

3C. Transportation/Traffic

INTRODUCTION

This section presents the results of the transportation/traffic analysis conducted for the project and summarizes the traffic counts and analysis for the proposed Newport Lexus project site. It includes the methodology, findings, and conclusions of the traffic impact analysis. A total of 24 primary study intersections in the vicinity of the project site were analyzed. Twenty of the intersections are located in the City of Newport Beach while the remaining four are located in the City of Irvine. The analysis assesses the effects of the additional trips forecast to be generated by the Newport Lexus dealership. The traffic impact analysis also takes into account other traffic growth due to specific development projects in the surrounding area and overall ambient growth in background traffic.

Information in this section is based on the *Traffic Study for Newport Lexus* prepared by Kimley-Horn and Associates. The entire report is available for review at the City of Newport Beach Planning Department located at City Hall.

SETTING

The street network in the project vicinity, existing traffic volumes, and levels of service at the primary study intersections are described below.

Street Network

The following section describes the characteristics of the streets and intersections in the immediate vicinity of the project site. The streets that are located in the immediate vicinity of the project area include MacArthur Boulevard, Jamboree Road, Dove Street, Quail Street and Bristol Street North.

I-405 - The Interstate 405 freeway (I-405) also named the San Diego Freeway, is an interstate/interregional freeway. It originates at Interstate 5 (I-5) in Orange County and terminates at I-5 in Los Angeles County. The I-405 runs east-west to the north of the project site. It is one of the most heavily traveled freeways in the state and accommodates approximately 290,000 vehicles per day in the vicinity of the project site.

SR 73 Tollway - The San Joaquin Hills Transportation Corridor (State Route 73) runs northwest to southeast south of the project site and carries approximately 62,000 vehicles per day.

SR 73 Freeway - State Route 73 extends from the northwesterly terminus of the San Joaquin Hills Transportation Corridor (SR 73 Tollway) southeast of SR 55 to an interchange at the I-405 Freeway. SR 73 carries between 90,000 and 130,000 vehicles per day.

SR 55 - State Route 55 (SR 55), the Costa Mesa Freeway has a total of five lanes in each direction including the carpool lane and provides enhanced traffic flow to the more than 200,000 motorists traveling the corridor each day. The SR 55 is located west of the project site and runs north south.

MacArthur Boulevard - MacArthur Boulevard is a six lane divided highway that runs north to south adjacent to the project site. It is classified as a major arterial and accommodates 30,000 to 45,000 average daily trips (ADT).

Jamboree Road - Jamboree Road is classified as a major roadway (six lanes divided) as it runs adjacent to the project site. South of the project site (just south of SR 73), Jamboree road is classified as a principal arterial and accommodates 45,000 to 60,000 ADT.

Bristol Street North - Bristol Street North varies from three to four lanes within the study area and accommodates between 16,000 and 28,000 ADT.

Bristol Street - Bristol Street varies from two to four lanes within the study area and is designated as a primary roadway and accommodates 20,000 to 30,000 ADT.

University Drive - University Drive is a six-lane divided roadway, located east of the project site and runs from the northeast to the southwest. It is designated as a major roadway in the vicinity of the project site and accommodates 30,000 to 45,000 ADT.

Birch Street - Birch Street is classified as a secondary roadway and runs east-west to the north of the project site, then curves to the south as it approaches the airport to run north-south parallel to Jamboree Road west of the project site. It is a four-lane roadway and accommodates 10,000 to 20,000 ADT

Campus Drive/Irvine Avenue - Campus Drive/Irvine Avenue is north of Birch Street and runs in a similar direction. North of the site (running east-west), Campus Drive is classified as secondary roadway (four lanes undivided). As Campus Drive turns to the south it is classified as a major roadway (six lanes divided) as it parallels the airport. It accommodates up to 26,000 ADT.

Existing Traffic Conditions

Level of Service (LOS) Definitions. The efficiency of traffic operations at intersections is described in terms of Level of Service (LOS). The LOS concept reflects average operating conditions at intersections during a single peak hour. It is based on volume-to-capacity (V/C) ratio with the ability to carry (the capacity) compared to the level of traffic (volume) during the peak hours. This method of analysis used to arrive at the LOS is known as the Intersection Capacity Utilization (ICU) technique. LOS range from A to F, with “A” representing excellent (free-flow) conditions and “F” representing extreme congestion. Table 3C-1 describes the level of service concept and the operating conditions expected under each level of service for signalized intersections.

