IV. Environmental Impact Analysis B.1 Transportation

1. Introduction

A transportation study, titled, Convention Center Modernization and Event Center Project, EIR Transportation Study (Transportation Study), dated March 21, 2012, was prepared for the Proposed Project by The Mobility Group. The scope and methodology for this study was determined in close coordination with the City's Department of Transportation and addresses a future year of 2017, as well as existing 2011 conditions. The Transportation study is included as Appendix I of this Draft EIR. This section of the EIR is based upon and summarizes the approach, methodology, key findings, and recommendations provided in the Transportation Study. For greater detail, please refer to the Transportation Study.

A total of 177¹ intersections were analyzed for three key event scenarios (Sunday Day, Saturday Day, and Weekday Evening), with each event scenario evaluated for both a Pre-Event Hour and Post-Event Hour as follows:

- Sunday Day Pre-Event Hour (12:00–1:00 P.M.)
- Sunday Day Post-Event Hour (4:30–5:30 P.M.)
- Saturday Day Pre-Event Hour (12:00–1:00 P.M.)
- Saturday Day Post-Event Hour (4:30–5:30 P.M.)
- Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)
- Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

The Pre-Event and Post-Event Hours listed above were evaluated under the following eight conditions:

¹ Ten additional intersections were analyzed under the Weekday Pre-Event scenario, for a total of 187.

- <u>Existing Conditions (Year 2011)</u>: This analysis describes existing transportation conditions in the study area, and provides the baseline for analysis of future conditions.
- <u>Future Without Project Conditions (Year 2017)</u>: This analysis describes projected transportation conditions in the Year 2017, including traffic from other planned developments in the area and from regional growth. It provides the baseline for an analysis of potential Project impacts on the transportation system.
- <u>Future With Project Conditions (Year 2017)</u>: This analysis identifies the potential transportation impacts of the Project in the year 2017, prior to any specific mitigation measures being applied to reduce or eliminate identified impacts.
- Existing With Project (Sunnyvale) Condition: This analysis is provided in Appendix J of this Draft EIR.
- <u>Future With Project Conditions (Year 2017) Compared to No Existing Activity at the LACC</u>: This analysis identifies the potential transportation impacts of the Project in the Year 2017, assuming that there is no activity at the Los Angeles Convention Center in the Existing Condition and the Future Without Project Scenarios, and prior to any specific mitigation measures being applied to reduce or eliminate identified impacts. This scenario is provided for informational purposes.
- <u>Future With Project Conditions (Year 2017) With Concurrent Event at the Los</u> <u>Angeles Coliseum and at Dodger Stadium</u>: This analysis addresses the Project in the Year 2017 if there was a concurrent event at both the Los Angeles Coliseum and at Dodger Stadium. It is provided for informational purposes only and to support development of the Transportation Management Plan (TMP).
- <u>Future With Project Conditions (Year 2017) With Concurrent Auto Show Event at the Los Angeles Convention Center</u>: This analysis addresses the Project in the Year 2017 if there was a concurrent Auto Show event at the Los Angeles Convention Center. It is provided for informational purposes only, to support development of the Transportation Management Plan.
- <u>Future With Project With Mitigation Conditions (Various)</u>: These scenarios identify the potential transportation impacts of the Project with a proposed mitigation program. A mitigation condition scenario was analyzed for the Future With Project (Year 2017) Conditions, and Future With Project Conditions (Year 2017) Compared to No Existing Activity at the LACC scenarios identified above.

In this section of the EIR, projects impacts are assessed for the following transportation-related issue areas for each key event scenario and analysis condition: (1) circulation on area intersections and freeways, including mainline segments, off-ramps,

and on-ramps; (2) the transit system; (3) the Congestion Management Plan; and (4) construction traffic.

The analysis begins with a description of the Existing Conditions for each of these issue areas, followed by the a discussion of the Approach and Methodology, Regulatory Framework, Thresholds of Significance, Project Impacts, Cumulative Impacts, Mitigation Measures, and the Level of Significance After Mitigation. In contrast to other sections in this Draft EIR, the related tables and figures noted throughout the text below are attached to the end of this section.

2. Existing Conditions

a. Regional Roadway System

The Project Site is located in downtown Los Angeles (Downtown) and is generally bounded by the following major roadways: the SR-110 Harbor Freeway to the west; Chick Hearn Court to the north; Figueroa Street to the east; and Venice Boulevard to the south. The Project Site is located at the heart of the regional transportation system for the metropolitan Los Angeles area. Figure IV.B.1-1 on page IV.B.1-296 shows the regional transportation facilities and arterial roadways serving Downtown and the Project Area.

The Project Site is served by an extensive freeway network. Primary regional access to the Project Site is provided by the Santa Monica Freeway (I-10), which runs in an east-west direction immediately south of the Project Site, and the Harbor/Pasadena Freeway (I-110/SR-110), which runs north-south immediately west of the site (see Figure IV.B.1-1. These two facilities also provide access to the Hollywood (US 101) and Golden State (I-5) freeways to the north, to the San Bernardino (I-10) and Pomona (SR 60) freeways to the east, and to the Santa Ana (I-5) freeway to the south. The Santa Monica Freeway also extends to the west from the Project Site, and all of these freeways connect to several other freeways in the region. There are over 45 freeway ramps located within the Downtown Area that connect to Downtown streets, 21 of which could be used to access the Project Site, as discussed in greater detail in the following sections.

