4.2 TRAFFIC AND CIRCULATION

This section of the Draft Environmental Impact Report (EIR) evaluates the potential traffic and circulation impacts associated with construction and operation of the City Hall and Park Development Plan. The analysis in this section is based on the information provided in the *Newport Beach City Hall & Park Traffic Impact Analysis* (RBF Consulting, July 31, 2009). The project's Traffic Impact Analysis (TIA) is included in Appendix B of this EIR. The TIA includes a forecast 2013 analysis using a manual "build-up" methodology consistent with the City of Newport Beach (City) Traffic Phasing Ordinance. Long-range General Plan consistency is evaluated using the City of Newport Beach General Plan traffic model, supplemented with post-2030 baseline traffic data obtained from the City of Irvine to which the project traffic was added.

Although the project proposes to move City Hall functions from the existing City Hall site to the proposed project site, the TIA does not take credit for the existing trips generated by the existing City Hall. Rather, project trips are added to the proposed project site, and the existing City Hall site is assumed to continue to generate the same number of trips.

Scoping Process

During the Initial Study (IS) process, it was determined that the proposed project could potentially result in significant impacts associated with six of the seven criteria for determining significance related to traffic and circulation and that further study in the EIR would be required to address these issues. Specifically, the IS identified potentially significant impacts related to traffic increase, level of service (LOS) standards, traffic hazards, emergency access, parking capacity, and conflict with adopted traffic policies, plans, or policies. The IS concluded that impacts related to a change in air traffic patterns are less than significant because commercial aircraft and helicopters using the airspace over the project site would be at sufficient altitude so as not to be affected by the proposed project. Therefore, impacts related to air traffic patterns would not occur and will not be discussed further in this EIR. Refer to Appendix A, IS/Notice of Preparation (NOP), for additional discussion.

Four comment letters related to traffic and circulation impacts were received in response to the IS/NOP circulated for the proposed project to the public and public agencies. The Orange County Transportation Authority (OCTA) noted that it is considering a new bus stop at the intersection of Avocado Avenue and Farallon Drive. In addition, it commented that the EIR should consider impacts to bicycle safety. The Environmental Quality Affairs Citizens Advisory Committee (EQAC) expressed concern regarding parking and traffic flow during construction and operation of the proposed project. Two residents commented that the EIR must address construction and operational traffic impacts, including those from routine City operations and nonroutine community events. In addition, they stated that transportation impacts must consider the full build out of the City Hall. A third resident expressed concern that traffic impacts would be detrimental to residents living in the vicinity of the project site. For copies of the IS/NOP comments, refer to Appendix A of this EIR. The recommendations and concerns raised during the scoping process related to traffic are addressed in this EIR section.

4.2.1 Methodology

The following methodologies were adhered to for analysis of traffic-related impacts.

City of Newport Beach Traffic Forecasting Methodology. Level of Service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Intersection Capacity Utilization (ICU) analysis method is utilized by the City to determine the operating LOS of signalized intersections. The ICU analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding volume-to-capacity (v/c) ratios shown in Table 4.2.A.

Table 4.2.A: V/C and LOS Ranges

Signalized Intersections				
V/C Ratio	LOS			
<u>≤</u> 0.60	А			
$0.61 \text{ to } \le 0.70$	В			
$0.71 \text{ to } \le 0.80$	С			
$0.81 \text{ to } \le 0.90$	D			
$0.91 \text{ to} \le 1.00$	Е			
> 1.00	F			

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

LOS = level of service

v/c = volume-to-capacity ratio

In accordance with the City's Traffic Phasing Ordinance (TPO), the ICU analysis assumes a capacity of 1,600 vehicles per hour (vph) for each travel lane (including turn lanes) through an intersection, with no reduction in capacity to account for the lost time during the yellow plus all-red signal indications. The City TPO methodology calculates the ICU value to three decimal places and then reports the resulting ICU value rounded to two decimal places.

City of Newport Beach Performance Criteria. The City's performance criteria are used in this analysis for intersections located within the City. The City target for peak-hour intersection operation, as stated in the Circulation Element of the General Plan, is LOS D or better, except at the following locations where LOS E is considered acceptable:

- Intersections in the John Wayne Airport area shared with the City of Irvine;
- Dover Drive/West Coast Highway (SR-1);
- Goldenrod Avenue/East Coast Highway; and
- Marguerite Avenue/East Coast Highway.

The criteria for assessing the phased implementation of development, as defined in the City's Traffic Phasing Ordinance, is to achieve LOS D or better at any primary intersection exceeding LOS D within the City.

City of Newport Beach Impact Significance Criteria. To determine whether the addition of project-generated trips at a signalized study intersection results in a significant impact, the City of Newport Beach has established the following threshold of significance:

- A significant impact occurs when the addition of project-generated trips causes the LOS at a study intersection to deteriorate from an acceptable LOS (LOS D or better except as noted above) to a deficient LOS (LOS E or F); or
- A significant impact occurs when the addition of project-generated trips increases the intersection capacity utilization at a study intersection by 1 percent or more of capacity (v/c 0.01), worsening a projected baseline condition of LOS E or LOS F.

City of Irvine Traffic Forecasting Methodology. Future forecast traffic conditions at signalized study intersections in the City of Irvine are also analyzed using the ICU analysis method. As described above, the ICU methodology is based on intersection v/c ratios. The efficiency of traffic operations is measured in terms of LOS. The LOS refers to the quality of traffic flow along roadways and at intersections. The ICU LOS level is determined by measuring the ratio of v/c. Each letter grade corresponds to a range of v/c values, which are described in Table 4.2.A.

City of Irvine Performance Criteria. The City of Irvine performance criteria are used in this analysis for intersections located within the City of Irvine. The City of Irvine target for peak-hour intersection operation is LOS D or better, except in the following areas where LOS E is considered acceptable:

- Intersections in the John Wayne Airport area shared with the City of Newport Beach; and
- Irvine Business Complex (IBC) area.

City of Irvine Impact Significance Criteria. To determine whether the addition of project-generated trips at a signalized study intersection results in a significant impact, the City of Irvine has established the following threshold of significance:

• If the intersection in question exceeds acceptable LOS in the baseline condition and the impact of the development is greater than or equal to 0.02, rounded to the second decimal place, then project mitigation will be required back, at a minimum, to baseline. For intersections projected to be deficient in the most recent Circulation Phasing Analysis Report, if the project raises the ICU at an intersection by 0.01, rounded to the third decimal place, causing it to become deficient, then project mitigation will be required to bring the location back to baseline conditions, at a minimum.

Congestion Management Program (CMP) Intersection Analysis Methodology. The CMP is the program by which agencies in Orange County (County) have agreed to monitor and report on the status of regional roadways. In the County, the CMP uses ICU intersection analysis methodology to

analyze its operations. The CMP Highway System is a backbone arterial system of regionally significant roadways carrying the highest volume of traffic. The ICU analysis methodology describes the operation of a signalized intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on corresponding v/c ratios shown in Table 4.2.B.

Table 4.2.B: CMP LOS and V/C Ratio Ranges

LOS	V/C Ratio
А	< 0.61
В	0.61 to 0.70
С	0.71 to 0.80
D	0.81 to 0.90
Е	0.91 to 1.00
F	> 1.00

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009); 2007 Orange County Congestion Management Program

CMP = Congestion Management Program LOS = level of service v/c = volume-to-capacity ratios

In accordance with the Orange County CMP, the ICU analysis assumes a capacity of 1,700 vph for each travel lane (including turn lanes) through an intersection, with a lost time factor of 0.05, or 5 percent of the total capacity of the intersection, included in the lane capacity assumptions.

Orange County CMP Threshold of Significance. To determine whether the addition of projectgenerated trips results in a significant impact at a CMP study intersection, the Orange County CMP utilizes the following threshold of significance:

• A significant project impact occurs when a proposed project increases traffic demand at a CMP study intersection by more than 3 percent of capacity (v/c >0.03), causing or worsening LOS F (v/c>1.00).

State Highway Intersection Analysis Methodology. The California Department of Transportation (Caltrans) advocates use of Highway Capacity Manual (HCM) intersection analysis methodology to analyze the operation of signalized intersections for all State highway facilities (including SR-1). The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A to LOS F, based on the corresponding stopped delay experienced per vehicle, as shown in Table 4.2.C.

	Delay (in seconds)
LOS	Signalized Intersections
А	<u>≤</u> 10.0
В	> 10.0 to ≤ 20.0
С	> 20.0 to ≤ 35.0
D	> 35.0 to ≤ 55.0
Е	> 55.0 to ≤ 80.0
F	> 80.0

Table 4.2.C: State Highway LOS and Delay Ranges

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009); Transportation Research Board, *Highway Capacity Manual*, 2000

LOS = level of service

LOS is based on the average stopped delay per vehicle for all movements of signalized intersections.

State Highway Intersection Thresholds of Significance. To determine a significant impact at a State Highway intersection, the following threshold of significance was utilized:

• A significant project impact occurs at a State Highway study intersection when the addition of project-generated trips causes the peak-hour LOS of the study intersection to change from acceptable operation (LOS A, B, or C) to deficient operation (LOS D, E, or F).

4.2.2 Existing Environmental Setting

Roadway Description. The characteristics of the roadway system in the vicinity of the project site are described below.

- East Coast Highway (SR-1). In the vicinity of the project, SR-1 trends in an east-west direction. East of Dover Drive, SR-1 is known as East Coast Highway. Between Dover Drive and Bayside Drive, East Coast Highway is a seven-lane undivided roadway (four lanes in the westbound direction and three lanes in the eastbound direction) with on-street parking prohibited. From a point east of Bayside Drive to Jamboree Road, East Coast Highway is an eight-lane roadway, with a raised, landscaped median and on-street parking prohibited. Between Jamboree Road and MacArthur Boulevard, East Coast Highway is a six-lane divided roadway. Between MacArthur Boulevard and Pelican Point Drive, East Coast Highway is a four-lane divided roadway. East of Pelican Point Drive, East Coast Highway is a six-lane divided roadway. The posted speed limit on East Coast Highway in the study area ranges from 35 to 55 miles per hour (mph).
- West Coast Highway (SR-1). West of Dover Drive, SR-1 is known as West Coast Highway. Between Dover Drive and Balboa Bay Club Entry, West Coast Highway is a four-lane divided roadway, with a continuous left-turn lane and some nonmetered on-street parking permitted. From Tustin Avenue to Balboa Bay Club Entry, West Coast Highway is a five-lane divided roadway (two to three lanes in the westbound direction and two in the eastbound direction), with a continuous left-turn lane and both metered and nonmetered on-street parking are permitted.

Between Riverside Avenue and Tustin Avenue, West Coast Highway is a five-lane divided roadway (three lanes in the westbound direction and two in the eastbound direction), with a raised median and metered on-street parking permitted. From the Newport Boulevard (State Route 55 [SR-55]) southbound off-ramp to Riverside Avenue, West Coast Highway is a five-lane divided roadway (three lanes in the westbound direction and two in the eastbound direction) with a continuous left-turn lane and metered on-street parking permitted. From Superior Avenue to the Newport Boulevard southbound off-ramp, West Coast Highway is a seven-lane divided roadway (four lanes in the westbound direction and three in the eastbound direction). West of Superior Avenue, West Coast Highway transitions to a six-lane divided roadway. The posted speed limit on West Coast Highway in the study area ranges from 40 to 50 mph.

- Avocado Avenue is a two- to four-lane roadway trending in a north-south direction with on-street parking permitted in certain areas south of Farallon Drive. South of East Coast Highway,
- Avocado Avenue is a four-lane divided roadway with a raised landscaped median with a posted speed limit of 30 mph. Between East Coast Highway and San Miguel Drive, Avocado Avenue is a four-lane undivided roadway with a posted speed limit of 45 mph. North of San Miguel Drive, Avocado Avenue is a two-lane undivided roadway with some permitted on-street parking.
- **Bayside Drive** is a two-lane undivided roadway trending in a north-south direction, north of East Coast Highway, with on-street parking permitted. The posted speed limit on Bayside Drive north of East Coast Highway is 25 mph. South of East Coast Highway, Bayside Drive is a four-lane divided roadway with a continuous left-turn lane and on-street parking prohibited.
- **Birch Street** is a four-lane divided roadway trending in an east-west direction with a painted median and on-street parking prohibited. The posted speed limit on Birch Street in the study area is 40 mph.
- **Bison Avenue** is a four-lane divided roadway with a raised landscaped median, trending in an east-west direction with on-street parking prohibited. The posted speed limit on Bison Avenue is 40 mph.
- **Bonita Canyon Drive** east of MacArthur Boulevard is a four-lane divided roadway with a raised landscaped median, trending in an east-west direction with on-street parking prohibited. The posted speed limit on Bonita Canyon Drive in the study area is 45 mph.
- **Campus Drive** is a four-lane divided roadway trending in an east-west direction with a painted median and on-street parking prohibited east of MacArthur Boulevard, and a six-lane divided roadway with a raised median on-street parking prohibited west of MacArthur Boulevard. The posted speed limit on Campus Drive in the study area ranges from 45 to 50 mph.
- **Dover Drive** is a four-lane divided roadway with a raised landscaped median, trending in a northsouth direction with on-street parking prohibited between Coast Highway and Westcliff Drive. South of Coast Highway, Dover Drive changes name to Bayshore Drive. Bayshore Drive is a two-lane undivided roadway with on-street parking prohibited. The posted speed limit on Dover Drive is 40 mph.
- **Ford Road** between Jamboree Road and MacArthur Boulevard is a four-lane divided roadway with a raised landscaped median, trending in an east-west direction with on-street parking prohibited. The posted speed limit on Ford Road is 45 mph.
- Jamboree Road north of East Coast Highway is a six-lane divided roadway trending in a northsouth direction with a raised landscaped median and on-street parking prohibited. South of East

Coast Highway, Jamboree Road is a four-lane undivided roadway with a painted median and onstreet parking prohibited. The posted speed limit on Jamboree Road is 50 mph north of East Coast Highway and 35 mph south of East Coast Highway.