**TABLE 3C-1
INTERSECTION LEVEL OF SERVICE DEFINITIONS**

LOS	Interpretation	Signalized Intersection Volume to Capacity Ratio (ICU)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 - 0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers felt somewhat restricted.	0.701 – 0.800
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900
E	Poor Operations. Some long-standing vehicular queues develop on critical approaches.	0.901 – 1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000

Source: Highway Capacity Manual (HCM), Special Report 209. Transportation Research Board, Washington D.C., 1997.

Existing Level of Service. Intersection analysis was conducted using the ICU methodology, which provides a comparison of the theoretical hourly vehicular capacity of an intersection to the number of vehicles actually passing through that intersection in a given hour.

The City of Newport Beach target LOS for peak hour operation of signalized intersections is LOS “D.” In the City of Irvine, the target LOS is also “D” except where the intersection is located in the Irvine Business Complex (IBC) or the Irvine Spectrum area. For intersections within the IBC and Irvine Spectrum area, the target LOS is “E.” Twenty of the intersections that were studied are located within the City of Newport Beach. The intersections of MacArthur Boulevard/ Michelson Drive, Von Karmen Avenue/Michelson Drive, and Jamboree Road/ Michelson Drive are located in the IBC, and therefore the target LOS is “E.” The target LOS for the intersection of Campus Drive/ University Drive (located in Irvine) is LOS “D.” The existing LOS results of the intersection analysis are summarized below in Table 3C-2. As indicated, only the Irvine Drive/Mesa Avenue intersection is operating at an LOS “E.”

APPLICABLE REGULATIONS

County of Orange

County of Orange Congestion Management Program. Congestion Management Plans (CMPs) are required pursuant to Proposition 111, passed in June 1990, which included a provision that a designated Congestion Management Agency develop and adopt a CMP for each county with a population of more than 50,000. OCTA is responsible for the development, monitoring and biennial updating of the County’s CMP. The goals of the County’s CMP are to reduce traffic congestion and to provide a mechanism for coordinating land use and development decisions. The CMP is also used as a method for proposing transportation projects that are eligible to compete for state gasoline tax funds.

The CMP for Orange County was developed through a cooperative effort involving local jurisdictions, public agencies, businesses and community groups. The regional transportation system subject to the CMP is defined as all state highways and principal arterials.

Bikeway Facilities. OCTA adopted a Commuter Bikeways Strategic Plan (CBSP) in May of 1995. The CBSP identified a network of proposed regional bikeways that link residential areas with activity centers. In the project vicinity, there are six existing bikeways: the Michelson Drive Class II (on road, striped bikeway), the Campus Drive Class II bikeway, the Bristol Street Class I bikeway (off-road, paved), Irvine Avenue Class II bikeway, MacArthur Boulevard Class I bikeway and the Jamboree Road Class I bikeway.

**TABLE 3C-2
EXISTING LEVELS OF SERVICE DURING THE AM/PM PEAK HOUR (2004)**

Intersection	Existing Conditions			
	AM Peak		PM Peak	
	ICU	LOS	ICU	LOS
1. MacArthur Blvd/ Campus Drive	0.52	A	0.62	B
2. Campus Drive/ Quail Street	0.51	A	0.45	A
3. Bristol Street North/ Campus Drive	0.60	A	0.70	B
4. Bristol Street South/ Campus Drive	0.64	B	0.45	A
5. MacArthur Boulevard/ Birch Drive	0.38	A	0.48	A
6. Birch Street/ Quail Street	0.55	A	0.64	B
7. Bristol Street North/ Birch Street	0.61	B	0.61	B
8. Bristol Street South/ Birch Street	0.42	A	0.45	A
9. Campus Drive/ Von Karman Avenue	0.43	A	0.75	C
10. MacArthur Boulevard/ Von Karman Avenue	0.33	A	0.69	B
11. Jamboree Road/ Campus Drive	0.61	B	0.74	C
12. Jamboree Road/ Birch Street	0.51	A	0.67	B
13. Jamboree Road/ MacArthur Boulevard	0.70	B	0.85	D
14. Bristol Street North/ Jamboree Road	0.49	A	0.57	A
15. Bristol Street South/ Jamboree Road	0.65	B	0.66	B
16. Jamboree Road/ University Drive/ Eastbluff Drive	0.58	A	0.53	A
17. University Drive/ MacArthur Boulevard SB Ramps	0.38	A	0.34	A
18. Irvine Avenue/ Mesa Drive	0.82	D	0.97	E
19. Irvine Avenue/ University Drive	0.65	B	0.73	C
20. Jamboree Road/ Bayview Way	0.42	A	0.37	A
Irvine Intersections (using City of Irvine ICU method)				
21. MacArthur Boulevard/ Michelson Drive	0.59	A	0.85	D
22. Von Karman Avenue/ Michelson Drive	0.45	A	0.62	B
23. Jamboree Road/ Michelson Drive	0.64	B	0.77	C
24. Campus Drive/ University Drive	0.50	A	0.83	D

Source: Kimley-Horn and Associates, Inc, *Traffic Study for Newport Lexus in the City of Newport Beach*, September, 2004.

