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 Corridor Specific Plan Area Traffic Analysis for Murdy-Commons Project* dated August 23, 2010 (Appendix E), and the *Beach Boulevard and Edinger Avenue Corridor 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.

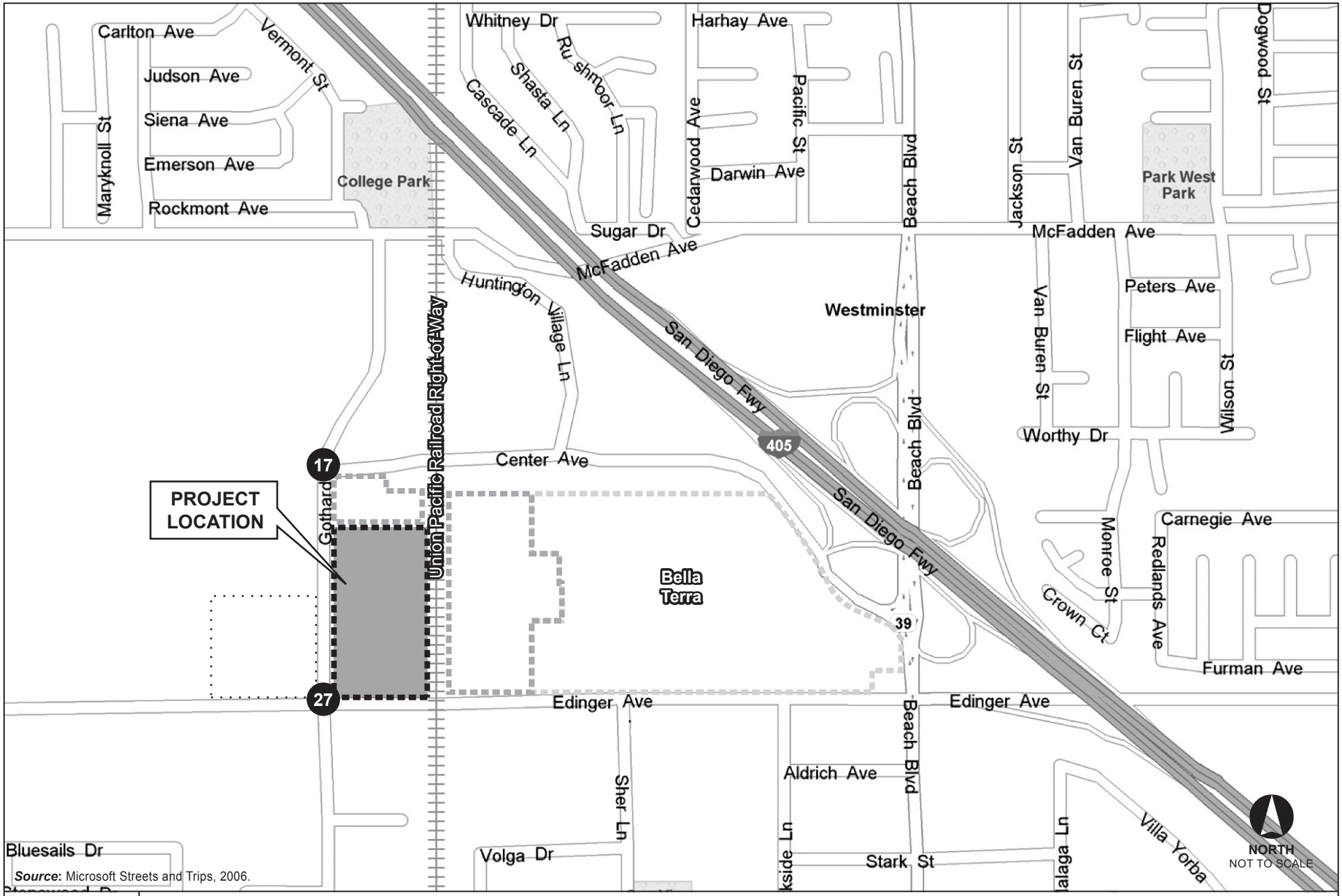
4.13.1 Environmental Setting

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 includes the intersections of Gothard Street and Center Avenue and Gothard Street and Edinger 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 designations of Town Center Core and Town Center Neighborhood, included as BECSP Section 2.1.3 (Town Center Core) and Section 2.1.4 (Town Center Neighborhood).



