3.12 TRANSPORTATION AND TRAFFIC

This chapter evaluates the potential transportation and traffic impacts associated with the proposed project. The following analysis is based on the *Transportation Impact Analysis for the Los Angeles State Historic Park Project*, prepared by Fehr & Peers in November 2011. This report is included as Appendix G of this EIR.

3.12.1 ENVIRONMENTAL SETTING

The project site is located north of downtown Los Angeles and north of the Metro Gold Line Chinatown Station. For purposes of the traffic impact analysis, the project study area is generally bound by Broadway to the north, Spring Street to the south, Avenue 18 to the east, and West College Street to the west. The project study area and the study intersections were approved by the City of Los Angeles Department of Transportation (LADOT) staff.

EXISTING HIGHWAY AND STREET SYSTEM

Primary regional access to the project site is provided by Interstate 110 (I-110, Pasadena Freeway), which runs north-south; Interstate 5 (I-5, Golden State Freeway), which runs north-south; and Interstate 101 (I-101, Santa Ana Freeway), which runs east-west. The main arterial streets serving the project area are Broadway, Spring Street, and Main Street. The key roadways providing access to the project site and surrounding area include:

- **I-110/Pasadena Freeway**: Runs in a north-south direction west of the project study area and extends from its southern terminus in San Pedro to its northern terminus in South Pasadena. The Pasadena Freeway generally provides three lanes in each direction through the study area. Ramps located in the study area provide access to and from Hill Street and Bishop Road/Stadium Way.

- **I-5/Golden State Freeway**: Runs in a north-south direction east of the study area and extends from Mexico in the south to Canada in the north. The Golden State Freeway generally provides four lanes in each direction through the study area. Ramps located in the study area provide access to and from Daly Street, North Broadway, and Pasadena Avenue.

- **I-101/Santa Ana Freeway**: Runs in an east-west direction south of the study area and extends from its southern terminus at I-5 in East Los Angeles northwest along the California coast. The Santa Ana Freeway generally provides three lanes in each direction through the study area. Ramps located in the study area provide access to and from Pleasant Avenue, Vignes Street, Commercial Street, Alameda Street, Grand Avenue, and Temple Street.

- **Broadway**: Classified as a Class II Major Highway that runs east-west with two lanes in each direction plus left-turn channelization at most intersections through the study area. Parking is generally allowed along most of Broadway and the posted speed limit is 35 miles per hour.

- **Spring Street**: Classified as a Class II Major Highway that runs east-west with two lanes in each direction through the study area. Parking is generally not allowed along most of Spring Street and the posted speed limit is 35 miles per hour.

- **Main Street**: Classified as a Secondary Highway that runs east-west with two lanes in each direction through the study area. Parking is generally not allowed along most of Spring Street and the posted speed limit ranges from 30 to 35 miles per hour.

EXISTING PUBLIC TRANSIT SERVICE

The project site is currently served by eight transit lines. These include transit lines operated by Los Angeles County Metropolitan Transportation Authority (Metro), LADOT transit, and Santa Clarita Transit. Given its proximity to existing transit lines, it is likely that proposed project patrons would use transit service to access the project site.

Los Angeles County Metropolitan Transportation Authority

- **Metro Gold Line**: This light rail transit line generally travels north-south along the I-110 alignment in the project area, and provides service between Pasadena and Union Station in downtown Los Angeles. In addition, the Eastside Extension of the Metro Gold Line provides service between Union Station in downtown and East Los Angeles. This line has average morning and evening peak hour headways of six minutes.[1]

- **Metro Local Bus Line 45**: Bus Line 45 provides daily service to the Lincoln Heights, downtown, and Rosewood areas via Broadway. Bus headways in the project area are approximately 10 minutes during the weekday peak hours.[2]

- **Metro Local Bus Line 76**: Bus Line 76 provides daily service between downtown and El Monte via Garvey Avenue. Bus headways in the project area are approximately 20 minutes during the weekday peak hours.[3]

- **Metro Local and Late Night Bus Line 83**: Bus Line 83 provides daily service between downtown and Eagle Rock via York Boulevard and Pasadena Avenue. Bus headways in the project area are approximately 20 minutes during the weekday peak hours.[4]

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1 Metro, Maps & Timetables, Metro Gold Line, available at: http://www.metro.net/riding_metro/bus_overview/images/804.pdf, accessed: November 8, 2011.

2 Metro Local Service to/from Downtown LA schedule, Bus Line 45, available at: http://www.metro.net/riding_metro/bus_overview/images/045.pdf, accessed: November 8, 2011.

3 Metro Local Service to/from Downtown LA schedule, Bus Line 76, available at: http://www.metro.net/riding_metro/bus_overview/images/076.pdf, accessed: November 8, 2011.

4 Metro Local Service to/from Downtown LA schedule, Bus Line 83, available at: http://www.metro.net/riding_metro/bus_overview/images/083.pdf, accessed: November 8, 2011.