City of Newport Beach

The Circulation Element of the Newport Beach General Plan identifies the general location and extent of the existing and proposed major roads, highways, trails, railroads, public transit routes and stations, and other public utilities and public facilities. The Circulation Element recognizes

the importance of traffic service levels and outlines several polices to accommodate vehicular traffic and maintain acceptable LOS. These include:¹

- *Construction of facilities' improvements resulting in a roadway system that is sized and located to accommodate all vehicular traffic generated by existing development and anticipated growth, as well as some regional traffic, at service levels as close to LOS "D" as possible.*
- *The construction of intersection improvements necessary to ensure maximum feasible efficiency of the roadway system and service levels as close to LOS "D" as possible.*
- *The City will adopt measures, such as transportation system management plans, which will reduce peak hour traffic and result in LOS below those forecast in the Circulation Element.*
- *Fund costs of major roadway facility and intersection improvements through gas tax revenues, state, federal and county grants, city ordinances and privately financed improvements.*

Traffic Phasing Ordinance (TPO). The Traffic Phasing Ordinance of the City of Newport Beach was adopted in order to: provide a uniform method of evaluating traffic impacts; identify impacts of project traffic and required circulation system improvements; ensure that project proponents make or fund circulation required system improvements; and, ensure that a project proponent's cost of improvements is proportional to project impacts.

According to TPO procedures, a traffic analysis for the project is required. The traffic study is to include analysis of any Primary Intersection to which the project contributes one percent or more of peak hour traffic on any intersection leg. A Primary Intersection is any intersection on the Primary Intersection list in Appendix B of the City's TPO, and any additional intersection selected by the Traffic Manager. A project's impact at a study intersection would be considered significant if the project either causes an unsatisfactory Level of Service (LOS "E" or "F") in one or both peak hours, or makes an already unsatisfactory condition at a study intersection worse (an ICU increase of 0.01 or more at an intersection already operating at LOS "E" or "F"). If the project traffic causes a significant impact, the project proponent will be required to pay a fee to fund the construction of recommended improvements to mitigate the project impacts. The fee is calculated according to a formula designed to assign fair-share responsibility to the project, based on the portion of the improvement that is required to accommodate the project traffic.

¹ Newport Beach General Plan, *Circulation Element*, 1996.

City of Irvine

The Irvine General Plan Circulation Element identifies the general location and extent of the existing and proposed major roads, highways, trails, railroads, public transit routes and stations, and other public utilities and public facilities. The primary goal of the Circulation Element of the Irvine General Plan is to provide a balanced transportation system. The Element also lists several objectives to support the overall goal, these include:²

- *Plan, provide and maintain an integrated vehicular circulation system to accommodate projected local and regional needs.*
- *Develop a vehicular circulation system consistent with high standards of transportation engineering safety and with sensitivity to adjoining land uses.*

IMPACTS AND MITIGATION

Methodology

Traffic generation for the proposed project was calculated using trip generation rates from the Institute of Transportation Engineers (ITE) publication Trip Generation, Seventh Edition. As appropriate, credit was applied for the trips associated with the existing uses on the site which will be replaced by the proposed project.

Future traffic forecasts were developed for two future scenarios:

1. For Traffic Phasing Ordinance (TPO) purposes, traffic forecasts are developed for the year following completion of the project. This future condition includes an ambient growth rate of one percent per year on selected key arterials (Jamboree Road, MacArthur Boulevard and Irvine Avenue), plus traffic from approved projects in the vicinity of the project. Project completion is expected to occur in 2006; therefore the year used for analysis is 2007. One percent per year ambient growth for four years has been applied to Jamboree Road, MacArthur Boulevard, and Irvine Avenue.
2. CEQA requires that a Cumulative Conditions analysis, which also includes traffic from related projects in the vicinity of the project, be conducted. Related projects include projects that are in various stages of the application and approval process, but have not

² Irvine General Plan, *Circulation Element*, <http://www.ci.irvine.ca.us/depts/cd/planningactivities/generalplan/pdf/circulation.pdf>, accessed online October 19, 2004.

yet been approved. These projects are considered to be “reasonably foreseeable” projects, and must therefore be analyzed in conjunction with approved projects for CEQA purposes.

