4.13 TRANSPORTATION/TRAFFIC

This EIR section analyzes the potential for adverse impacts on existing transportation and traffic conditions resulting from implementation of the proposed project. Data used to prepare this section were taken from the City's General Plan Circulation Element, *Beach-Edinger Corridors Specific Plan Area Traffic Analysis for Beach-Warner Project* dated December 8, 2010 (Appendix D), and the *Beach Boulevard and Edinger Avenue Corridors Specific Plan Traffic Study* dated August 2009. In addition, analysis and findings from the *Beach and Edinger Corridors Specific Plan EIR*, which was certified in December 2009, was used where appropriate. Full bibliographic entries for all reference materials are provided in Section 4.13.5 (References) at the end of this section.

4.13.1 Environmental Setting

This section provides an assessment of existing conditions in and around the project study area, including a description of the existing street and highway system, traffic volumes on these facilities, and operating conditions at selected intersections. This section also analyzes the proposed project and its substantial compliance with the findings of the transportation/traffic section of the EIR prepared for the greater BECSP area of which this project is a part. Therefore, this section relies on both the project-specific traffic information provided in the traffic study prepared for this project as well as the information provided in the certified BECSP EIR and traffic study. The traffic impact area analyzed for the project includes the area immediately surrounding the proposed project site, and the intersections of Beach Boulevard and Warner Avenue, and Beach Boulevard and Slater Avenue (Figure 4.13-1 [Project Study Area Intersections]).

4.13.2 Regulatory Framework

Refer to Section 4.13.2 (Regulatory Framework) of the BECSP Program EIR, for applicable federal, state, and local regulations that would apply to the proposed project. No new regulations have been implemented since the certification of the Program EIR.

The BECSP Development Code, which includes development standards, development regulations, and guidelines, governs all development actions with the BECSP area, including the proposed project site. The proposed project would be subject to development standards specific to the proposed project site's BECSP designation of Neighborhood Center, included as BECSP Section 2.1.5 (Neighborhood Centers).

General Plan and BECSP Consistency Analysis

The proposed project is located at the southwest corner of Beach Boulevard and Warner Avenue. Alternative modes of transportation would be accessible for both patrons of the commercial uses within the project area, as well residents of the proposed project. The OCTA operates bus line 79 on Warner Avenue and bus line 29 on Beach Boulevard providing a convenient location for use by future residents. The walkability of the surrounding area, and access to public transit would promote objectives relating to traffic reduction and increased reliance on alternative modes of transportation included in the Circulation Element and the Growth Management Element of the City's General Plan. As discussed further in

Section 4.13.3 (Project Impacts and Mitigation), all of the intersections within the project study area would operate at acceptable levels of service with the implementation of BECSP mitigation measures, including those within the immediate vicinity of the project site (Beach Boulevard and Warner Avenue). Therefore, the proposed project would meet acceptable minimum standards as stated in General Plan Policy 5.3.4, and would not conflict with this policy or the BECSP. Additionally, the proposed project would be considered consistent with the Goals and Policies of the Huntington Beach General Plan.

The proposed project is also in substantial compliance with the objectives of the BECSP Neighborhood Center designation by providing ground floor commercial and mixed-use residential in an area with local amenities, including access to public transit. The proposed project is a key component in achieving the "critical mass" of mixed uses in the neighborhood, to create a vibrant and walkable neighborhood.

4.13.3 Project Impacts and Mitigation

Analytic Method

Intersection Analysis

As part of the environmental analysis of the BECSP, intersection capacity utilization (ICU) analysis was performed at intersections throughout the overall BECSP area. ICU values are used to determine levels of service at study area intersection locations and provide a means to quantitatively estimate incremental traffic impacts. To calculate the ICU value for an intersection, the volume of traffic using an intersection is compared with the capacity of the intersection. The ICU is usually expressed as a decimal percent (e.g., 0.86). The decimal percent represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The ICU-based level of service (LOS) is defined below in Table 4.13-1 (ICU Level of Service).

Table 4.13-1 ICU Level of Service

Level of Service	*Intersection Capacity Utilization (ICU) Value*
A	0–0.60
B	0.61–0.70
C	0.71–0.80
D	0.81–0.90
E	0.91–1.00
F	> 1.00

SOURCE: Austin-Foust Associates, Inc., *City of Huntington Beach, Beach Boulevard and Edinger Avenue Corridors Specific Plan Traffic Study* (August 2009), Table 1-1.

Levels of service for signalized intersections are defined in terms of control delay as follows:

- LOS A describes operations with low control delay, up to 10 seconds per vehicle. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.

Source: Google Earth Pro, basemap, 2010; PBS&J, an Atkins company, 2010.

FIGURE **4.13-1**

Project Study Area Intersections

- LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than the LOS A, causing higher levels of delay.
- LOS C describes operations with control delay greater than 20 seconds and up to 35 seconds per vehicle. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though may still pass through the intersection without stopping.
- LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high volume to capacity (V/C) ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
- LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent.
- LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high V/C ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The City of Huntington Beach considers LOS D acceptable, whereas LOS E is the performance standard for the CMP intersections.

The criterion for a significant impact is an ICU increase of one percent or more. A determination is carried out by summing the project traffic ICU contribution to each critical movement (such as left turns within an intersection) in the ICU calculation to three decimal places (i.e., one decimal place for a percentage value).

The 2030 ICU values and LOS with the BECSP for intersections in close proximity to the project site are included in Table 4.13-2 (2030 ICU Summary). As shown in Table 4.13-2, the intersection of Beach Boulevard and Warner Avenue shows a PM deficiency (LOS E) and Beach Boulevard at Slater Avenue operates at an acceptable LOS (LOS D) in 2030 with the BECSP.

