4.15 TRANSPORTATION

This section analyzes the existing and planned transportation and circulation conditions for the proposed Cypress City Center project (proposed project) and the surrounding area, and identifies circulation impacts that may result subsequent to the development of the proposed project. The analysis contained in this section is based on the *Traffic Impact Analysis for the Cypress City Center Project, Cypress, Orange County, California* (TIA) (LSA, December 2019), which is provided in Appendix J to this Environmental Impact Report (EIR).

4.15.1 Methodology

The TIA prepared for the project is consistent with the objectives and requirements of the City of Cypress, the City of Los Alamitos, and the *Orange County Congestion Management Program* (CMP) (County of Orange 2019), as well as applicable provisions of the California Environmental Quality Act (CEQA), including disclosure of project impacts in both existing and cumulative horizon years.

The scope of work for the TIA, including the project study area, was reviewed and approved by the City's Traffic Engineer prior to the preparation of the TIA. Study area locations were selected in consultation with City staff. The study area analyzed in the project TIA includes the following 19 intersections (5 intersections in Cypress, 6 intersections in both Cypress and Los Alamitos, 7 intersections in Los Alamitos, and 1 interchange along Interstate 605 (I-605) that is under the jurisdiction of the California Department of Transportation [Caltrans]):

1. Los Alamitos Boulevard/Cerritos Avenue (Los Alamitos)
2. Bloomfield Street/Cerritos Avenue (Los Alamitos)
3. Denni Street/Cerritos Avenue (Cypress/Los Alamitos)
4. Moody Street/Cerritos Avenue (Cypress)
5. Walker Street/Cerritos Avenue (Cypress)
6. Valley View Street/Cerritos Avenue (Cypress)
7. Interstate (I) 605 Northbound Ramps/Katella Avenue (Caltrans)
8. Wallingsford Road–Walnut Street/Katella Avenue (Los Alamitos)
9. Los Alamitos Boulevard/Katella Avenue (Los Alamitos)
10. Bloomfield Street/Katella Avenue (Los Alamitos)
11. Lexington Drive/Katella Avenue (Cypress/Los Alamitos)
12. Cottonwood Way/Katella Avenue (Cypress/Los Alamitos)
13. Siboney Street/Katella Avenue (Cypress/Los Alamitos)
14. Winners Circle/Katella Avenue (Cypress/Los Alamitos)
15. Walker Street/Katella Avenue (Cypress/Los Alamitos)
16. Valley View Street/Katella Avenue (Cypress)
17. Valley View Street/Orangewood Avenue (Cypress)
18. Lexington Drive/Farquhar Avenue (Los Alamitos)
19. Los Alamitos Boulevard/Farquhar Avenue (Los Alamitos)

4.15.1.1 Intersection Level of Service Methodologies

In accordance with the requirements of the City of Cypress, the City of Los Alamitos, and the Orange County CMP, signalized intersection operation is analyzed using the Intersection Capacity Utilization (ICU) methodology. The ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums up these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The resulting ICU is expressed in terms of level of service (LOS), where LOS A represents free-flow operation and LOS F represents over capacity operation.

The relationship between LOS and the ICU value (i.e., v/c ratio) is as follows.

Level of Service	Volume-to-Capacity (ICU Methodology)
A	≤0.60
B	>0.60 and ≤0.70
C	>0.70 and ≤0.80
D	>0.80 and ≤0.90
E	>0.90 and ≤1.00
F	>1.00

ICU = intersection capacity utilization

In addition to the ICU methodology of calculating signalized intersection LOS, the *Highway Capacity Manual* (HCM), 6th Edition (Transportation Resources Board 2016) methodology is used to determine the LOS of the unsignalized intersections and signalized intersections at freeway interchanges (i.e., I-605 northbound ramps/Katella Avenue), as required by Caltrans. The HCM signalized intersection methodology is based on delay (in seconds per vehicle), as opposed to capacity, as the measure of effectiveness. The following table illustrates the relationship of delay to LOS for unsignalized and signalized intersections.

Level of Service	Intersection Delay (seconds) per Vehicle (HCM Methodology)	
	Signalized	Unsignalized
A	≤10.0	≤10.0
B	>10.0 and ≤20.0	>10.0 and ≤15.0
C	>20.0 and ≤35.0	>15.0 and ≤25.0
D	>35.0 and ≤55.0	>25.0 and ≤35.0
E	>55.0 and ≤80.0	>35.0 and ≤50.0
F	>80.0	>50.0

HCM = *Highway Capacity Manual* (Transportation Research Board 2017)

It should be noted that since the HCM 6th Edition analysis methodology does not support analysis of nonstandard signal phasing or more than one exclusive lane on turning movements, the HCM 2000 analysis methodology was utilized at one location (Lexington Drive/Farquhar Avenue).

