

3.7 TRANSPORTATION AND TRAFFIC

This traffic analysis was conducted by Iteris, Inc. A copy of the technical report is included in Appendix E. The scope of work for the traffic study was developed in conjunction with LADPW Traffic and Lighting Division staff. The base assumptions, technical methodologies, and geographic coverage of the study were all identified as part of the study approach. The study, which analyzes the potential project-generated traffic impacts on the street system, assumes completion of the proposed project in 2013. The potential impacts of the proposed project are therefore determined for 2013 conditions and include an analysis of the following traffic scenarios:

- **Existing Conditions:** The analysis of existing traffic conditions provides a basis for the remainder of the study. The existing conditions analysis includes an assessment of present streets, traffic volumes, and operating conditions.
- **Existing plus Project Conditions:** This is an analysis of future traffic conditions with the proposed project added to existing traffic volumes to identify the incremental addition of proposed project trips to existing traffic operations.
- **Future Base Conditions:** Future traffic conditions are projected for 2013 without the proposed project. The future base conditions reflect predicted growth in traffic over existing conditions from two sources. The first source is the ambient growth in traffic. Ambient growth reflects increases in traffic due to regional growth and development between baseline (year 2006) and future (year 2013). The second source is growth due to traffic generated by specific projects located within, or in the vicinity of, the lease boundary. The objective of this phase of analysis is to proposed project future traffic growth and operating conditions that could be expected to result from growth in the vicinity of the proposed project site by 2013.
- **Future Base plus Project Conditions:** This is an analysis of future traffic conditions with the traffic expected from the proposed project added to the future base traffic forecasts. The impacts of the proposed project in combination with future traffic operating conditions can then be identified.
- **Special Event Conditions:** This is an analysis of future traffic conditions with the traffic expected when a large event during the evening peak hour is held at the site (maximum capacity of the multi-purpose room), as described in Table 2-6, added to future base traffic forecasts. The impacts of special event conditions on future traffic operating conditions can then be identified.

A Memorandum of Understanding (MOU) was developed in consultation with the LADPW Traffic and Lighting Division staff regarding the traffic study content and assumptions. In the MOU, the following two intersections were analyzed as part of the traffic analysis for this project (see Figure 3.7-1):



Source: Meyer, Mohaddes Associates, April 2007.



-  Study Intersection
-  Project Location



Figure 3.7-1
Location of Study Intersections
and Existing Lane Configuration

- Durfee Avenue at SR 60 Eastbound Ramps: This is a T-intersection with no northbound approach. This intersection is controlled by a two-phase traffic signal. A set of freeway on- and off-ramps are located in the north leg of this intersection. The southbound approach consists of 2 left-turn lanes and one right-turn lane. The eastbound approach consists of one shared left-through lane and 2 through lanes. The westbound approach consists of 2 through lanes and one right-turn lane.
- Durfee Avenue at Peck Road: This intersection is controlled by a 3-phase traffic signal with split phasing in the eastbound and westbound directions. The northbound approach consists of one left-turn lane, one through lane, and one shared through-right lane. The southbound approach consists of one left-turn lane, 2 through lanes, and one right-turn lane. The eastbound approach consists of one left-turn lane, one all-movement lane, and one right-turn lane. The westbound approach contains one all-movement lane.

These two intersections represent locations that LADPW Traffic and Lighting Division identified as potentially impacted by traffic generated by the proposed project. The study intersections were chosen based on their close proximity to SR-60 and I-605 because the Natural Area is a regional facility and visitors are expected to use these intersections to access the proposed project site.

3.7.1 ENVIRONMENTAL SETTING

Data was collected to develop a detailed description of existing conditions within the study area. The assessment of conditions relevant to this study includes an inventory of the street system, traffic volumes on these facilities, and operating conditions at the study intersections.

EXISTING TRANSPORTATION SYSTEM

Regional Roadways

Pomona Freeway (SR 60) is a major east-west regional freeway located north of the lease boundary. It extends eastward from downtown Los Angeles across the Inland Empire into San Bernardino County. Within the study area, this facility consists of 4 general travel lanes and one high-occupancy vehicle (HOV) lane in each direction. Full interchanges are located in the project vicinity at Santa Anita Avenue and Peck Road.