***Source*:** Microsoft Streets and Trips, 2006.

FIGURE **4.13-1**

Project Study Area Intersections

General Plan and BECSP Consistency Analysis

The proposed project is located at the northeast corner of Edinger Avenue and Gothard Street. 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 Goldenwest Transit Center is located just north of the project area at Center Avenue and Gothard Street and provides a convenient location for future residents to make trips using transit. The walkability of the surrounding area, as well as the easy access to Bella Terra mall, Goldenwest College, and transit facilities would promote objectives relating to traffic reduction and increase 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 (Edinger Avenue/Gothard Street and Gothard Street/Center 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 Town Center Neighborhood and Town Center Core districts by providing ground-floor commercial 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 Corridor 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.
- 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).

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. The trip generation for the project site is summarized in Table 4.13-2 (Trip Generation Comparison for Murdy Commons), along with the future land uses that were analyzed for the subject site under the BECSP. A detailed land use and trip generation summary, including trip generation rate sources, can be found in the traffic study (Appendix E).

Table 4.13-2 Trip Generation Comparison for Murdy Commons

		Peak Hour						
		AM			PM			
Project Description	*Amount*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*ADT*
Proposed Project								
Mixed-Use Vertical Residential	984 du	98	403	***501***	394	216	***610***	6,612
Mixed-Use Vertical Commercial	60,000 sf	57	51	***108***	77	80	***157***	2,408
Project Trip Generation Total		***155***	***454***	***609***	***471***	***296***	***767***	***9,020***
BECSP EIR								
Mixed-Use Vertical Residential	1,268 du	127	520	***647***	507	279	***786***	8,521
Mixed-Use Vertical Commercial	60,000 sf	57	51	***108***	77	80	***157***	2,408
BECSP Trip Generation Total		***184***	***571***	***755***	***584***	***359***	***943***	***10,929***
Net Change from BECSP EIR	-284 du	-29	-117	***-146***	-113	-63	***-176***	-1,909
% Difference		—	—	***-19%***	—	—	***-19%***	-17%

SOURCES: Austin-Foust Associates, Inc., *City of Huntington Beach, Beach Boulevard and Edinger Avenue Corridor Specific Plan Traffic Study* (August 2009), Table 3-1; Austin-Foust Associates, Inc., *Beach-Edinger Corridor Specific Plan Area Traffic Analysis for Murdy-Commons Project* (September 29, 2010), Table 1.

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

As shown in Table 4.13-2, the proposed project generates fewer AM peak hour trips (609 trips versus 755 trips), fewer PM peak hour trips (767 trips versus 943 trips), and fewer daily trips (9,020 trips versus 10,929 trips) than the land use program contemplated for the project site in the BECSP EIR and traffic study. The proposed project results in a 19 percent decrease in both the AM and PM peak hours and an overall 17 percent trip reduction for 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 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 4.13-2 (Project Trip Distribution) shows the project's future trip distribution.