4.15.1.2 Thresholds of Significance

The City of Cypress considers LOS D as the upper limit of satisfactory operations for intersections, except at intersections along Valley View Street, Lincoln Avenue, and Katella Avenue. The City has

adopted LOS E as the standard for intersections along these three arterials, as they carry a significant amount of traffic. In addition, Valley View Street and Katella Avenue are designated in the Orange County CMP as CMP facilities, and intersections along these roadways must not be below LOS E.

Based on the City of Cypress and the City of Los Alamitos standards, a project traffic impact occurs at an intersection if the project causes an intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS, or if an intersection is already operating at an unacceptable LOS and the project adds 0.01 or more to the peak-hour ICU.

For the purpose of this analysis, a project impact would occur at an unsignalized intersection if the project adds traffic to a deficient intersection, project traffic results in a deficient intersection, or a traffic signal warrant is met.

The *Caltrans Guide for the Preparation of Traffic Impact Studies* (2002) does not have published criteria for determination of significant impacts. Caltrans states that it endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities and to maintain the existing LOS in cases where a facility is operating at less than the target LOS. LOS C is considered the target LOS standard and was used in the TIA to assess the project's impacts at the Caltrans study intersection. A significant project impact at a Caltrans intersection would occur if the addition of the project trips causes the peak-hour LOS to deteriorate from an acceptable LOS (LOS A, B, or C) to an unacceptable LOS (LOS D, E, or F), or causes an intersection that is already operating at an unacceptable LOS to deteriorate to a worse LOS.

4.15.2 Existing Environmental Setting

4.15.2.1 Existing Circulation System

The project site is generally bounded by Katella Avenue to the south, Siboney Street to the west, Winners Circle to the east, and the Los Alamitos Race Course to the north. Access to the project site would be provided via Siboney Street (and the existing traffic signal at Siboney Street/Katella Avenue), Winners Circle (and the existing traffic signal at Winners Circle/Katella Avenue), and a right-turn-in/out-only driveway directly on Katella Avenue.

Key roadways in the vicinity of the project site are as follows:

- **Valley View Street** is a north-south six-lane divided roadway located east of the project site. According to the City of Cypress General Plan Circulation Element (City of Cypress 2000), Valley View Street is classified as a Major Arterial. Valley View Street is designated in the Orange County CMP as a CMP facility. The posted speed limit is 45 miles per hour (mph). Sidewalks are provided on both sides of the street in the vicinity of the project site. On-street parking is not permitted.

- **Walker Street** is a north-south four-lane undivided roadway located east of the project site. According to the City of Cypress General Plan Circulation Element, Walker Street is classified as a

Secondary Arterial. The posted speed limit is 40 mph. Sidewalks are provided on both sides of the street. On-street parking is not permitted.

- **Moody Street** is a north-south four-lane divided roadway. Moody Street is located north of the project site and ends at Cerritos Avenue at the Los Alamitos Race Course. According to the City's General Plan Circulation Element, Moody Street is classified as a Primary Arterial. The posted speed limit is 40 mph. On-street bicycle lanes (Class II) and sidewalks are provided on both sides of the street. On-street parking is generally not permitted.

- **Denni Street–Lexington Drive** is a north-south undivided roadway located west of the project site. Lexington Drive is a two-lane roadway located south of Cerritos Avenue, and Denni Street is a four-lane roadway located north of Cerritos Avenue. According to the City of Cypress General Plan Circulation Element, Denni Street is classified as a Secondary Arterial. The posted speed limit is 35 mph. Sidewalks are provided on both sides of Denni Street and on some parts of Lexington Drive. On-street parking is not permitted.

- **Bloomfield Street** is a north-south four-lane divided roadway located west of the project site. According to the City of Cypress and City of Los Alamitos General Plans, Bloomfield Street is classified as a Secondary Arterial. The posted speed limit is 40 mph. On-street bicycle lanes (Class II) and sidewalks are provided on both sides of the street. On-street parking is permitted in select locations.

- **Los Alamitos Boulevard** is a six-lane divided roadway located west of the project site. According to the City of Los Alamitos General Plan, Los Alamitos Boulevard is classified as a Major Arterial. The posted speed limit is 35 mph. Sidewalks are provided on both sides of the street. On-street parking is permitted in select locations.

- **Katella Avenue** is a six-lane divided roadway located south of the project site. Katella Avenue is located in both City of Cypress and City of Los Alamitos jurisdictions. Katella Avenue is designated as a Major Arterial in the City of Cypress General Plan and as a Smart Street in the City of Los Alamitos General Plan. Katella Avenue is designated on the Orange County CMP as a CMP facility. The posted speed limit is 40 to 45 mph. Sidewalks are provided on both sides of the street. On-street parking is permitted in select locations.

- **Cerritos Avenue** is a four to five-lane divided roadway located north of the project site. According to both the City of Cypress and City of Los Alamitos General Plans, Cerritos Avenue is a Primary Arterial. The posted speed limit is 35 to 45 mph. Sidewalks are provided on both sides of the street, and on-street (Class II) bicycle lanes are provided on both sides between Walker Street and Denni Street. On-street parking is permitted in select locations.