San Gabriel River Freeway (I-605) is a major north-south regional freeway that extends southward from the Foothill Freeway (I-210) in the Inland Empire to the San Diego Freeway (I-405) in the South Bay. This facility is located east of the proposed project site and consists of 4 general travel lanes and one HOV lane in each direction as it passes through the study area. Half interchanges are located at Peck Road and Pellissier Place. A full interchange with SR 60 is located east of the lease boundary.

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Surface Arterial and Local Streets

Local arterial roadways provide the primary regional access to and from the lease boundary. These regional roadways allow direct access between the lease boundary and surrounding communities. Freeway access to these arterial streets is from I-605 and SR 60.

Durfee Avenue is an east-west major arterial that extends from Rosemead Boulevard (State Route 19 [SR 19]) eastward to Peck Road. This facility is located immediately adjacent to the north edge of the lease boundary and provides access to the existing WNNC. The existing lane configuration consists of 2 travel lanes in each direction with a 2-way left turn lane in the immediate vicinity of the proposed project site. Curbside parking is allowed along both sides of the street. There is a sidewalk located only on the north side of Durfee Avenue in the vicinity of the lease boundary.

Peck Road is a north-south major arterial that provides access to Interstate 10 (I-10, San Bernardino Freeway), SR 60, and I-605. This facility is located approximately one-third of a mile east of the lease boundary. The existing lane configuration of this facility consists of 2 travel lanes in each direction with a painted center median. Curbside parking is not allowed along either side of the street in the vicinity of the lease boundary.

Santa Anita Avenue is a north-south major arterial that provides access to both SR 60 and I-10 before continuing northward into the Inland Empire. This roadway is located approximately 0.5 mile west of the lease boundary. The existing lane configuration for this facility consists of 2 travel lanes in each direction with an alternating 2-way left-turn lane and a striped median.

Existing Transit Operations

Los Angeles County Metropolitan Transportation Authority and Foothill Transit operate several bus lines within the study area. A description of transit service follows:

Los Angeles County Metropolitan Transportation Authority Route 270 is a north-south line that travels from Monrovia to the I-605/Interstate 105 (I-105) Metro Green Line station using Peck Road as it passes through the study area. This line operates weekdays, Saturdays and minor holidays from 4:00 a.m. to 9:00 p.m.

Foothill Transit Route 269 is a north-south local route that operates between the El Monte Metrolink station and the Montebello Town Center using Durfee Avenue as it travels through the study area. This route operates daily and on holidays from 6:00 a.m. to 10:30 p.m.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

The following discussion presents the existing peak hour turning movement traffic volumes for each of the intersections analyzed in the study, describes the methodology used to assess the traffic conditions at

each intersection, and analyzes the resulting operating conditions at each intersection studied, indicating volume-to-capacity ratios (V/C), or delay, and level of service (LOS).

Existing Traffic Volumes

Traffic counts were conducted at the study intersections on April 2, 2007. The traffic impact analysis was based on the highest single hour of traffic (during the a.m. and p.m. peak periods) at each location. A field inventory was conducted at both of the study intersection locations. The inventory included review of intersection geometric layout, traffic control, lane configuration, posted speed limits, transit service, land use and parking. This information is required for the subsequent traffic impact analysis. Figure 3.7-1 illustrates the existing intersection geometry (lane configurations) for the analyzed intersections. Figure 3.7-2 shows the existing weekday peak hour traffic volumes at the study intersections. The field inventory is provided in Appendix E.