- **Metro Local and Late Night Bus Line 84**: Bus Line 84 provides service between downtown and Eagle Rock via Eagle Rock Boulevard. Bus headways in the project area are approximately 15 minutes during the weekday peak hours.[5]

City of Los Angeles Department of Transportation

- **LADOT DASH Bus Line B**: DASH Bus Line B provides service in the Chinatown and Financial District areas of downtown Los Angeles. Within the project area, Line B runs along Broadway. This line operates Monday through Friday only, and provides service every eight minutes from 5:50 a.m. to 6:30 p.m.[6]

- **LADOT DASH Lincoln Heights/Chinatown Bus Line**: The DASH Lincoln Heights/Chinatown Bus Line operates Monday through Saturday with average headways of 30 minutes. In the project area, this line travels along Broadway, Spring Street, College Street, Ann Street, and Main Street.[7]

Santa Clarita Transit

- **Santa Clarita Transit Commuter Express Bus Line 799**: The Commuter Express Bus Line 799 provides weekday service between the City of Santa Clarita and downtown Los Angeles. Within the project area, this line travels along Broadway and connects with Alameda Street, with average weekday peak hour headways of 15 minutes.[8]

BICYCLE AND PEDESTRIAN FACILITIES

Bicycle and pedestrian facilities exist near the project site throughout the study area. Crosswalks are generally provided at signalized intersections and sidewalks exist along the frontage of most developed properties. However, Class II bike lanes (on-street with signing and striping) are generally not provided within the study area, and bicyclists must share the road with vehicles.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

Study Intersections

Four intersections were selected for analysis; two signalized intersections were selected for operational analysis, while two unsignalized intersections were selected for signal warrant analysis. The locations of

[5] Metro Local Service to/from Downtown LA schedule, Bus Line 84, available at: http://www.metro.net/riding_metro/bus_overview/images/083.pdf, accessed: November 8, 2011.

[6] LADOT Transit Services, DASH Downtown Schedules, available at: http://www.ladottransit.com/dash/routes/downtown/downtown.php, accessed: November 8, 2011.

[7] LADOT Transit Services, DASH Lincoln Heights/Chinatown Schedule, available at: http://www.ladottransit.com/dash/routes/LincolnHeights_Chinatown/lincolnheights.php, accessed: November 8, 2011.

[8] City of Santa Clarita Transit, Routes and Schedules, available at: http://santaclaritatransit.com/Index.aspx?page=78, accessed: November 8, 2011.

the four study intersections are shown in Figure 3.12-1. The analyzed study intersections were selected in conjunction with LADOT and include the following:

1. Spring Street & West College Street (signalized)
2. Spring Street & Sotello Street (unsignalized)
3. Spring Street & Mesnagers Street (unsignalized)
4. Spring Street/Broadway & Avenue 18 (signalized)

Level of Service Methodology

Level of service (LOS) is a qualitative measure describing the operating condition of intersections and roadways. LOS ranges from A through F, which represents driving conditions from best to worst, respectively. In general, LOS A represents free-flow conditions with no congestion, while LOS F represents severe congestion and delay under stop-and-go conditions.

Intersection LOS was calculated using the Critical Movement Analysis (CMA) methodology and the *Highway Capacity Manual* (Transportation Research Board, 2000) unsignalized methodology to assess the estimated operating conditions in the weekday PM and Saturday midday peak hours. Both analysis methodologies use intersection geometries, traffic control, and traffic volumes to determine level of service.

LADOT requires that the CMA methodology of intersection capacity analysis be used to determine the intersection volume-to-capacity (V/C) ratio and corresponding level of service at signalized intersections within the City of Los Angeles. The signalized intersection analysis was performed using the City's CalcaDB intersection analysis software. This software, developed by LADOT, is used to determine the ratio of critical turning movements at the intersection to its capacity.

In accordance with LADOT analysis procedures, the V/C ratio calculated using the CMA methodology is further reduced by 0.07 for those intersections included in the Automated Traffic Surveillance and Control system and an additional 0.03 for intersections with the Adaptive Traffic Control System, to account for the improved operation and increased efficiency from these systems that is not captured in the CMA methodology. Intersection V/C reductions were applied outside the CalcaDB intersection analysis software.

Source: Google Earth

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Figure 3.12-1

Study Intersection Locations

Table 3.12-1 defines the ranges of V/C ratios and their corresponding levels of service using the CMA methodology. Unsignalized intersections were analyzed using the *Highway Capacity Manual* unsignalized methodology. The LOS for side-street stop-controlled intersections was based on delay for the traffic movement with the greatest delay. Table 3.12-2 defines the ranges of control delay and their corresponding levels of service using the *Highway Capacity Manual* methodology.

TABLE 3.12-1
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

LOS	V/C Ratio	Definition
A	0.000 – 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>0.700 – 0.800	GOOD. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, Transportation Research Board, 1980.

Source (Table): Fehr & Peers, November 2011.

TABLE 3.12-2
LEVEL OF SERVICE DEFINITIONS FOR UNSIGNALIZED INTERSECTIONS

LOS	Average Vehicle Delay (seconds)
A	0 to 10
B	>10 to 15
C	>15 to 25
D	>25 to 35
E	>35 to 50
F	>50

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

Source (Table): Fehr & Peers, November 2011.

Traffic Count Data

The study intersections were counted during the weekday PM (4:00 p.m. to 6:00 p.m.) and Saturday midday (11:00 a.m. to 4:00 p.m.) peak periods and the peak hour traffic volumes were determined at each

study intersection and used as the basis for the existing traffic operations analysis. Typically, the weekday AM and PM peak periods are selected for the traffic operations analysis. However, limited vehicle activity was observed at the project site during the weekday AM peak period field visits. A Saturday midday peak period analysis was supplemented for the weekday AM peak period analysis due to higher vehicle activity levels observed at the project site. Traffic counts were collected in September 2010 at the four study intersections. Traffic counts were also collected at the existing park driveway, which will be closed as part of the proposed project, to determine existing park trip generation rates. Existing traffic volumes are shown in Figure 3.12-2.