- **Orangewood Avenue** is a four-lane undivided roadway located southeast of the project site. According to the City of Cypress General Plan, Orangewood Avenue is a Secondary Arterial. The posted speed limit is 40 mph. Sidewalks are provided on both sides of the street. On-street parking is not permitted.

All other roadways within the study area are local or collector streets.

Pedestrian Circulation. Sidewalks currently exist on both sides of Katella Avenue in the vicinity of the project site. There are pedestrian crosswalks at all signalized intersections in the vicinity of the project site. These facilities provide for pedestrian circulation between the project site and the surrounding areas.

Bicycle Circulation. On-street (Class II) bicycle lanes are provided on both sides of Cerritos Avenue (between Walker Street and Denni Street) and Bloomfield Street. There is a Class I bicycle lane on the south side of Cerritos Avenue between Walker Street and Denni Street. On-street bicycle lanes (Class II) and sidewalks are provided on both sides of Moody Street. There are no bicycle lanes on Katella Avenue.

Transit Facilities. Transit facilities will be accessible to and from the project site. An Orange County Transportation Authority (OCTA) bus stop is provided adjacent to the project site (OCTA Route 50). OCTA Route 50 provides transportation to/from the Cities of Orange and Long Beach via Katella Avenue. OCTA Route 50 runs at an approximately 30-minute headway during weekday peak hours. An OCTA bus stop is provided on Valley View Street/Katella Avenue within 1 mile of the project site (OCTA Route 21). OCTA Route 21 provides transportation to/from Buena Park and Sunset Beach via Valley View Street. OCTA Route 21 runs at an approximately 60-minute headway during weekday peak hours.

4.15.2.2 Existing Traffic Volumes and LOS Analysis

Existing turn movement counts were provided by the City of Cypress for nine of the study area intersections (October 2018) and additional turning movement counts were conducted for the remaining 10 study area intersections in May of 2019. All counts were conducted by National Data & Surveying Services (NDS).

Table 4.15.A summarizes the results of the existing peak-hour LOS analysis for the study area intersections. As discussed above, the ICU methodology for signalized intersections compares the v/c ratios of conflicting turn movements at an intersection, sums up these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The HCM intersection methodology presents LOS in terms of delay (in seconds per vehicle). The resulting delay is expressed in terms of LOS, as in the ICU methodology. As shown in Table 4.15.A, all study area intersections currently operate at satisfactory LOS during both peak hours.

Table 4.15.A: Existing Intersection Level of Service Summary

Intersection		Control	Peak Hour	Existing	
				ICU/Delay	LOS
1	Los Alamitos Boulevard/Cerritos Avenue	Signal	AM	0.704	C
			PM	0.745	C
2	Bloomfield Street/Cerritos Avenue	Signal	AM	0.693	B
			PM	0.739	C
3	Denni Street/Cerritos Avenue	Signal	AM	0.594	A
			PM	0.751	C
4	Moody Street/Cerritos Avenue	Signal	AM	0.572	A
			PM	0.756	C
5	Walker Street/Cerritos Avenue	Signal	AM	0.681	B
			PM	0.730	C
6	Valley View Street/Cerritos Avenue	Signal	AM	0.731	C
			PM	0.834	D
7	I-605 Northbound Ramps/Katella Avenue	Signal	AM	0.493	A
			PM	0.590	A
		Signal (Delay)	AM	2.8	A
			PM	4.1	A
8	Wallingsford Road – Walnut Street/Katella Avenue	Signal	AM	0.811	D
			PM	0.711	C
9	Los Alamitos Boulevard/Katella Avenue	Signal	AM	0.745	C
			PM	0.745	C
10	Bloomfield Street/Katella Avenue	Signal	AM	0.819	D
			PM	0.742	C
11	Lexington Drive/Katella Avenue	Signal	AM	0.579	A
			PM	0.592	A
12	Cottonwood Way/Katella Avenue	Signal	AM	0.371	A
			PM	0.447	A
13	Siboney Street/Katella Avenue	Signal	AM	0.461	A
			PM	0.524	A
14	Winners Circle/Katella Avenue	Signal	AM	0.396	A
			PM	0.521	A
15	Walker Street/Katella Avenue	Signal	AM	0.658	B
			PM	0.687	B
16	Valley View Street/Katella Avenue	Signal	AM	0.723	C
			PM	0.749	C
17	Valley View Street/Orangewood Avenue	Signal	AM	0.784	C
			PM	0.826	D
18	Lexington Drive/Farquhar Avenue	AWSC (Delay)	AM	8.8	A
			PM	9.7	A
19	Los Alamitos Boulevard/Farquhar Avenue	Signal	AM	0.614	B
			PM	0.618	B

Note: Delay is reported in seconds.
AWSC = all-way stop control
I-605 = Interstate 605
ICU = Intersection Capacity Utilization
LOS = level of service

4.15.3 Regulatory Setting

4.15.3.1 Federal Regulations

No federal policies or regulations pertaining to transportation are applicable to the proposed project.