Level of Service Methodology

Traffic operating conditions in the vicinity of the proposed project site were analyzed the “Intersection Capacity Utilization” methodology for signalized intersections. The efficiency of traffic operations at a given intersection is measured in terms of level of service (LOS). The level of service concept is a measure of average operating conditions at the designated intersection during a peak hour. It is based on a volume-to-capacity (V/C) ratio for signalized locations and delay (in seconds) for stop-controlled intersections. Levels range from A to F, with A representing excellent (free-flow) conditions and F representing extreme congestion. The Intersection Capacity Utilization methodology compares the amount of traffic a through or turn lane is able to process (the capacity) to the level of traffic during the peak hours (volume). The critical V/C ratios are combined to determine the Intersection Capacity Utilization value (V/C ratio) for the entire intersection. Table 3.7-1 describes the level of service concept and the operating conditions expected under each level of service.



Source: Meyer, Mohaddes Associates, April 2007.

**Figure 3.7-2
Existing Traffic Volumes**

Study Intersection XXX/XXX AM/PM Peak Hour Volume
 █ Project Location



TABLE 3.7-1 INTERSECTION LEVEL OF SERVICE DEFINITIONS

LOS	Interpretation	V/C Ratio
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 - 0.699
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.700 - 0.799
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.800 - 0.899
E	Poor operation. Some long standing vehicular queues develop on critical approaches.	0.900 – 0.999
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: Transportation Research Board 2000.

Existing Levels of Service

The weekday morning and weekday evening peak hour LOS analyses were conducted for the study intersections based on the measured traffic volumes and the methodologies described previously. All intersection analyses were performed using the TRAFFIX (Traffic Impact Analysis) software program. The existing conditions level of service analysis results are summarized in Table 3.7-2. The results shown in Table 3.7-2 indicate that all of the study intersections are currently operating at LOS E or better during both of the analyzed peak hours. Specifically, Durfee Avenue at SR 60 eastbound ramps is currently operating at LOS A during the morning and evening peak hours. Durfee Avenue at Peck Road is currently operating at LOS E during the morning peak hour and LOS D during the evening peak hour. The detailed level of service worksheets are provided in Appendix E.

TABLE 3.7-2 LEVEL OF SERVICE SUMMARY – EXISTING CONDITIONS

#	Intersection	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	LOS	V/C	LOS
1	Durfee Avenue at SR 60 Eastbound Ramps	0.532	A	0.493	A
2	Durfee Avenue at Peck Road	0.953	E	0.804	D

Source: Iteris, Inc. 2008.

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Existing Driveway Operations

The existing driveway to the WNNC is located approximately one-third of a mile west of the intersection of the SR 60 eastbound ramps and Durfee Avenue. Durfee Avenue currently has two travel lanes, one in each direction, and a two-way left-turn lane located in the center median. South El Monte High School is located across from the project site on the north side of Durfee Avenue. There is an existing exit from the faculty parking lot located approximately 120 feet east of the existing WNNC driveway. This parking lot is used by faculty on weekdays. On Friday nights, this lot is available for use by individuals attending football games at the high school. On Saturdays, the lot is used by individuals attending morning classes.

Manual traffic counts were conducted at midday on a Saturday and during the morning and evening peak periods on a Tuesday. These counts provide detailed information regarding traffic movements at the driveway intersection and directional distribution for traffic accessing the WNNC. The Saturday midday peak hour was determined to occur between 11:45 a.m. and 12:45 p.m. The Tuesday morning peak hour was identified as 7:15 a.m. to 8:15 a.m., as would be expected for a location in close proximity to a school facility. The Tuesday evening peak hour was identified as occurring between 4:45 p.m. to 5:45 p.m. Traffic counts were conducted during the time when the high school would dismiss students, but this time period was found to experience lower traffic volumes, and therefore, was not identified as the peak hour of activity along Durfee Avenue.

Traffic counts were taken at the existing WNNC driveway beginning on Saturday and continuing through Tuesday. Using this data, the peak periods for activity in both the morning and afternoon were identified. During the weekend and on Monday, the morning peak hour of activity was identified from 10:00 a.m. to 11:00 a.m. and the afternoon peak hour was from 2:00 p.m. to 3:00 p.m. On Tuesday, the morning peak was identified as 6:00 a.m. to 7:00 a.m. The afternoon peak hour was identified as 12:00 p.m. to 1:00 p.m. Thus, the peak hours of activity for the WNNC occur at different times during the day than the peak hours of vehicle activity along Durfee Avenue, including general activities occurring at the high school.