Thresholds of Significance

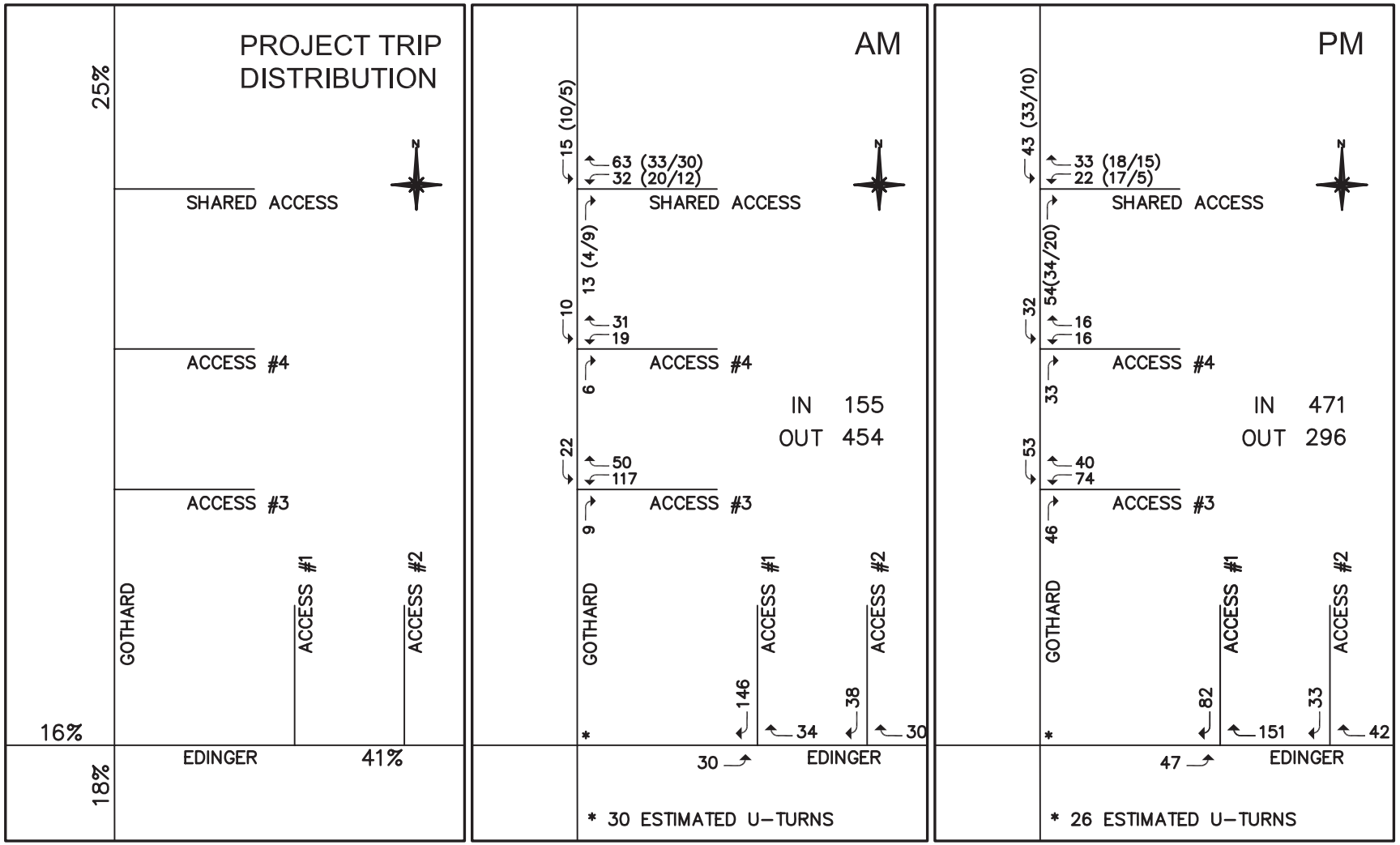
The following thresholds of significance are based on Appendix G of the 2010 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on transportation/traffic if it would do any of the following:

- 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 and does not propose any structures of substantial height to interfere with existing airspace or flight patterns. ***No impact*** would occur.



LEGEND

XX (YY/ZZ) Shared Access Volumes
Total (Project/Ripcurl)

* WB U-turns at Gothard St

NORTH
NOT TO SCALE

Source: Austin-Faust Associates, Inc., 2010.

FIGURE **4.13-2**

Project Trip Distribution

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. The analysis also includes the increased u-turns at Gothard Street and Edinger Avenue that would be caused by a restricted right-turn only onto westbound Edinger Avenue at the project site's primary access point. During the AM Peak hour, 30 additional u-turns are expected and 26 additional u-turns during the PM Peak hour.