4.15.3.2 State Regulations

Senate Bill 743. On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law and started a process that changes the methodology of a transportation impact analysis as part of CEQA requirements. SB 743 directed the California Office of Planning and Research (OPR) to establish new CEQA guidance for jurisdictions that removes the LOS method, which focuses on automobile vehicle delay and other similar measures of vehicular capacity or traffic congestion, from CEQA transportation analysis. Rather, vehicle miles traveled (VMT), or other measures that promote "the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses," are now be used as the basis for determining significant transportation impacts in the State.

***State CEQA Guidelines* Section 15064.3, Subdivision (b).** In January 2018, the State of California Office of Planning and Research (OPR) submitted a proposal for comprehensive updates to the *State CEQA Guidelines* to the California Natural Resources Agency. The submittal included proposed updates related to the analysis of greenhouse gas (GHG) emissions, energy, transportation impacts pursuant to SB 743, and wildfires, as well as revisions to Section 15126.2(a) in response to the California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369. On December 28, 2018, the updated *State CEQA Guidelines* went into effect.

As part of the update to the *State CEQA Guidelines*, Section 15064.3 was added and codifies that project-related transportation impacts are typically best measured by evaluating the project's VMT. Specifically, subdivision (b) focuses on specific criteria related to transportation analysis and is divided into four subdivisions: (1) land use projects, (2) transportation projects, (3), qualitative analysis, and (4) methodology. Subdivision (b)(1) provides guidance on determining the significance of transportation impacts of land use projects using VMT; projects located within 0.5 mile of high quality transit should be considered to have a less than significant impact. Subdivision (b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every project type; in these cases, a qualitative analysis may be used. Subdivision (b)(4) stipulates that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT. Although an agency may elect to be governed by the provisions of this section immediately, it is not required until July 1, 2020.

At this time, the City has not adopted a methodology to analyze VMT impacts within its jurisdiction. In addition, the City does not currently have thresholds or standards in place for assessing potential VMT impacts. Therefore, traffic impacts in this Draft EIR are based on the City's LOS thresholds.

4.15.3.3 Regional Regulations

Orange County Congestion Management Program. The Orange County Transportation Authority (OCTA) is a multimodal transportation agency that began in 1991 with the consolidation of seven separate agencies. OCTA serves Orange County residents and travelers by providing the following: countywide bus and paratransit service; Metrolink rail service; the 91 Express Lanes; freeway, street, and road improvement projects; individual and company commuting solutions; motorist aid services; and regulation of taxi operations. State law requires that a Congestion Management Program (CMP) be developed, adopted, and updated biennially for every county that includes an urbanized area, and requires that it include every city and the county government within that county. As the Congestion Management Agency for Orange County, OCTA is responsible for implementing the Orange County CMP.

OCTA adopted the CMP in 1991 to reduce traffic congestion and to provide a mechanism for coordinating land use and development decisions in Orange County. Compliance with the CMP requirements ensures a city's eligibility to compete for State gas tax funds for local transportation projects.

4.15.3.4 Local Regulations

City of Cypress General Plan. The Cypress General Plan is the primary source of long-range planning and policy direction that will guide growth and preserve the quality of life within the community. The future of Cypress, like that of all cities, will be the result of past and current decision making by those who have a local role in the development process, including residents, property and business owners, elected officials and City staff. The 2000 General Plan Update supersedes the 1993 General Plan Update and is based upon the community's vision for Cypress and expresses the community's long-term goals. Implementation of the Cypress General Plan will ensure that future projects and improvements are consistent with the community's goals, policies, and objectives.

Circulation Element. The Circulation Element is a general guide for the planning, development, and enhancement of the City of Cypress circulation system, based on existing and anticipated land uses. Most transportation-related plans and programs are established with the goal of maintaining acceptable operating LOS on the City's transportation system. The City of Cypress has adopted LOS D or better as the desired citywide operating standard for most City streets. However, given the influence of regional traffic on Valley View Street, Lincoln Avenue, and Katella Avenue, which are beyond the control of the City of Cypress, LOS E or better has been adopted as the minimum operating Level of Service for street segments and intersections on these arterials. The Circulation Element goals and policies define the City's vision for a balanced, efficient circulation system which incorporate many modes of travel and which allows for the safe movement of people and goods in and around Cypress. Based on the Circulation Element, the local and regional street network is built out in Cypress. Similarly, the bikeway system is generally built out in the project vicinity, with the exception of a planned bike lane on Walker Street south of Cerritos Avenue. This proposed bike lane would connect to the existing bike lane on Walker Street north of Cerritos Avenue.