3.7.2 REGULATORY SETTING

COUNTY OF LOS ANGELES

The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by the MTA. The CMP for Los Angeles County requires that the traffic impact of individual development projects of potential regional significance be analyzed. A specific system of arterial roadways and all freeways comprise the CMP system. A total of 164 intersections are identified for monitoring on the system in Los Angeles County. Transportation Impact Assessment guidelines require analysis at monitored street intersections and segments, including freeway on-and off-ramp intersections where a project is expected to add 50 or more peak hour vehicle trips and mainline freeway or ramp monitoring locations where a project is expected to add 150 or more peak hour trips. If a

project does not add, but merely shifts trips at a given monitoring location, the CMP analysis is not required.

3.7.3 ENVIRONMENTAL IMPACTS

SIGNIFICANCE CRITERIA

As part of the Initial Study (see Appendix A), it was determined that the proposed project would not result in a change in air traffic patterns; result in inadequate emergency access; or conflict with adopted policies, plans, or programs supporting alternative transportation. Accordingly, these issues are not further analyzed in the EIR.

The proposed project would have a significant effect on transportation and traffic if it would:

- Cause an increase in traffic that 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 v/c ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, a level of service standards established by the county congestion management agency for designated roads or highways;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate parking capacity.

Future traffic volume is a measure of traffic generated by the proposed project in addition to traffic from both area projects and ambient traffic growth. A proposed project may result in a substantial increase in traffic in relation to the existing traffic load and capacity of the street system if the estimated proposed project traffic, in combination with future traffic volumes, would increase the V/C ratio on the intersection operating condition as illustrated in Table 3.7-3:

TABLE 3.7-3 LEVEL OF SERVICE THRESHOLD CRITERIA

Intersections		
Pre-Project		Project V/C Increase
LOS	V/C	
C	0.710 - 0.800	0.040 or more
D	0.810 - 0.900	0.020 or more
E/F	0.910 or more	0.010 or more

Source: County of Los Angeles 2006.

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IMPACT ANALYSIS

TRANS-1 *The proposed project would not result in an increase in traffic that would create a substantial change in relation to the existing traffic load and capacity of the street system or cumulatively exceed a level of service standard established by the County.*

PROPOSED PROJECT TRAFFIC VOLUMES

Proposed Project Traffic Generation. The proposed project would consist of an interpretive center that would host educational programs and events related to watershed education. Table 3.7-4 summarizes the anticipated weekday morning and evening peak hour trip estimates for the proposed project. As shown in Table 3.7-4, the proposed project is expected to generate approximately 109 weekday morning peak hour trips and 39 weekday evening peak hour trips.

TABLE 3.7-4 PROJECT TRIP GENERATION ESTIMATES

Land Use	Size (ksf)	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
WNNC	4.71	16	12	28	6	4	10
	Total	16	12	28	6	4	10
Proposed Project	18.23	62	47	109	23	16	39
	Total	62	47	109	23	16	39

Note: ksf = 1,000 square feet
Source: Iteris, Inc. 2008.

As shown, this represents an increase of 81 weekday morning peak hour trips and 29 weekday evening peak hour trips compared to the existing WNNC trip generation.

Project Traffic Distribution and Assignment. The trip distribution assumptions are used to determine the origin and destination of the new vehicle trips associated with the proposed project. The general distribution pattern developed for the project trips is summarized on Figure 3.7-3. Trips generated by the proposed project were assigned to the surrounding roadway network based on the distribution patterns to estimate the project-only peak hour traffic volumes.

EXISTING PLUS PROJECT CONDITIONS

The proposed project trip assignment was added to existing traffic volumes. The existing plus proposed project traffic volumes for the morning and evening weekday peak hour are shown in Tables 3.7-5 and 3.7-6.



Source: Meyer, Mohaddes Associates, April 2007.