Table 4.13-2 2030 ICU Summary

Intersection	AM Peak Hours		PM Peak Hours	
	ICU	LOS	ICU	LOS
Beach Boulevard and Warner Avenue	0.78	C	0.95	E
Beach Boulevard and Slater Avenue	0.86	D	0.90	D

SOURCE: Austin-Foust Associates, Inc., *Beach and Edinger Specific Plan Area Traffic Analysis for Beach-Warner Project* (December 8, 2010).

Project Traffic

The traffic related to the proposed project has been calculated by determining the average daily trips (ADT) and Peak Hour trips generated from the project site based on land use characteristics and quantities. These discreet quantities of traffic are then distributed throughout the project area on the existing roadway network.

Project Trip Generation

Trip generation represents the amount of traffic attracted to and produced by a particular land use, project site, or development.

Existing Conditions

The trip generation for the project site is summarized in Table 4.13-3 (Trip Generation Comparison for Beach and Warner Project), along with existing trip generation based on the existing land uses. A detailed land use and trip generation summary, including trip generation rate sources, can be found in the traffic study (Appendix D).

As shown in Table 4.13-3, the proposed project generates more AM peak hour trips (700 trips versus 621 trips), fewer PM peak hour trips (829 trips versus 892 trips), and fewer daily trips (8,210 trips versus 8,853 trips) than the existing land uses generate. The proposed project would result in a 13 percent increase in the AM peak hours, an 8 percent decrease in the PM peak hours, and an overall 7 percent trip reduction for ADT. Figure 4.13-2 (Project Peak Hour Traffic Volumes) shows the distribution of peak hour trips across the project access points as well as the operation of each access point.

Specific Plan

Table 4.13-3 compares the estimated number of trips generated by the proposed project based to the estimated number of trips generated by land uses approved under the BECSP for the project site.[72] As shown in Table 4.13-3, the proposed project generates fewer AM peak hour trips (700 trips versus 748 trips), fewer PM peak hour trips (829 trips versus 1,062 trips), and fewer daily trips (8,210 trips versus 12,965 trips). The proposed project would result in 6 percent decrease in AM peak hours, a 22 percent decrease in PM peak hours, and an overall 46 percent reduction of ADT.

Project Trip Distribution

Trip distribution and assignment represents the directional orientation of traffic to and from an individual parcel. Trip distribution is influenced by existing travel patterns, the geographic location of the individual parcels, the location of residential areas, commercial and recreational opportunities, and the proximity of the regional freeway system. The geographic distribution of trips in the study area to and

[72] This represents a conservative estimate of development anticipated for the project site under the Specific Plan. While the proposed project was considered for 272 residential units in one Traffic Analysis Zone (TAZ) of the Specific Plan, the currently vacant lot at the south end of the project site was in a separate TAZ and was contemplated to represent some level of development/trip credit. However, that potential credit has not been included in this analysis and the baseline SP conditions are assumed to be those of the IS/NOP issued in 2008 for the proposed project.

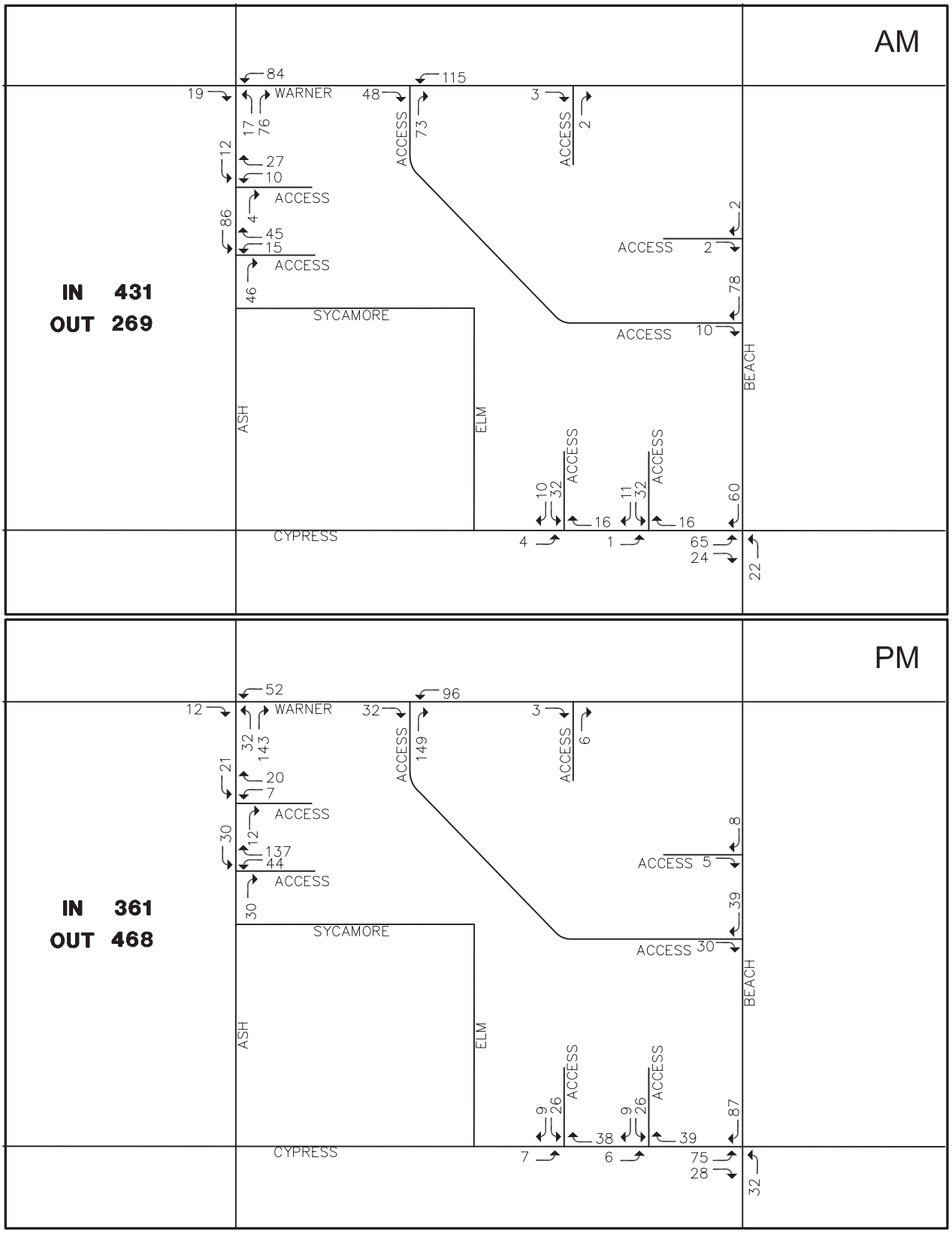
Table 4.13-3 Trip Generation Comparison for Beach and Warner Project