Table 3.12-3 summarizes the weekday PM and Saturday midday peak hour V/C ratio or delay and corresponding LOS at each of the study intersections. As shown in Table 3.12-3, the four study intersections currently operate at acceptable levels of service (LOS D or better) during both the weekday PM and Saturday midday (MD) peak hours.

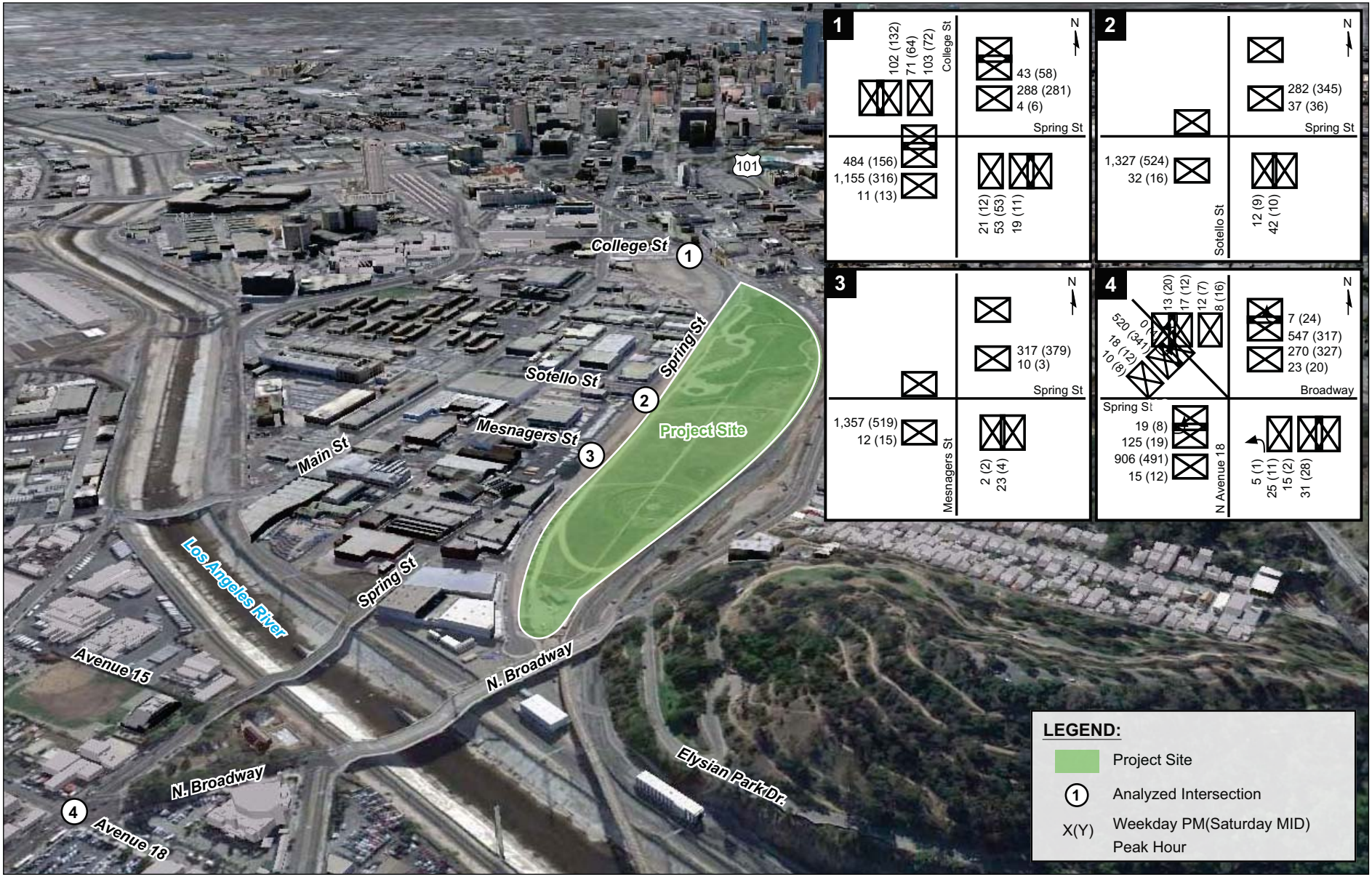
TABLE 3.12-3
INTERSECTION TRAFFIC OPERATIONS
EXISTING (2010) CONDITIONS

No.	Intersection	Control	Peak Hour	Existing[a]	
				V/C	LOS
1.	North Spring Street & West College Street	Signalized	Weekday PM	0.443	A
			Saturday MD	0.205	A
2.	North Spring Street & Sotello Street[b]	Side-Street Stop	Weekday PM	24	C
			Saturday MD	13	B
3.	North Spring Street & Mesnagers Street[b]	Side-Street Stop	Weekday PM	17	C
			Saturday MD	12	B
4.	North Spring Street/North Broadway & South Avenue 18	Signalized	Weekday PM	0.372	A
			Saturday MD	0.124	A

[a] Based on counts conducted September 2010.
[b] For side-street stop controlled intersections, delay in seconds for the worst movement is reported.
Source: Fehr & Peers, November 2011.

