LSA Project No. 20230923)

LSA has prepared this trip generation and vehicle miles traveled (VMT) analysis for the proposed Packing House District Transit-Oriented Development (TOD) Expansion Project (project) in Placentia, Orange County, California. The City of Placentia (City) proposes to expand the City's existing TOD zoning district and land use designation to include several properties adjacent to the Original TOD Area identified in the City's recently adopted Housing Element. The proposed project site (the TOD Expansion Area) consists of approximately 14.5 acres of land (containing 317,866 square feet [sf] of existing industrial-use buildings) near a proposed Metrolink station. Table A (provided as Attachment A) provides a detailed summary of existing and proposed land uses for each parcel within the project site. Figure 1 (provided as Attachment B) depicts the location of the original TOD area, the proposed TOD expansion area, and the proposed Metrolink station.

As shown in Table A and Figure 1, the South Melrose Street site (11.5 acres) includes 259,497 sf of existing industrial-use buildings. This site is bordered on the north by West Crowther Avenue and the Original TOD Area, on the south by Metrolink train tracks and an industrial park, on the east by an industrial park, and on the west by State Route 57. The Cameron Street site (3 acres) includes 58,369 sf of existing industrial-use buildings and is bordered on the north by West Crowther Avenue, on the south by an industrial park, on the east by an industrial park, and on the west by an apartment complex (multifamily residential uses). The proposed project site (the TOD Expansion Area) is designated for Industrial uses in the City's General Plan.

The proposed project would facilitate the development of 1,378 new residential units within the TOD Expansion Area by rezoning the 14.5-acre project site to allow residential uses at the maximum allowable density of 95 units per acre, as specified in applicable Packing House District Development Standards designated by the City.

The purpose of this analysis is to identify the trip generation of the proposed project and determine whether the proposed project requires a VMT analysis per *the City of Placentia Traffic Impact Analysis Guidelines* (TIA Guidelines) *for Vehicle Miles Traveled and Level of Service Assessment* (January 2021).

TRIP GENERATION

The daily and peak-hour trips of the current industrial uses and the proposed residential project were calculated using trip rates from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition (2021) for Land Use 110 (General Light Industrial) and Land Use 221 (Multifamily Housing [Mid-Rise] Close to Rail Transit). Table B (provided as Attachment C) presents the ITE trip generation summary for the current uses and the proposed project of 1,378 new residential units based on the maximum allowable density of 95 units per acre.

As shown in Table B, the current 14.5 acres of land (containing 317,866 sf of industrial-use buildings) generates 1,548 daily trips, including 236 trips (207 inbound and 29 outbound) in the a.m. peak hour and 207 trips (29 inbound and 178 outbound) in the p.m. peak hour.

The proposed project would generate 6,544 daily trips, including 441 trips (248 inbound and 193 outbound) in the a.m. peak hour and 399 trips (165 inbound and 234 outbound) in the p.m. peak hour.

The proposed project represents a net increase of 4,996 daily trips, including a net increase of 205 a.m. and 192 p.m. peak-hour trips, compared to the current uses.

VEHICLE MILES TRAVELED ANALYSIS

Vehicle Miles Traveled Background

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) Guidelines for use. Among the changes to the guidelines were removal of vehicle delay and level of service as the sole basis of determining CEQA impacts. With the adopted *State CEQA Guidelines*, transportation impacts are to be evaluated based on a project's effect on VMT. The VMT screening evaluation for the proposed project was prepared based on the City's TIA Guidelines (January 2021).

Vehicle Miles Traveled Screening

The City's TIA Guidelines provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant transportation impact without conducting a more detailed analysis. Screening thresholds are as follows:

1. Transit Priority Area (TPA) Screening
2. Low VMT Area Screening
3. Project Type Screening

Transit Priority Area Screening

Projects within a TPA may be presumed to have a less than significant transportation impact. A TPA is defined as a 0.5-mile area around an existing major transit stop or an existing stop along a high-quality transit corridor. "Major transit stop" means a site containing an existing rail station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus

routes with a frequency of service interval of 15 minutes or less during the morning and evening peak commute periods. A "high-quality transit corridor" means a corridor with a fixed route bus service with service intervals no longer than 15 minutes during the peak commute hours.