Project Description	Amount	Peak Hour						ADT
		AM			PM			
		In	Out	Total	In	Out	Total	
Proposed Project (Existing development to remain and new construction)								
Office Tower (Existing)	196,000	267	37	***304***	49	243	***292***	2,158
General Commercial (Existing)	13,414	8	5	***13***	25	25	***50***	576
Restaurant (Existing)	12,322	74	68	***142***	81	56	***137***	1,567
General Commercial	29,600 sf	18	12	***30***	54	56	***110***	1,271
Restaurant	6,000	36	33	***69***	40	27	***67***	763
Mixed-Use Residential	279 du	28	114	***142***	112	61	***173***	1,875
Project Trip Generation Total		***431***	***269***	***700***	***361***	***468***	***829***	***8,210***
Existing Conditions								
General Commercial (Existing)	13,414	8	5	***13***	25	25	***50***	576
Restaurant	18,322	110	101	***211***	121	84	***205***	2,329
Office Tower	196,000	267	37	***304***	49	243	***292***	2,158
Single-Story Office	24,200	29	6	***35***	7	24	***31***	309
Health/Fitness Club	42,343	26	32	***58***	85	64	***149***	1,394
Movie Theater	26,730	0	0	***0***	155	10	***165***	2,087
Existing Trip Generation Total		***440***	***181***	***621***	***442***	***450***	***892***	***8,853***
Net Change from Existing		-9	88	***79***	-81	18	***-63***	**-643**
% Difference from Existing				***13%***			***-8%***	**-7%**
Approved BECSP Land Uses for the Project Site								
Mixed-Use Residential	272 du	27	112	139	109	60	169	1,828
Mixed-Use Commercial	15,000	14	13	27	19	20	40	602
General Commercial	242,340	308	274	582	419	434	853	12,965
Approved BECSP Land Uses Trip Generation Total		***431***	***269***	***700***	***361***	***468***	***829***	***8,210***
Net Change from Approved BECSP		82	-130	***-48***	-186	-46	***-233***	**-7,185**
% Difference from Approved BECSP				***-6%***			***-22%***	**-46%**

SOURCES: Austin-Foust Associates, Inc., *Beach-Edinger Corridors Specific Plan Area Traffic Analysis for Beach-Warner Project* (December 20, 2010), Tables 1 and 2.

ADT = average daily traffic; du = dwelling unit; sf = square feet

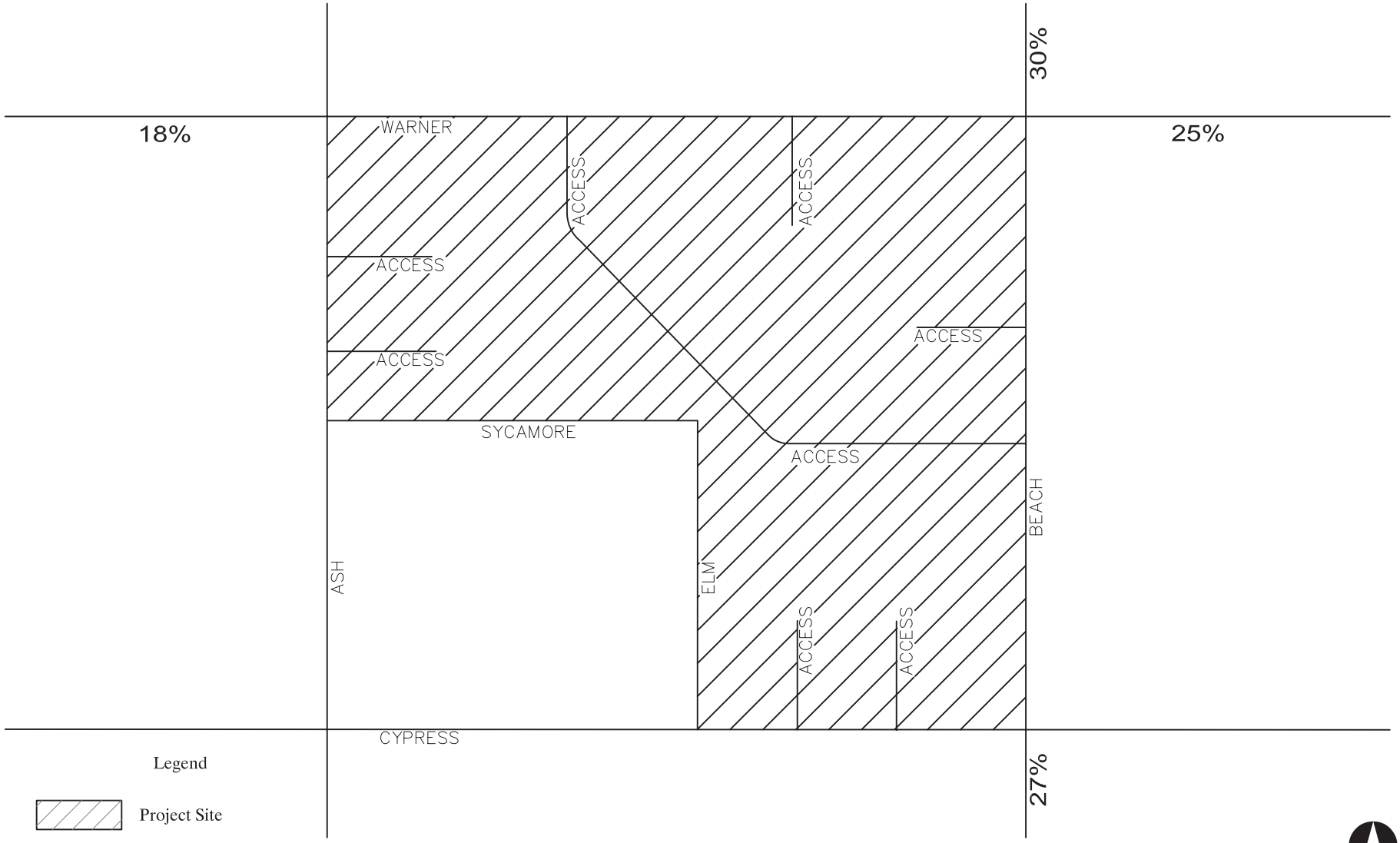
from the project was estimated using distribution patterns derived from the Huntington Beach Traffic Model (HBTM). This is based on the distribution of daily trips generated by the project, as assigned to the study area street system. Figure 4.13-3 (Project Trip Distribution) shows the project's future trip distribution.