LOS ANGELES COUNTY CONGESTION MANAGEMENT PROGRAM

To address the increasing public concern that traffic congestion was impacting the quality of life and economic vitality of the State of California, the Congestion Management Program (CMP) was enacted by Proposition 111. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program process. A countywide approach has been established by Metro, the local CMP agency, designating a highway network that includes all state highways and principle arterials within the County and monitoring the network's LOS to implement the



Source: Google Earth

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Figure 3.12-2

Existing (2010) Peak Hour Traffic Volumes

statutory requirements of the CMP. This monitoring of the CMP network is one of the responsibilities of local jurisdictions. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to be in conformance with the countywide plan.

The criteria for determining the study area for CMP arterial monitoring intersections and for freeway monitoring locations are:

a) All CMP arterial monitoring intersections where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic; and

b) All CMP mainline freeway monitoring locations where the proposed project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

Five freeway mainline locations were identified on the three major freeways in the project area, including I-5, I-10, and I-110. The following five mainline locations are identified as CMP freeway monitoring stations:

- I-5 at Stadium Way
- I-10 at eastern Los Angeles City limit
- I-110 south of US-101
- I-110 at Alpine Street
- I-110 at Pasadena Avenue

3.12.2 ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

As part of the Initial Study (see to Appendix A of this EIR), it was determined that the proposed project would not result in impacts related to hazardous design features or incompatible uses. Accordingly, this issue is not further analyzed in this EIR.

In accordance with the CEQA Guidelines, the proposed project would have a significant impact related to transportation and traffic if it would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

- Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Result in inadequate emergency access; or

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

METHODOLOGY

In accordance with LADOT criteria, an impact is considered significant related to signalized intersections if one of the thresholds identified in Table 3.12-4 is exceeded. No significant impacts are deemed to occur if the final LOS is A or B, as these operating conditions exhibit sufficient surplus capacities to accommodate large traffic increases with little effect on traffic flows.

TABLE 3.12-4
CITY OF LOS ANGELES SIGNIFICANT TRANSPORTATION IMPACT CRITERIA

Level of Service	Final V/C Ratio	Project-Related Increase in V/C
C	> 0.701 – 0.800	≥ 0.040
D	> 0.801 – 0.900	≥ 0.020
E	> 0.901 – 1.000	≥ 0.010
F	> 1.000	≥ 0.010

Source: Fehr & Peers, November 2011

LADOT does not require the analysis of unsignalized intersections and no impact criteria are defined for unsignalized intersections. In addition, an impact is considered significant if implementation of the proposed project would disrupt or interfere with existing or planned transit operations or transit facilities. An impact is also considered significant if implementation of the proposed project would disrupt or interfere with existing or planned bicycle or pedestrian facilities.

TRAFFIC MANAGEMENT PLAN

The proposed project would be designed to hold a small number of special events during the year, which have the potential to attract thousands of visitors. The occasional increase in traffic congestion that may result from a special event would be improved through development and implementation of a traffic management plan. LAPD personnel and traffic control officers may be required, in the future, to provide the sufficient level of traffic management needed by such an event. Additionally, collaboration with

LADOT, California Department of Transportation, and the California Highway Patrol may also be required.

The traffic management plan would consist of numerous strategies designed to help manage traffic and minimize the potential increases in traffic congestion on roadways surrounding the project site. The roadways that provide access to the project site on which most of the traffic congestion would likely occur include:

- Spring Street/Alameda Street
- Main Street
- Broadway
- College Street
- Cesar E. Chavez Avenue
- Mission Road
- Daly Street/Avenue 26

During special events, the majority of these streets may be very heavily congested. LAPD officers and LADOT traffic officers may be required to implement the traffic management plan. The following steps describe the framework of procedures for such a plan:

- To facilitate movement of vehicles, LAPD and LADOT staff must have the authority to implement turn restrictions, parking prohibitions, lane closures, barriers/cones, and flexible signage. A temporary command post could also be made available on-site to control and monitor traffic conditions. The area may be split up into zones, with an engineer assigned to each zone. These engineers would have the authority to react to situations and change restrictions if necessary.

- Real time radio alerts and broadcasts via Highway Advisory Radio may be used. These are portable units and would be located wherever LADOT deems appropriate. These units are particularly useful for incident management and special events such as outdoor concerts. The units also require very little setup by trained officers. They could be programmed remotely via cellular phones, and traditionally have a range of three to five miles on an AM frequency. LASHP or event employees would be trained and authorized to staff the Highway Advisory Radio.

- In conjunction with the aforementioned steps, Changeable Message Signs could be used to direct vehicles from the freeways and surface streets to the designated parking lots. The signs or messages may consist of advance warning for motorists informing them of any parking or turning restrictions.

- As part of special events signage, the Changeable Message Signs would be augmented with the addition of designated routes that direct traffic along travel paths that are not immediately obvious. These routes would be designed and linked by colored arrows that direct drivers to specific locations. Temporary signage would indicate these routes. The routes would provide alternate locations such as the less-utilized parking lots and any designated overspill parking facilities.

- Coordination with Dodger Stadium, Staples Center, the Los Angeles Convention Center, and other organizations is recommended to ensure that large, publicly attended events are not overlapping, thus minimizing possible traffic conflicts and congestion.

- There is also a need to encourage the use of carpools, transit, and bicycles for special events. Travel by alternative modes of transportation could be incentivized either by reducing the cost of parking for carpools or by special ticket pricing. This would aid in reducing overall vehicle trips to and from the project site during special events.

- Encourage the use of alternate parking sites.

- CDPR would be responsible for development of the traffic management plan for special events, and for approving any and all modifications to the plan by the event organizer.