Criteria for Determining Significant Impacts

The project impacts on the transportation system are considered to be significant if the project is determined to:

- Cause an intersection to deteriorate from an acceptable level of service (LOS “D” in the City of Newport Beach and Irvine, except for those intersections within the Irvine Business Complex or the Irvine Spectrum, where the acceptable Level of Service is LOS “E”) to an unacceptable level.
- Cause an increase of 0.01 or greater at an intersection in the City of Newport Beach and 0.02 or greater at an intersection in the City of Irvine already operating at an unacceptable Level of Service.
- Result in inadequate parking capacity;
- Have a significant impact relative to site access or circulation, a substantial disruption to existing circulation patterns, and/or substantial increase in safety risk;
- Result in inadequate emergency access; or
- Exceed, either individually or cumulatively, a level of service established by the county congestion management agency for designated roads or highways

Project Impacts

Potential Impact 3C1: Level of Service.

Proposed Project Traffic

The proposed development is projected to generate a total of 3,280 net new trips per day with 112 vehicles per hour during AM peak hour and 189 vehicles per hour during the PM peak hour.

Trip distribution represents the directional orientation of traffic to and from the proposed project site. Trip distribution is influenced by the geographical location of the site, the location of employment, commercial, residential, and recreational facilities, and the proximity of the regional freeway system. Trip distribution assumptions for the traffic study were also based on information provided by the project applicant regarding the anticipated trade area for the project site.

TPO Analysis

Existing Plus Growth Plus Approved Projects Plus Project Traffic Conditions

For the TPO analysis, the project AM and PM peak hour traffic volumes were compared to the Existing Plus Growth Plus Approved Project peak hour volume on each leg of each study intersection to determine the extent of the traffic analysis required of the project. Project traffic would exceed one percent on one or more approach legs at 15 of the 24 study intersections.

Project traffic would not exceed one percent on any approach in either peak hour at the following intersections within the City of Newport Beach:

- MacArthur Boulevard/Campus Drive
- Campus Drive/Von Karman Avenue
- Jamboree Road/Campus Drive
- Jamboree Road/University/Eastbluff
- Jamboree Road /Bayview Way

Project traffic would also not exceed one percent on any approach in either peak hour at any of the intersections within the City of Irvine. The analysis results for the Irvine intersections are presented here for information purposes.

Project peak hour traffic was added to the impacted intersections for the intersection analysis.

As shown in Table 3C-3, the addition of project traffic would result in a significant impact at two study intersections:

- Jamboree Road at MacArthur Boulevard would decrease from LOS “D” to LOS “E” in the PM peak hour; and
- Irvine Avenue and Mesa Drive would have a 0.01 impact in the evening peak hour.

At the intersection of Irvine Avenue and Mesa Drive, the project impact would be 0.01 and this intersection would continue to operate at LOS “E;” however, the actual ICU increases from 0.98 to 0.99 due to rounding. While this is not a significant environmental effect, it is still an impact pursuant to the City’s TPO. At the intersection of MacArthur Boulevard and Jamboree Road, the project would cause the intersection to worsen from LOS “D” to LOS “E” with a project impact of 0.010. This would be considered an impacted intersection under the TPO, and the project would be required to participate in improvements to this intersection, **M-3C.1** and **M-3C.2** that would mitigate the project impact to a level of insignificance.

**TABLE 3C-3: TPO
SUMMARY OF PEAK HOUR INTERSECTION OPERATION EXISTING PLUS GROWTH PLUS APPROVED PROJECTS
PLUS PROJECT CONDITIONS**