***Source*:** Austin-Foust Associates, Inc., 2010.

FIGURE **4.13-2**

Project Peak Hour Traffic Volumes



***Source*:** Austin-Foust Associates, Inc., 2010.

FIGURE **4.13-3**

Project Trip Distribution

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2010 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on transportation/traffic if it would do any of the following:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit
- Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access
- Result in inadequate parking capacity
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

Effects Not Found to Be Significant

Threshold	Would the proposed project result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks?

The project area is not located within 2 miles of a public or private airstrip. However, a private helipad located on the rooftop of the office tower would remain on the project site with implementation of the proposed project. The project would not result in a change to the air traffic patterns surrounding this helipad, nor will it change the air traffic levels at the site. The project does not propose any structures of substantial height to interfere with existing airspace or flight patterns. ***No impact*** would occur.

Impacts and Mitigation Measures

Threshold	Would the proposed project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Impact 4.13-1 **Under Year 2030 conditions, implementation of the proposed project could conflict with the City's acceptable LOS of service standard of D or better identified in Policy CE 2.1.1 of the General Plan for the performance of the project area roadway system. However, with the incorporation of BECSP mitigation, this would be a *less than significant* impact.**

Year 2030 volumes used for this analysis were derived using the Huntington Beach Traffic Model (HBTM). Year 2030 conditions of the proposed project include build-out of the City's General Plan and regional growth projections from OCTA.

As shown in Table 4.13-3 (Trip Generation Comparison for Beach and Warner Project), the proposed project would result in a 13 percent increase in AM peak hour trips, an 8 percent decrease in PM peak hour trips, and a 7 percent decrease in ADT compared to existing conditions. This can be credited to the change in land uses and the associated trip generation.

Table 4.13-4 (ADT Volume Summary) presents the ADT volumes anticipated from full build out of the BECSP, as well as those anticipated in 2030 with build out of the BECSP and the proposed project. A project consisting of 272 residential dwelling units, 29,600 sf of retail uses, 6,000 sf of restaurant uses, and 7,000 sf of residential common area was contemplated for the proposed project site and was factored into the BECSP traffic analysis. The project, as proposed, is seven dwelling units larger than the project contemplated in the BECSP traffic analysis.

Table 4.13-4 ADT Volume Summary

Location	*2030 BECSP ADT Volume*	*2030 ADT Volume with Proposed Project*	*% Change*
Beach Boulevard north of Warner Avenue	66,000	63,845	-3%
Beach Boulevard south of Warner Avenue	64,000	62,707	-2%
Warner Avenue west of Beach Boulevard	40,000	38,204	-4%
Warner Avenue east of Beach Boulevard	43,000	41,060	-4%

SOURCE: Austin-Foust Associates, Inc., *Beach and Edinger Specific Plan Area Traffic Analysis for Beach-Warner Project* (December 20, 2010).

As shown in Table 4.13-4, all segments are projected to have slight decreases in daily traffic volumes compared to daily traffic volumes projected for the BECSP in 2030, as result of the 7 percent reduction in ADT at the project site.[73] However, the percentage change would be less than one percent. Based on this reduction in overall ADT, the proposed project would not exceed anticipated daily traffic volumes with the BECSP that were determined to be less than significant in the BECSP EIR.

On Ash Street, south of Warner Avenue, and Cypress Avenue, west of Beach Boulevard, where direct access to proposed parking garages would be available, the proposed project would result in a decrease in ADT over existing 2010 volumes. Based on existing residential land uses located along these roadways, 2010 ADT volumes are 567 trips on Ash Street and 328 trips on Cypress Avenue. The proposed project

[73] 2030 BECSP ADT Volumes consider a project consisting of 272 residential dwelling units, 29,600 sf of retail uses, 6,000 sf of restaurant uses, and 7,000 sf of residential common on the project site. The project, as proposed, is 7 dwelling units larger than the project considered for the BECSP.

would result in a 6 percent decrease in daily trips (37 trips) on Ash Street and a 7 percent decrease in daily trips (22 trips) on Cypress Street. As such, the local roadways will not experience a significant difference from existing conditions and the proposed project would slightly decrease trips on these local roadways.