Table 4.13-3 (Intersection 2030 LOS Summary) summarizes the 2030 conditions for BECSP build-out. This shows that the two project area intersections will continue to operate above the City's acceptable LOS of D. As shown in Table 4.13-2 (Trip Generation Comparison for Murdy Commons), the proposed project would result in approximately 17 percent fewer trips than the project contemplated under the BECSP analysis. Therefore, as the BECSP would result in a less than significant impact to the project area intersections, the proposed project would result in a less than significant impact to these intersections as well.

Table 4.13-3 2030 Intersection LOS Summary

		AM		PM	
	Intersection	*ICU*	*LOS*	*ICU*	*LOS*
17	Gothard Street at Center Avenue	0.37	A	0.58	A
27	Gothard Street at Edinger Avenue	0.57	A	0.65	B

SOURCE: Austin-Foust Associates, Inc., *Beach-Edinger Corridor Specific Plan Area Traffic Analysis for Murdy-Commons Project* (September 29, 2010), p. 6.

In addition, the proposed project will be subject to its fair-share contribution towards future, as-needed improvements to the area roadway system, as outlined in BECSP mitigation measures MM4.13-1 through MM4.13-14. 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 would result in less trip generation than analyzed in the BECSP EIR and no additional impacts, the proposed project is consistent with the analysis in the BECSP EIR and would result in less than significant impacts.

In summary, the proposed project will generate 17 percent fewer ADT than analyzed in the BECSP EIR which was determined to result in a less than significant impact. Therefore, impacts from the proposed project are considered ***less than significant*** with the implementation of BECSP mitigation measures MM4.13-1 through 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 BECSP mitigation measure 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, Edinger Avenue, Goldenwest Street, and Bolsa Avenue are designated truck routes and are easily accessible from the project area. Access to the I-405 freeway is available from Center Avenue to the east. McFadden Avenue to the north is considered a state highway between Gothard Street and Goldenwest Street in the City of Huntington Beach General Plan Circulation Element. Access to state freeways would eliminate truck traffic in the surrounding arterial streets. Truck trips could travel along designated truck routes north/east to I-405 or south to Pacific Coast Highway. As discussed in Chapter 3, the proposed project is anticipated to result in approximately 15,000 haul/truck trips over the approximately six year demolition, grading, and construction period which will not result in a temporary or long term increase in loading on the existing street system. Furthermore, BECSP mitigation measures MM4.2-8, MM4.2-9, and 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; however, there are no CMP intersections located within the limited project study area. The nearest CMP intersection is Beach Boulevard at Edinger Avenue, located approximately 0.5 mile east of the project area. 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. The CMP analysis was carried out for a short-range time frame (five to seven years) as per CMP guidelines. Accordingly, year 2016 information from the BECSP EIR was used for this analysis and the results are presented in Table 4.13-4 (CMP Intersection Analysis).[77] This table shows all CMP intersections analyzed in the BECSP; the bolded intersection is nearest to the project area although it is not located within the limited project study area.

Table 4.13-4 CMP Intersection Analysis

	No Project		*With Project*	
Intersection	***AM***	***PM***	***AM***	***PM***
Beach Boulevard at Adams Avenue	.65	.82	.65	.82
Beach Boulevard at Edinger Avenue	**.83**	**.94**	**.86**	**.94**
Beach Boulevard at Pacific Coast Highway	.64	.75	.65	.75
Beach Boulevard at Warner Avenue	.72	.92	.74	.93
Beach Boulevard at Bolsa Avenue	.88	.97	.86	.96

SOURCE: Austin-Foust Associates, Inc., *City of Huntington Beach, Beach Boulevard and Edinger Avenue Corridor Specific Plan Traffic Study* (August 2009), Table 5-2

As shown above, none of the intersections show ICU values that exceed the allowable CMP threshold of 1.00. Additionally, the proposed project will generate 17 percent fewer overall ADT (19 percent fewer AM and PM peak hour trips) for its contribution to these intersections than was identified in the BECSP EIR, which was identified to have a less than significant impact. 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,

[77] Although the entirety of the proposed project will not yet be complete in 2016, but rather 2017, the build-out year of 2017 was sufficiently close to the previously studied year 2016 of the BECSP EIR and traffic study to utilize for the purposes of this portion of the analysis.