No.	Signalized Intersection	Approved w/out Project Conditions				Approved w/ Project Conditions				Project Impact		Sig?
		AM Peak		PM Peak		AM Peak		PM Peak		Change in ICU		
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	
2	Campus Dr @ Quail St	0.51	A	0.45	A	0.52	A	0.46	A	0.01	0.01	No
3	Bristol St North @ Campus Dr	0.60	A	0.70	B	0.60	A	0.71	C	0.00	0.01	No
4	Bristol St South @ Campus Dr	0.65	B	0.45	A	0.65	B	0.45	A	0.00	0.00	No
5	MacArthur Blvd @ Birch St	0.39	A	0.49	A	0.40	A	0.49	A	0.01	0.00	No
6	Birch St @ Quail St	0.55	A	0.64	B	0.56	A	0.65	B	0.01	0.01	No
7	Bristol St North @ Birch St	0.61	B	0.62	B	0.62	B	0.62	B	0.01	0.00	No
8	Bristol St South @ Birch St	0.42	A	0.46	A	0.42	A	0.46	A	0.00	0.00	No
10	MacArthur Blvd @ Von Karman Ave	0.34	A	0.70	B	0.34	A	0.70	B	0.00	0.00	No
12	Jamboree Rd @ Birch St	0.54	A	0.70	B	0.54	A	0.70	B	0.00	0.00	No
13	Jamboree Rd @ MacArthur Blvd	0.74	C	0.90	D	0.75	C	0.91	E	0.01	0.01	Yes
14	Bristol St North @ Jamboree Rd	0.52	A	0.60	A	0.52	A	0.61	B	0.00	0.00	No
15	Bristol St South @ Jamboree Rd	0.68	B	0.69	B	0.68	B	0.69	B	0.00	0.00	No
17	University Dr @ MacArthur Blvd SB Ramps	0.38	A	0.34	A	0.38	A	0.34	A	0.00	0.00	No
18	Irvine Ave @ Mesa Dr	0.84	D	0.98	E	0.84	D	0.99	E	0.00	0.01	Yes
19	Irvine Ave @ University Dr	0.67	B	0.75	C	0.67	B	0.76	C	0.00	0.01	No
Irvine Intersections (using City of Irvine ICU method)												
21	MacArthur Blvd @ Michelson Dr	0.61	B	0.87	D	0.61	B	0.87	D	0.00	0.00	No
22	Von Karman Ave @ Michelson Dr	0.46	A	0.63	B	0.46	A	0.63	B	0.00	0.00	No
23	Jamboree Rd @ Michelson Dr	0.67	B	0.80	C	0.68	B	0.80	C	0.01	0.00	No
24	Campus Dr @ University Dr	0.50	A	0.83	D	0.50	A	0.83	D	0.00	0.00	No

Source: Kimley-Horn and Associates, Inc, *Traffic Study for Newport Lexus in the City of Newport Beach*, September, 2004.

Reasonably Foreseeable Future (CEQA Analysis)

Traffic Conditions With Cumulative Developments

ICU analysis was conducted for Cumulative (Existing Plus Growth Plus Approved Plus Cumulative Projects) peak hour traffic conditions for the impacted intersections as typically undertaken for documents prepared subject to CEQA. The resulting peak hour intersection operation is summarized in Table 3C-4. Based on this analysis, two Newport Beach intersections are projected to operate at unacceptable LOS:

- The intersection of Irvine Avenue at Mesa Drive will continue to operate at ICU 0.99/LOS “E” in the evening peak hour;
- The intersection of MacArthur Boulevard at Jamboree Road will operate at ICU 0.99/LOS “E” in the evening peak hour.

Project peak hour traffic was then added to the study intersections. Cumulative Plus Project peak hour operating conditions are shown in Table 3C-4. With the addition of the project traffic, the two intersections listed above would continue to operate at an unacceptable level of service. At the intersection of Irvine Avenue and Mesa Drive, the project impact would not change the ICU value, therefore the impact would not be considered to be a significant impact. At the intersection of MacArthur Boulevard and Jamboree Road, the project would cause the ICU to increase by 0.010, which would be considered a significant impact.

The following mitigation measures have been identified to reduce project impacts:

Mitigation Measures

M-3C.1 *To mitigate the TPO impact: Restripe the westbound approach at the intersection of Irvine Avenue and Mesa Drive to provide one left turn lane, one shared through/left lane and one right-turn lane. In addition, necessary signal modifications will be made to implement split-phase signal operation on the east-west approaches.*

M-3C.2 *To mitigate both the TPO and CEQA impact: Improve the westbound approach of Jamboree Road at the intersection of MacArthur Boulevard and Jamboree Road to provide a triple left-turn pocket, and improve the eastbound approach to provide a fourth through lane.*

In accordance with the City of Newport Beach TPO, 70 percent of the incremental increase in intersection capacity (based on a capacity of 1,600 vehicles per hour for each new full traffic lane) is used to recalculate the intersection operation with the proposed mitigation.

**TABLE 3C-4: CEQA
SUMMARY OF PEAK HOUR INTERSECTION OPERATION EXISTING PLUS GROWTH PLUS APPROVED PROJECTS
PLUS CUMULATIVE PROJECTS PLUS PROJECT CONDITIONS**