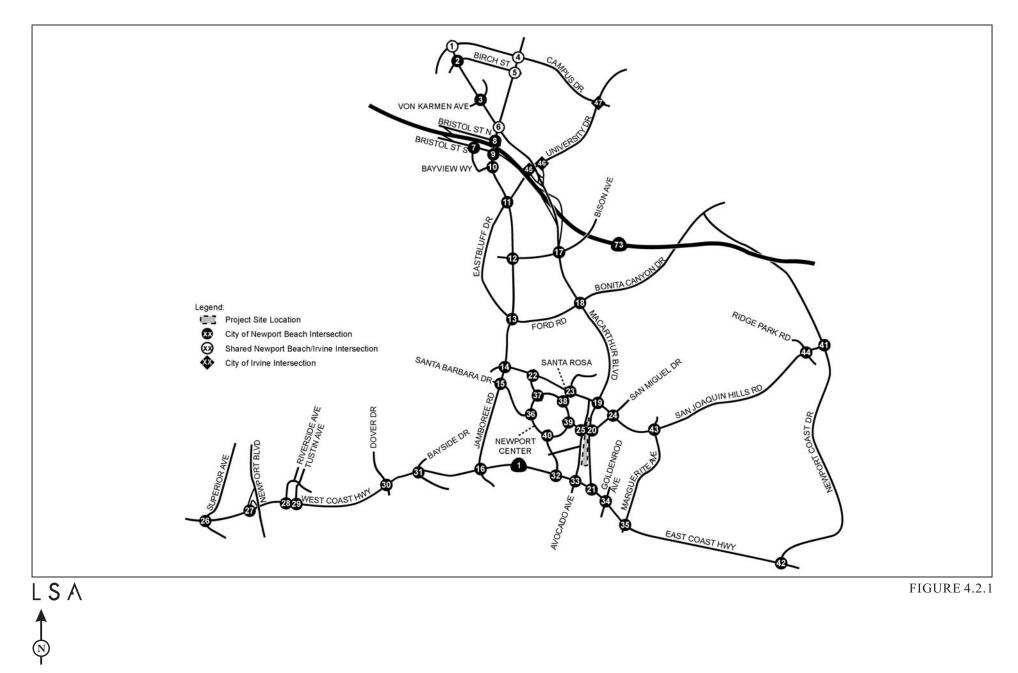
- MacArthur Boulevard trends in a north-south direction in the City. Between Coast Highway (SR-1) and San Miguel Drive, MacArthur Boulevard is a four-lane divided roadway with a raised landscaped median and a posted speed limit of 55 mph. Between San Miguel Drive and Bonita Canyon Drive, MacArthur Boulevard is a six-lane divided roadway with a raised landscaped median and a posted speed limit of 50 mph. Between Bonita Canyon Drive and the State Route 73 (SR-73) ramps, MacArthur Boulevard is an eight-lane divided roadway with a raised landscaped median and a posted speed limit of 50 mph. North of the SR-73 ramps, MacArthur Boulevard is a six-lane divided roadway with a raised landscaped median and a posted speed limit of 50 mph. North of the SR-73 ramps, MacArthur Boulevard is a six-lane divided roadway with a raised landscaped median and a posted speed limit of 50 mph. North of the SR-73 ramps, MacArthur Boulevard is a six-lane divided roadway with a raised landscaped median and a posted speed limit of 50 mph. North of the SR-73 ramps, MacArthur Boulevard is a six-lane divided roadway with a raised landscaped median and a posted speed limit of 50 mph. North of the SR-73 ramps, MacArthur Boulevard is a six-lane divided roadway with a raised landscaped median and a posted speed limit of 50 mph. On-street parking is prohibited on MacArthur Boulevard.
- **Riverside Avenue** between West Coast Highway and Avon Street is a four-lane undivided roadway, trending in a north-south direction, with on-street parking prohibited. North of Avon Street, Riverside Avenue is a two-lane undivided roadway. The posted speed limit on Riverside Avenue is 30 mph.
- San Joaquin Hills Road between Jamboree Road and Marguerite Avenue is a six-lane divided roadway with a raised landscaped median, trending in an east-west direction with on-street parking prohibited and a posted speed limit of 45 mph. Between Marguerite Avenue and Newport Coast Drive, San Joaquin Hills Road is a four-lane divided roadway with a raised landscaped median, trending in an east-west direction with on-street parking prohibited and a posted speed limit of 50–55 mph.
- San Miguel Drive is a four-lane divided roadway with a raised landscaped median, trending in an east-west direction with on-street parking prohibited. The posted speed limit on San Miguel Drive in the study area is 35 mph west of MacArthur Boulevard and 40 mph east of MacArthur Boulevard.
- **Tustin Avenue** is a two-lane undivided roadway trending in a north-south direction that terminates on the south at West Coast Highway. Metered on-street parking is permitted on Tustin Avenue.
- University Drive between Jamboree Road and MacArthur Boulevard varies from five lanes east of Jamboree Road to six lanes from the San Diego Creek Bridge to MacArthur Boulevard. The segment from MacArthur Boulevard to the University of California Irvine is a four-lane divided roadway with a raised landscaped median, trending in an east-west direction with on-street parking prohibited. The posted speed limit on University Drive in the study area is 45–50 mph.
- Von Karman Avenue is a four-lane divided roadway trending in an east-west direction with a painted median and on-street parking prohibited. The posted speed limit on Von Karman Avenue in the study area is 40 mph.

Existing Transit Service. Transit service is provided by OCTA in the vicinity of the proposed project site. The proposed project site is immediately adjacent to the Newport Transportation Center at the intersection of Avocado Avenue and San Nicolas Drive. The Civic CentervicCenter would be approximately 0.33 mile down Avocado Avenue from the Newport Transportation Center.

- OCTA Bus Line 1 travels along Coast Highway between Long Beach and San Clemente. Bus Line 1 stops at the Newport Transportation Center and travels on Avocado Avenue in front of the project site. Headways on Bus Line 1 are 30–60 minutes on weekdays and approximately 60 minutes on weekends and holidays.
- OCTA Bus Line 55 travels between Santa Ana and the Newport Transportation Center. Bus Line 55 originates/terminates at the Newport Transportation Center and travels on Newport Center Drive around Fashion Island using San Nicolas Drive to access the OCTA site. Headways on Bus Line 55 are approximately 20 minutes on weekdays and approximately 30 minutes on weekends and holidays.
- OCTA Bus Line 57 travels along State College Boulevard-Bristol Street between the Brea Mall and the Newport Transportation Center. Bus Line 57 originates/terminates at the Newport Transportation Center and travels on Newport Center Drive around Fashion Island using San Nicolas Drive to access the OCTA site. Headways on Bus Line 57 are approximately 30–60 minutes on weekdays and approximately 60 minutes on weekends and holidays.
- OCTA Bus Line 75 travels along Harvard Avenue and Jamboree Road between the Tustin Marketplace area and the Newport Transportation Center. Bus Line 75 originates/terminates at the Newport Transportation Center and travels on San Nicolas Drive and Newport Center Drive in the project vicinity. Headways on Bus Line 75 are 60 minutes on weekdays, with no service on weekends.
- OCTA Bus Line 76 travels along Talbert Avenue and MacArthur Boulevard between Huntington Beach and the Newport Transportation Center. Bus Line 76 originates/terminates at the Newport Transportation Center and travels on Avocado Avenue to San Miguel Drive in front of the project site. Headways on Bus Line 76 are 30–40 minutes on weekdays and approximately 60 minutes on weekends and holidays.
- OCTA Bus Line 79 travels along Irvine Boulevard, Culver Drive, and University Avenue between Tustin and the Newport Transportation Center. Bus Line 79 originates/terminates at the Newport Transportation Center and travels on Newport Center Drive around Fashion Island using San Nicolas Drive to access the OCTA site. Headways on Bus Line 79 are 30–60 minutes on weekdays and 60–80 minutes on weekends and holidays.

Study Area Intersections. The study area for the TIA included the following 47 intersections. The study area was initially determined in consultation with City of Newport Beach and City of Irvine staff and is confirmed through the Traffic Phasing Ordinance (TPO) analysis methodologies. Three intersections in the City of Irvine were added at the request of the City of Irvine. The locations of these study intersections are shown in Figure 4.2.1.

- 1. MacArthur Boulevard/Campus Drive*
- 2. MacArthur Boulevard/Birch Street
- 3. MacArthur Boulevard/Von Karman Avenue
- 4. Jamboree Road/Campus Drive*
- 5. Jamboree Road/Birch Street*



Newport Beach City Hall and Park Development Plan Study Area Intersection Locations

SOURCE: RBF Consulting

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- 6. Jamboree Road/MacArthur Boulevard*
- 7. Bayview Way/Bristol Street South
- 8. Jamboree Road/Bristol Street North
- 9. Jamboree Road/Bristol Street South
- 10. Jamboree Road/Bayview Way
- 11. Jamboree Road/Eastbluff Drive-University Drive
- 12. Jamboree Road/Bison Avenue
- 13. Jamboree Road/Eastbluff Drive-Ford Road
- 14. Jamboree Road/San Joaquin Hills Road
- 15. Jamboree Road/Santa Barbara Drive
- 16. Jamboree Road/East Coast Highway
- 17. MacArthur Boulevard/Bison Avenue
- 18. MacArthur Boulevard/Ford Road-Bonita Canyon Drive
- 19. MacArthur Boulevard/San Joaquin Hills Road
- 20. MacArthur Boulevard/San Miguel Drive
- 21. MacArthur Boulevard/East Coast Highway
- 22. Santa Cruz Drive/San Joaquin Hills Road
- 23. Santa Rosa Drive/San Joaquin Hills Road
- 24. San Miguel Drive/San Joaquin Hills Road
- 25. Avocado Avenue/San Miguel Drive
- 26. Balboa Boulevard-Superior Avenue/West Coast Highway
- 27. Newport Boulevard southbound ramps/West Coast Highway
- 28. Riverside Avenue/West Coast Highway
- 29. Tustin Avenue/West Coast Highway
- 30. Dover Drive/West Coast Highway+
- 31. Bayside Drive/East Coast Highway
- 32. Newport Center Drive/East Coast Highway
- 33. Avocado Avenue/East Coast Highway
- 34. Goldenrod Avenue/East Coast Highway+
- 35. Marguerite Avenue/East Coast Highway+
- 36. Newport Center Drive/Santa Barbara Drive
- 37. Santa Cruz Drive/Newport Center Drive

- 38. Santa Rosa Drive/Newport Center Drive
- 39. Newport Center Drive/San Miguel Drive
- 40. Newport Center Drive/Fashion Island
- 41. Newport Coast Drive/San Joaquin Hills Road
- 42. Newport Coast Drive/East Coast Highway
- 43. Marguerite Avenue/San Joaquin Hills Road
- 44. Ridge Park Road/San Joaquin Hills Road
- 45. MacArthur Boulevard southbound ramps/University Drive (City of Irvine)
- 46. MacArthur Boulevard northbound ramps/University Drive (City of Irvine)
- 47. Campus Drive/University Drive (City of Irvine)

* Intersection on the boundary of Newport Beach and Irvine

+ LOS E is acceptable LOS at these locations

Existing Conditions Peak-Hour Intersection LOS. Table 4.2.D summarizes the existing conditions, a.m. peak-hour and p.m. peak-hour LOS of the study intersections, as reported in the TIA. Traffic counts were obtained from the following sources:

City of Newport Beach intersections:

- 2009 traffic counts provided by City of Newport beach staff;
- Traffic counts available in *City of Newport Beach North Newport Center Traffic Phasing Ordinance Traffic Study (November, 2007);* and
- AM and PM peak-hour intersection turn movement counts collected in May 2009.

City of Irvine intersections:

• Traffic counts from the City of Irvine

As shown in Table 4.2.D, all of the study intersections currently operate at an acceptable LOS D. While the study intersections are calculated to operate at an acceptable LOS, it should be noted that the MacArthur Boulevard/San Miguel Drive and Avocado Avenue/San Miguel Drive intersections have experienced operational issues in the past due to the combination of the short spacing between the intersections and heavy turning movements.