- # Study Intersection
- Project Location



Figure 3.7-3
Project Trip Distribution

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**TABLE 3.7-5 EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE
- WEEKDAY AM PEAK HOUR**

#	Intersection	Existing Conditions		Existing with Project Conditions		Change in V/C Ratio	Significant Impact?
		V/C	LOS	V/C	LOS		
1	Durfee Avenue at SR 60 Eastbound Ramps	0.532	A	0.539	A	0.007	N
2	Durfee Avenue at Peck Road	0.953	E	0.959	E	0.006	N

Source: Iteris, Inc. 2008.

**TABLE 3.7-6 EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE
- WEEKDAY PM PEAK HOUR**

#	Intersection	Existing Conditions		Existing with Project Conditions		Change in V/C Ratio	Significant Impact?
		V/C	LOS	V/C	LOS		
1	Durfee Avenue at SR 60 Eastbound Ramps	0.493	A	0.494	A	0.001	N
2	Durfee Avenue at Peck Road	0.804	D	0.805	D	0.001	N

Source: Iteris, Inc. 2008.

As shown in Tables 3.7-5 and 3.7-6, the addition of proposed project traffic to existing conditions would not exceed the County's level of service thresholds. The proposed project-specific increases in traffic at the study intersections would be less than significant.

FUTURE TRAFFIC PROJECTIONS

The future base conditions reflect predicted growth in traffic over existing conditions from two sources. The first source is the ambient growth in traffic. Ambient growth reflects increases in traffic due to regional growth and development between baseline (year 2006) and future (year 2013). The second source is growth due to traffic generated by specific projects located within, or in the vicinity of, the study area. The methods and assumptions used to develop cumulative base traffic projections are described in more detail below.

Ambient Traffic Growth. Ambient traffic growth is the traffic growth that will occur in the study area due to predictable general employment growth, housing growth and growth in regional through trips in southern California. Even if there was no change in housing or employment in the County, there will be some background (ambient) traffic growth in the region. Per the CMP, a one percent per year growth rate was assumed as a conservative estimate of traffic increase in the study area.

Related Project Traffic Generation and Assignment. The cumulative project traffic growth is growth due to specific, known development projects in the study area, and is included in the analysis of the future base conditions. Approximately 10 related projects have been identified (see Section 4.3, Cumulative Impacts). These include components of the San Gabriel River Corridor Master Plan within a one-mile radius of the project site, as well as the current effort to update the Whittier Narrows Master Plan. However, these projects are conceptual only and no facilities have been identified at this time that would be constructed or would generate new vehicle trips in the project vicinity. For the purposes of the traffic analysis, 2 known development projects are considered. Table 3.7-7 summarizes the size and type of land uses for the related projects. These include an approximately 352,000-square-foot warehouse expansion located approximately 2.2 miles southeast of the lease boundary and a new bus garage that was recently constructed on the campus of South El Monte High School.

TABLE 3.7-7 TRIP GENERATION ESTIMATES FOR RELATED PROJECT

Project#	Description	Size		Weekday AM Peak Hour			Weekday PM Peak Hour		
				In	Out	Total	In	Out	Total
1	Warehouse/Distribution	352	ksf	130	29	159	41	124	165
2	ELUHSD Bus Garage	15	ksf	--	--	--	30	0	30
Total				130	29	159	71	124	195

Note: ksf = 1,000 square feet.
 Source: Institute of Transportation Engineers 2007.

Traffic generated by the related projects was estimated based on the information from the County and standard trip generation data from the Institute of Transportation Engineers' *Trip Generation (7th Edition)* (2003). As shown, the cumulative projects are forecast to generate a total of approximately 159 trips during the weekday morning and approximately 195 trips during the weekday evening peak. These trips were assigned to the traffic model as part of the development of the "Future Without Project" projections. The proposed project-only peak hour traffic volumes were added to the ambient growth and related project traffic volumes ("Future Without Project"). The resulting "Future With Project" traffic volumes are shown on Figure 3.7-4. The intersection V/C ratios and corresponding LOS for "Future With Project" conditions were calculated and the results summarized in Tables 3.7-8 and 3.7-9. The resultant change in V/C ratio comparing the "Future With Project" to the "Future Without Project" is also presented in the tables.