The presumption of a less than significant transportation impact for a project within a TPA may not be applicable under the following conditions:

- If the project has a floor area ratio (FAR) of less than 0.75
- If the project includes more parking for use by residents, customers, or employees than required by the jurisdiction
- If the project is inconsistent with the applicable Sustainable Communities Strategy
- If the project replaces affordable residential units with a smaller number of moderate or high-income residential units

Per City's TIA Guidelines, the North Orange County Collaborative (NOCC+) VMT Traffic Study Screening Tool was used to identify if the project is in a TPA. The NOCC+ VMT Screening Tool result is included as Attachment D. Based on the NOCC+ VMT Screening Tool, the proposed project would be within a planned TPA because of the proposed Metrolink station. Based on the project description mentioned above, the proposed project is consistent with the applicable Sustainable Communities Strategy and will not replace affordable residential units with a smaller number of moderate or high-income residential units. To meet the screening criteria, the City will need to ensure, as part of future site plans, that the proposed project FAR be equal to or greater than 0.75 and the project should not provide more parking for use by residents, customers, or employees than the city code requires.

Evaluation: The TPA screening is met for the proposed project.

Low Vehicle Miles Traveled Area Screening

According to the City's TIA Guidelines, residential and office projects in a low VMT generating area may be presumed to have a less than significant VMT impact absent substantial evidence to the contrary. Additionally, employment-related and mixed-use projects may also qualify to be screened out based on this criterion if they are expected to generate VMT per resident, VMT per worker, or VMT per service population that is similar to the existing land uses in the low VMT area.

Per City's TIA Guidelines, the NOCC+ VMT Traffic Study Screening Tool was used to identify whether the project is in a low VMT-generating area. The NOCC+ VMT Screening Tool result is included as Attachment D. Based on the NOCC+ VMT Screening Tool, the proposed project is not in a low VMT-generating area. In addition, the proposed project changes the existing land use type from industrial to residential uses.

Evaluation: Low VMT Area screening is not met for the proposed project.

Project Type Screening

According to the City's TIA Guidelines, a project generating less than 110 daily vehicle trips may be presumed to have a less than significant VMT impact absent substantial evidence to the contrary.

Per City's TIA Guidelines, the NOCC+ VMT Traffic Study Screening Tool was used to confirm if the project generates 110 daily trips or less. The NOCC+ VMT Screening Tool result is included as Attachment D. Based on the NOCC+ VMT Screening Tool, the proposed project is expected to generate 10,313 daily trips assuming a worst-case scenario buildout of the TOD Expansion area at the maximum allowable density of 95 dwelling units per acre.

As described earlier, the proposed project is anticipated to generate 6,544 ITE daily trips and a net increase of 4,996 ITE daily trips compared to the existing land uses on site. This also confirms that the proposed project would exceed the daily trip threshold, per the city screening criteria.

Evaluation: Project Type screening is not met for the proposed project.

CONCLUSIONS

Based on review and evaluation of the City's VMT screening thresholds, the proposed project meets the TPA Screening because the project would be within a planned TPA (near the proposed Metrolink station). Therefore, the proposed project is screened out from a VMT analysis and no additional VMT analysis is required. The proposed project is presumed to have a less than significant VMT impact. It should be noted that the City will need to ensure as part of future site plans that the proposed project FAR be equal to or greater than 0.75 and the project should not provide more parking for use by residents, customers, or employees than required by the city code.

If you have any questions, please contact me at (949) 553-0666 or at ken.wilhelm@lsa.net.

Attachments: A – Table A: Project Parcel Land Use Summary
B – Figure 1: Project Location
C – Table B: Project Trip Generation
D – NOCC+ VMT Screening Tool Result