		AM	PM		
Int.		Peak Hour	Peak Hour		
No.	Study Intersection	V/C-LOS	V/C-LOS		
1	MacArthur Boulevard/Campus Drive	0.50–A	0.84–D		
2	MacArthur Boulevard/Birch Street	0.65–B	0.75–C		
3	MacArthur Boulevard/Von Karman Avenue	0.37–A	0.53–A		
4	Jamboree Road/Campus Drive	0.67–B	0.73–C		
5	Jamboree Road/Birch Street	0.57–A	0.65–B		
6	Jamboree Road/MacArthur Boulevard	0.59–A	0.66–B		
7	Bayview Way/Bristol Street	0.58–A	0.67–B		
8	Jamboree Road/Bristol Street North	0.57–A	0.54–A		
9	Jamboree Road/Bristol Street South	0.67–B	0.68–B		
10	Jamboree Road/Bayview Way	0.40–A	0.46–A		
11	Jamboree Road/Eastbluff-University	0.58–A	0.58–A		
12	Jamboree Road/Bison Avenue	0.43–A	0.47–A		
13	Jamboree Road/Eastbluff-Ford	0.60–A	0.61–B		
14	Jamboree Road/San Joaquin Hills Road	0.56–A	0.57–A		
15	Jamboree Road/Santa Barbara Drive	0.49–A	0.66–B		
16	Jamboree Road/East Coast Highway	0.67–B	0.70–B		
17	MacArthur Boulevard/Bison Avenue	0.61–B	0.67–B		
18	MacArthur Boulevard/Ford-Bonita Canyon	0.73–C	0.78–C		
19	MacArthur Boulevard/San Joaquin Hills Road	0.66–B	0.82–D		
20	MacArthur Boulevard/San Miguel Drive	0.45–A	0.71–C		
21	MacArthur Boulevard/East Coast Highway	0.72–C	0.65–B		
22	Santa Cruz Drive/San Joaquin Hills Road	0.30–A	0.30–A		
23	Santa Rosa Drive/San Joaquin Hills Road	0.28–A	0.43–A		
24	San Miguel Drive/San Joaquin Hills Road	0.40–A	0.54–A		
25	Avocado Avenue/San Miguel Drive	0.33–A	0.72–C		
26	Balboa-Superior/West Coast Highway	0.65–B	0.65–B		
27	Newport Boulevard Southbound/West Coast Highway	0.83–D	0.64–B		
28	Riverside Avenue/West Coast Highway	0.65–B	0.71–C		
29	Tustin Avenue/West Coast Highway	0.65–B	0.58–A		
30	Dover Drive/West Coast Highway	0.63–B	0.71–C		
31	Bayside Drive/East Coast Highway	0.75–C	0.65–B		
32	Newport Center Drive/East Coast Highway	0.36–A	0.54–A		
33	Avocado Avenue/East Coast Highway	0.47–A	0.73–C		
34	Goldenrod Avenue/East Coast Highway	0.75–C	0.70–B		
35	Marguerite Avenue/East Coast Highway	0.80–C	0.74–C		
36	Newport Center Drive/Santa Barbara Drive	0.18–A	0.25–A		
37	Santa Cruz Drive/Newport Center Drive	0.12–A	0.21–A		
38	Santa Rosa Drive/Newport Center Drive	0.14–A	0.37–A		
39	Newport Center Drive/San Miguel Drive	0.22–A	0.45–A		
40	Fashion Island/Newport Center Drive	0.18–A	0.39–A		

Table 4.2.D: Existing (2009) Conditions AM and PM Peak-Hour LOS

		AM	PM
Int.		Peak Hour	Peak Hour
No.	Study Intersection	V/C-LOS	V/C-LOS
41	Newport Coast Drive/San Joaquin Hills Road	0.48–A	0.42–A
42	Newport Coast Drive/East Coast Highway	0.46–A	0.47–A
43	Marguerite Avenue/San Joaquin Hills Road	0.42–A	0.43–A
44	Ridge Park Road/San Joaquin Hills Road	0.29–A	0.28–A
45	MacArthur Southbound Ramps/University Drive	0.43–A	0.39–A
46	MacArthur Northbound Ramps/University Drive	0.47–A	0.58–A
47	University Drive/Campus Drive	0.78–C	0.72–C

Table 4.2.D: Existing (2009) Conditions AM and PM Peak-Hour LOS

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009) Int. No. = intersection number LOS = level of service V/C = volume-to-capacity ratio

4.2.3 Regulatory Setting

Federal Regulations. There are no relevant federal traffic and circulation regulations applicable to the proposed project.

State Regulations.

Congestion Management Program. As stated above, the CMP is the program by which agencies in the County have agreed to monitor and report on the status of regional roadways. In June 1990, the passage of the Proposition 111 gas tax increase required urbanized areas in the State with a population of 50,000 or more to adopt a CMP. Decisions made the following year by the majority of local governments in the County designated OCTA as the Congestion Management Agency (CMA) for the County. Since then, OCTA has been charged with the development, monitoring, and biennial updating of Orange County's CMP. The goals of Orange County's CMP are to reduce traffic congestion and provide a mechanism for coordinating land use and development decisions. The CMP is also the vehicle for proposing transportation projects that are eligible to compete for the State gas tax funds.

The CMP requires that a TIA be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System. Per the CMP guidelines, this number is based on the desire to analyze any impacts that comprise 3 percent or more of the existing CMP Highway System facilities' capacity. The CMP Highway System includes specific roadways, including State highways, smart streets, and CMP arterial monitoring locations/intersections. Therefore, the CMP TIA requirements relate only to the designated CMP Highway System. The CMP system in the City consists of the following roadways:

- MacArthur Boulevard (Jamboree Road to Coast Highway)
- Jamboree Road (between the City limits and MacArthur Boulevard)

- Coast Highway (throughout)
- Newport Boulevard (from the north City limits to Coast Highway)

Local Regulations.

City of Newport Beach Municipal Code. The following guidelines and provisions related to transportation and parking are part of the City Municipal Code.

Chapter 15.38 of the Municipal Code, *Fair Share Traffic Contribution Ordinance*, has been established by the City Council to establish a fee, based upon the unfunded cost to implement the Master Plan of Streets and Highways, to be paid in conjunction with the issuance of a building permit. The ordinance sets forth procedures for calculating the fair-share amounts as adopted by City Council resolution.

Chapter 20.66 of the Municipal Code, *Off Street Parking and Loading*, details the number of parking spaces required by various land uses. In addition, PC-27 establishes a specific parking requirement for libraries within the PC.

Chapter 15.40 of the Municipal Code, *Traffic Phasing Ordinance*, has been established by the City Council to ensure that the effects of new development projects are mitigated by developers as they occur. Specifically, the ordinance was established to:

- Provide a uniform method of analyzing and evaluating the traffic impacts of projects that generate a substantial number of average daily trips and/or trips during the morning or evening peak-hour period
- Identify the specific and near-term impacts of project traffic and ensure that development is phased with identified circulation system improvements
- Ensure that project proponents, as conditions of approval pursuant to this chapter, make or fund circulation system improvements that mitigate the specific impacts of project traffic on primary intersections at or near the time the project is ready for occupancy
 - Provide a mechanism for ensuring that project proponents' cost of complying with traffic-related conditions of project approval is roughly proportional to project impacts

City of Newport Beach General Plan. Traffic and circulation goals and policies are included in the Circulation Element of the City General Plan (2006). The following goals and policies are applicable to the proposed project.

Policy CE 2.1.1 Level of Service Standards: Plan the arterial roadway system to accommodate projected traffic at the following level of service standards:

A. Level of Service (LOS) "D" throughout the City, unless otherwise noted B. LOS "E" at any intersection in the Airport Area shared with Irvine

C. LOS "E" at Coast Highway (EW) and Dover Drive (NS) due to right-of-way

Limitations

D. LOS "E" at Marguerite Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of Corona del Mar

E. LOS "E" at Goldenrod Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of in Corona del Mar

Policy CE 2.1.4 Roadway Improvements: Pursue construction of intersection improvements shown on Figure CE3 (of the General Plan) or alternate improvements that achieve an acceptable level of service.

Policy CE 2.2.6 Emergency Access: Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.

Policy CE 5.1.13 Overhead Pedestrian Street Crossings: Consider overhead pedestrian crossings in areas where pedestrian use limits the efficiency of the roadway or signalized intersection.

Policy CE 6.2.1 Alternative Transportation Modes: Promote and encourage the use of alternative transportation modes, such as ridesharing, carpools, vanpools, public transit, bicycles, and walking; and provide facilities that support such alternate modes.

Policy CE 6.2.2 Support Facilities for Alternative Modes: Require new development projects to provide facilities commensurate with development type and intensity to support alternative modes, such as preferential parking for carpools, bicycle lockers, showers, commuter information areas, rideshare vehicle loading areas, water transportation docks, and bus stop improvements.

Policy CE 7.1.1 Required Parking: Require that new development provide adequate, convenient parking for residents, guests, business patrons, and visitors.

4.2.4 Impact Significance Criteria

The thresholds for traffic and circulation impacts used in this analysis are consistent with Appendix G of the State CEQA Guidelines. The effects of the project related to traffic and circulation are considered to be significant if the proposed project would:

Threshold 4.2.1:	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)
Threshold 4.2.2:	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways
Threshold 4.2.3:	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
Threshold 4.2.4:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
Threshold 4.2.5:	Result in inadequate emergency access
Threshold 4.2.6:	Result in inadequate parking capacity
Threshold 4.2.7:	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

The IS, included as Appendix A, substantiates that impacts associated with Threshold 4.2.3 would be less than significant. Therefore, this threshold will not be addressed in the following analysis.

4.2.5 Project Impacts

Threshold 4.2.1: Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?

Less than Significant with Mitigation Incorporated.

Project Trip Generation. Table 4.2.E summarizes the forecast trips anticipated to be generated by the proposed project. As shown in Table 4.2.E, the proposed project is forecast to generate approximately 3,070 daily trips, which include approximately 223 a.m. peak-hour trips and approximately 352 p.m. peak-hour trips.

	AM Peak-hour Trips			PM P			
Land Use	In	Out	Total	In	Out	Total	
City Hall (295 employees)	159	21	180	71	162	233	
17.135 tsf Library expansion	16	7	23	47	52	99	
14.3-acre park	1	0	1	1	0	1	
0.5-acre dog park	12	7	19	10	9	19	
Trip Generation of Proposed Project	188	35	223	129	223	352	

Table 4.2.E: Forecast Trip Generation of Proposed Project

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009) tsf = thousand square feet

As noted in the project description, the proposed Community Room and the Civic Green may be made available for nonrecurring special events. These events may include, but are not limited to, children's story hour, puppet shows, book discussion groups, film screenings, receptions for events and authors, evening dinner events, and Arts Commission events such as plays and art shows. Traffic modeling focuses on typical daily operations and does not account for occasional events that occur for short, discrete time frames during the year. Most of the events are expected to occur relatively infrequently and outside of the weekday a.m. or p.m. peak period, when traffic on the adjacent streets would be less than during the peak periods and therefore, significant traffic impacts are unlikely to occur from the hosting of these periodic events.

Existing plus Project Traffic Impacts. Traffic impacts were analyzed for the existing plus project condition to determine whether the increased trips generated by the proposed project would result in significant impacts to the study area intersections.

Existing plus project traffic a.m. and p.m. peak-hour volumes were derived by adding projectgenerated trips to existing conditions traffic volumes. Table 4.2.F summarizes existing with project traffic a.m. peak-hour and p.m. peak-hour LOS of the study intersections. As shown in Table 4.2.F, with the addition of project-generated trips, all study intersections are forecast to continue to operate at an acceptable LOS according to agency (Cities of Newport Beach and Irvine) performance criteria for existing with project traffic.

Table 4.2.F: Existing with Project Traffic AM and PM Peak-Hour LOS

		Existing Conditions		Exis with Proje				
		AM	PM	AM	PM	Increase in		
Int.		Peak Hour	Peak Hour	Peak Hour	Peak Hour	V	/C	Significant
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
1	MacArthur Boulevard/Campus Drive	0.50–A	0.84–D	0.50–A	0.84–D	0.00	0.00	No
2	MacArthur Boulevard/Birch Street	0.65–B	0.75–C	0.65–B	0.75–C	0.00	0.00	No
3	MacArthur Boulevard/Von Karman Avenue	0.37–A	0.53–A	0.37–A	0.54–A	0.00	0.01	No
4	Jamboree Road/Campus Drive	0.67–B	0.73–C	0.68–B	0.74–C	0.01	0.01	No
5	Jamboree Road/Birch Street	0.57–A	0.65–B	0.57–A	0.65–B	0.00	0.00	No
6	Jamboree Road/MacArthur Boulevard	0.59–A	0.66–B	0.59–A	0.67–B	0.00	0.01	No
7	Bayview Way/Bristol Street	0.58–A	0.67–B	0.59–A	0.67–B	0.01	0.00	No
8	Jamboree Road/Bristol Street North	0.57–A	0.54–A	0.57–A	0.54–A	0.00	0.00	No
9	Jamboree Road/Bristol Street South	0.67–B	0.68–B	0.67–B	0.68–B	0.00	0.00	No
10	Jamboree Road/Bayview Way	0.40–A	0.46–A	0.40–A	0.47–A	0.00	0.01	No
11	Jamboree Road/Eastbluff-University	0.58–A	0.57– A	0.58–A	0.57–A	0.00	0.00	No
12	Jamboree Road/Bison Avenue	0.43–A	0.47–A	0.43–A	0.48–A	0.00	0.01	No
13	Jamboree Road/Eastbluff-Ford	0.60–A	0.61–B	0.61–B	0.61–B	0.01	0.00	No
14	Jamboree Road/San Joaquin Hills Road	0.56–A	0.57–A	0.57–A	0.58–A	0.01	0.01	No
15	Jamboree Road/Santa Barbara Drive	0.49–A	0.66–B	0.49–A	0.66–B	0.00	0.00	No
16	Jamboree Road/East Coast Highway	0.67–B	0.70–B	0.67–B	0.71–B	0.00	0.01	No
17	MacArthur Boulevard/Bison Avenue	0.61–B	0.67–B	0.61–B	0.67–B	0.00	0.00	No
18	MacArthur Boulevard/Ford-Bonita Canyon	0.73–C	0.78–C	0.73–C	0.79–C	0.00	0.01	No
19	MacArthur Boulevard/San Joaquin Hills Road	0.66–B	0.82–D	0.67–B	0.84–D	0.01	0.02	No
20	MacArthur Boulevard/San Miguel Drive	0.45–A	0.71–C	0.49–A	0.73–C	0.04	0.02	No
21	MacArthur Boulevard/East Coast Highway	0.72–C	0.65–B	0.72–C	0.66–B	0.00	0.01	No
22	Santa Cruz Drive/San Joaquin Hills Road	0.30–A	0.30–A	0.30–A	0.31–A	0.00	0.01	No
23	Santa Rosa Drive/San Joaquin Hills Road	0.28–A	0.43–A	0.29–A	0.44–A	0.01	0.01	No
24	San Miguel Drive/San Joaquin Hills Road	0.40–A	0.54–A	0.40–A	0.55–A	0.00	0.01	No
25	Avocado Avenue/San Miguel Drive	0.33–A	0.72–C	0.34–A	0.79–C	0.01	0.07	No
26	Balboa-Superior/West Coast Highway	0.65–B	0.65–B	0.65–B	0.65–B	0.00	0.00	No
27	Newport Boulevard Southbound/West Coast Highway	0.83–D	0.64–B	0.84–D	0.64–B	0.01	0.00	No
28	Riverside Avenue/West Coast Highway	0.65–B	0.71–C	0.66–B	0.72–C	0.01	0.01	No
29	Tustin Avenue/West Coast Highway	0.65–B	0.58–A	0.67–B	0.58–A	0.02	0.00	No