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

Access to the project site would be provided from Gothard Street (three ingress and three egress points) and from Edinger Avenue (two ingress and three egress points), as shown in Figure 3-3 (Proposed Project Site Plan). The north access on Gothard Street is a shared access roadway with the Red Oak/Amstar Mixed-Use project. The main access into the project from Edinger Avenue allows for an eastbound left-turn ingress into the site, but does not allow for outbound left-turns. The median break to allow for the left-turn into the site would affect access to the commercial site located opposite the proposed project, as it would eliminate the westbound left-turn ingress into that property. The combination of these two left-turn restrictions has the potential to increase the westbound left-turn volumes at Gothard Street and Edinger Avenue due to the increase in U-turn demand (30 AM peak, 26 PM peak). However, it has been determined that this additional demand would not result in a significant impact. The proposed project access scheme will be formally approved during the site plan review process undertaken by the City.

Design Features

The proposed project is part of the BECSP which established street sections within the BECSP area, and therefore, the project site. They are intended to provide an aesthetic streetscape environment consistent with the overall objectives of the BECSP. Two features that would have some potential effect on traffic operations are the recommendations for additional local streets and the creation of a boulevard section on Edinger Avenue. While neither is expected to increase roadway hazards, additional information is provided below.

New Streets

The addition of new local streets to act as buffers between commercial and residential areas as well as to foster pedestrian circulation and improve connectivity offers several advantages with respect to circulation. Foremost is the ability to create a secondary circulation system, potentially reducing some traffic on the main arterials. In concept, it is similar to creating openings between adjacent parking lots along commercial frontage. Such openings allow vehicles to make more than one stop without having to access the adjacent arterial street, and also provide opportunities for driveway consolidation. The proposed project will develop an interior set of new local streets for interconnectivity and will be centered on a park area. This is intended to both serve the project area for vehicular access as well as foster pedestrian usage.

Edinger Avenue Classic Boulevard Treatment

The BECSP Circulation Plan (Section 3.1.2) calls for the creation of a "classic" boulevard along Edinger Avenue between Goldenwest Street and Parkside Lane, which includes the project site's frontage. The creation of this boulevard would provide a unique streetscape with both vehicular and pedestrian amenities. The parking along the frontage road would provide a buffer for pedestrians, and actual

volumes on the frontage road would be low so that ingress and egress would seldom be an issue. The proposed frontage road for this boulevard treatment would start after and terminate before the signalized intersections. This would avoid creating complex intersections with multiple conflict points and ensure that the frontage roads do not negatively impact traffic operations at those intersections.

New Intersections

The potential for roadway hazards can occur as an inherent result of the placement of additional access points along public roadways. New intersections require adequate sight distance and intersection traffic control in order to minimize potential hazards. The proposed project would result in two points of access on Edinger Avenue (but will incorporate the use of a frontage road to minimize conflicts and create safe on-street parking), as well as three access points along Gothard Street. In order to ensure safe construction of project intersections in the future, the following code requirements would be required:

BECSP CR4.13-1 On-site and off-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project area. Restriping and signage on certain roadways could be required to control movements and provide safe access from any proposed driveways.

BECSP CR4.13-2 Sight distance at individual project access points shall be reviewed to ensure compliance with appropriate sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

On-Street Parking Along Gothard Street

The proposed project includes on-street parking along Gothard Street, from north of Edinger Avenue to the northern extents of the property. The addition of this parking presents two main issues: capacity and safety, as discussed further below.