No.	Signalized Intersection	Cumulative w/out Project Conditions				Cumulative w/ Project Conditions				Project Impact		Sig?
		AM Peak		PM Peak		AM Peak		PM Peak		Change in ICU		
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	
2	Campus Dr @ Quail St	0.51	A	0.45	A	0.52	A	0.46	A	0.01	0.01	No
3	Bristol St North @ Campus Dr	0.65	B	0.71	C	0.65	B	0.71	C	0.00	0.00	No
4	Bristol St South @ Campus Dr	0.65	B	0.46	A	0.65	B	0.46	A	0.00	0.00	No
5	MacArthur Blvd @ Birch St	0.41	A	0.52	A	0.41	A	0.52	A	0.00	0.00	No
6	Birch St @ Quail St	0.55	A	0.64	B	0.56	A	0.65	B	0.01	0.01	No
7	Bristol St North @ Birch St	0.62	B	0.62	B	0.62	B	0.62	B	0.00	0.00	No
8	Bristol St South @ Birch St	0.43	A	0.46	A	0.43	A	0.46	A	0.00	0.00	No
10	MacArthur Blvd @ Von Karman Ave	0.40	A	0.78	C	0.40	A	0.78	C	0.00	0.00	No
12	Jamboree Rd @ Birch St	0.58	A	0.78	C	0.58	A	0.79	C	0.00	0.01	No
13	Jamboree Rd @ MacArthur Blvd	0.85	D	0.99	E	0.86	D	1.00	E	0.01	0.01	Yes
14	Bristol St North @ Jamboree Rd	0.54	A	0.64	B	0.54	A	0.64	B	0.00	0.00	No
15	Bristol St South @ Jamboree Rd	0.73	C	0.75	C	0.73	C	0.75	C	0.00	0.00	No
17	University Dr @ MacArthur Blvd SB Ramps	0.42	A	0.38	A	0.42	A	0.38	A	0.00	0.00	No
18	Irvine Ave @ Mesa Dr	0.84	D	0.99	E	0.85	D	0.99	E	0.01	0.00	No
19	Irvine Ave @ University Dr	0.67	B	0.75	C	0.67	B	0.76	C	0.00	0.01	No
Irvine Intersections (using City of Irvine ICU method)												
21	MacArthur Blvd @ Michelson Dr	0.65	B	0.89	D	0.66	B	0.89	D	0.01	0.00	No
22	Von Karman Ave @ Michelson Dr	0.48	A	0.66	B	0.48	A	0.66	B	0.00	0.00	No
23	Jamboree Rd @ Michelson Dr	0.72	C	0.84	D	0.72	C	0.84	D	0.00	0.00	No
24	Campus Dr @ University Dr	0.53	A	0.90	D	0.53	A	0.90	D	0.00	0.00	No

Source: Kimley-Horn and Associates, Inc, *Traffic Study for Newport Lexus in the City of Newport Beach*, September, 2004.

As shown in Table 3C-5, implementation of these intersection improvements would mitigate project impacts. At the intersection of Irvine Avenue and Mesa Drive, the PM ICU would be improved to 0.94. Although this would still be a LOS “E” it would be an improvement to the pre-project conditions. At the intersection of MacArthur Boulevard and Jamboree Road, the proposed improvement would return the intersection to an acceptable LOS (0.811, LOS “D” in the evening peak hour) in the TPO. Implementation of this intersection improvement will also result in an acceptable Level of Service (0.894, LOS “D” in the evening peak hour) in the CEQA (Cumulative Projects Plus Project) Condition.

The project will be required to participate in the funding of improvements at these intersections. In order to determine the project’s responsibility to the intersection improvements, the City of Newport Beach TPO requires the determination of the “effective capacity increase” and “effective capacity decrease.”

Results of the analysis indicate that the project’s fair share responsibility toward the cost of the Irvine Avenue and Mesa Drive improvement would be 7.8 percent. The project’s fair share responsibility toward the cost of the Macarthur Boulevard and Jamboree Road improvement would be 10.5 percent.

Remaining Impacts

With implementation of the mitigation measures described above, the proposed project would not have a significant impact on levels of service in the project area. Impacts would be less than significant.

Potential Impact 3C2: Parking supply.

As shown in the site plan (Figure 2-4) for the project, 32 on-site parking spaces are provided for customers in front of the showroom building. An additional eight parking spaces are provided for vendors on the lot adjacent to the parts department. Two hundred and three employee parking spaces are included on the roof of the service building/parking structure facility.

Implementation of mitigation measure **M-3C.3** would ensure that the proposed project has a less than significant impact on area parking.

Mitigation Measure

M-3C.3 *The proposed project shall comply with all City of Newport Beach Municipal Code (Section 20.66.050) parking requirements.*

Remaining Impacts

The proposed project would provide adequate parking supply. Impacts would be less than significant.

Potential Impact 3C3: Any hazards due to a design feature or incompatible use.

As shown in Figure 2-4 (Site Plan), access to the site would be provided from both MacArthur Boulevard and Dove Street. The entry on MacArthur Boulevard would be located near the north end of the site, approximately 320 feet south of Bowsprit Drive, and would be a right-in/right-out only driveway that would lead to the front sales and showroom area. A raised median in MacArthur Boulevard would preclude left turns to and from this driveway.