		Existing Conditions		Existing with Project Traffic				
		AM	PM	AM	PM	Increase in		
Int.		Peak Hour	Peak Hour	Peak Hour	Peak Hour	V	/ C	Significant
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
30	Dover Drive/West Coast Highway ¹	0.63–B	0.71–C	0.64–B	0.72–C	0.01	0.01	No
31	Bayside Drive/East Coast Highway	0.75–C	0.65–B	0.76–C	0.66–B	0.01	0.01	No
32	Newport Center Drive/East Coast Highway	0.36–A	0.54–A	0.37–A	0.56–A	0.01	0.02	No
33	Avocado Avenue/East Coast Highway	0.47–A	0.73–C	0.50–A	0.74–C	0.03	0.01	No
34	Goldenrod Avenue/East Coast Highway ¹	0.75–C	0.70–B	0.76–C	0.71–C	0.01	0.01	No
35	Marguerite Avenue/East Coast Highway ¹	0.80–C	0.74–C	0.81–D	0.75–C	0.01	0.01	No
36	Newport Center Drive/Santa Barbara Drive	0.18–A	0.25–A	0.18–A	0.25–A	0.00	0.00	No
37	Santa Cruz Drive/Newport Center Drive	0.12–A	0.21–A	0.12–A	0.21–A	0.00	0.00	No
38	Santa Rosa Drive/Newport Center Drive	0.14–A	0.37–A	0.16–A	0.41–A	0.02	0.04	No
39	Newport Center Drive/San Miguel Drive	0.22–A	0.45–A	0.24–A	0.46–A	0.02	0.01	No
40	Fashion Island/Newport Center Drive	0.18–A	0.39–A	0.18–A	0.39–A	0.00	0.00	No
41	Newport Coast Drive/San Joaquin Hills Road	0.48–A	0.42–A	0.48–A	0.42–A	0.00	0.00	No
42	Newport Coast Drive/East Coast Highway	0.46–A	0.47–A	0.46–A	0.48–A	0.00	0.01	No
43	Marguerite Avenue/San Joaquin Hills Road	0.42–A	0.43–A	0.42–A	0.44–A	0.00	0.01	No
44	Ridge Park Road/San Joaquin Hills Road	0.29–A	0.28–A	0.29–A	0.28–A	0.00	0.00	No
45	MacArthur Southbound Ramps/University Drive	0.43–A	0.39–A	0.43–A	0.39–A	0.00	0.00	No
46	MacArthur Northbound Ramps/University Drive	0.47–A	0.58–A	0.47–A	0.58–A	0.00	0.00	No
47	University Drive/Campus Drive	0.78–C	0.72–C	0.78–C	0.72–C	0.00	0.00	No

Table 4.2.F: Existing with Project Traffic AM and PM Peak-Hour LOS

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

¹ City of Newport beach General Plan Circulation Element establishes LOS E as acceptable LOS at this intersection.

Int. No. = intersection number LOS = level of service V/C = volume-to-capacity ratio

Forecast Year 2013. The City of Newport Beach TPO requires determination of whether project trips will increase traffic on any leg of a study intersection by one percent or more during any peak-hour one year after project completion. The project is anticipated to open in 2012. Forecast year 2013 traffic was derived by adding an ambient growth rate of 1 percent per year to the existing volumes on primary roadways (Newport Boulevard north of Coast Highway, Coast Highway, Jamboree Road, and MacArthur Boulevard) as well as at the City of Irvine intersections along University Drive. In addition, traffic from committed projects (projects that have already been approved, but do not have a certificate of occupancy, with the exception of Newport Coast, which is approved but still being built out) was added to peak hour volumes. The committed projects assumed in the 2013 analysis are shown in Table 4.2.G.

Committed Project	Percent Complete
Fashion Island Expansion	40%
Temple Bat Yahm Expansion	65%
CIOSA–Irvine Project	91%
Newport Dunes	0%
1401 Dove Street	0%
Hoag Hospital Phase III	0%
St. Mark Presbyterian Church	77%
Corporate Plaza West	60%
Mariner's Mile Gateway	0%
OLQA Church Expansion	0%
2300 Newport Boulevard	0%
Newport Executive Court	0%
Hoag Health Center	50%
North Newport Center	0%
Santa Barbara Condo	0%

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

CIOSA = Circulation and Improvement and Open Space Agreement

OLQA = Our Lady Queen of Angels

According to TPO procedures, if forecast peak-hour traffic from the proposed project is less than 1 percent of the projected baseline traffic at any of the study intersections, then ICU analysis is not required. The following 10 City intersections do not require ICU analysis for forecast year 2013 with committed projects conditions because they do not contribute more trips than the 1 percent threshold:

- MacArthur Boulevard/Campus Drive
- MacArthur Boulevard/Birch Street
- Jamboree Road/Campus Drive
- Jamboree Road/Birch Street
- Bayview Way/Bristol Street

- Jamboree Road/Santa Barbara Drive
- Newport Center Drive/Santa Barbara Drive
- Santa Cruz Drive/Newport Center Drive
- Newport Coast Drive/San Joaquin Hills Road
- Ridge Park Road/San Joaquin Hills Road

Forecast Year 2013 withCommitted Projects without Project Traffic Impacts. Table 4.2.H summarizes forecast year 2013 baseline LOS with committed projects (without project traffic a.m. peak-hour and p.m. peak-hour trips) for the 37 study intersections requiring analysis for 2013. As shown in Table 4.2.H, all of the study intersections are forecast to continue to operate at an acceptable LOS according to agency performance criteria for forecast year 2013 with committed projects without project traffic.

Forecast Year 2013 with Committed Projects Plus Project Traffic Impacts. Traffic impacts were analyzed for the existing plus project condition and the forecast year 2013 with committed project plus project conditions to determine whether the increased trips generated by the proposed project would result in significant impacts to the study area intersections.

Forecast year 2013 with committed projects with project traffic a.m. and p.m. peak-hour volumes were derived by adding project-generated trips to forecast year 2013 with committed projects without project traffic. Table 4.2.I summarizes forecast year 2013 with committed projects without project and with project traffic a.m. peak-hour and p.m. peak-hour LOS of the 37 study intersections requiring ICU analysis. As shown in Table 4.2.I, with the addition of project-generated trips, the study intersections are forecast to continue to operate at an acceptable LOS according to agency (Cities of Newport Beach and Irvine) performance criteria for forecast year 2013 with committed projects with project traffic.

As also shown in Table 4.2.I, based on City of Newport Beach and City of Irvine-established thresholds of significance, the addition of project-generated trips would not result in significant impacts at the study intersections for forecast year 2013 with committed projects with project traffic. No mitigation is required.

		AM	PM
Int.		Peak Hour	Peak Hour
No.	Study Intersection	V/C-LOS	V/C-LOS
3	MacArthur Boulevard/Von Karman Avenue	0.38–A	0.54–A
6	Jamboree Road/MacArthur Boulevard	0.62–B	0.71–C
8	Jamboree Road/Bristol Street North	0.60–A	0.56–A
9	Jamboree Road/Bristol Street South	0.70–B	0.72–C
10	Jamboree Road/Bayview Way	0.41–A	0.48–A
11	Jamboree Road/Eastbluff-University	0.62–B	0.61–B
12	Jamboree Road/Bison Avenue	0.46–A	0.52–A
13	Jamboree Road/Eastbluff-Ford	0.64–B	0.65–B
14	Jamboree Road/San Joaquin Hills Road	0.60–A	0.64–B
16	Jamboree Road/East Coast Highway	0.71–C	0.76–C
17	MacArthur Boulevard/Bison Avenue	0.63–B	0.69–B
18	MacArthur Boulevard/Ford-Bonita Canyon	0.75–C	0.81–D
19	MacArthur Boulevard/San Joaquin Hills Road	0.69–B	0.87–D
20	MacArthur Boulevard/San Miguel Drive	0.45–A	0.73–C
21	MacArthur Boulevard/East Coast Highway	0.76–C	0.68–B
22	Santa Cruz Drive/San Joaquin Hills Road	0.31–A	0.31–A
23	Santa Rosa Drive/San Joaquin Hills Road	0.29–A	0.45–A
24	San Miguel Drive/San Joaquin Hills Road	0.40–A	0.55–A
25	Avocado Avenue/San Miguel Drive	0.33–A	0.73–C
26	Balboa-Superior/West Coast Highway	0.68–B	0.70–B
27	Newport Boulevard Southbound/West Coast Highway	0.89–D	0.70–B
28	Riverside Avenue/West Coast Highway	0.71–C	0.76–C
29	Tustin Avenue/West Coast Highway	0.71–C	0.62–B
30	Dover Drive/West Coast Highway ¹	0.67–B	0.77–C
31	Bayside Drive/East Coast Highway	0.81–D	0.74–C
32	Newport Center Drive/East Coast Highway	0.39–A	0.57–A
33	Avocado Avenue/East Coast Highway	0.50–A	0.75–C
34	Goldenrod Avenue/East Coast Highway ¹	0.79–C	0.73–C
35	Marguerite Avenue/East Coast Highway ¹	0.84–D	0.77–C
38	Santa Rosa Drive/Newport Center Drive	0.15–A	0.38–A
39	Newport Center Drive/San Miguel Drive	0.22–A	0.46–A
40	Fashion Island/Newport Center Drive	0.19–A	0.40–A
42	Newport Coast Drive/East Coast Highway	0.47–A	0.48–A
43	Marguerite Avenue/San Joaquin Hills Road	0.42–A	0.44–A
45	MacArthur Southbound Ramps/University Drive	0.47–A	0.41–A
46	MacArthur Northbound Ramps/University Drive	0.47–A	0.60–A
47	University Drive/Campus Drive	0.84–D	0.79–C

Table 4.2.H: Forecast Year 2013 with Committed Projects without ProjectTraffic AM and PM Peak-Hour LOS

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009
 City of Newport Beach General Plan Circulation Element establishes LOS E as acceptable LOS at this intersection.

Int. No. = intersection number LOS = level of service V/C = volume-to-capacity ratio

Table 4.2.I: Forecast Year 2013 with Committed Projects with Project Traffic AM and PM Peak-Hour LOS

			st Year					
			Committed					
			jects	2013 with 0				
			Project	Proj				
			affic	with Proje				
		AM	PM	AM	PM	Inone	ase in	
Int.		Peak	Peak	Peak	Peak		/C	Significant
nn. No.	Study Intersection	Hour	Hour	Hour	Hour			Impact?
	-	V/C-LOS		V/C-LOS	V/C-LOS	AM	PM	-
3	MacArthur Boulevard/Von Karman Avenue	0.38–A	0.54–A	0.38–A	0.55–A	0.00	0.01	No
6	Jamboree Road/MacArthur Boulevard	0.62–B	0.71–C	0.62–B	0.71–C	0.00	0.00	No
8	Jamboree Road/Bristol Street North	0.60–A	0.56–A	0.60–A	0.56–A	0.00	0.00	No
9	Jamboree Road/Bristol Street South	0.70–B	0.72–C	0.71–C	0.73–C	0.01	0.01	No
10	Jamboree Road/Bayview Way	0.41–A	0.48–A	0.41–A	0.49–A	0.00	0.01	No
11	Jamboree Road/Eastbluff-University	0.62–B	0.61–B	0.63–B	0.62–B	0.01	0.01	No
12	Jamboree Road/Bison Avenue	0.46–A	0.52–A	0.46–A	0.53–A	0.00	0.01	No
13	Jamboree Road/Eastbluff-Ford	0.64–B	0.65–B	0.65–B	0.65–B	0.01	0.00	No
14	Jamboree Road/San Joaquin Hills Road	0.60–A	0.64–B	0.61–B	0.68–B	0.01	0.04	No
16	Jamboree Road/East Coast Highway	0.71–C	0.76–C	0.71–C	0.77–C	0.00	0.01	No
17	MacArthur Boulevard/Bison Avenue	0.63–B	0.69–B	0.63–B	0.69–B	0.00	0.00	No
18	MacArthur Boulevard/Ford-Bonita Canyon	0.75–C	0.81–D	0.75–C	0.82–D	0.00	0.01	No
19	MacArthur Boulevard/San Joaquin Hills Road	0.69–B	0.87–D	0.70–B	0.88–D	0.01	0.01	No
20	MacArthur Boulevard/San Miguel Drive	0.45–A	0.73–C	0.49–A	0.75–C	0.04	0.02	No
21	MacArthur Boulevard/East Coast Highway	0.76–C	0.68–B	0.76–C	0.69–B	0.00	0.01	No
22	Santa Cruz Drive/San Joaquin Hills Road	0.31–A	0.31–A	0.32–A	0.32–A	0.01	0.01	No
23	Santa Rosa Drive/San Joaquin Hills Road	0.29–A	0.45–A	0.32–A	0.46–A	0.03	0.01	No
24	San Miguel Drive/San Joaquin Hills Road	0.40–A	0.55–A	0.40–A	0.56–A	0.00	0.01	No
25	Avocado Avenue/San Miguel Drive	0.33–A	0.73–C	0.34–A	0.80–C	0.01	0.07	No
26	Balboa-Superior/West Coast Highway	0.68–B	0.70–B	0.68–B	0.70–B	0.00	0.00	No
27	Newport Boulevard Southbound/West Coast Highway	0.89–D	0.70–B	0.90–D	0.70–B	0.01	0.00	No
28	Riverside Avenue/West Coast Highway	0.71–C	0.76–C	0.72–C	0.76–C	0.01	0.00	No
29	Tustin Avenue/West Coast Highway	0.71–C	0.62–B	0.72–C	0.63–B	0.01	0.01	No
30	Dover Drive/West Coast Highway ¹	0.67–B	0.77–C	0.68–B	0.78–C	0.01	0.01	No
31	Bayside Drive/East Coast Highway	0.81–D	0.74–C	0.82–D	0.75–C	0.01	0.01	No