Capacity

The 2030 peak hour volume in the northbound direction is 770 vehicles per hour (VPH) in the AM peak hour and 810 VPH in the PM peak hour. A typical saturation flow rate is 1700 VPH per lane. As the forecast volumes under the proposed project are substantially below the saturation rate, the use of a single lane while vehicles are parking and "unparking" would not create a mid-block capacity deficiency. Additionally, there are two lanes of northbound traffic through the Edinger Avenue intersection and one of these may be underutilized when blockage occurs due to parking/unparking maneuvers. Therefore, the proposed on-street parking along Gothard Street would result in a less than significant impact to capacity.

Safety

A survey of vehicle accidents was performed for the proposed project on select roadways in the City of Huntington Beach. The accident analysis identified roadways that had similar physical characteristics to Gothard Street, and tabulated accident data for locations where on-street parking is allowed and for similar locations with no parking. The results of this analysis indicated that mid-block accident rates where parking is allowed are approximately double the rates where parking is not allowed (primarily due to increases in rear-end, side-swipe, and broadside accidents). Therefore, the proposed on-street parking

could be expected to result in a substantial increase in accident potential approaching and adjacent to the on-street parking area. Additionally, there is a concern that introducing curbside parking will increase the hazard to cyclists in the bike lane adjacent to the on-street parking (primarily cyclist collisions with open car doors). Finally, provision of this parking may create a scenario where Goldenwest College students utilize this parking and then jaywalk across Gothard Street. Therefore, the proposed on-street parking is considered potentially significant due to primary safety concerns.

However, the following project-specific mitigation measures have been developed to reduce the potentially significant impacts of the on-street parking along Gothard:

Project MM4.13-15 Ensure adequate sight distance from the two driveways on Gothard Street per standard engineering requirements. At the time of the project site-plan submittal, a formal review of the sight distances will be performed. This may include a reduction in potential on-street parking spaces from that proposed.

Project MM4.13-16 Provide adequate width for parking maneuvers to occur without blocking the curb lane. This shall include a 10-foot buffer lane in addition to the 8-foot parking lane. If this area is striped with a bike lane, the remainder of the space shall serve as clearance (e.g., 6 feet for bikes plus 4 feet of clearance), to mitigate impacts to cyclists.

Project MM4.13-17 "No Pedestrian Crossing" signs shall be posted along Gothard Street for the extent of the on-street parking area to address potential jaywalking.

Therefore, implementation of Project mitigation measures MM4.13-15, MM4.13-16, and MM4.13-17, as well as 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 proposed project would be served by both subterranean and on-street parking. Table 4.13-5 (Parking Summary) provides a breakdown of the number of parking spaces provided within each block based on the land use proposed. In addition, angled parking spaces would be available on an access lane along the

southern perimeter of the project site, parallel to but separated from Edinger Avenue by a landscaped median. Parking would be provided on site at a ratio of 4 spaces per 1,000 square feet (sf) for commercial uses, 2 spaces per live-work unit, and 1.75 spaces per residential dwelling unit for a total of 1,979 parking spaces. 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. Additionally, although not included in the required parking tally, the proposed project includes provision of on-street parking along Gothard Street, which will increase parking in the project vicinity. Based on minimum standards, a maximum of 24 parking spaces could be provided along the Gothard Street frontage. This impact is considered ***less than significant***, and no mitigation is required.

Table 4.13-5 Parking Summary

Block	*Commercial (stalls)*	*Live-Work (stalls)*	*Residential (stalls)*
1	148	20	242
2	92	10	322
3	—	44	126
4	—	16	126
5	—	40	364
6	—	—	429
Total by Use	***240***	***130***	***1,609***
Total for Project	***1,979***		

SOURCE: City of Huntington Beach, Murdy Commons at Edinger and Gothard Project Summary, Applicant Project Summary (May 26, 2010).