TABLE 3.7-8 CUMULATIVE INTERSECTION LEVEL OF SERVICE - WEEKDAY A.M. PEAK HOUR

#	Intersection	Future Without Project		Future With Project		Change in V/C Ratio	Significant Impact?
		V/C	LOS	V/C	LOS		
1	Durfee Avenue at SR 60 Eastbound Ramps	0.542	A	0.553	A	0.011	N
2	Durfee Avenue at Peck Road	0.972	E	0.980	E	0.008	N

Source: Iteris, Inc. 2008.



Figure 3.7-4
Future with Project Traffic Volumes

TABLE 3.7-9 CUMULATIVE INTERSECTION LEVEL OF SERVICE - WEEKDAY P.M. PEAK HOUR

#	Intersection	Future Without Project		Future With Project		Change in V/C Ratio	Significant Impact?
		V/C	LOS	V/C	LOS		
1	Durfee Avenue at SR 60 Eastbound Ramps	0.503	A	0.509	A	0.006	N
2	Durfee Avenue at Peck Road	0.821	D	0.827	D	0.006	N

Source: Iteris, Inc. 2008.

As shown in Tables 3.7-8 and 3.7-9, the “Future Without Project” forecasts indicate that the addition of trips from the proposed project would result in a less than significant cumulative traffic impact at the study intersections per the County thresholds of significance.

Special Event Analysis

The proposed project is estimated to host approximately 4 evening events per month with up to 150 attendees per event. These events would generally operate between the hours of 6:00 p.m. and 9:30 p.m. on a weekday. An additional evening peak hour analysis was conducted to assess the potential traffic impacts associated with these events. For the purposes of a conservative analysis, it was assumed that all 150 attendees (maximum capacity of the multi-purpose room) would travel to the lease boundary in separate vehicles. Thus, the trip generation associated with the special events is 150 inbound trips in the evening peak hour. These trips were added to the “Future Without Project” evening peak hour traffic volumes. The same trip distribution pattern was assumed as the normal weekday activities at the lease boundary. The 150 new trips associated with the special event traffic were added to “Future With Project” volumes, as shown in Figure 3.7-5 and Table 3.7-10.

TABLE 3.7-10 CUMULATIVE INTERSECTION LEVEL OF SERVICE WITH SPECIAL EVENT - WEEKDAY P.M. PEAK HOUR

#	Intersection	Future Without Project		Future With Project		Change in V/C Ratio	Significant Impact?
		V/C	LOS	V/C	LOS		
1	Durfee Avenue at SR 60 Eastbound Ramps	0.503	A	0.513	A	0.010	N
2	Durfee Avenue at Peck Road	0.821	D	0.830	D	0.009	N

Source: Iteris, Inc. 2008.

As shown in Table 3.7-10, the addition of special event traffic to “Future Without Project” conditions would result in a less than significant cumulative traffic impact at the study intersections per the County thresholds of significance.



Source: Meyer, Mohaddes Associates, April 2007.

- # Study Intersection
- █ Project Location



Figure 3.7-5
Future with Project
and Special Event Traffic Volumes

TRANS-2 *The proposed project would not substantially increase hazards due to a design feature or incompatible uses.*

Vehicle Operations

Using the traffic count data described above, traffic operations at the driveway intersection with Durfee Avenue were analyzed under the expected worst-case scenario. To determine whether significant delays and congestion could occur along Durfee Avenue during a large event at the San Gabriel River Discovery Center (Discovery Center or proposed project), it was assumed that two separate events are taking place at the Discovery Center: one that is just finishing and all visitors are leaving; and a second event just beginning with a completely new set of visitors are arriving. Both events were assumed to draw a total of 150 vehicles each and no visitors stayed between events. This analysis was conducted under both the Saturday and Tuesday conditions. Table 3.7-11 shows the amount of delay expected at the driveway under these conditions.