1

Table 4.2.I: Forecast Year 2013 with Committed Projects with Project Traffic AM and PM Peak-Hour LOS

		without Project Traffic AM PM		tted Forecast Year 2013 with Committed t Projects with Project Traffic AM PM		Increase in		
Int.		Peak Peak Hour Hour		Реак Hour	Peak Hour		/C	Significant
No.	Study Intersection	V/C-LOS		V/C-LOS	V/C-LOS	AM	PM	Impact?
32	Newport Center Drive/East Coast Highway	0.39–A	0.57–A	0.39–A	0.58–A	0.00	0.01	No
33	Avocado Avenue/East Coast Highway	0.50–A	0.75–C	0.52–A	0.76–C	0.02	0.01	No
34	Goldenrod Avenue/East Coast Highway ¹	0.79–C	0.73–C	0.79–C	0.74–C	0.00	0.01	No
35	Marguerite Avenue/East Coast Highway ¹	0.84–D	0.77–C	0.84–D	0.78–C	0.00	0.01	No
38	Santa Rosa Drive/Newport Center Drive	0.15–A	0.38–A	0.17–A	0.42–A	0.02	0.04	No
39	Newport Center Drive/San Miguel Drive	0.22–A	0.46–A	0.25–A	0.47–A	0.03	0.01	No
40	Fashion Island/Newport Center Drive	0.19–A	0.40–A	0.19–A	0.40–A	0.00	0.00	No
42	Newport Coast Drive/East Coast Highway	0.47–A	0.48–A	0.48–A	0.49–A	0.01	0.01	No
43	Marguerite Avenue/San Joaquin Hills Road	0.42–A	0.44–A	0.42–A	0.44–A	0.00	0.00	No
45	MacArthur Southbound Ramps/University Drive	0.47–A	0.41–A	0.47–A	0.41–A	0.00	0.00	No
46	MacArthur Northbound Ramps/University Drive	0.47–A	0.60–A	0.47–A	0.60–A	0.00	0.00	No
47	University Drive/Campus Drive	0.84–D	0.79–C	0.84–D	0.79–C	0.00	0.00	No

¹ City of Newport Beach General Plan Circulation Element establishes LOS E as acceptable LOS at this intersection. Int. No. = intersection number LOS = level of service V/C = volume-to-capacity ratio

Forecast Year 2013 with Committed and Cumulative Projects Traffic Impacts. Cumulative impacts are assessed below by analyzing project impacts in the forecast year 2013 with committed and cumulative projects condition.

Forecast Year 2013 with Committed and Cumulative Projects. This section extends the forecast year 2013 with committed projects analysis to include trips associated with cumulative projects in addition to committed projects. Trip generation and distribution of cumulative projects in the study area were obtained from City Traffic Engineering staff and added to peak hour volumes to obtain forecast year 2013 with committed and cumulative projects without project conditions traffic volumes. The cumulative projects included in this analysis are as follows:

- Newport Coast
- Mariner's Medical Arts
- WPI-Newport, LLC
- Banning Ranch
- Sunset Ridge Park
- Old Newport General Plan Amendment (GPA)
- Marina Park
- Pres Office Building B
- Conexant/Koll Conceptual Plan
- Coast Community College District

Complete descriptions and traffic projections for these cumulative projects are provided in Appendix EE of the RBF TIA. As shown in Table 4.2.J, with the addition of project-generated trips, the study intersections are forecast to operate at an acceptable LOS according to agency performance criteria for forecast year 2013 with committed and cumulative projects plus project traffic with the exception of the following intersection:

• Newport Boulevard southbound ramps/West Coast Highway (p.m. peak hour only)

However, the deficiency is due to existing and cumulative traffic volumes, not the addition of project traffic, as this intersection would operate at an unacceptable LOS with or without the project.

Based on City of Newport Beach and City of Irvine-established thresholds of significance, the addition of project-generated trips would not result in significant impacts at the study intersections for forecast year 2013 with committed and cumulative projects. There is no significant impact at the deficiently operating study intersections since the v/c increase from project trips is less than 0.01. Therefore, no mitigation is required.

Table 4.2.J: Forecast Year 2013 with Committed and Cumulative Projects without and with Project Traffic AM and PMPeak-Hour LOS

		Forecast YearForecast Year2013 with Committed2013 with Committedand Cumulativeand Cumulative						
			nulative jects		nulative jects			
		without Project Traffic with Project Traffic						
		AM	PM	AM	PM		ase in	
Int.		Peak Hour	Peak Hour	Peak Hour	Peak Hour	V	/C	Significant
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
3	MacArthur Boulevard/Von Karman Avenue	0.40–A	0.53–A	0.40–A	0.53–A	0.001	0.001	No
6	Jamboree Road/MacArthur Boulevard	0.66–B	0.73–C	0.66–B	0.74–C	0.001	0.006	No
8	Jamboree Road/Bristol Street North	0.61–B	0.57–A	0.61–B	0.57–A	0.003	0.002	No
	Jamboree Road/Bristol Street South	0.70–B	0.73–C	0.71–C	0.74–C	0.008	0.006	No
	Jamboree Road/Bayview Way	0.42–A	0.49–A	0.42–A	0.50–A	0.001	0.007	No
11	Jamboree Road/Eastbluff-University	0.64–B	0.63–B	0.65–B	0.64–B	0.009	0.009	No
12	Jamboree Road/Bison Avenue	0.47–A	0.55–A	0.47–A	0.56–A	0.001	0.010	No
	Jamboree Road/Eastbluff-Ford	0.67–B	0.68–B	0.68–B	0.69–B	0.010	0.006	No
14	Jamboree Road/San Joaquin Hills Road	0.62–B	0.68–B	0.63–B	0.72–C	0.014	0.036	No
16	Jamboree Road/East Coast Highway	0.77–C	0.86–D	0.77–C	0.87–D	0.002	0.010	No
17	MacArthur Boulevard/Bison Avenue	0.64–B	0.70–B	0.64–B	0.71–C	0.001	0.003	No
	MacArthur Boulevard/Ford-Bonita Canyon	0.77–C	0.82–D	0.77–C	0.83–D	0.004	0.010	No
	MacArthur Boulevard/San Joaquin Hills Road	0.69–B	0.88–D	0.71–C	0.90–D	0.013	0.014	No
20	MacArthur Boulevard/San Miguel Drive	0.47–A	0.75–C	0.51–A	0.77–C	0.041	0.026	No
21	MacArthur Boulevard/East Coast Highway	0.83–D	0.77–C	0.83–D	0.77–C	0.004	0.002	No
22	Santa Cruz Drive/San Joaquin Hills Road	0.31–A	0.31–A	0.32–A	0.32–A	0.009	0.009	No
23	Santa Rosa Drive/San Joaquin Hills Road	0.29–A	0.46–A	0.32–A	0.46–A	0.027	0.005	No
24	San Miguel Drive/San Joaquin Hills Road	0.40–A	0.55–A	0.41–A	0.56–A	0.002	0.009	No
25	Avocado Avenue/San Miguel Drive	0.34–A	0.74–C	0.35–A	0.81–D	0.009	0.072	No
26	Balboa-Superior/West Coast Highway	0.72–C	0.75–C	0.72–C	0.76–C	0.004	0.003	No
27	Newport Boulevard Southbound/West Coast Highway	0.97-Е	0.87–D	0.98-E	0.87–D	0.006	0.003	No
	Riverside Avenue/West Coast Highway	0.73–C	0.78–C	0.74–C	0.79–C	0.011	0.010	No
29	Tustin Avenue/West Coast Highway	0.73–C	0.65–B	0.74–C	0.67–B	0.011	0.010	No
30	Dover Drive/West Coast Highway ¹	0.69–B	0.80–C	0.70–B	0.82–D	0.010	0.012	No

Table 4.2.J: Forecast Year 2013 with Committed and Cumulative Projects without and with Project Traffic AM and PMPeak-Hour LOS

		Forecast Year 2013 with Committed and Cumulative Projects without Project Traffic		and Cui Proj with Proj	Committed nulative jects ect Traffic	Increase in		
Int.		AM PM Peak Hour Peak Hour Pe		AM Peak Hour	PM Peak Hour	TUC		Significant
No.	Study Intersection			V/C-LOS	V/C-LOS	AM	PM	Impact?
31	Bayside Drive/East Coast Highway	0.82–D	0.76–C	0.83–D	0.77–C	0.011	0.010	No
32	Newport Center Drive/East Coast Highway	0.44–A	0.57–A	0.44–A	0.59–A	0.006	0.015	No
33	Avocado Avenue/East Coast Highway	0.56–A	0.82–D	0.59–A	0.83–D	0.025	0.007	No
34	Goldenrod Avenue/East Coast Highway ¹	0.91–E	0.86–D	0.92–E	0.87–D	0.006	0.007	No
35	Marguerite Avenue/East Coast Highway ¹	1.00-E	0.90–D	1.00-E	0.91–E	0.006	0.007	No
38	Santa Rosa Drive/Newport Center Drive	0.15–A	0.39–A	0.17–A	0.43–A	0.017	0.037	No
39	Newport Center Drive/San Miguel Drive	0.23–A	0.48–A	0.25–A	0.48–A	0.025	0.011	No
40	Fashion Island/Newport Center Drive	0.19–A	0.41–A	0.19–A	0.41–A	0.001	0.001	No
42	Newport Coast Drive/East Coast Highway	0.60–A	0.78–C	0.60–A	0.79–C	0.004	0.004	No
43	Marguerite Avenue/San Joaquin Hills Road	0.42–A	0.44–A	0.42–A	0.44–A	0.003	0.005	No
45	MacArthur Southbound Ramps/University Drive	0.48–A	0.42–A	0.48–A	0.42–A	0.003	0.001	No
46	MacArthur Northbound Ramps/University Drive	0.50–A	0.61–B	0.50–A	0.62–B	0.00	0.005	No
47	University Drive/Campus Drive	0.84–D	0.81–D	0.85–D	0.82–D	0.003	0.001	No

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

¹ City of Newport Beach General Plan Circulation Element establishes LOS E as acceptable LOS at this intersection.

Int. No. = intersection number LOS = level of service V/C = volume-to-capacity ratio; deficient intersection operation shown in **bold**

Forecast General Plan Build-Out Traffic Impacts. Impacts are assessed below by analyzing project impacts in the forecast General Plan build-out condition.

Forecast General Plan Build Out. Forecast General Plan build out without project conditions are based on General Plan build-out traffic volumes, with build-out intersection geometrics, contained in City of Newport Beach General Plan Transportation Study (Urban Crossroads 2006) and post-2030 traffic volumes obtained from the City of Irvine.

Table 4.2.K summarizes forecast General Plan build out without and with project traffic a.m. peak-hour and p.m. peak-hour LOS of the study intersections. As shown Table 4.2.K, the study intersections are forecast to operate at an acceptable LOS according to agency performance criteria for forecast General Plan build out without project traffic.

Under General Plan build out with project traffic, the following three intersections are projected to operate at LOS E. However, these intersections are defined in the General Plan as being locations where LOS E is acceptable:

- Dover Drive/West Coast Highway
- Goldenrod Avenue/East Coast Highway
- Marguerite Avenue/East Coast Highway

The one remaining LOS E location is the Bayside Drive/Coast Highway intersection, where the addition of project traffic would increase the ICU from 0.90 to 0.91. Based on the City's thresholds of significance, the addition of project-generated trips is forecast to result in a significant cumulative impact at the Bayside Drive/Coast Highway intersection for Forecast General Plan build out with project traffic.

Mitigation Measure 4.2.1 requires restriping of the northbound Bayside Drive approach to the East Coast Highway intersection from two left-turn lanes and a shared left/through/right lane to two left turns, a shared left/through lane, and a right-turn lane. With the restriping, a.m. and p.m. peak-hour v/c at Bayside Drive/East Coast Highway would be 0.89 and 0.86, respectively. This intersection would operate at LOS D in the a.m. and p.m. peak hours. Therefore, with implementation of Mitigation Measure 4.2.1, the cumulative traffic impacts at Bayside Drive/East Coast Highway would be reduced to less than significant during the a.m. peak hour for forecast General Plan build out with project traffic.