ATTACHMENT A

TABLE A: PROJECT PARCEL LAND USE SUMMARY

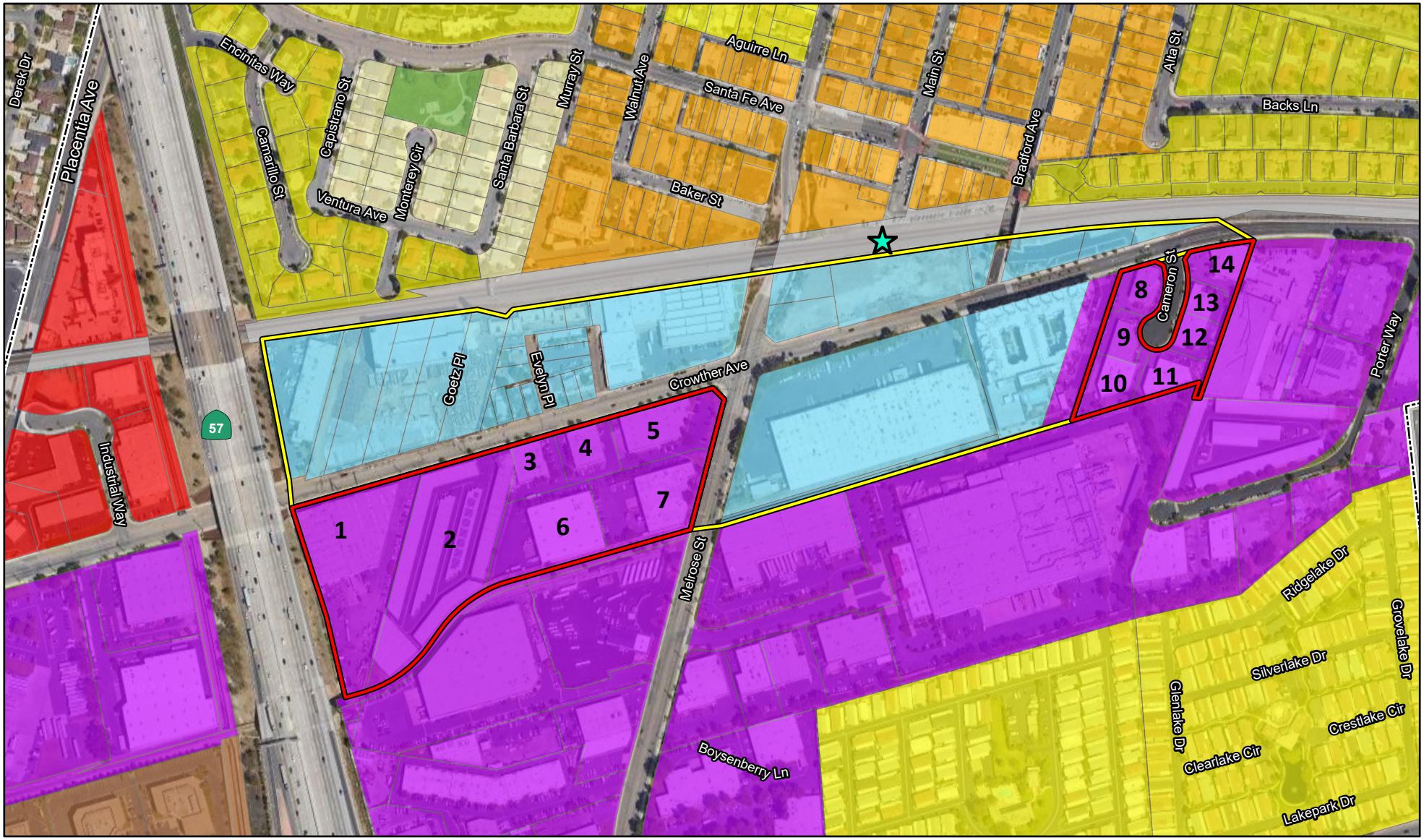
LSA

Table A: Project Parcel Land Use Summary

TOD Expansion Area		APN	Address	Square Feet (SF)	Existing Use	Calculated Acres (AC)	DU/AC	Dwelling Units (DU)
South Melrose Street Site (11.5 Acres)	1	339-101-06	550 W. Crowther Avenue	55,210	Industrial	2.87	95	273
	2	339-101-07	480 W. Crowther Avenue	109,323	Industrial	3.34	95	317
	3	339-101-10	440 W. Crowther Avenue	9,200	Industrial	0.53	95	50
	4	339-101-11	330 W. Crowther Avenue	9,391	Industrial	0.59	95	56
	5	339-101-12	505 S. Melrose Street	19,284	Industrial	1.12	95	107
	6	339-101-14	420 W. Crowther Avenue	33,107	Industrial	1.55	95	147
	7	339-101-13	515 S. Melrose Street	23,982	Industrial	1.54	95	146
			Subtotal Existing Land Use SF:	**259,497**	Industrial		**Subtotal Proposed DU:**	**1,097**
Cameron Street Site (3 Acres)	8	339-451-01	511 Cameron Street	6,449	Industrial	0.43	95	41
	9	339-451-02	521 Cameron Street	6,925	Industrial	0.37	95	35
	10	339-451-03	531 Cameron Street	9,296	Industrial	0.58	95	55
	11	339-451-05	530 Cameron Street	9,151	Industrial	0.49	95	47
	12	339-451-06	516 Cameron Street	12,898	Industrial	0.34	95	33
	13	339-451-14	510 Cameron Street	5,350	Industrial	0.29	95	27
	14	339-451-12,15	500 Cameron Street	8,300	Industrial	0.46	95	44
			Subtotal Existing Land Use SF:	**58,369**	Industrial		**Subtotal Proposed DU:**	**281**
			Total Existing Land Use SF:	**317,866**	Industrial		**Total Proposed DU:**	**1,378**