Commercial: 4 spaces per 1,000 sf

Live-Work: 2 spaces per unit

Residential: 1.75 spaces per unit

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 Transportation Elements, the Circulation Plan and Development Standards set forth in the BECSP. The location of the proposed project within the Town Center District 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 transit facilities would promote the city's goal of reducing vehicle miles traveled by residents and visitors of the BECSP area and the city.

In addition, the Goldenwest Transportation Center, located at Gothard Avenue and Center Avenue, 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 close proximity to the transportation center hub would provide residents with a convenient means of alternative transportation. In addition, although not included as part of this analysis, the project area could also benefit from future commuter rail service if it is established along the existing Union Pacific Railroad line.

Additionally, the project would also create a network of sidewalks and pathways that would provide pedestrian connections between the adjacent Red Oak/Amstar Mixed-Use project, and the proposed public open space, and would not preclude the possibility of a pedestrian connection to the future Village at Bella Terra and the Bella Terra Mall across the UPRR ROW. Figure 3-3 (Proposed Project Site Plan) depicts proposed roadways, driveways, parking, sidewalks, and pedestrian connections on the project site.

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 close proximity to the OCTA transit center, as well as anticipated mixed-use development in the area (i.e., The Amstar/Red Oak and The Revised Village at Bella Terra projects), 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, proposed project traffic represents an approximately 17 percent reduction from the project contemplated at the proposed project site under the BECSP. 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 and the implementation of a discretionary improvement by adding a second left-turn lane northbound at Beach Boulevard at Heil Avenue, which was analyzed in the BECSP EIR.

Mitigation measures MM4.13-1 through MM4.13-14 required in the Section 4.13 of the BECSP EIR set forth the payment of fair-share impact fees to fund future intersection roadway improvements. Implementation of MM4.13-1 through MM4.13-14 as well as the discretionary action proposed for Beach Boulevard at Heil Avenue would allow all intersections to operate at acceptable levels of service.

Under 2030 conditions, implementation of the BECSP mitigation measures MM4.13-1 through MM4.13-14 and the discretionary improvement at Beach Boulevard and Heil Avenue (identified in the BECSP EIR) 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 BECSP mitigation measures MM4.13-3 through MM4.13-9 and 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. Both of these intersections are located within the cumulative study area of the BECSP EIR, therefore, the proposed project would contribute to an already significant impact and this impact would be considered ***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 and Beach Boulevard at Garfield Avenue. Therefore, the proposed project would contribute to a deficient system and would result in a ***significant and unavoidable*** cumulative impact.

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 BECSP mitigation measure 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, Edinger Avenue, Goldenwest Street, and Bolsa Avenue are designated truck routes and are easily accessible from the project area. Access to the I-405 freeway is available from Center Avenue to the east. McFadden Avenue to the north is considered a state highway between Gothard Street and Goldenwest Street in the City of Huntington Beach General Plan Circulation Element. Access to state freeways would eliminate truck traffic in the surrounding arterial streets. Truck trips could travel along designated truck routes north/east to I-405 or south 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
- 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. 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)?

Potential hazard impacts resulting from the BECSP were evaluated in terms of new streets necessitated by the BECSP, the Edinger Avenue Classic Boulevard treatment, the Edinger Avenue railroad at-grade crossing, and new access points/intersections. With incorporation of identified code requirements, the proposed project would not result in a cumulatively considerable contribution to the area and the cumulative impact would be ***less than significant***.

CR4.13-1 *On-site and off-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project area. Restriping and signage on certain roadways could be required to control movements and provide safe access from any proposed driveways.*

CR4.13-2 *Sight distance at individual project access points shall be reviewed to ensure compliance with appropriate sight distance standards at the time of preparation of final grading, landscape and street improvement plans.*

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 was 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 was 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 was 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 Corridor Specific Plan Traffic Study*, August 2009.

———. *City of Huntington Beach, Beach-Edinger Corridor Specific Plan Area Traffic Analysis for Murdy-Commons Project*, September 29, 2010.

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

———. Murdy Commons at Edinger and Gothard Project Summary. Applicant Project Summary, May 26, 2010.