Construction Traffic. Construction of the project is anticipated to occur from 2009 to 2012. During the construction period, two types of construction traffic would be generated: construction employee trips and construction vehicle trips. This assessment quantifies the projected construction-related traffic and assesses the likelihood of its impacts during the approximately 30-month construction period.

		Forecast G			eneral Plan			
		Build			l Out			
		without Pro		0	ect Traffic	Terono		
T 4		AM	PM	AM	PM		ase in /C	
Int.	Studu Internetion	Peak Hour	Peak Hour	Peak Hour				Significant
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
1	MacArthur Boulevard/Campus Drive	0.77–C	0.83–D	0.77–C	0.83–D	0.00	0.001	No
2	MacArthur Boulevard/Birch Street	0.77–C	0.84–D	0.77–C	0.84–D	0.00	0.001	No
3	MacArthur Boulevard/Von Karman Avenue	0.50–A	0.65–B	0.51–A	0.65–B	0.001	0.001	No
4	Jamboree Road/Campus Drive	0.87–D	0.90–D	0.87–D	0.90–D	0.00	0.00	No
5	Jamboree Road/Birch Street	0.89–D	0.78–C	0.89–D	0.78–C	0.003	0.004	No
6	Jamboree Road/MacArthur Boulevard	0.87–D	0.82–D	0.87–D	0.82–D	0.004	0.004	No
7	Bayview Way/Bristol Street	0.58–A	0.61–B	0.59–A	0.62–B	0.004	0.002	No
8	Jamboree Road/Bristol Street North	0.68–B	0.67–B	0.68–B	0.67–B	0.002	0.001	No
9	Jamboree Road/Bristol Street South	0.88–D	0.80–C	0.89–D	0.80–C	0.001	0.005	No
10	Jamboree Road/Bayview Way	0.45–A	0.60–A	0.45–A	0.61–B	0.001	0.007	No
11	Jamboree Road/Eastbluff-University	0.68–B	0.65–B	0.68–B	0.66–B	0.002	0.010	No
12	Jamboree Road/Bison Avenue	0.52–A	0.60–A	0.52–A	0.61–B	0.001	0.010	No
13	Jamboree Road/Eastbluff-Ford	0.78–C	0.76–C	0.79–C	0.77–C	0.010	0.006	No
14	Jamboree Road/San Joaquin Hills Road	0.600–A	0.71–C	0.61–B	0.72–C	0.014	0.010	No
15	Jamboree Road/Santa Barbara Drive	0.56–A	0.75–C	0.56–A	0.76–C	0.001	0.002	No
16	Jamboree Road/East Coast Highway	0.76–C	0.78–C	0.76–C	0.79–C	0.002	0.010	No
17	MacArthur Boulevard/Bison Avenue	0.74–C	0.77–C	0.74–C	0.77–C	0.001	0.004	No
18	MacArthur Boulevard/Ford-Bonita Canyon	0.78–C	0.87–D	0.79–C	0.88–D	0.008	0.010	No
19	MacArthur Boulevard/San Joaquin Hills Road	0.65–B	0.81–D	0.67–B	0.82–D	0.013	0.012	No
20	MacArthur Boulevard/San Miguel Drive	0.66–B	0.75–C	0.70–B	0.78–C	0.041	0.027	No
21	MacArthur Boulevard/East Coast Highway	0.71–C	0.77–C	0.71–C	0.77–C	0.004	0.002	No
22	Santa Cruz Drive/San Joaquin Hills Road	0.37–A	0.35–A	0.38–A	0.36–A	0.009	0.009	No
23	Santa Rosa Drive/San Joaquin Hills Road	0.40–A	0.67–B	0.41–A	0.67–B	0.009	0.005	No
24	San Miguel Drive/San Joaquin Hills Road	0.55–A	0.67–B	0.55–A	0.68–B	0.002	0.008	No
25	Avocado Avenue/San Miguel Drive	0.37–A	0.80–C	0.39–A	0.86–D	0.024	0.058	No
26	Balboa-Superior/West Coast Highway	0.90–D	0.75–C	0.90–D	0.75–C	0.004	0.002	No

Table 4.2.K: Forecast General Plan Build Out without and with Project Traffic AM and PM Peak-Hour LOS

		Forecast G	eneral Plan l Out		eneral Plan l Out			
			ject Traffic		ect Traffic			
		AM	PM	AM	PM	Incre	ase in	
Int.		Peak Hour Peak Hour Peak Hour			r V/C		Significant	
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
27	Newport Boulevard Southbound/West Coast Highway	0.84–D	0.74–C	0.85–D	0.74–C	0.008	0.004	No
28	Riverside Avenue/West Coast Highway	0.74–C	0.87–D	0.74–C	0.88–D	0.008	0.009	No
29	Tustin Avenue/West Coast Highway	0.60–A	0.77–C	0.61–B	0.77–C	0.008	0.009	No
30	Dover Drive/West Coast Highway ¹	0.78–C	0.90–D	0.79–C	0.91–EE	0.011	0.012	No
31	Bayside Drive/East Coast Highway	0.90–D	0.85–D	0.91-EE	0.86–D	0.010	0.009	Yes
32	Newport Center Drive/East Coast Highway	0.47–A	0.63–B	0.48–A	0.64–B	0.006	0.015	No
33	Avocado Avenue/East Coast Highway	0.72–C	0.75–C	0.75–C	0.77–C	0.024	0.024	No
34	Goldenrod Avenue/East Coast Highway ¹	0.99–E	0.69–B	0.99–E	0.70–B	0.006	0.007	No
	Marguerite Avenue/East Coast Highway ¹	0.98–E	0.97–E	0.99–E	0.97–E	0.006	0.007	No
36	Newport Center Drive/Santa Barbara Drive	0.19–A	0.26–A	0.19–A	0.26–A	0.00	0.00	No
37	Santa Cruz Drive/Newport Center Drive	0.13–A	0.23–A	0.13–A	0.23–A	0.00	0.00	No
38	Santa Rosa Drive/Newport Center Drive	0.16–A	0.41–A	0.18–A	0.44–A	0.016	0.038	No
39	Newport Center Drive/San Miguel Drive	0.24–A	0.49–A	0.26–A	0.50–A	0.024	0.012	No
40	Fashion Island/Newport Center Drive	0.19–A	0.42–A	0.19–A	0.42–A	0.00	0.00	No
41	Newport Coast Drive/San Joaquin Hills Road	0.64–B	0.49–A	0.64–B	0.50–A	0.00	0.001	No
42	Newport Coast Drive/East Coast Highway	0.71–C	0.75–C	0.71–C	0.75–C	0.004	0.004	No
43	Marguerite Avenue/San Joaquin Hills Road	0.44–A	0.52–A	0.44–A	0.53–A	0.002	0.004	No
44	Ridge Park Road/San Joaquin Hills Road	0.33–A	0.28–A	0.34–A	0.29–A	0.001	0.001	No
45	MacArthur Southbound Ramps/University Drive	0.68–B	0.69–B	0.68–B	0.69–B	0.002	0.002	No
46	MacArthur Northbound Ramps/University Drive	0.60–A	0.72–C	0.60–A	0.72–C	0.00	0.00	No
47	University Drive/Campus Drive	0.65–B	0.74–C	0.66–B	0.75–C	0.002	0.002	No

Table 4.2.K: Forecast General Plan Build Out without and with Project Traffic AM and PM Peak-Hour LOS

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)
¹ City of Newport Beach General Plan Circulation Element establishes LOS E as acceptable LOS at this intersection.

Int. No. = intersection number LOS = level of service V/C = volume-to-capacity ratio

According to C.W. Driver, the construction project manager for the proposed project, the maximum number of construction workers on site at any one time would be a peak of 480. While this number of employees could result in a trip generation of 400 to 420 trips during the hour of their arrival and departure, these trips would not coincide with the peak hours of vehicle traffic on the streets. The construction schedule provided by C.W. Driver calls for employees to arrive on site by 7:00 a.m. and to leave between 3:00 and 3:30 p.m. Because the morning and evening peak hours of vehicle traffic on the streets are from 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m., they are outside these time frames, and none of the intersections within the study area are operating near capacity, the potential impact of the construction employee trips is negligible.

The trip generation related to construction vehicle trips is related to delivery-related vehicle trips that occur on a random basis throughout the site's construction hours. On a daily basis, such trips could overlap with the morning peak hour of the streets; therefore, any impacts due to construction vehicle trips would occur in the a.m. peak hour. A substantial haul operation would be necessary during the initial part of the construction period to export excess dirt from the site. The dirt export operation could result in 200 roundtrips per day, with 40 occurring per hour. Utilizing a passenger car equivalency (PCE) of 3.0 per truck (a factor expressed in the HCM for heavy truck movements on rolling and/or hilly terrain) would equate to 120 inbound and 120 outbound trips per hour for a total of 240 trips.

The projected haul route through the study area is anticipated to utilize MacArthur Boulevard in conjunction with SR-73. Therefore, the focus of this assessment is on the MacArthur Boulevard intersections from Coast Highway to the SR-73 ramps northerly of Bison Avenue. Refer to Figure 3.17 for an illustration of the proposed haul route.

Examination of the projected a.m. peak hour conditions along this stretch of MacArthur Boulevard for the with project condition with consideration of both committed and cumulative projects (Table 4.2.J) shows that all affected intersections are projected to operate within a satisfactory range. Since the committed and cumulative scenarios are actually 2 years beyond the time when the haul operation is anticipated to occur and, therefore, includes extra traffic due to application of the 11 percent annual growth rate, it can be concluded that applicable capacity criteria would not be exceeded due to consideration of the haul operation.

Recognizing the recent history of operations issues at the intersections of San Miguel Drive with Avocado Avenue and MacArthur Boulevard, it is clear that conditions at these intersections would degrade if the haul route were to include the use of San Miguel Drive. Project construction traffic may cause conditions at these intersections to degrade if the project haul route were to include the use of San Miguel Drive (i.e., vehicles queues could grow, downstream traffic congestion could increase, vehicle discharge could take greater than one or two signal cycles). Mitigation Measure 4.2.2 requires the preparation and implementation of a Construction Area Traffic Management Plan that would prohibit the use of San Miguel Drive between MacArthur Boulevard and Newport Center Drive as the dirt-hauling route during construction. With implementation of Mitigation Measure 4.2.2, traffic impacts related to construction traffic would be reduced to below a level of significance.

Operational Traffic Characteristics at State Highway Intersections. LOS analyses were performed at study intersections under the jurisdiction of Caltrans using the HCM methods in accordance with the Caltrans Guide for the Preparation of Traffic Impact Studies. Table 4.2.L summarizes existing plus project traffic a.m. peak hour and p.m. peak hour LOS of the State Highway study intersections. As this table shows, with the addition of project-generated trips, the State Highway study intersections are forecast to operate at an acceptable LOS (LOS C or better) according to Caltrans performance criteria for existing condition.

Table 4.2.M summarizes forecast year 2013 with committed projects with project traffic a.m. peakhour and p.m. peak-hour LOS of the State Highway study intersections. As this table shows, with the addition of project-generated trips, the State Highway study intersections are forecast to operate at an acceptable LOS (LOS C or better) according to Caltrans performance criteria for forecast year 2013. As shown in Table 4.2.M, the addition of project-generated trips is forecast to result in no significant impacts at the State Highway study intersections for forecast year 2013 with committed projects and with project traffic. No mitigation is required.

		Existing (Conditions	Existing Plus l	Project Traffic
Int.		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
No.	Study Intersection	Delay-LOS	Delay-LOS	Delay-LOS	Delay-LOS
26	Balboa-Superior/West Coast Highway	24.3–C	29.1–C	24.4–C	29.1–C
27	Newport Boulevard Southbound/West Coast Highway	14.1–B	16.4–B	14.2-В	16.4–B
28	Riverside Avenue/West Coast Highway	11.3–B	14.1–B	11.3–B	14.1–B
29	Tustin Avenue/West Coast Highway	3.2–A	5.6–A	3.3–A	5.5–A
30	Dover Drive/West Coast Highway	20.1–C	21.4–C	20.1–C	21.5–C
31	`Bayside Drive/East Coast Highway	12.3–B	13.6–B	12.4–B	13.5–B

Table 4.2.L: State Highway Existing Plus Project Traffic AM and PM Peak-Hour Intersection LOS

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009) Int. No. = Intersection Number LOS = level of service

Table 4.2.N summarizes forecast year 2013 with committed and cumulative projects without and with project traffic a.m. peak-hour and p.m. peak-hour LOS of the State Highway study intersections. As shown in Table 4.2.N, the State Highway study intersections are forecast to operate at an acceptable LOS (LOS C or better) according to Caltrans performance criteria for forecast year 2013 with committed and cumulative projects without and with project traffic. As also shown in Table 4.2.N, the addition of project-generated trips is forecast to result in no significant impacts at the State Highway study intersections for forecast year 2013 with committed and cumulative project traffic.

Table 4.2.O summarizes forecast General Plan build out based on Newport Beach and Irvine post-2030 traffic volumes for both without and with project traffic a.m. peak-hour and p.m. peak-hour LOS of the State Highway study intersections. As shown in Table 4.2.O, the State Highway study intersections are forecast to operate at an acceptable LOS (LOS C or better) according to Caltrans performance criteria for forecast General Plan build out without and with project traffic.

As also shown in Table 4.2.O, the addition of project-generated trips is forecast to result in no significant impacts at the State Highway study intersections for forecast General Plan build out with project traffic.