ATTACHMENT B

FIGURE 1: PROJECT LOCATION



LSA

Original TOD Area (2017)
TOD Expansion Area
City Boundaries
Proposed Metrolink Station
1 TOD Expansion Area Number

General Plan Land Uses
Low Density Residential
Medium Density Residential
High Density Residential
Commercial
Industrial
Parks
Railroad
Specific Plan
TOD
Old Town

0 200 400
FEET

SOURCE: Google (2022); City of Placentia (2023)

J:\20230923\GIS\Pro\Packing House District Transit-Oriented Development Project\Packing House District Transit-Oriented Development Project.aprx (10/6/2023)

FIGURE 1

Packing House District
Transit-Oriented Development Project

Project Location

ATTACHMENT C

TABLE B: PROJECT TRIP GENERATION

Table B: Project Trip Generation

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
General Light Industrial		TSF	4.87	0.65	0.09	0.74	0.09	0.56	0.65
Multifamily (Mid-Rise)		DU	4.75	0.18	0.14	0.32	0.12	0.17	0.29
Existing Trip Generation									
General Light Industrial	317.866	TSF	1,548	207	29	236	29	178	207
Proposed Project Trip Generation									
Multifamily (Mid-Rise)	1,378	DU	6,544	248	193	441	165	234	399
Net Trip Generation									
Net New Trips (Proposed Project - Existing)			4,996	41	164	205	136	56	192

[1] Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 11th Edition (2021).

Land Use 110 - General Light Industrial

Land Use 221 - Multifamily Housing (Mid-Rise) Close to Rail Transit

TSF = Thousand Square Feet

DU = Dwelling Units

ATTACHMENT D

NOCC+ VMT SCREENING TOOL RESULT

NOCC+

North Orange County Collaborative VMT Traffic Study Screening Tool

Project Information

Project Name	Opening Year
Placentia TOD Expansion Project	2045

Parcel Number (OCTAM TAZ#160)

339-101-06, 339-101-07, 339-101-10, 339-101-11, 339-101-12, 339-101-14, 339-101-13, 339-451-01, 339-451-02, 339-451-03, 339-451-05, 339-451-06, 339-451-14, 339-451-12, 339-451-15

Screening Criteria for Placentia

Is the project location in a Transit Priority Area?	Yes
Is the project location in a low VMT generating zone?	No
Is the Project one of these land use types? (show land use types)	Yes
Does the project generate fewer than 110 daily trips? (enter project land use in the section below)	No

The Project can be considered for screening from additional analysis.
Please refer to the 'secondary screening checks' table in the User Guide.

Project Land Use Information

		Unit
Residential : Single Family Homes	0	Dwelling Units
Residential : MultiFamily Homes	1378	Dwelling Units
Office	0.000	1,000 Sqaure Feet
Retail	0.000	1,000 Sqaure Feet
Industrial	0.000	1,000 Sqaure Feet
Private School	0	Students
University	0	Students
Entertainment	0.000	1,000 Sqaure Feet
Hotel	0	Rooms