Table 4.13-2 (2030 ICU Summary) which includes 2030 ICU values and LOS for the approved BECSP, shows an acceptable AM LOS (LOS C) and a PM deficiency (LOS E) at the intersection of Beach Boulevard and Warner Avenue, and shows that Beach Boulevard at Slater Avenue operates at an acceptable LOS (LOS D). Because the reduction in ADT with the proposed project is too small to result in a change, the anticipated LOS at these intersections would not change as a result of the proposed project. While overall ADT and PM peak hour trip generation would decrease, the proposed project would result in an increase of 88 outbound trips in the AM peak hour; however the impact of these additional trips will not change the LOS for this time period. As such, the deficiency identified at Beach Boulevard and Warner Avenue in the BECSP EIR and traffic analysis would require mitigation as part of the overall BECSP development, but the mitigation is not a direct project responsibility since the proposed project would result in a decrease in PM peak hour trip generation.

In conclusion, the proposed project would result in a reduced ADT at the project site, would not exceed overall ADT within the BECSP area in 2030, and would not result in a change to the LOS at intersections in the vicinity of the project site. Therefore, the proposed project would not conflict with applicable plans, including the City's General Plan, which established an LOS of D or better, and would result in a less than significant impact to the intersection in the immediate project vicinity.

Although mitigation is not a project responsibility, as required by mitigation measures BECSP MM4.13-1 through BECSP MM4.13-14, the proposed project will be subject to its fair-share contribution towards future improvements to the area roadway system. This contribution, and therefore satisfaction of mitigation, would reduce the project's impacts on the area roadway system to a less than significant level as determined in the certified BECSP Program EIR. As the proposed project is substantially consistent with the project contemplated in the BECSP EIR and would not result in additional ADT above that in the BECSP EIR, the proposed project is considered consistent with the analysis in the BECSP EIR and would result in less than significant impacts.

Therefore, impacts from the proposed project are considered ***less than significant*** with the implementation of mitigation measures BECSP MM4.13-1 through BECSP MM4.13-14.

BECSP MM4.13-1 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate westbound right-turn lane to the intersection of Beach Boulevard at Warner Avenue. Implementation of this improvement would require Caltrans approval.

BECSP MM4.13-2 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of dual northbound and southbound left-turn lanes to the intersection of Beach Boulevard at Garfield Avenue. Implementation of this improvement would require Caltrans approval.

BECSP MM4.13-3 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth northbound through lane to the intersection of Brookhurst Street at Adams Avenue.

BECSP MM4.13-4 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate northbound right-turn lane to the intersection of Brookhurst Street at Adams Avenue.

BECSP MM4.13-5 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth southbound through lane to the intersection of Brookhurst Street at Adams Avenue.

BECSP MM4.13-6 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth eastbound through lane to the intersection of Brookhurst Street at Adams Avenue.

BECSP MM4.13-7 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth westbound through lane to the intersection of Brookhurst Street at Adams Avenue.

BECSP MM4.13-8 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution to allow a right-turn overlap for a westbound right turn at the intersection of Brookhurst Street at Adams Avenue.

BECSP MM4.13-9 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution to allow a right-turn overlap for a northbound right turn at the intersection of Brookhurst Street at Adams Avenue.

BECSP MM4.13-10 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth northbound through lane to the intersection of Beach Boulevard at Edinger Avenue. Implementation of this improvement would require Caltrans approval.

BECSP MM4.13-11 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a third westbound through lane to the intersection of Beach Boulevard at Edinger Avenue. Implementation of this improvement would require Caltrans approval.

BECSP MM4.13-12 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the conversion of a separate westbound right-turn lane to a de facto right-turn lane at the intersection of Newland Street at Warner Avenue.

BECSP MM4.13-13 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a third westbound through lane to the intersection of Newland Street at Warner Avenue.

BECSP MM4.13-14 For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate southbound right-turn lane to the intersection of Beach Boulevard at Bolsa Avenue. Implementation of this improvement would require Caltrans approval.

Impact 4.13-2 Construction of the proposed project would not cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system. This impact is considered *less than significant*.

Most construction traffic generally occurs outside of the peak periods, consistent with the typical construction workday of 7:00 AM to 3:00 PM. Further, per mitigation measure BECSP MM4.2-9, construction activities that would affect traffic flow on the arterial system would be scheduled between

10:00 AM and 4:00 PM. Additionally, several arterial roadways in the project vicinity are designated truck routes in the City General Plan Circulation Element (Figure CE-7). Specifically, Warner Avenue is a designated truck route and is easily accessible from the project area. Access to the I-405 freeway is available from Warner Avenue to the east. Access to state freeways would eliminate truck traffic in the surrounding arterial streets. Truck trips could travel along designated truck routes east to I-405. Furthermore, mitigation measures BECSP MM4.2-8, BECSP MM4.2-9, and BECSP MM4.2-10 (as included in Section 4.2 [Air Quality]) would ensure that construction traffic does not block the free flow of traffic. The proposed project would also be required to submit a traffic control plan during construction to ensure appropriate emergency access during construction. As such, construction-related traffic impacts would be ***less than significant***. No mitigation measures are required.

Threshold	Would the proposed project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Impact 4.13-3 **Implementation of the proposed project would not conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. This would be a *less than significant* impact.**

The Orange County Transportation Authority is designated as the Congestion Management Agency (CMA) to oversee the Orange County CMP. The CMP Highway System includes specific roadways, which include state highways and Smart Streets, and CMP arterial monitoring locations/intersections. There are five CMP intersections throughout the BECSP area; including the project intersection of Beach Boulevard and Warner Avenue. CMP-designated intersections have a performance standard of LOS E or better (intersection capacity utilization (ICU) not to exceed 1.00), and a project is considered to have a significant impact if it contributes three percent or more to an ICU when the performance standard is exceeded.