City of Los Alamitos General Plan. The City of Los Alamitos General Plan establishes a comprehensive framework through which the City manages its growth and development to ensure it efficiently and effectively provides public facilities and services. The General Plan guides land use

and development for the entire Los Alamitos planning area, which includes the City, JFTB Los Alamitos, and the unincorporated community of Rossmoor. The General Plan identifies JFTB Los Alamitos as Community & Institutional/JFTB. The Los Alamitos City Council adopted an updated General Plan on March 23, 2015, to better reflect current conditions, refine goals and policies, and position the City for success over the next 20 years through the year 2035. The new General Plan replaces the previous plan adopted in 1990.

Mobility and Circulation Element. The City of Los Alamitos analyzes the operation of the roadway system in Los Alamitos and Rossmoor in terms of LOS. Similar to the City of Cypress, the City of Los Alamitos considers LOS D as the upper limit of satisfactory operations for intersections, except at intersections along Katella Avenue, where LOS E is acceptable.

4.15.4 Thresholds of Significance

The thresholds for transportation impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to transportation if it would:

Threshold 4.15.1: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Threshold 4.15.2: Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Threshold 4.15.3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Threshold 4.15.4: Result in inadequate emergency access?

4.15.5 Project Impacts

Threshold 4.15.1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. The proposed project would be required to comply with General Plan policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The proposed project would also be required to comply with the City's transportation-related goals, policies, and metrics for determining traffic impacts, as well as the *Orange County Congestion Management Program* (CMP) (2019). The project's consistency with these plans is described in detail below.

A trip generation analysis was conducted to determine the number of trips that would occur following implementation of the project. As shown in Table 4.15.B, the project has the potential to generate approximately 4,978 average daily trips (ADT), including 164 trips (68 inbound and 96 outbound) in the a.m. peak hour and 323 trips (176 inbound and 147 outbound) in the p.m. peak hour.

Table 4.15.B: Project Trip Generation Summary

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
Shopping Center		TSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81
Multifamily Housing (Mid-Rise)		du	5.44	0.09	0.27	0.36	0.27	0.17	0.44
Hotel		rooms	8.36	0.28	0.19	0.47	0.31	0.29	0.60
Multiplex Movie Theater		screens	220.00	-	-	-	7.00	6.73	13.73
Project Trip Generation									
Shopping Center	20.800	TSF	785	12	8	20	38	41	79
Multifamily Housing (Mid-Rise)	251	du	1,365	23	67	90	68	42	110
Hotel	120	rooms	1,003	34	22	56	37	35	72
Multiplex Movie Theater	10	screens	2,200	0	0	0	70	67	137
Gross Trip Generation			5,353	69	97	166	213	185	398
Internal Capture Reduction[2]			(375)	(1)	(1)	(2)	(26)	(26)	(52)
Shopping Center Pass-By Trip Reduction (PM-34%)[3]			0	0	0	0	(11)	(12)	(23)
Net Trip Generation			**4,978**	**68**	**96**	**164**	**176**	**147**	**323**

[1] Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017).
Land Use Code 820 - Shopping Center
Land Use Code 221 - Multifamily Housing (Mid-Rise)
Land Use Code 310 - Hotel
Land Use Code 445 - Multiplex Movie Theater has been used for PM trip rates. Multiplex Movie Theater rate was not available for daily.
Land Use Code 444 - Movie Theater has been used for daily rate. The movie theater is assumed to be closed in the AM peak hour.

[2] Internal capture referenced from NCHRP 684 Internal Trip Capture Estimation Tool (AM 1%, PM 13%). Internal capture for daily is the average of internal capture for AM and PM (7%).

[3] Pass-by percentages are based on the ITE *Trip Generation Handbook*, 3rd Edition.

ADT = average daily trips
du = dwelling units
TSF = thousand square feet

In order to determine impacts at roadway intersections associated with implementation of the project (i.e., the Existing Plus Project condition), the results of the trip generation analysis for the proposed project were added to existing baseline traffic volumes at the study area intersections. Tables 4.15.C summarizes the results of the Existing Plus Project peak hour LOS analysis. As shown in Table 4.15.C, with the addition of the project, all study area intersections would continue to operate at satisfactory LOS during both peak hours. Project impacts are based on LOS significance criteria of the City of Cypress (for Cypress intersections) and/or the City of Los Alamitos (for Los Alamitos intersections). As previously stated, vehicle access to the project site would be provided via Siboney Street, Winners Circle, and a right-turn-in/out-only driveway directly on Katella Avenue.

Both intersections of Siboney Street/Katella Avenue and Winners Circle/Katella Avenue are analyzed as study intersections in the TIA, and would operate at LOS B or better during both peak hours in the Existing Plus Project and Opening Year Plus Project Conditions.