- The traffic management plan would be approved by LAPD, LADOT, California Department of Transportation, and California Highway Patrol.

- All special event permit fees would be required to implement the traffic management plan.

- CDPR staff would ensure that the traffic management plan is implemented and enforced during special events.

The above listed strategies would be used to form the framework of the traffic management plan to be implemented for special events at the project site. These strategies are designed to work together to have maximum effect in reducing the traffic congestion during a planned event.

IMPACT ANALYSIS

TRANS-1 *The proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Impacts would be less than significant.*

Project Traffic Volumes

As discussed below, the evaluation of project traffic volume is a three-step process that includes trip generation, trip distribution, and trip assignment.

Project Trip Generation

Vehicle trip generation rates for the proposed project were derived from traffic counts collected at the existing park driveway and a parking survey conducted at the parking lot located just east of the existing driveway and on-street parking along Spring Street. The observed trip generation rates were then compared against data from the Institute of Transportation Engineers and the San Diego Association of Governments. The observed vehicle trip generation rate exceeded the Institute of Transportation Engineers' PM peak hour regional park rate of 1.1 and Saturday midday peak hour rate of 1.68, as well as the San Diego Association of Governments' PM peak hour regional developed park rate of 1.8. The observed trip generation rates and resulting trip generation estimates for the proposed project are summarized in Table 3.12-5.

As shown in Table 3.12-5, the proposed project is expected to generate approximately 61 new net trips during the weekday PM peak hour and 30 new net trips during the Saturday midday peak hour. Based on data from the San Diego Association of Governments, the existing IPU park currently generates approximately 20 daily trips per acre for a total of approximately 320 daily trips. The proposed project is expected to generate approximately 640 daily trips, for a net increase of approximately 320 daily trips over the existing IPU park.

Project Trip Distribution

The geographic distribution of traffic generated by the proposed project depends on several factors, including the proposed land uses, the location of site access points in relation to the surrounding street system, the geographic distribution of existing and future population centers, existing travel patterns, and topographic constraints.

TABLE 3.12-5
TRIP GENERATION RATES AND ESTIMATES

Trip Generation Rates[a]							
Land Use	**Rate**	**Weekday PM Peak Hour**			**Weekend MD Peak Hour**		
		In %	**Out %**	**Total**	**In %**	**Out %**	**Total**
LASHP	Per Acre	47%	26%	3.81	43%	57%	1.88
Trip Generation Estimates							
Land Use	**Rate**	**Weekday PM Peak Hour**			**Weekend MD Peak Hour**		
		In	**Out**	**Total**	**In**	**Out**	**Total**
Existing Uses							
LASHP	16 Acres	45	16	61	13	17	30
Total Existing Park Trips		*45*	*16*	*61*	*13*	*17*	*30*
Proposed Project							
LASHP	32 Acres	90	32	122	26	34	60
Total Proposed Project Trips		*90*	*32*	*122*	*26*	*34*	*60*
Total Net New Project Trips		**45**	**16**	**61**	**13**	**17**	**30**

[a] Trip generation rates derived from a driveway count and parking survey performed September 2010. The trip generation rates do not assume alternative modes of transportation (e.g., biking, transit, etc.).

Source: Fehr & Peers, November 2011.

The estimated distribution of trips generated by the proposed project was developed with the aid of traffic counts performed at the existing park driveway and the parking survey conducted. The trip distribution pattern for the proposed project is summarized below and shown in Figure 3.12-3.

- 10 percent to and from the north
- 45 percent to and from the east
- 45 percent to and from the west

Project Trip Assignment

The trip generation estimates summarized in Table 3.12-5, and the trip distribution pattern shown in Figure 3.12-3 were used to assign the project-related traffic to the local and regional roadway system. Existing traffic currently uses the existing driveway and adjacent parking lot, both of which would be closed as part of the proposed project. As such, existing traffic was rerouted to the two new driveways included with the proposed project under the cumulative (2035) plus project conditions.

Cumulative (2035) No Project Conditions

Operational traffic impacts associated with the cumulative (2035) no project conditions were assessed using the travel demand forecasting model developed for the CASP Transportation Impact Analysis. This was due to the inclusion of the project site within the specific plan boundary and the proposed changes in the land use and transportation system provided as part of the specific plan. The travel demand model was developed from Southern California Association of Governments' (SCAG's) 2008 Regional Transportation Plan travel demand forecasting model. This model focuses on estimating regional travel for the entire southern California region. Since the CASP is a local, rather than a regional, planning document, it was necessary to supplement the model with a more detailed sub-area model.

The CASP 2035 traffic forecasts were developed by modifying SCAG's 2008 Regional Transportation Plan model roadway network to match the roadway network of the preferred CASP alternative. Land use in the project study area was also modified based on the preferred project land use plan. Vehicle trips generated by the preferred alternative were distributed and assigned to the regional roadway network by the model. This method was chosen over manually assigning trips to the roadway network due to the size of the CASP project area, as well as to account for the redistribution that would likely occur from the project site's proximity to downtown Los Angeles and other neighboring communities.