As discussed under Impact 4.13-1, the proposed project would result in a reduction in ADT compared to existing conditions and would not exceed ADT 2030 Volumes for the BECSP (Table 4.13-4). The Beach Boulevard and Warner Avenue intersection currently operates at an acceptable level of LOS E and the proposed changes to operation due to the proposed project will not change this LOS; although the anticipated reduction in ADT will help the daily operation of the intersection. Therefore, a ***less than significant*** impact to CMP intersections would occur as a result of the proposed project.

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

Impact 4.13-4 **Implementation of the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) with the implementation of code requirements. This would be a *less than significant* impact.**

For the purposes of this analysis, hazards are defined as changes to circulation patterns that could result in unsafe driving or pedestrian conditions. Examples include inadequate vision or stopping distance, sharp roadway curves where there is an inability to see oncoming traffic, or vehicular/pedestrian traffic conflicts. The proposed project would not substantially increase hazards due to design features or incompatible uses nor would it introduce design features incompatible with current circulation patterns.

Site Access

Currently there are nine driveways providing access to the project site; four on Cypress Avenue, two on Beach Boulevard, one on Warner Avenue, one on Ash Street, and one on Elm Street (curb cut for fire access). With implementation of the project, access to the project site would be redesigned and would be provided from a total of eight driveways, including two limited access driveways on Beach Boulevard, two limited access driveways on Warner Avenue, and two full access driveways on both Cypress Street and Ash Street, as shown in Figure 4.13-3.

The existing southerly driveway on Beach Boulevard and the existing westerly driveway on Warner Avenue would provide access to the proposed surface parking lot via an existing internal site roadway. The northerly driveway on Beach Boulevard and east driveway on Warner Avenue would provide access to the existing surface parking located along Beach Boulevard and Warner Avenue. Direct access to the existing and proposed parking structures would be available from two driveways on Ash Street and two driveways on Cypress Avenue. Additional driveways along the internal roadway would provide access to the existing parking structure (on the west side of the project site), existing retail and office uses, and the proposed Beach Boulevard Mixed-Use building.

The access locations on Beach Boulevard and Warner Avenue will have limited access. The two access points on Beach Boulevard will be right-turn ingress and egress only. The west driveway on Warner Avenue will allow left- and right-turn ingress and right-turn egress only, while the east driveway on Warner Avenue access will have right-turn ingress and egress only. All four access locations along Ash Street and Cypress Avenue would allow full access. Access to the existing and proposed parking structures would not be available from Beach Boulevard and Warner Avenue. Although no new roadways would be introduced as part of the proposed project, the existing internal roadway will be realigned. The realigned roadway will be substantially straight (at least when compared to existing conditions) and would help to reduce potential roadway hazards. Design of the access points and the internal circulation will be formally approved during the site plan review process undertaken by the City.

Parking Design

The amount of parking provided on the project site was designed to comply with the Parking Regulations established in BECSP Section 2.1.5 for the Neighborhood Center designation. Parking for the Beach Mixed-Use building would be provided in a new internal three-level, 481-stall parking structure (one level below grade, one level at-grade, one level above-grade). Access to the below-grade parking level would be provided via a westerly ramp on Cypress Avenue, while access to the at-grade and above-grade parking levels would be accessed via a separate, easterly ramp on Cypress Avenue. Paseos would lead pedestrians from the parking areas out to the surrounding streets and internal roadway at ground level.

Parking for the Warner Mixed-Use building would be provided in a new internal two-level, 55-stall parking structure (one-level below grade, one above grade). Additional parking would be provided in the existing six-story, 863-stall parking structure immediately south of the proposed mixed-use building. Access to the new internal parking structure would be available from a northerly ramp on Ash Street, while access to the existing parking structure would continue to be available from a southerly ramp on Ash Street. The proposed retail buildings at the corner of Beach Boulevard and Warner Avenue would utilize the existing and proposed parking structures, as well as existing surface parking spaces to provide parking for patrons and employees. Parking in this configuration represents an effective continuation of existing conditions on the project site whereby parking structures are not accessed off major roadways to reduce conflicts, increase safety, and maintain free flowing traffic.

Accidents

The traffic analysis prepared for the proposed project included a survey of vehicle accidents for segments of Beach Boulevard and Warner Avenue adjacent to the proposed project site. According to the traffic analysis, midblock accident rates for both roadways are within the commonly accepted norm (less than 3.5 accidents per million vehicle miles). The majority of collisions on both segments consists of rear-end or sideswipe collisions approaching the Beach Boulevard and Warner Avenue intersection. These collisions may be a result of queuing-caused congestion at this intersection.

A second analysis examined the intersection accident rate for the two local intersections that would be affected by the project (Warner Avenue/Ash Street/Millstream Street and Beach Boulevard/Cypress Avenue), as well as the existing left-turn access driveway on Warner Avenue. The location of this intersection and the existing driveway on Warner Avenue is shown in Figure 4.13-2. The accident rate for all three locations was determined to be well within the accepted norm (less than 1.0 accident per million vehicles) and no significant patterns to accidents were identified that might indicate a need to modify access design or controls. At the intersection of Ash Street and Warner Avenue, the majority of collisions consists of right-of-way violations and rear-end or sideswipe collisions on Warner Avenue

For the intersection of Beach Boulevard at Cypress Avenue, which is controlled by a stop sign on Cypress Avenue, approximately one-third of the total collisions are the result of left-turns from Cypress Avenue onto Beach Boulevard and one-third are rear-end or sideswipe collisions on Beach Boulevard.