Table 4.15.C: Existing Plus Project Intersection Level of Service Summary

	Intersection	Control	Peak Hour	Existing		Existing Plus Project		Project Impact	
				ICU/ Delay	LOS	ICU/ Delay	LOS	Δ ICU/ Delay	Yes/No
1	Los Alamitos Boulevard/Cerritos Avenue	Signal	AM	0.704	C	0.705	C	0.001	No
			PM	0.745	C	0.747	C	0.002	No
2	Bloomfield Street/Cerritos Avenue	Signal	AM	0.693	B	0.693	B	0.000	No
			PM	0.739	C	0.741	C	0.002	No
3	Denni Street/Cerritos Avenue	Signal	AM	0.594	A	0.594	A	0.000	No
			PM	0.751	C	0.754	C	0.003	No
4	Moody Street/Cerritos Avenue	Signal	AM	0.572	A	0.572	A	0.000	No
			PM	0.756	C	0.757	C	0.001	No
5	Walker Street/Cerritos Avenue	Signal	AM	0.681	B	0.684	B	0.003	No
			PM	0.730	C	0.734	C	0.004	No
6	Valley View Street/Cerritos Avenue	Signal	AM	0.731	C	0.733	C	0.002	No
			PM	0.834	D	0.840	D	0.006	No
7	I-605 Northbound Ramps/Katella Avenue	Signal	AM	0.493	A	0.498	A	0.005	No
			PM	0.590	A	0.599	A	0.009	No
		Signal (Delay)	AM	2.8	A	2.9	A	0.1	No
			PM	4.1	A	4.1	A	0.0	No
8	Wallingsford Road – Walnut Street/Katella Avenue	Signal	AM	0.811	D	0.815	D	0.004	No
			PM	0.711	C	0.718	C	0.007	No
9	Los Alamitos Boulevard/Katella Avenue	Signal	AM	0.745	C	0.752	C	0.007	No
			PM	0.745	C	0.756	C	0.011	No
10	Bloomfield Street/Katella Avenue	Signal	AM	0.819	D	0.828	D	0.009	No
			PM	0.742	C	0.755	C	0.013	No
11	Lexington Drive/Katella Avenue	Signal	AM	0.579	A	0.585	A	0.006	No
			PM	0.592	A	0.608	B	0.016	No
12	Cottonwood Way/Katella Avenue	Signal	AM	0.371	A	0.377	A	0.006	No
			PM	0.447	A	0.460	A	0.013	No
13	Siboney Street/Katella Avenue	Signal	AM	0.461	A	0.480	A	0.019	No
			PM	0.524	A	0.551	A	0.027	No
14	Winners Circle/Katella Avenue	Signal	AM	0.396	A	0.405	A	0.009	No
			PM	0.521	A	0.591	A	0.070	No
15	Walker Street/Katella Avenue	Signal	AM	0.658	B	0.666	B	0.008	No
			PM	0.687	B	0.691	B	0.004	No
16	Valley View Street/Katella Avenue	Signal	AM	0.723	C	0.730	C	0.007	No
			PM	0.749	C	0.758	C	0.009	No
17	Valley View Street/Orangewood Avenue	Signal	AM	0.784	C	0.786	C	0.002	No
			PM	0.826	D	0.832	D	0.006	No
18	Lexington Drive/Farquhar Avenue	AWSC	AM	8.8	A	8.8	A	0.0	No
			PM	9.7	A	9.7	A	0.0	No
19	Los Alamitos Boulevard/Farquhar Avenue	Signal	AM	0.614	B	0.615	B	0.001	No
			PM	0.618	B	0.621	B	0.003	No

Note: Delay is reported in seconds.
AWSC = all-way stop control
I-605 = Interstate 605
ICU = Intersection Capacity Utilization
LOS = level of service

As such, the proposed project would not conflict with applicable provisions in the City's General Plan Circulation Element regarding the maintenance of a safe, efficient, economical, and aesthetically pleasing transportation system providing for the movement of people, goods, and services to serve the existing and future needs of the City of Cypress. Additionally, the proposed project would be consistent with all relevant goals included in the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy regarding transit and active transportation as shown in Table 4.10.A in Section 4.10, Land Use and Planning.

Therefore, the project could be implemented with no significant peak-hour impacts when compared to existing conditions. No mitigation would be required.

Less Than Significant Impact.

Conformance with the Orange County CMP As previously noted, a TIA is required for CMP purposes for any proposed development generating 2,400 or more daily trips, with the exception of developments that will directly access a CMP Highway System roadway segment, for which the threshold for requiring a TIA is reduced to 1,600 or more trips per day. Because the proposed project is estimated to generate 4,978 daily trips, a TIA was prepared for the proposed project in compliance with CMP standards.

The CMP Highway System includes two roadway arterials in the project area: Valley View Street and Katella Avenue. In addition, the CMP Highway System includes two intersections within the study area: Valley View Street/Katella Avenue and I-605 northbound ramps/Katella Avenue. These two intersections are both study intersections within the project study area.