The intersection of Bowsprit Drive and MacArthur Boulevard currently operates as an unsignalized intersection with a free-flow right-turn lane to serve right-turning traffic from Bowsprit onto southbound MacArthur Boulevard. The free-flow lane is configured with a 90-foot curb radius and a raised median, which allows right-turning vehicles not only to make the turn without stopping, but also at a relatively high rate of speed. The end of the curb radius is approximately 200 feet from the proposed Lexus dealership driveway.

Access to the Lexus site will also be provided via three curb cuts on Dove Street. The center entrance will align with Quail Street, and will provide access to the service canopy, on the south side of the showroom building. A smaller entrance on Dove Street at the north end of the site will provide customers access to both the showroom/sales area and the service area. A service entrance near the south end of the project site will be used by staff only to take cars in and out of the service areas for test drives.

The proximity of the free-flow right turn lane at Bowsprit/MacArthur to the curb cut proposed to provide primary vehicular access to the dealership from MacArthur Boulevard could create a hazard as described above. Implementation of the following mitigation measures will ensure a less than significant impact.

Mitigation Measures

M-3C.4 *The applicant will make the required improvements at the intersection of Bowsprit Drive and MacArthur Boulevard to reduce the curb radius of the eastbound free right turn on Bowsprit Drive to MacArthur Boulevard to an approximately 35-foot curb radius to slow turning traffic and to increase the distance between Bowsprit Drive and the project entrance.*

Remaining Impacts

With implementation of the mitigation measure described above, the proposed project would not create a hazard due to a design feature. Impacts would be less than significant.

Potential Impact 3C4: Emergency access.

The proposed project design would be in compliance with Fire Department requirements regarding emergency vehicle access. As shown in the site plan (Figure 2-4), the proposed Lexus site provides several access points for emergency vehicles. Therefore, no impacts are anticipated.

Mitigation Measure

No mitigation is required.

Remaining Impacts

The proposed project would provide adequate emergency access. Impacts would be less than significant.

Potential Impact 3C5: Congestion Management Program.

The Orange County Congestion Management Program (CMP) was established in 1991 to reduce traffic congestion and to provide a mechanism for coordinating land use and development decisions. Compliance with the CMP requirements ensures a city's eligibility to compete for State gasoline tax funds for local transportation projects.

Within the City of Newport Beach, the CMP Highway System includes three arterials:

- Jamboree Road from the north City limit to MacArthur Boulevard;
- MacArthur Boulevard from Jamboree Road to Coast Highway; and
- Coast Highway.

CMP monitored intersections within the City of Newport Beach include:

- Jamboree Road at MacArthur Boulevard (shared with the City of Irvine);
- MacArthur Boulevard at Coast Highway; and
- Newport Boulevard at Coast Highway.

The Level of Service standard for CMP intersections is LOS “E,” or the current Level of Service, whichever is farthest from Level of Service “A.” No intersection may be allowed to deteriorate below LOS “E” or the existing LOS if worse than “E” without mitigation.

The Orange County CMP states that a Traffic Impact Assessment (TIA) “will be required for CMP purposes for all proposed developments generating 2,400 or more daily trips,” and that “for developments which will directly access a CMP Highway System link, the threshold for requiring a TIA should be reduced to 1,600 or more trips per day.”

The project is estimated to generate a total of 3,280 daily trips, and as such, the project is required to comply with the CMP Traffic Impact Analysis guidelines. The study area for a CMP analysis is defined by a measure of the project’s significant impact on the roadway links. Significant impact is defined as links impacted by three percent or more of their LOS “E” capacity. The CMP states, “If a TIA is required only for CMP purposes, the study area would end when traffic falls below three percent of capacity on individual roadway links. If the TIA is also required for other purposes, additional analysis can be required by the local jurisdiction based on engineering judgment or local regulation as applicable.”

The LOS “E” capacities of the roadways surrounding the project site, and the forecasted daily project traffic volumes on those segments are shown on Figure 3C-1. Review of Figure 3C-1 shows that the traffic analysis has been carried sufficiently far enough so as to extend beyond the three percent range required by the CMP.

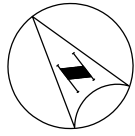
The intersection of Jamboree Road and MacArthur Boulevard is located within the study area. This intersection was included in the TPO and Cumulative analysis. The intersection is shown to operate at LOS “E” both with and without the project. The project will not cause any CMP intersection to operate at a deficient Level of Service. This traffic study, therefore, complies with CMP requirements.