Source: Google Earth

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Figure 3.12-3

Project Trip Distribution Pattern

Los Angeles State Historic Park Master Development Plan Draft EIR
California Department of Parks and Recreation

The CASP 2035 traffic forecasts were based on the SCAG 2008 Regional Transportation Plan model and, as such, accounted for the forecasted growth in population, employment, households, and housing units in the SCAG region by 2035 as forecasted by the SCAG 2008 "Integrated Growth Forecasting" process. This process provided the basis for developing the land use assumptions at the regional and small area levels of the model. Additionally, the model was checked to ensure infrastructure projects such as high-occupancy vehicle lanes on I-5 and the North Spring Street Bridge Widening project were included, as well as development projects such as the Ritz Carlton/Marriott Convention Center Hotel, New Genesis Apartments, and Chinatown Gateway, which were not completed when traffic counts were collected. The projected traffic volumes representing cumulative (2035) no project conditions are shown in Figure 3.12-4.

The analysis of cumulative (2035) no project traffic volumes assumed regional traffic growth as estimated by SCAG's regional travel demand model, consistent with land use and transportation system changes associated with the CASP. The intersection analysis is summarized in Table 3.12-6.

As shown in Table 3.12-6, the two signalized study intersections are projected to operate at LOS C or better during both weekday PM and Saturday midday peak hours under cumulative (2035) no project conditions. The two unsignalized study intersections are projected to operate at LOS C or worse during one or both peak hours:

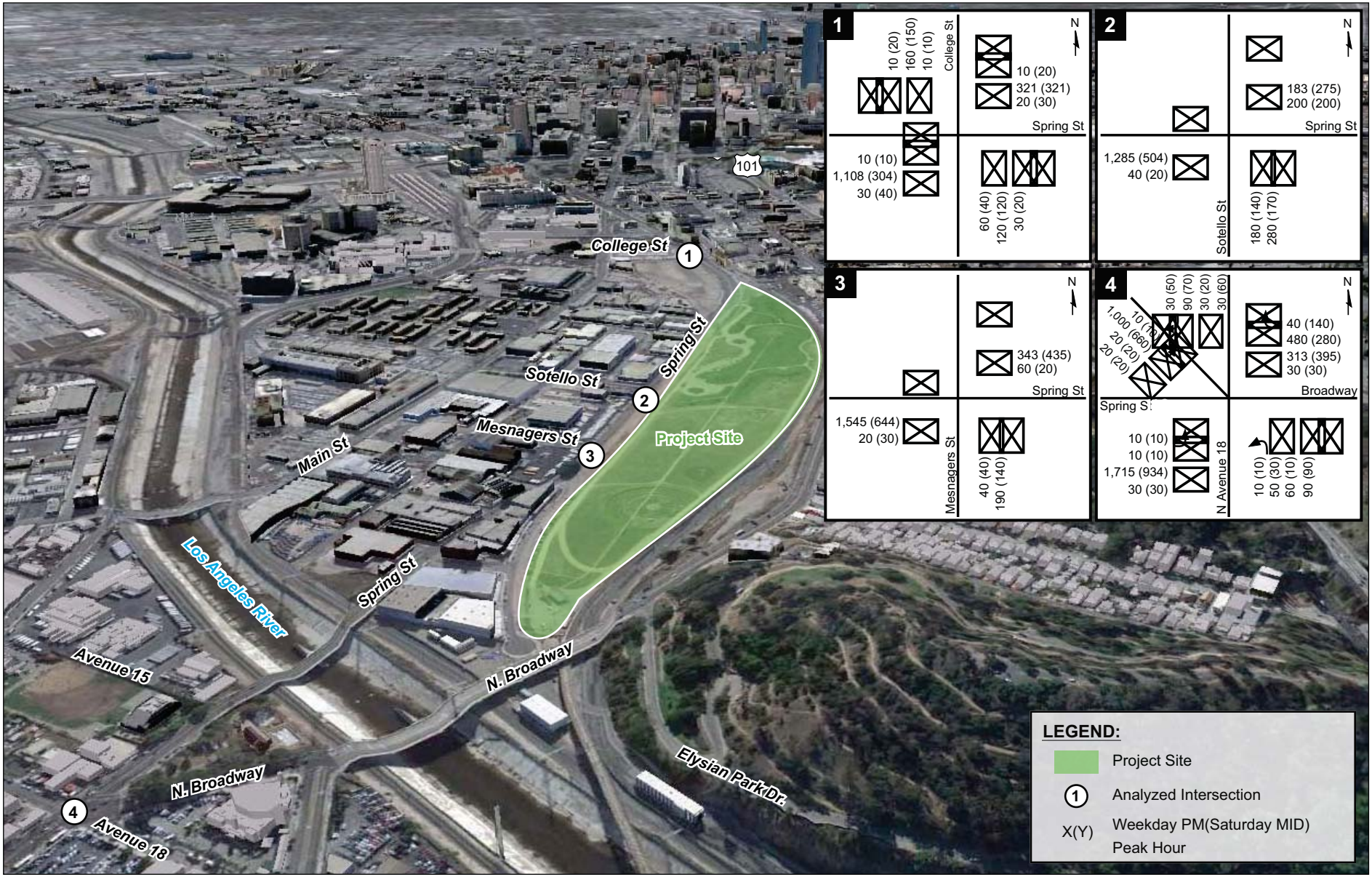
- Spring Street & Sotello Street (LOS F during weekday PM and Saturday midday)
- Spring Street & Mesnagers Street (LOS F during weekday PM)

Cumulative (2035) Plus Project Traffic Projections

The proposed project traffic volumes were added to the cumulative (2035) no project traffic projections to develop the cumulative (2035) plus project traffic projections. Figure 3.12-5 shows the resulting projected cumulative (2035) plus project traffic volumes for a typical weekday PM and Saturday midday peak hour, representing future traffic conditions following completion of the proposed project.