Table 4.2.M: State Highway Forecast Year 2013 with Committed Projects with Project Traffic AM and PM Peak-Hour **Intersection LOS**

		Committee			ar 2013 with Projects with Traffic			
Int.		AM PM		AM Doole Hour	PM Peak Hour	Increase in Ir Delay		Significant
No.	Study Intersection	Peak HourPeak HourDelay-LOSDelay-LOS		Peak Hour Delay-LOS	Delay-LOS	, i		Impact?
26	Balboa-Superior/West Coast Highway	24.4–C	29.8–C	24.4–C	29.8–C	0.0	0.0	No
27	Newport Boulevard Southbound/West Coast Highway	16.4–B	17.3–B	16.6–B	17.4–B	0.2	0.1	No
28	Riverside Avenue/West Coast Highway	11.3–B	14.0–B	11.3–B	14.0–B	0.0	0.0	No
29	Tustin Avenue/West Coast Highway	3.4–A	5.4–A	3.4–A	5.4–A	0.0	0.0	No
30	Dover Drive/West Coast Highway	19.9–B	21.9–C	20.0-В	22.1–C	0.1	0.2	No
31	Bayside Drive/East Coast Highway	15.1–B	16.5–B	15.2–B	16.5–B	0.1	0.0	No

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

Delay shown in seconds per vehicle. Int. No. = Intersection Number

LOS = level of service

Table 4.2.N: State Highway Forecast Year 2013 with Committed and Cumulative Projects without and with Project Traffic AMand PM Peak-Hour LOS

		Forecast Year 2013Forecast Year 2013with Committed Andwith Committed AndCumulative ProjectsCumulative Projects withwithout Project TrafficProject Traffic						
Int.		AM PM Peak Hour Peak Hour		AM Peak Hour	PM Peak Hour	Incre De	ase in lav	Significant
No.		Peak HourPeak HourDelay-LOSDelay-LOS		Delay-LOS	Delay-LOS	AM	PM	Impact?
26	Balboa-Superior/West Coast Highway	24.5–C	30.2–C	24.6–C	30.2–C	0.1	0.0	No
27	Newport Boulevard Southbound/West Coast Highway	19.8–B	21.1–C	20.2-С	21.2–C	0.4	0.1	No
28	Riverside Avenue/West Coast Highway	11.4–B	14.0–B	11.4–B	14.0–B	0.0	0.0	No
29	Tustin Avenue/West Coast Highway	3.4–A	5.5–A	3.4–A	5.5–A	0.0	0.0	No
30	Dover Drive/West Coast Highway	19.9–B	22.6–C	20.0-В	22.8–C	0.1	0.2	No
31	Bayside Drive/East Coast Highway	15.0–B	16.8–B	15.2-В	16.8–B	0.2	0.0	No

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

Delay shown in seconds per vehicle. Int. No. = Intersection Number LOS = level of service

Table 4.2.O: State Highway Forecast General Plan Build Out without and with Project Traffic AM and PM Peak-Hour LOS

		Forecast General Plan Build F Out without Project Traffic		Forecast Genera with Proj				
Int.		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		ase in lay	Significant
No.	Study Intersection	Delay-LOS	Delay-LOS	Delay-LOS	Delay-LOS	AM	PM	Impact?
26	Balboa-Superior/West Coast Highway	24.0–C	23.9-С	24.1–C	23.9–С	0.1	0.0	No
27	Newport Boulevard Southbound/West Coast Highway	12.7–B	14.7–B	12.9–B	14.7–B	0.2	0.0	No
28	Riverside Avenue/West Coast Highway	10.3–B	12.1–B	10.2–B	12.2–B	-0.1	0.1	No
29	Tustin Avenue/West Coast Highway	3.4–A	5.9–A	3.4–A	5.9–A	0.0	0.0	No
30	Dover Drive/West Coast Highway	17.3–B	16.4–B	17.4–B	16.6–B	0.1	0.2	No
31	Bayside Drive/East Coast Highway	16.3–B	13.7–B	16.5–B	13.7–B	0.2	0.0	No

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009) Delay shown in seconds per vehicle. Int. No. = Intersection Number LOS = level of service

		Existing C	onditions	Existing Pl Tra	•			
Int.		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	Increase in V/C		Significant
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
6	Jamboree Road/MacArthur Boulevard	0.60–A	0.68–B	0.61–B	0.68–B	0.01	0.00	No
21	MacArthur Boulevard/East Coast Highway	0.73–C	0.67–B	0.73–C	0.67–B	0.00	0.00	No
27	Newport Boulevard Southbound/West Coast Highway	0.83–D	0.65–B	0.84–D	0.66–B	0.01	0.01	No

Table 4.2.P: Existing with and without Project Traffic AM and PM Peak-Hour CMP Intersection LOS

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

CMP = Congestion Management Program Int. No. = Intersection Number LOS = level of service

V/C = volume-to-capacity ratio

It should be noted that while the Bayside Drive/East Coast Highway intersection operates deficiently due to the addition of project traffic, with the proposed project based on the ICU analysis methodology, it operates acceptably based on the HCM analysis methodology utilized by Caltrans.

Threshold 4.2.2: Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. Project and cumulative impacts were analyzed for the following CMP monitored intersections in accordance with the CMP guidelines: (1) Jamboree Road/MacArthur Boulevard, (2) MacArthur Boulevard/East Coast Highway, and Newport Boulevard southbound ramps/West Coast Highway. Results of this analysis are discussed below.

Existing Plus Project Traffic CMP Intersection Peak-Hour LOS. Table 4.2.P summarizes existing plus project traffic a.m. peak-hour and p.m. peak-hour LOS of the CMP study intersections. As shown in Table 4.2.P, the addition of project-generated trips is not forecast to result in significant impacts at the CMP study intersections for existing plus project traffic. Therefore, traffic impacts to CMP intersections for the existing plus project condition is considered less than significant. No mitigation is required.

Forecast Year 2013 with Committed Projects with Project Traffic CMP Intersection Peak-Hour LOS. Table 4.2.Q summarizes forecast year 2013 with committed projects with project traffic a.m. peak-hour and p.m. peak-hour LOS of the CMP study intersections. As shown in Table 4.2.Q, the addition of project-generated trips is forecast to result in no significant impacts at the CMP study intersections for forecast year 2013 with committed projects with project traffic. Therefore, traffic impacts to CMP intersections for the 2013 with committed projects plus project condition is considered less than significant. No mitigation is required.

Table 4.2.Q: Forecast Year 2013 with Committed Projects with and without Project Traffic AM and PM Peak-Hour CMP Intersection LOS

		Forecast Year 2013 with Committed Projects without Project Traffic		Forecast Ye Committe with Proje				
Int.		AM PM Peak Hour Peak Hour		AM Peak Hour	PM Peak Hour	Increase in V/C		Significant
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
6	Jamboree Road/MacArthur Boulevard	0.64–B	0.72–C	0.64–B	0.72–C	0.00	0.00	No
21	MacArthur Boulevard/East Coast Highway	0.76–C	0.69–B	0.77–C	0.70–В	0.01	0.01	No
27	Newport Boulevard Southbound/West Coast Highway	0.89–D	0.71–C	0.89–D	0.71–C	0.00	0.00	No

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

CMP = Congestion Management Program Int. No. = Intersection Number LOS = level of service V/C = volume-to-capacity ratio

Forecast Year 2013 with Committed and Cumulative Projects with Project Traffic CMP Intersection Peak-Hour LOS. Table 4.2.R summarizes forecast year 2013 with committed and cumulative projects with project traffic a.m. peak-hour and p.m. peak-hour LOS of the CMP study intersections. As shown in Table 4.2.R, the addition of project-generated trips is forecast to result in no significant impacts at the CMP study intersections for forecast year 2013 with committed and cumulative projects with project traffic. Therefore, traffic impacts to CMP facilities for the 2013 with committed and cumulative projects plus project condition is considered less than significant. No mitigation is required.

		2013 Commit Cumu Projects	st Year with tted and llative without Traffic	2013 Commit Cumu Projec	st Year with tted and llative ts with Traffic			
Terd		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	Incre V	ase in /C	G
Int. No.	Study Intersection	V/C– LOS	V/C– LOS	V/C– LOS	V/C– LOS	AM	PM	Significant Impact?
6	Jamboree Road/MacArthur Boulevard	0.67–B	0.74–C	0.67–B	0.75–C	0.00	0.01	No
21	MacArthur Boulevard/East Coast Highway	0.83–D	0.77–C	0.84–D	0.77–C	0.01	0.00	No
27	Newport Boulevard Southbound/West Coast Highway	0.96–E	0.86–D	0.97–E	0.87–D	0.01	0.01	No

Table 4.2.R: Forecast Year 2013 with Committed and Cumulative Projects with and without Project Traffic AM and PM Peak-Hour CMP Intersection LOS

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009) CMP = Congestion Management Program LOS = level of service V/C = volume-to-capacity ratio

Forecast General Plan Build Out with Project Traffic CMP Intersection Peak-hour LOS.

Table 4.2.S summarizes forecast General Plan build out with project traffic a.m. peak-hour and p.m. peak-hour LOS of the CMP study intersections. As shown in Table 4.2.S, the addition of project-generated trips is forecast to result in no significant impacts at the CMP study intersections for forecast General Plan build out with project traffic. Therefore, traffic impacts to CMP intersections for the General Plan build out plus project condition is considered less than significant. No mitigation is required.

Table 4.2.S: Forecast Year General Plan Build Out with and without Project Traffic AM and PM Peak-hour CMP Intersection LOS

		Forecast General Plan Build Out without Project Traffic		Forecast Gener Out with Pro				
Int.		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		ase in /C	Significant
No.	Study Intersection	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	AM	PM	Impact?
6	Jamboree Road/MacArthur Boulevard	0.87–D	0.82–D	0.87–D	0.82–D	0.00	0.00	No
21	MacArthur Boulevard/East Coast Highway	0.72–C	0.77–C	0.72–C	0.77–C	0.00	0.00	No
27	Newport Boulevard Southbound/West Coast Highway	0.84–D	0.74–C	0.85–D	0.75–C	0.01	0.01	No

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

CMP = Congestion Management Program Int No. = Intersection Number LOS = level of service V/C = volume-to-capacity ratio

Threshold 4.2.4: Would the project substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant with Mitigation.

San Miguel Drive Geometric Improvements Analysis. This section analyzes the effects of proposed improvements to San Miguel Drive. The project includes improvements to San Miguel Drive, focusing on the segment between MacArthur Boulevard and Avocado Avenue. Although these intersections operate at acceptable LOS, this segment of roadway has experienced operational issues due to the relatively short distance between these intersections and the relatively high number of turning movements. Through widening San Miguel Drive, the following geometric improvements would be provided as part of the proposed project:

- A third eastbound left-turn lane from San Miguel Drive onto MacArthur Boulevard
- A third eastbound through lane at San Miguel Drive/Avocado Avenue
- A defacto eastbound right-turn lane from San Miguel Drive onto MacArthur Boulevard
- A defacto westbound right-turn lane from San Miguel Drive onto Avocado Avenue

In addition, the southbound Avocado Avenue approach to San Miguel Drive would be restriped to provide for two left-turn lanes as part of the proposed project. The improvements are proposed both to provide additional capacity and to improve the operational characteristics of the intersections of San Miguel Drive with MacArthur Boulevard and Avocado Avenue.

Table 4.2.T summarizes a.m. and p.m. peak-hour intersection LOS of the MacArthur Boulevard/San Miguel Drive and Avocado Avenue/San Miguel Drive intersections with and without the proposed San Miguel Drive geometric improvements for with project conditions to identify the capacity improvements that result from the improvements. As shown in Table 4.2.T, the LOS analysis ndicates that a capacity enhancement is achieved for both the a.m. and p.m. peak hours, with the more substantial improvement occurring during the p.m. peak hour. The proposed geometric improvements would result in enhanced roadway capacity and would therefore result in a less than significant impact.

Sight distances at the project entrance at Avocado Avenue and Farallon Drive will need to be confirmed as adequate relative to the vertical grade of Farallon Drive. Therefore, a detailed sight distance analysis must be prepared for the proposed project entrances, especially the main entrance at Avocado Avenue and Farallon Drive, to ensure that safe access and egress are provided (Mitigation Measure 4.2.2). The sight distance analysis should be prepared according to the standards and guidelines of the City and indicate limited use areas (i.e., low-height landscaping) and on-street parking restrictions (i.e., red curb), if necessary. These modifications would be undertaken to provide adequate sight distance. With implementation of Mitigation Measure 4.2.2, requiring the project to meet minimum sight distances for the proposed access drive, impacts related to hazards associated with design features would be reduced to less than significant, and no additional mitigation is required.