Project Trips and VMT Information

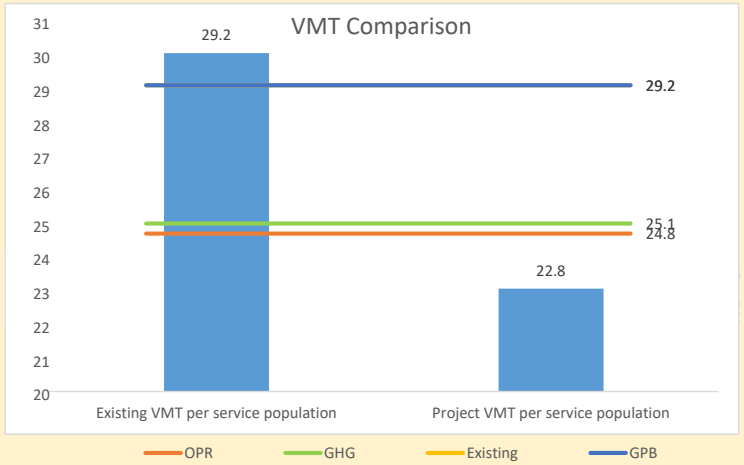
VMT Methodology: Origin Destination (OD)

Daily Trips: 10313 Average Trip Length: 7.6 Service Population: 3445

VMT per service population 22.8

Project VMT Thresholds Comparison

- [x] OPR Guidance (15% Below Existing)
- [x] GHG Reduction Targets (14.3% Below Existing)
- [x] Below Existing
- [x] Better than General Plan Buildout



FEHR PEERS

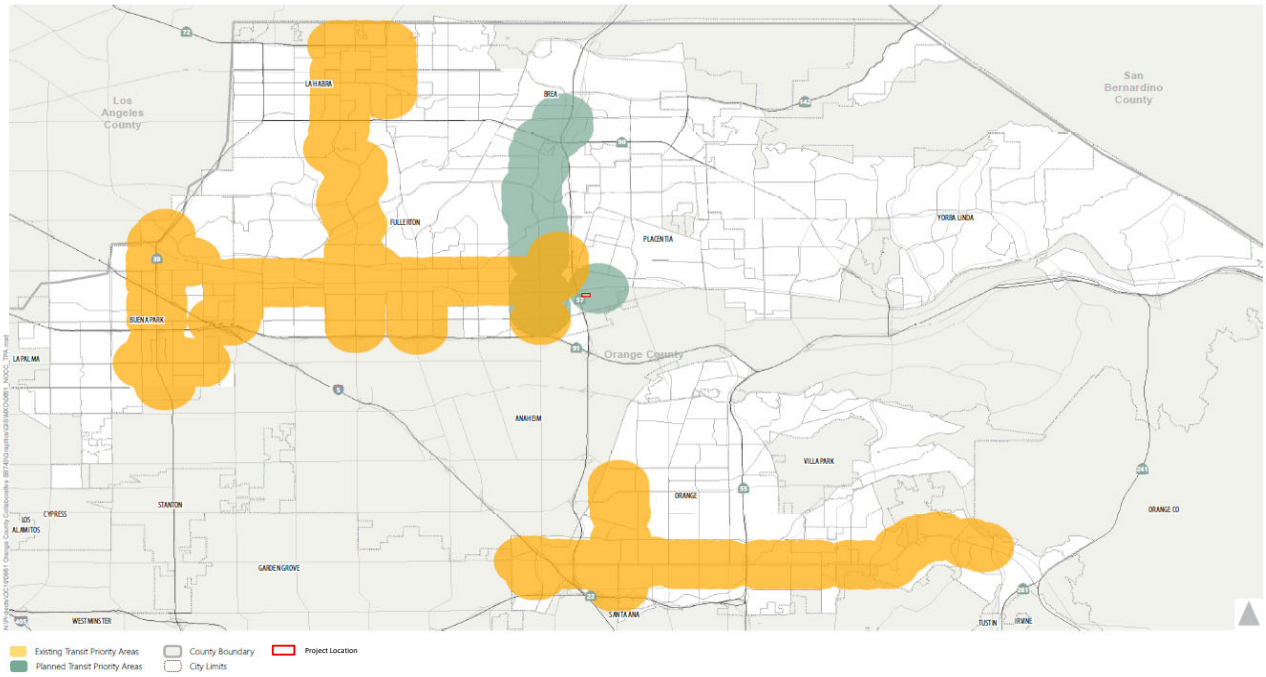


Figure X

North Orange County Cities
Transit Priority Areas (TPA)

Note: Reflective of existing and planned transit service in late 2019. Temporary changes in transit service due to COVID-19 are considered temporary in nature and are not reflected in this figure.

This page intentionally left blank