Based on CMP requirements, the study area for a project must extend far enough to cover any CMP roadway segment on which the project traffic would represent 3 percent or more of the roadway segment's LOS E capacity. According to the OCTA's *Guidance for Administration of the Orange County Master Plan of Arterial Highways* (2017), the LOS E capacity for a six-lane major roadway (i.e., Katella Avenue and Valley View Street) is 56,300 vehicles per day.

The project's ADT on Katella Avenue exceeds the 3 percent threshold on Katella Avenue immediately east and west of the project site. However, the project's ADT is less than the 3 percent threshold on Katella Avenue and Valley View Street at the traffic study area boundaries based on the distribution of project trips throughout the traffic study area. Therefore, the traffic study area for the project is sufficiently sized to cover all roadway segments adding the 3 percent threshold of the project's ADT to the CMP roadway segment's LOS E capacity. As such, the traffic analysis satisfies the CMP requirements. Furthermore, as discussed elsewhere in this section, the project is not expected to result in a significant traffic impact at any CMP intersection, as shown in Table 4.15.C above and in Table 4.15.D provided later in this section. Therefore, this TIA complies with the CMP requirements.

Threshold 4.15.2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. According to *State CEQA Guidelines* Section 15064.3(a), project-related transportation impacts are generally best measured by evaluating the project's

vehicle miles traveled (VMT). VMT refers to the amount and distance of automobile travel attributable to a project.

State CEQA Guidelines Section 15064.3(b) sets forth criteria for analyzing transportation impacts, breaking down the methodology based on project type and specifying other criteria for conducting VMT analysis.

For land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects located within 0.5 mile of an existing high-quality transit corridor should be considered to have a less than significant impact. *State CEQA Guidelines* Section 15064.3(b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) of the *State CEQA Guidelines*, Section 15064.3, acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every project type; in these cases, a qualitative analysis may be used. The regulation goes on to state that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT. (*State CEQA Guidelines* Section 15064.3(b)(4)). It is important to note that *State CEQA Guidelines* Section 15064.3(c) states that while an agency may elect to be governed by the provisions of this section immediately, it is not required until July 1, 2020.

At this time, the City has not adopted a methodology to analyze VMT impacts within its jurisdiction. In addition, the City does not currently have thresholds or standards in place for assessing potential VMT impacts. Therefore, traffic impacts in this Draft EIR are based on the City's LOS thresholds and the analysis provided under Threshold 4.15.1, above.

Threshold 4.15.3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. As discussed in Chapter 3.0, Project Description, the proposed project does not propose any major traffic infrastructure improvements. In addition, as described in Section 4.10, Land Use and Planning, the project would not include any land uses that would be incompatible with surrounding uses. The proposed project would generate a similar vehicle mix to other surrounding land uses, consisting primarily of single-occupancy vehicles and distribution trucks. Additionally, all new driveways at the project site would be subject to the provisions of the City of Cypress design standards to alleviate design feature and safety hazards, which would reduce any potential impacts to less than significant levels. Therefore, the proposed project's impacts would be less than significant. No mitigation is required.

Threshold 4.15.4: Would the project result in inadequate emergency access?

Less Than Significant Impact. The project site would be accessed via Siboney Street (and the existing traffic signal at Siboney Street/Katella Avenue), Winners Circle (and the existing traffic signal at Winners Circle/Katella Avenue), and a right-turn-in/out-only driveway directly on Katella Avenue. As discussed above under Threshold 4.15.4, the project driveways would be designed to conform to the City's standards. Therefore, the project's impacts associated with emergency access would be less than significant. No mitigation is required.

4.15.6 Level of Significance Prior to Mitigation

Information related to *State CEQA Guidelines* Section 15064.3 subdivision (b) was not provided because the City has not yet adopted VMT metrics or thresholds of significance related to VMT, and the use of VMT is not yet required under Section 15064.3. The proposed project would have less than significant impacts related to conflicts with a program, plan, ordinance, or policy addressing the circulation system, hazards due to geometric design features and emergency access. In addition, the project is not expected to result in a significant impact at any CMP intersection. Therefore, no mitigation is required.

4.15.7 Regulatory Compliance Measures and Mitigation Measures

No regulatory compliance measures or mitigation measures are required for the proposed project.

4.15.8 Level of Significance after Mitigation

The proposed project's impacts related to traffic/transportation would be less than significant. No mitigation is required.

4.15.9 Cumulative Impacts

As defined in the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects. The cumulative impact area for traffic/transportation is the traffic study area outlined in the TIA, which includes 17 intersections in the Cities of Cypress and Los Alamitos. A list of approved/ pending projects provided by the Cities of Cypress and Los Alamitos and the surrounding Cities of Garden Grove, Stanton, La Palma, Buena Park, and Hawaiian Gardens were reviewed to determine whether projects in the vicinity of the project site (if any) should be included in the cumulative condition. With concurrence from the City of Cypress, all 17 of the related projects listed in Table 4.A, Summary of Related Projects, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures, were included in the cumulative (Opening Year 2021) condition.