TABLE 3.7-11 AVERAGE DRIVEWAY VEHICLE DELAY

Day	Time	LOS	Delay/Vehicle (seconds)
Saturday	10:00 a.m. – 11:00 a.m.	B	13.6
Saturday	2:00 p.m. – 3:00 p.m.	C	15.9
Tuesday	10:00 a.m. – 11:00 a.m.	C	17.6
Tuesday	2:00 p.m. – 3:00 p.m.	C	17.6

Source: Iteris, Inc. 2006.

As shown in Table 3.7-11, the driveway intersection would operate at an acceptable level of service with vehicles experiencing minimal delay when either entering or exiting the project site under worst-case conditions.

Sight Distance Analysis

One of the major causes of both delay and accidents at driveway locations is the lack of adequate sight distance for drivers exiting a facility or parking lot to see on-coming traffic. To reduce driver discomfort, the proposed new driveway would be located at a position that affords drivers adequate sight distances along Durfee Avenue in both directions. To complicate matters, Durfee Avenue currently has a slight curve in the roadway traveling west from Peck Road. The existing WNNC driveway is located at the tail end of the concave, or inside, edge of this curve. This limits the amount of sight distance drivers exiting the site have to identify on-coming traffic due to the presence of foliage along Durfee Avenue. To increase the sight distance available to drivers, the proposed project includes the addition of a deceleration lane before the new driveway and an acceleration lane after the new driveway. Further, the foliage located along Durfee Avenue would be removed to provide an additional 12 to 15 feet of sight distance

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for drivers. With implementation of these project design features, the impacts to driver safety related to line of sight would be less than significant.

Intersection Configuration Analysis

Offset intersections can be confusing to drivers and the cause of potentially dangerous traffic operations. The existing WNNC driveway is located approximately 120 feet west of the exit driveway for the high school parking lot. While this offset distance does not pose any substantial danger to drivers at either location, it can create greater delay and confusion at both driveways. To help improve traffic operations and safety at both locations, the proposed driveway for the interpretive center would be located as close as possible to directly oppose the existing exit driveway at the high school. This alignment would reduce driver confusion by providing a common intersection configuration with opposing traffic queuing in direct sight. With implementation of these project design features, the impacts to driver safety related to intersection configuration would be less than significant.

TRANS-3 *The proposed project would not result in inadequate parking capacity.*

The proposed project includes a single 150-space surface parking lot. The proposed project was designed to have 150 parking spaces based on the anticipated program needs for the interpretive center. Normal visitor levels are anticipated to be approximately 200 to 250 visitors per day with turnover 3 to 4 times per day. School groups would primarily use the lease boundary during the weekdays and would arrive in up to 3 buses at one time because parking for 3 buses would be provided. As such, the proposed project would provide adequate daily parking.

The meeting rooms would be available for reservations and/or rentals from 8:00 a.m. to 10:00 p.m., 7 days per week subject to availability, for groups focused on cultural and natural resources and watershed conservation. These groups would be allowed use of the facility for meetings that provide programs open to the public. Currently programmed special events and meetings are anticipated to attract up to 100 persons (see Table 2-4). However, the multi-purpose room is designed to accommodate groups of up to 150 persons. These groups would likely use the meeting rooms during weekday evenings when normal visitors to the grounds have left. As such, the proposed parking lot was designed to accommodate these 150 visitors driving to the lease boundary in separate vehicles. However, some special events currently occur at the existing WNNC, such as annual clean ups, and that would continue to occur at the interpretive center during some weekends would attract approximately 200 visitors to the site in a single day in addition to normal visitors. As such, the proposed project could experience visitor levels of approximately 300 to 400 persons in a given day when a large event is held. The existing WNNC typically makes arrangements with nearby businesses for additional off-site parking. Traffic police are used along Durfee Avenue to direct visitors to the appropriate parking lots and to stop through traffic to allow visitors to safely cross Durfee Avenue. These arrangements would continue to be made for the proposed project during special events that require overflow parking. The impacts to parking supply would be less than significant.

3.7.4 MITIGATION MEASURES

No mitigation measures are required.

3.7.5 SIGNIFICANCE AFTER MITIGATION

The impact to transportation and parking would be less than significant.

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