Additionally, a review of the concentration of accidents during the AM and PM peak hours was performed and concluded that vehicular accidents are spread throughout the day rather than concentrated during the peaks. The proposed project would result in an 8 percent decrease in ADT and 8 percent decrease for PM peak hour trips, and a 13 percent increase in the AM peak hour trips, primarily due to 88 outbound trips. As a result, the minor increase in AM peak hour trips (approximately 0.1 percent of the total traffic on Beach Boulevard and 0.11 percent on Warner Avenue) is not expected to cause a significant increase in accidents.

In consideration of the analysis provided above, the proposed project would not be a major cause of accidents for adjacent roadways and intersections.

Compliance with city requirements and the site plan review process would ensure impacts related to design hazards are ***less than significant***.

Threshold	Would the proposed project result in inadequate emergency access?

Impact 4.13-5 Implementation of the proposed project would not result in inadequate emergency access. This would be a *less than significant* impact.

As part of standard development procedures, plans for the proposed project, as well as other development within the BECSP, would be submitted to the City of Huntington Beach Fire Department for review and approval to ensure that all new development has adequate emergency access in compliance with existing regulations. The project will be required to prepare a traffic control plan for its construction; this would ensure adequate emergency access would be maintained during construction. Therefore, a ***less than significant*** impact would occur after compliance with existing regulations, and future project traffic would not impede emergency access to and from adjacent and surrounding roadways.

Threshold	Would the proposed project result in inadequate parking capacity?

Impact 4.13-6 Implementation of the proposed project would not result in inadequate parking capacity. This would be a *less than significant* impact.

The amount of parking provided on the project site would be designed to comply with the Parking Regulations established in BECSP Section 2.1.5 for the Neighborhood Center designation. Parking would be provided at varying ratios dependent on the land use. The proposed land use program would require 1,398 parking spaces.[74] The proposed project is programmed to provide 1,498 parking spaces, in excess of the BECSP requirement. Table 3-4 (Parking Summary) identifies the number of existing and proposed parking spaces. Parking for the Beach Mixed-Use building would be provided in a new internal three-level, 481-stall parking structure (one level below grade, one level at grade, one level above grade). Parking for the Warner Mixed-Use building would be provided in a new internal two-level, 55-stall parking structure (one level below grade, one above grade). Additionally, parking for the Warner Mixed-Use building would be provided in the existing six-story, 863-stall parking structure immediately south of

[74] Based on the following parking ratios: 4 spaces per 1,000 square feet (sf) for retail uses; 8 spaces per 1,000 sf for restaurant uses; 3.5 spaces per 1,000 sf of common area; 1 space per 1 bedroom dwelling unit (du); 1.5 spaces per 2 bedroom or 2 bedroom+ du; 0.1 space per du for guests; 3.5 spaces per 1,000 sf of office space.

the proposed building. The proposed retail buildings at the corner of Beach Boulevard and Warner Avenue would utilize the existing and proposed parking structures, as well as existing surface parking spaces that will remain. This would meet the parking requirements of the City of Huntington Beach based on approved parking ratios established in the BECSP for the project area. This impact is considered ***less than significant***, and no mitigation is required.

Threshold	Would the proposed project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Impact 4.13-7 **Implementation of the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). This would be a *less than significant* impact.**

Project implementation would be consistent with local policies related to alternative transportation, including the City of Huntington Beach General Plan Land Use and Circulation Elements, the Circulation Plan and Development Standards set forth in the BECSP. The proposed project site's designation as a Neighborhood Center and its location with the Neighborhood Boulevard Segment of the BECSP requires further design considerations that promote alternative modes of transportation. Alternative modes of transportation are accessible for both patrons of commercial uses within the project area, as well as residents of future development. The walkability of the surrounding area, as well as the easy access to public transit would promote the city's goal of reducing vehicle miles traveled by residents and visitors of the BECSP area and the city.

Near the proposed project, OCTA bus line 79 runs along Warner Avenue and bus line 29 runs along Beach Boulevard, providing a convenient means of alternative transportation for future residents and commercial patrons. In addition, the Goldenwest Transportation Center, located at Gothard Avenue and Center Avenue approximately 1.9 miles from the project site, is the City's largest transit hub and serves six bus lines and provides transit access throughout northern Orange County. The location of the project area in such proximity to the transportation center hub would provide residents with a convenient means of alternative transportation. As discussed in Chapter 3 (Project Description) of the BECSP EIR, a primary objective of the proposed project is to promote alternative methods of transportation, specifically to promote an active pedestrian environment and the use of public transit. In consideration of the project area's proximity to the OCTA transit center, the project promotes and allows for the use of alternative transportation modes. Due to project compatibility with adopted policies supporting alternative transportation, this impact would be ***less than significant***. No mitigation measures are required.

4.13.4 Cumulative Impacts

According to CEQA, cumulative impacts are those impacts where two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts (Guidelines Section 15355). The BECSP EIR and traffic analysis were certified in December 2009. The proposed project is located within the BECSP area. Project-related traffic, when considered in the context of adjacent or nearby development (existing and future) could result in cumulative LOS and other impacts that are considered unacceptable. However, as discussed in this section, traffic resulting

from the proposed project does not exceed what was analyzed in the BECSP and associated traffic study for the project site. Therefore, generally, the proposed project would not contribute substantial traffic that was not contemplated under the BECSP EIR and would generally be consistent with impacts identified in the BECSP EIR. Therefore, the geographic context for cumulative transportation impacts is the BECSP planning area.

Threshold	Would the proposed project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Impacts related to the proposed project's generation of traffic that could lead to a conflict with an established measure of effectiveness for project area intersections were found to be less than significant. The impacts associated with implementation of the BECSP were found to be less than significant with incorporation of mitigation. Mitigation measures MM4.13-1 through MM4.13-14 required in BECSP EIR Section 4.13 set forth the payment of fair-share impact fees to fund future intersection roadway improvements.