The analysis of the cumulative (2035) plus project operating conditions assumed the addition of estimated project trips to cumulative (2035) no project conditions, which is summarized in Table 3.12-6. As shown in Table 3.12-6, the two signalized study intersections are projected to operate at LOS C or better during both weekday PM and Saturday midday peak hours under cumulative (2035) plus project conditions. Similar to the cumulative (2035) no project conditions, under the cumulative (2035) plus project condition, the two unsignalized study intersections are projected to operate at LOS C or worse during one or both peak hours:

- North Spring Street & Sotello Street (LOS F during weekday PM and Saturday midday)
- North Spring Street & Mesnagers Street (LOS F during weekday PM)



Source: Google Earth

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Figure 3.12-4

Cumulative (2035) No Project Peak Hour Volumes

Los Angeles State Historic Park Master Development Plan Draft EIR
California Department of Parks and Recreation

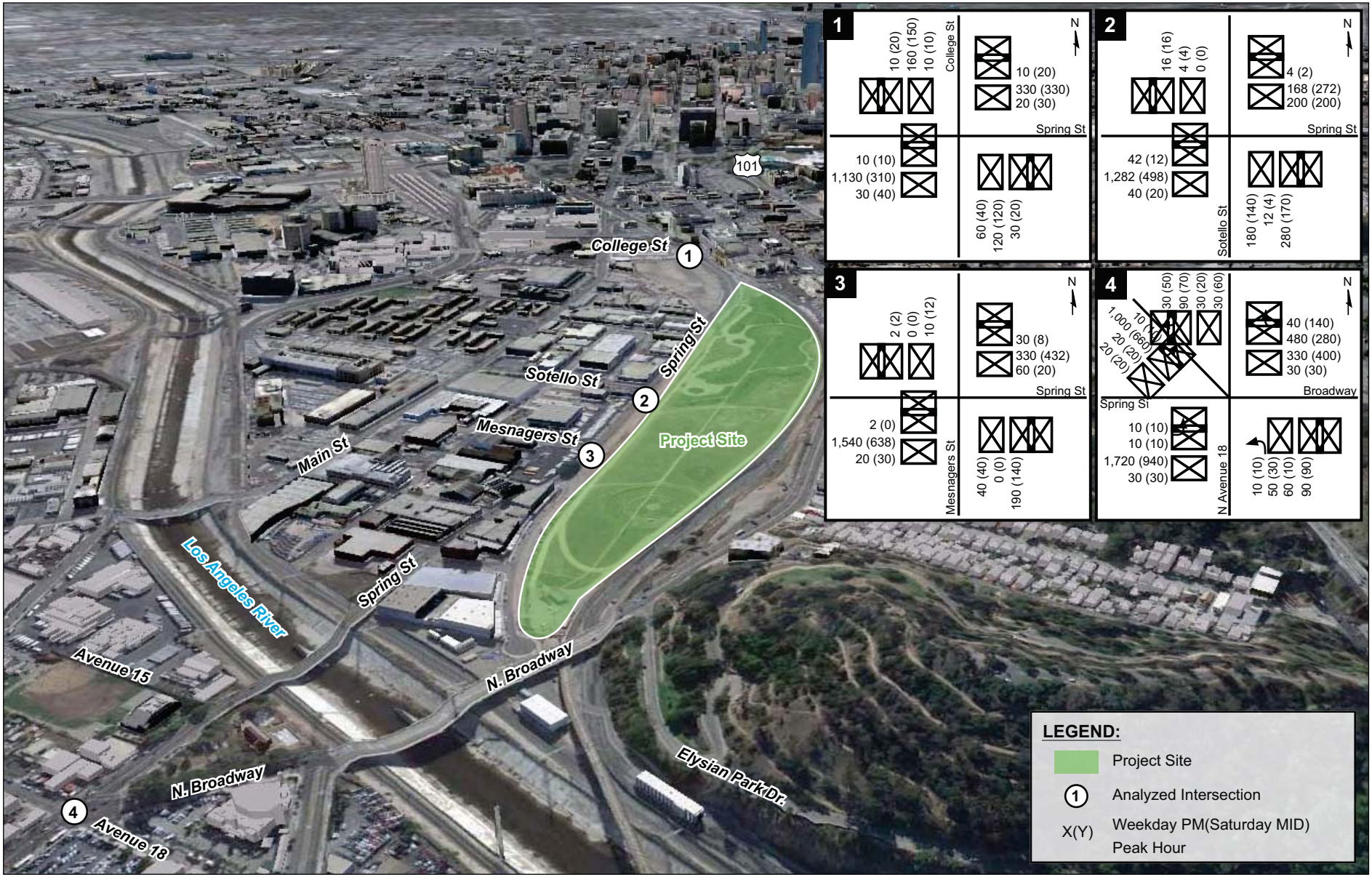
TABLE 3.12-6
INTERSECTION TRAFFIC OPERATIONS
FUTURE (2035) CONDITIONS

No.	Intersection	Control	Peak Hour	Existing (2010)[a]		Cumulative Base (2035)		Cumulative (2035) Plus Project			
				V/C	LOS	V/C	LOS	V/C	LOS	Change	Impact?
1.	North Spring Street & West College Street	Signalized	Weekday PM	0.443	A	0.429	A	0.437	A	0.008	No
			Saturday MD	0.205	A	0.148	A	0.150	A	0.002	No
2.	North Spring Street & Sotello Street[b]	Side-Street Stop	Weekday PM	24	C	>200	F	>200	F	--	No
			Saturday MD	13	B	81	F	177	F	96	No
3.	North Spring Street & Mesnagers Street[b]	Side-Street Stop	Weekday PM	17	C	188	F	>200	F	--	No
			Saturday MD	12	B	16	C	21	C	5	No
4.	North Spring Street/North Broadway & South Avenue 18	Signalized	Weekday PM	0.372	A	0.789	C	0.790	C	0.001	No
			Saturday MD	0.124	A	0.438	A	0.439	A	0.001	No

[a] Based on counts conducted September 2010.