4.15.9.1 Project Plus Cumulative (Opening Year 2021) Condition

Less Than Significant Impact. According to the Applicant/Developer, the project would open in 2021. To develop a Year 2021 condition, an ambient growth rate of 0.5 percent per year (i.e., 1.5 percent total growth for 3 years) was applied to the existing traffic counts. This condition also included the proposed project trips. Application of a 0.5 percent per year growth rate to the existing traffic volumes is considered conservative and would account for any additional future development in the project vicinity.

Table 4.15.D summarizes the results of the Existing Plus Project Plus Cumulative peak hour LOS analysis for the study area intersections. As shown in Table 4.15.D, with the addition of the proposed project, all study area intersections are forecast to operate at satisfactory LOS during both peak hours. Therefore, a significant project impact is not expected to occur at any study area intersection in the Opening Year (2021) conditions.

Table 4.15.D: Existing Plus Project Plus Cumulative Intersection

	Intersection	Control	Peak Hour	Opening Year ICU/ Delay	Opening Year LOS	Opening Year Plus Project ICU/ Delay	Opening Year Plus Project LOS	Project Impact Δ ICU/ Delay	Project Impact Yes/No
1	Los Alamitos Boulevard/Cerritos Avenue	Signal	AM	0.725	C	0.726	C	0.001	No
			PM	0.770	C	0.770	C	0.000	No
2	Bloomfield Street/Cerritos Avenue	Signal	AM	0.707	C	0.707	C	0.000	No
			PM	0.757	C	0.758	C	0.001	No
3	Denni Street/Cerritos Avenue	Signal	AM	0.626	B	0.626	B	0.000	No
			PM	0.812	D	0.817	D	0.005	No
4	Moody Street/Cerritos Avenue	Signal	AM	0.594	A	0.594	A	0.000	No
			PM	0.782	C	0.784	C	0.002	No
5	Walker Street/Cerritos Avenue	Signal	AM	0.711	C	0.714	C	0.003	No
			PM	0.755	C	0.759	C	0.004	No
6	Valley View Street/Cerritos Avenue	Signal	AM	0.755	C	0.756	C	0.001	No
			PM	0.861	D	0.866	D	0.005	No
7	I-605 Northbound Ramps/Katella Avenue	Signal	AM	0.503	A	0.508	A	0.005	No
			PM	0.602	B	0.611	B	0.009	No
		Signal (Delay)	AM	3.0	A	4.0	A	1.0	No
			PM	4.2	A	4.3	A	0.1	No
8	Wallingsford Road – Walnut Street/Katella Avenue	Signal	AM	0.828	D	0.831	D	0.003	No
			PM	0.726	C	0.733	C	0.007	No
9	Los Alamitos Boulevard/Katella Avenue	Signal	AM	0.764	C	0.770	C	0.006	No
			PM	0.766	C	0.773	C	0.007	No
10	Bloomfield Street/Katella Avenue	Signal	AM	0.838	D	0.848	D	0.010	No
			PM	0.762	C	0.776	C	0.014	No
11	Lexington Drive/Katella Avenue	Signal	AM	0.613	B	0.620	B	0.007	No
			PM	0.623	B	0.630	B	0.007	No
12	Cottonwood Way/Katella Avenue	Signal	AM	0.392	A	0.399	A	0.007	No
			PM	0.470	A	0.484	A	0.014	No
13	Siboney Street/Katella Avenue	Signal	AM	0.520	A	0.543	A	0.023	No
			PM	0.556	A	0.584	A	0.028	No
14	Winners Circle/Katella Avenue	Signal	AM	0.424	A	0.450	A	0.026	No
			PM	0.560	A	0.629	B	0.069	No
15	Walker Street/Katella Avenue	Signal	AM	0.695	B	0.703	C	0.008	No
			PM	0.703	C	0.722	C	0.019	No
16	Valley View Street/Katella Avenue	Signal	AM	0.756	C	0.762	C	0.006	No
			PM	0.771	C	0.779	C	0.008	No
17	Valley View Street/Orangewood Avenue	Signal	AM	0.805	D	0.808	D	0.003	No
			PM	0.848	D	0.853	D	0.005	No
18	Lexington Drive/Farquhar Avenue	AWSC	AM	8.8	A	8.8	A	0.0	No
			PM	9.8	A	9.8	A	0.0	No
19	Los Alamitos Boulevard/Farquhar Avenue	Signal	AM	0.624	B	0.625	B	0.001	No
			PM	0.630	B	0.633	B	0.003	No

Note: Delay is reported in seconds.
AWSC = all-way stop control
I-605 = Interstate 605
ICU = Intersection Capacity Utilization
LOS = level of service

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