Table 4.2.T: Peak-hour Intersection LOS with and without San Miguel Drive Geometric Improvements

Study Intersection	MacArthur Boulevard/ San Miguel Drive		Avocado Avenue/ San Miguel Drive		
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
Scenario	V/C-LOS	V/C-LOS	V/C-LOS	V/C-LOS	
Existing Plus Project	0.49–A	0.73–C	0.34–A	0.79–C	
Improved Existing Plus Project	0.49–A	0.64–B	0.29–A	0.65–B	
Change in v/c with improvements	0.000	-0.093	-0.043	-0.145	
FY 2013 + Committed + Project	0.49–A	0.75–C	0.34–A	0.80–C	
Improved FY 2013 + Committed + Project	0.49–A	0.66–B	0.29–A	0.65–B	
Change in v/c with improvements	-0.003	-0.094	-0.046	-0.150	
FY 2013 + Cumulative & Committed + Project	0.51–A	0.77–C	0.35–A	0.81–D	
Improved FY 2013 + Cumulative & Committed + Project	0.51–A	0.68–B	0.29–A	0.66–B	
Change in v/c with improvements	0.001	-0.094	-0.056	-0.153	
General Plan Build Out Plus Project	0.70–B	0.78–C	0.39–A	0.86–D	
Improved General Plan Build Out Plus Project	0.70–B	0.68–B	0.38–A	0.70–B	
Change in v/c with improvements	-0.002	-0.098	-0.009	-0.163	

Source: Newport Beach City Hall & Park Traffic Impact Analysis (RBF Consulting, July 31, 2009)

FY = future year

LOS = level of service

v/c = volume-to-capacity ratio

As part of the project, a pedestrian bridge over San Miguel Drive would be constructed. This is consistent with City of Newport Beach Circulation Element Policy 5.1.13, which encourages consideration of "overhead pedestrian crossings in areas where pedestrian use limits the efficiency of the roadway or signalized intersection." A preliminary sight distance assessment determined the required height of the pedestrian bridge so that visibility of the traffic signals on San Miguel Drive at Avocado Avenue and MacArthur Boulevard would not be obstructed. Consistent with the results of the sight analysis, PDF TRA-1 specifies that the pedestrian overcrossing linking the northern and central parcels shall be a minimum of 19.5 ft above the ground surface of San Miguel Drive. In addition, Mitigation Measure 4.2.3 requires that a sight distance analysis be performed on the final construction plans to verify the required height of the pedestrian bridge. With implementation of PDF TRA-1 and Mitigation Measure 4.2.3, project impacts related to the design of the pedestrian bridge would be reduced to below a level of significance.

Threshold 4.2.5: Would the project result in inadequate emergency access?

Less than Significant Impact. Emergency vehicles would have access to the site at the main entrance at the intersection of Avocado Avenue and Farallon Drive, from the entrance to the Library along Avocado Avenue south of Farallon Drive, and to the loading dock along Avocado Avenue. In addition, a fire/medical emergency entrance from MacArthur Boulevard to the top level of the parking structure would be available to emergency vehicles only. The proposed project would not inhibit or reduce emergency access to the project site. All driveways would be designed to City standards to facilitate emergency vehicle access. Because the proposed project would not result in inadequate emergency access, project impacts related to emergency access are less than significant, and no mitigation is required.

Threshold 4.2.6: Would the project result in inadequate parking capacity?

Less than Significant Impact. The proposed project includes a parking structure located adjacent to the proposed City Hall which is designed to provide 450 parking spaces. This parking structure is planned to provide the necessary parking for the City Hall and passive park uses as well as for the Library expansion. The proposed project also includes another 25 parking spaces near the entry to the parking garage, for a total of 475 parking spaces provided south of San Miguel Drive.

A parking study was conducted at the existing City Hall site on April 29, 2009, to identify the parking demand patterns, with particular emphasis on identifying the peak demand. The results of the study indicated that the peak parking demand was 1.11 parking spaces per City employee present on the day of the study. This conclusion includes the demand associated with visitors to City Hall as well (it should be noted that were approximately 280 visitors to City Hall on the day the parking survey was conducted). Utilizing the observed demand for the projected 295 employees at the proposed City Hall, this would equate to a peak parking demand of 328 parking spaces. Increasing this demand by 10 percent to allow for circulation purposes per ITE and Urban Land Institute (ULI) recommendations results in a projected effective parking demand of 361 parking spaces for City Hall associated uses.

The existing Library parking lot provides a total of 210 parking spaces and is often effectively full, particularly on weekends. In a 2002 Library parking study conducted for the City by Robert Rohlf, it was determined that weekend afternoons resulted in the peak demands but also found that on weekday mid-afternoons, as few as 20 spaces might be available during periods of high demand.

The current scenario equates to the provision of on-site parking at the approximate ratio of one space per 286 gross square feet of the Library. Application of this demand ratio to the 71,500 sf would result in a total demand for 250 parking spaces to serve the Library. Increasing this demand by 10 percent to allow for circulation purposes results in a projected effective parking demand of 275 spaces for Library use. With 210 existing Library parking spaces, a projected demand of 65 parking spaces should be considered for Library use in the proposed garage on a weekday afternoon.

An additional component to be considered in this parking assessment is the provision of parking for City vehicles. Currently, there are 37 City vehicles parked at City Hall between 3:00 p.m. and 9:00 a.m. These vehicles and associated parking spaces were considered in the previously mentioned count program since those spaces are utilized for visitor parking during the remainder of the day. However, the City vehicles would count as an additional increment of demand if the shared use of such parking spaces were not provided.

Combining the projected demand for the City Hall and Library expansion would result in a projected demand for 463 parking spaces. Parking demand for the proposed park uses southerly of San Miguel Drive is anticipated to be negligible relative to the peak parking demand given the combination of minimal demand associated with the passive park uses and the tendency for those uses to be outside the peak hours of the City Hall peak demand. Therefore, it can be concluded that the 475 parking spaces provided in the proposed parking structure and associated parking lot should be adequate to support the proposed uses southerly of San Miguel Drive.

The primary use within the 3.5-acre segment of the park northerly of San Miguel Drive is for a dog park that would occupy approximately 0.5 acre of the site. To assess the potential parking demand for this use, a parking study was conducted at the Laguna Beach dog park on May, 14, 2009. The Laguna Beach facility provides significantly more area for dogs (approximately 2.5 acres) and would appear to serve a larger demand due to its location; therefore, it would be expected to produce a higher demand. The Laguna Beach study showed a peak parking demand for 24 parking spaces during the day of observation. Therefore, since the much larger facility showed a peak demand of 24 parking spaces, it is anticipated that the 20 parking spaces proposed to be provided along Avocado Avenue for the park uses should be sufficient to meet the future demand for the northern park segment. Potential impacts related to parking would be less than significant, and no mitigation is required.

Code-Based Assessment

As a cross-check to the demand-based projection for parking, the proposed project was reviewed using applicable requirements from the Newport Village Zoning text and the City's Parking Code (Chapter 20.66 of the existing Zoning Code). Application of those requirements resulted in the following parking requirements shown in Table 4.2.U.

Use	Parking Requirement	Spaces Required
98,000 sf City Hall	1 space/300 sf ¹	327
	1 space/250 sf^2	286
71,500 sf Library	Existing Parking	210
		76 Net
14.3-acre park	Not specified ³	N/A
City vehicle parking	N/A	37
	Total Required	440

¹ Rate for "Governmental Offices"

 2 From Section 111.C.4 of the Newport Village Planned Community Development Plan 3 City are a provide a sector of the ITE and the ITE and the sector of the sec

³ City rates have no specific rate for park uses, and the ITE rate for parks assumes extensive athletic uses, which are not applicable

N/A = not applicable

sf = square feet

As shown in Table 4.2.U, the code-based parking requirement for the project is less than the projected demand based on field observations. This comparison, therefore, indicates that the projected peak parking demand of 463 parking spaces would exceed the standard City Code requirements.

The overall conclusion of this assessment is that the amount of parking proposed for the overall project is considered sufficient to meet anticipated demand, and no mitigation is required.

Threshold 4.2.7:Would the project conflict with adopted policies, plans, or programs
supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Less than Significant Impact. Impacts to transportation services are also discussed in Section 4.13, Public Services, Utilities, and Service Systems. OCTA currently operates six bus routes that service the proposed project area via the Newport Transportation Center, located immediately north of the proposed project site. OCTA Route 1 operates on Avocado Avenue south of San Miguel Drive. In a letter dated April. 22, 2009, OCTA indicated that it considered installation of a new bus stop at Avocado Avenue and Farallon Drive. In another letter dated May 29, 2009, OCTA stated that the new bus stop, if approved, would likely open concurrently with the proposed City Hall. Through existing programs, the City encourages the use of alternative transportation, including public transportation and use of bicycles. OCTA indicated that while more riders would be expected as a result of the proposed project, no adverse impacts to existing services are anticipated.

Because existing routes in the vicinity of the proposed project are operating within capacity and additional ridership resulting from the proposed project could be accommodated, no significant impacts to public transportation services are anticipated.

There are existing bicycle facilities (e.g., lanes and paths) in the vicinity of the proposed project, including a Class I Off-Road Paved Bikeway as well as Class II On-Road Bicycle Lanes on

MacArthur Boulevard and Class II On-Road Paved Striped Bikeways on San Miguel Drive and Avocado Avenue south of San Miguel Drive. Existing bikeways would be maintained as part of the proposed project.

In addition to maintaining current bike lanes, the City would continue to seek new opportunities to promote commuter carpooling and transit use, as well as alternative transportation for City employees and City Hall visitors (PDF GHG-2). For example, the proposed project would provide preferential parking for carpools, bicycle lockers, and would be located near an OCTA bus stop and the Newport Transportation Center.

Therefore, the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation, and no mitigation is required.

4.2.6 Cumulative Impacts

As stated above (refer to the discussion of potential impacts related to Threshold 4.2.1), cumulative impacts were assessed by analyzing potential project impacts (1) in the forecast year 2013 with committed and cumulative project conditions, and (2) in the forecast General Plan build-out condition. Based on the City of Newport Beach and City of Irvine established thresholds of significance, the addition of project-generated trips would not result in or contribute to a significant cumulative impact at the study area intersections in forecast year 2013 with committed and cumulative projects. Based on the City's thresholds of significance, the project would result in a cumulative impact to the intersection of Bayside Drive/Coast Highway under the General Plan build-out scenario. Mitigation Measure 4.2.1 requires restriping of the northbound Bayside Drive approach to East Coast Highway from two left-turn lane. With implementation of the mitigation measure, the cumulative project impacts at Bayside Drive/East Coast Highway would be reduced to a less than significant level. No additional mitigation is required.

The proposed project would not contribute to a cumulative impact related to CMP LOS standards, design hazards, emergency access, parking, or conflicts with adopted policies, plans, or programs supporting alternative transportation. No mitigation is required.

4.2.7 Level of Significance Prior to Mitigation

The following impacts are less than significant: (1) project-related increase in traffic, (2) LOS standards established by the County CMA, (3) inadequate emergency access, (4) inadequate parking capacity, and (5) conflict with adopted policies, plans, or programs supporting alternative transportation.

The following impacts are considered potentially significant prior to mitigation: (1) potential impacts to the intersections of San Miguel Drive with Avocado Avenue and MacArthur Boulevard during construction, (2) cumulative increase in traffic, and (3) potential hazards.

4.2.8 Project Design Features and Mitigation Measures

The following Project Design Feature (PDF) commitments identified in Chapter 3.0 of this EIR are intended to address potential impacts related to traffic and circulation. In addition, the mitigation measures listed below would offset potentially significant adverse impacts to traffic and circulation associated with implementation of the proposed project.

PDF TRA-1:	Pedestrian Overcrossing. The pedestrian overcrossing linking the northern and central parcels shall be a minimum of 19.5 feet (ft) above the ground surface of San Miguel Drive.					
Mitigation Measure 4.2.1:	Bayside Drive. Prior to issuance of building permits, the City of Newport Beach (City) Director of Public Works or designee shall identify a future project in the City's Capital Improvement Program that will include restriping the northbound Bayside Drive approach to the East Coast Highway intersection from two left-turn lanes and a shared left/through/right lane to two left turns, a shared left/through lane and a right-turn lane. These required improvements shall be implemented within 1 year of when traffic counts completed on behalf of the City in accordance with the schedule for traffic counts provided for in the City's Traffic Phasing Ordinance result in the finding that the intersection is operating at, or over, an Intersection Capacity Utilization (ICU) of 0.90.					
Mitigation Measure 4.2.2:	Construction Area Traffic Management Plan. Prior to issuance of a grading permit, the City of Newport Beach Director of Public Works or designee shall review and approve a Construction Area Traffic Management Plan for the proposed project. The Plan shall be designed by a registered Traffic Engineer and shall address traffic control for any temporary street closures, detours, or other disruptions to traffic circulation and public transit routes. The Plan shall identify the routes that construction vehicles shall use to access the site, the hours of construction traffic, traffic controls and detours, vehicle staging areas, and parking areas for the project. The Plan shall specifically prohibit the use of San Miguel Drive between MacArthur Boulevard and Newport Center Drive as part of the haul route for removal of excess dirt from the project site. The Plan shall also require project contractors to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt. The City of Newport Beach Director of Public Works or designee shall verify that the Construction Contractor's Agreement requires the construction contractor to comply with the Construction Area Traffic Management Plan.					
Mitigation Measure 4.2.3:	Sight Distance Analysis. Prior to issuance of grading permits, the City of Newport Beach Director of Public Works or designee shall					

verify that a detailed sight distance analysis for the proposed project driveway along Avocado Avenue has been prepared. The sight distance analysis shall be prepared according to the City of Newport Beach Sight Distance standards and guidelines and shall include provisions for dedicated limited use areas (i.e., low-height landscaping) and on-street parking restrictions (i.e., red curb), if necessary. The sight distance analysis report shall also verify the required height of the pedestrian bridge (19.5 feet above the ground surface of San Miguel Drive) as specified in PDF TRA-1. The recommendations of the sight distance analysis shall be incorporated into final project design to ensure than an unobstructed view of the intersections and traffic control devices would be provided. The findings of the sight distance analysis shall be included in a report subject to review and approval by the City of Newport Beach Director of Public Works, or designee.

4.2.9 Level of Significance after Mitigation

After implementation of the mitigation measures listed above, all traffic and circulation impacts would be reduced to below a level of significance.