Under 2030 conditions, implementation of the mitigation measures BECSP MM4.13-1 through BECSP MM4.13-14 would ensure that five of the seven impacted intersections (as identified in the BECSP EIR) have acceptable ICU values (LOS C or LOS D). The improvements for the remaining two locations, Brookhurst Street at Adams Avenue and Beach Boulevard at Bolsa Avenue, would mitigate the project impact at these locations but not achieve an acceptable LOS. Even with implementation of mitigation measures BECSP MM4.13-3 through BECSP MM4.13-9 and BECSP MM4.13-14, the Brookhurst Street at Adams Avenue intersection would remain at LOS E in the AM peak hour and the Beach Boulevard at Bolsa Avenue intersection would remain at LOS F in the PM peak hour. At both of these intersections, with the incorporation of mitigation measures, the impact to the intersection would be mitigated to a less than significant level, even though the LOS would not be considered acceptable. However, while these intersections are located within the cumulative study area of the BECSP, they are outside City jurisdiction to ensure mitigation completion. Therefore, the impact remains ***significant and unavoidable***.

In addition, the BECSP area would contribute traffic to the I-405 northbound loop ramp from Beach Boulevard, as well as the regional freeway system, which are both projected to have deficiencies in 2030. For a deficient Caltrans intersection, any increase in delay due to the project is considered a significant impact. The 2030 results show two locations in the BECSP area with impacts, both of which were identified in the ICU analysis: Beach Boulevard at Warner Avenue (the project intersection) and Beach Boulevard at Garfield Avenue. Therefore, the proposed project would contribute to a deficient system for which there is no feasible mitigation to reduce impacts. Further, as these are under Caltrans jurisdiction, the City does not have jurisdiction to ensure mitigation completion. The impact would remain ***significant and unavoidable***.

As for construction-related impacts to transportation, most construction traffic generally occurs prior to the peak periods, consistent with the typical construction workday of 7:00 AM to 3:00 PM. Further, per mitigation measure BECSP MM4.2-9, construction activities that would affect traffic flow on the arterial

system would be scheduled between 10:00 AM and 4:00 PM. Additionally, several arterial roadways in the project vicinity are designated truck routes in the City General Plan Circulation Element. Specifically, Warner Avenue is a designated truck route and is easily accessible from the project site. Access to the I-405 freeway is available from Warner Avenue to the east. Access to state freeways would reduce truck traffic in the surrounding arterial streets. Truck trips could travel along designated truck routes east to I-405 or south-southwest to Pacific Coast Highway. As discussed in this section, the proposed project would result in a less than significant impact during construction and will not be cumulatively considerable with respect to the number of truck trips. Further, as identified in the BECSP EIR, due to the minor number of truck trips expected with construction of future projects in the BECSP area, the likelihood that construction of projects will occur over a 10- to 20-year timeframe and not all concurrently, and due to the temporary nature of construction activities, truck trips due to import/export activities in the project area would not be anticipated to cause a substantial increase in traffic volumes and delays in the project area. All projects, including the proposed, would be required to prepare and implement a traffic control plan that would ensure adequate emergency access during the construction process. Therefore, the proposed project would not be cumulatively considerable and cumulative traffic impacts resulting from construction would be ***less than significant***.

Threshold	Would the proposed project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Impacts related to potential conflict with the Orange County CMP were found to be less than significant in the BECSP EIR. The following CMP intersections were analyzed throughout the BECSP area:

- Beach Boulevard at Adams Avenue
- Beach Boulevard at Edinger Avenue
- Beach Boulevard at Pacific Coast Highway
- Beach Boulevard at Warner Avenue (the proposed project intersection)
- Beach Boulevard at Bolsa Avenue

None of these intersections exceed the ICU value CMP threshold of 1.00, resulting in a less than significant impact. Further, the proposed project would not change the currently LOS E status of the Beach Boulevard and Warner Avenue intersection. The proposed project would therefore not result in cumulatively considerably contribution to the area and the cumulative impact would be ***less than significant***.

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

No new roadways would be introduced as a result of the proposed project. Access to the existing and proposed parking structures would not be available from Beach Boulevard or Warner Avenue, thereby reducing congestion on these roadways. Design of the access points and the internal circulation will be formally approved during the site plan review process undertaken by the City. Compliance with city requirements and the site plan review process for the proposed project would ensure impacts related to

design hazards would not result in a cumulatively considerable contribution to the area and the cumulative impact would be ***less than significant***.

Threshold	Would the proposed project result in inadequate emergency access?

The BECSP was found to have less than significant impacts related to inadequate emergency access. The proposed project would not result in significant impacts to emergency access and would therefore not make a cumulatively considerable contribution. No mitigation is required. Therefore, this cumulative impact is ***less than significant***.

Threshold	Would the proposed project result in inadequate parking capacity?

The BECSP was found to have less than significant impacts related to inadequate parking. The proposed project would not result in significant impacts to parking and would therefore not make a cumulatively considerable contribution. No mitigation is required. Therefore, this cumulative impact is ***less than significant***.

Threshold	Would the proposed project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The BECSP was found to have less than significant impacts related to conflict with adopted plans and/or policies supporting alternative transportation modes. The proposed project would not result in significant impacts due to a conflict with alternative transportation projects and would therefore not make a cumulatively considerable contribution. No mitigation is required. Therefore, this cumulative impact is ***less than significant***.

4.13.5 References

Austin-Foust Associates, Inc. *City of Huntington Beach, Beach Boulevard and Edinger Avenue Corridors Specific Plan Traffic Study*, August 2009.

———. *City of Huntington Beach, Beach-Edinger Corridors Specific Plan Area Traffic Analysis for Beach Warner Project*, December 8, 2010.

Huntington Beach, City of. Circulation Element. *Huntington Beach General Plan*, May 13, 1996.

———. *Beach and Edinger Corridors Specific Plan Environmental Impact Report*, November 2009.