Mitigation Measure

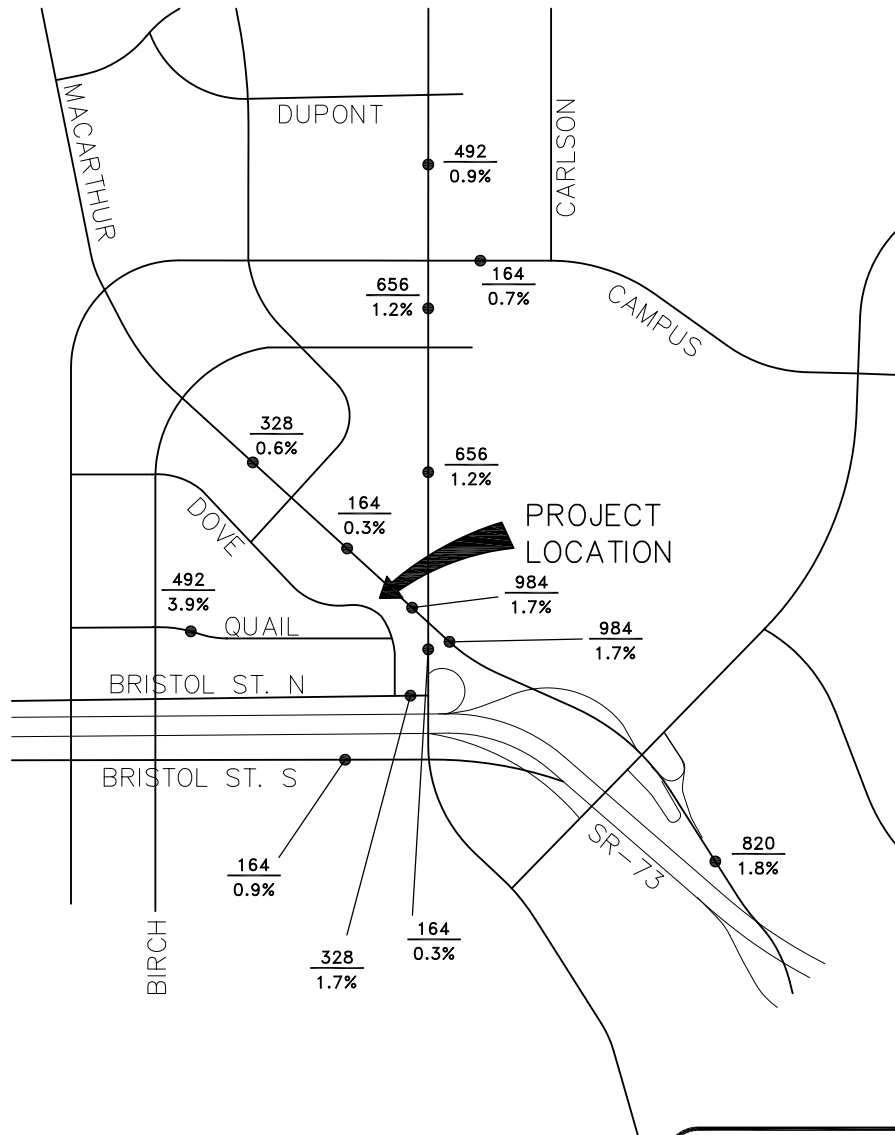
No mitigation is required.

Remaining Impacts

The proposed project would not exceed levels of service established by the County Congestion Management Agency. Impacts would be less than significant.



NOT TO SCALE



LEGEND:

$$\frac{XXX}{X.XX\%} = \frac{\text{Project ADT}}{\text{Project Traffic Percentage of Roadway LOS "E" Capacity}}$$

Figure 3C-1
CMP Study Area Determination

Potential Impact 3C6: Cumulative traffic impacts.

Cumulative project traffic growth, which is growth due to development projects in the area, and growth in “pass through” traffic, is included in the analysis of the proposed project conditions. The area projects that could affect the study area are listed in Chapter 2, Table 2-2. Currently, several area projects have been identified which could pose a cumulative impact to area traffic conditions. Tables 3C-3 and 3C-4 show the results of both the TPO and typical CEQA analysis, both of which consider area growth and future projects. Area growth would result in deterioration of levels of service at area intersections. The proposed mitigation would reduce identified cumulative project impacts.

By providing service to current and future Lexus owners in closer proximity to where they live, this project could reduce the length of some regional trips.

Mitigation Measure

Refer to mitigation measures **M-3C.1 and M-3C-2.**

Remaining Impacts

Together with other area projects, the proposed project, with mitigation, would not create a cumulative impact. Impacts would not be cumulatively considerable.