[b] For side-street stop controlled intersections, delay in seconds for the worst movement is reported.

Source: Fehr & Peers, November 2011.



Source: Google Earth

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Figure 3.12-5

Cumulative (2035) Plus Project Peak Hour Volumes

Los Angeles State Historic Park Master Development Plan Draft EIR
California Department of Parks and Recreation

However, as previously discussed, analysis at unsignalized intersections is not required. Nonetheless, per LADOT requirements, a signal warrant analysis was performed for the two unsignalized study intersections.

The signal warrant analysis is included in Appendix G of this EIR. As the two signalized intersections would continue to operate at LOS C or better with implementation of the proposed project, no significant impacts to traffic volumes would occur. Furthermore, implementation of the traffic management plan would ensure that impacts remain less than significant during special events.

TRANS-2 *The proposed project would not conflict with an applicable congestion management program. The impact would be less than significant.*

As previously discussed, a CMP traffic impact analysis is required if a project would add 150 or more trips to the freeway, in either direction during the AM or PM peak hour, as well as CMP monitoring intersections where a project would add 50 or more peak hour trips. Five CMP freeway monitoring stations have been identified within the vicinity of the proposed project. These stations are located on the three major freeways in the project area, including I-5, I-10, and I-110.

Pursuant to California Department of Transportation evaluation standards, the potential project impact was evaluated to the long-term future year of 2035. The proposed project would add fewer than 150 peak hour trips in either direction to all five of the mainline freeway monitoring locations. Therefore, the proposed project would not conflict with the CMP and impacts would be less than significant.

TRANS-3 *The proposed project does not include aviation-related uses and would not result in a change in air traffic patterns. No impact would occur.*

The project site does not contain any aviation-related uses. The proposed project would entail the construction and operation of a 32-acre park including various event spaces, observation and interpretive areas, recreation areas and pathways, parking, constructed wetlands and habitat area, as well as park furnishings and infrastructure. The proposed project would not include the development of aviation-related uses. As such, the development of the proposed project would not have the potential to result in a change in air traffic patterns; therefore, no impact would occur.

TRANS-4 *The proposed project would not result in inadequate emergency access. The impact would be less than significant.*

Vehicular access to the project site would be provided via two driveways along Spring Street, which would replace the existing single driveway entrance. With the implementation of the proposed project, emergency access to the project site would be maintained at all times. However, special events held at the project site would have the potential to attract thousands of visitors. CDPR would coordinate with LADOT and other transportation agencies as necessary to develop a traffic management plan to be implemented during special events at the project site. Additionally, the traffic management plan would be developed in collaboration with LAPD, as personnel and traffic control officers may be required to

provide sufficient levels of traffic management during special events. Further, as part of the project design, emergency access and service road(s) would be provided along the northern border of the project site. Coordination with local agencies and development and implementation of the traffic management plan would ensure that impacts related to emergency access would be less than significant.

TRANS-5 *The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The impact would be less than significant.*

As previously discussed, the project site is currently served by eight public transit lines, including the Metro Gold Line, which is located adjacent to and north of the project site. Many patrons attending events held at LASHP utilize the Metro Gold Line for travel, and walk to the project site from the Metro Gold Line Chinatown Station, located approximately 600 feet south of the project site. Additionally, there are several bicycle facilities in the project area. Facilities serving the project site include Broadway, which is a designated Bicycle Lane and Bicycle Route; and Spring Street and Main Street, both of which are designated Bicycle Lanes.[9] Existing pedestrian facilities in the project area include crosswalks and sidewalks.

Implementation of the proposed project includes closing the existing driveway providing vehicular access to the project site and providing two new driveways. This may cause a temporary disruption in access to the existing pedestrian and/or bicycle facilities. However, access to pedestrian and bicycle facilities would be fully restored upon project operation. Additionally, the proposed project would include the development of hardscaped walkways and/or plazas, including pedestrian plazas along Spring Street, as well as tree-lined pedestrian promenades. These facilities would serve to enhance the public realm at the project site and encourage pedestrianism.

As previously discussed, the proposed project would not have a significant impact at any of the study intersections. Development of the proposed project would not alter any existing transit lines serving the project site or surrounding area. Furthermore, CDPR would work with LADOT and other transportation agencies as necessary to develop a traffic management plan to be implemented during special events at the project site. The traffic management plan would include measures to encourage the use of transit lines and bicycles. Therefore, impacts related to alternative transportation policies would be less than significant.

3.12.3 MITIGATION MEASURES

No mitigation measures are required.

[9] City of Los Angeles Department of City Planning, *2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element*, Adopted March 1, 2011, available at: http://cityplanning.lacity.org/cwd/gnlpln/transelt /NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf, accessed: November 9, 2011.

3.12.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to transportation and traffic would be less than significant without mitigation.