There are also two regional Freeway Transitways serving the Downtown, both of which provide exclusive lanes for buses and high-occupancy vehicles (HOV's). The Harbor Freeway Transitway runs in the center of the Harbor Freeway from the SR-91 Artesia Freeway to Adams Street just south of Downtown, and the El Monte Freeway Transitway which runs in the San Bernardino Freeway from El Monte to Alameda Street in Downtown at Union Station, north of the Project Site.

b. Street System

Streets that serve the Project Site include Olympic Boulevard and Chick Hearn Court/11th Street on the north, Pico and Venice Boulevards on the south, Figueroa and Flower Streets on the east and L.A. Live Way (formerly Cherry Street) on the west. The detailed physical characteristics of the streets serving the Project Area, including the street segment, classification, number of lanes, median type, and on-street parking restrictions, are presented in Table 2.3.1 of the Transportation Study in Appendix I of this Draft EIR.

The arterial roadway system in the vicinity of the Project Site forms a comprehensive grid system allowing for several options to access the area, as shown in Figure IV.B.1-1 on page IV.B.1-296. Several of the streets function as one-way couplets, while others provide for two-way travel. The major north/south streets and major east-west streets serving the Project Area are as follows:

North-South Streets

<u>Figueroa Street</u>—Figueroa Street is a north-south roadway located immediately to the east of the Project Site. The City's General Plan classifies this facility as a Modified Major Class II Highway. South of Olympic Boulevard, Figueroa Street is a two-way street, providing two southbound lanes and four northbound lanes. The northbound curb lane is a "bus only" lane both north and south of Olympic Boulevard during the morning peak period (6:00 A.M.–9:00 A.M.). No on-street parking is permitted in the vicinity of the Project Site. North of Olympic Boulevard, Figueroa Street is a one-way northbound street providing five travel lanes with on-street parking generally prohibited along both sides of the street.

<u>Flower Street</u>—Flower Street is a north-south street located east of Figueroa Street. In the vicinity of the Proposed Project, it is classified as a Modified Secondary Highway. Flower Street is a one-way southbound street, providing four travel lanes north of 11th Street. On-street parking is permitted along both sides of the street with some restrictions. South of 11th Street, this roadway narrows to three travel lanes and on-street parking is prohibited along both sides of the street. A Metro Blue Line station is located on Flower Street between 12th Street and Pico Boulevard.

<u>Grand Avenue</u>—Grand Avenue is a north-south street located east of Flower Street. The City's General Plan classifies this facility a Modified Major Class II Highway. North of 5th Street, Grand Avenue is a two-way street with two travel lanes in each direction. On-street parking is permitted with some restrictions. South of 5th Street, this facility becomes a one-way southbound street, providing four travel lanes in the vicinity of the Project Site. On-street parking is permitted along both sides of the street with some restrictions. <u>Olive Street</u>—Olive Street is a north-south street located east of Grand Avenue. This street is classified as a Modified Secondary Highway under the City's General Plan. North of 5th Street, Olive Street is a two-way street with three travel lanes in the northbound direction and one or two travel lanes in the southbound direction. On-street parking is generally not permitted along either side of the street. South of 5th Street, Olive Street becomes a one-way northbound facility with four travel lanes in the vicinity of the Proposed Project. On-street parking is generally allowed with some restrictions.

<u>Hill Street</u>—Hill Street is a north-south street located east of Olive Street. This facility is classified as a Modified Secondary Highway. In the vicinity of the Project Site it is a two-way street with two travel lanes in both directions. On-street parking is generally allowed with some restrictions.

<u>Spring Street</u>—Spring Street is north-south street located east of Hill Street. It extends north from 9th Street. It is classified as a Modified Secondary Highway under the City's General Plan. This facility is a one-way southbound street with five travel lanes. On-street parking is generally allowed with some restrictions.

<u>Main Street</u>—Main Street is a north-south street located east of Spring Street. North of 9th Street, this facility is classified as a Modified Secondary Highway under the City's General Plan. It is a one-way northbound street with four travel lanes. On-street parking is generally allowed along both sides of the street with some restrictions. South of 9th Street, Main Street is a two-way street and is classified as a Major Class II Highway. It generally consists of two travel lanes in each direction with on-street parking allowed along both sides with some restrictions.

East-West Streets

<u>Wilshire Boulevard</u>—Wilshire Boulevard is an east-west street located north of the Project Site. Between the Harbor Freeway (SR-110) and Figueroa Street, this facility is classified as a Modified Major Class II Highway in the City's General Plan. From Figueroa Street to Grand Avenue, this street is classified as a Modified Secondary Highway. In both segments, this facility consists of two travel lanes in each direction. On-street parking is prohibited along both sides of the street.

<u>8th Street</u>—8th Street is an east-west street located north of the Project Site. In the vicinity of the Project Site, it is classified as a Modified Secondary Highway in the City's General Plan. It is a one-way westbound street with five travel lanes. On-street parking is prohibited along both sides of the street.

<u>9th Street</u>—9th Street is an east-west street located north of the Project Site. It is classified as a Modified Secondary Highway under the City's General Plan. This facility is a one-way eastbound street, generally providing five travel lanes in the vicinity of the Project Site. No on-street parking is permitted between the Harbor Freeway (SR-110) and Flower Street. East of Flower Street, on-street parking is allowed with some restrictions.

<u>Olympic Boulevard</u>—Olympic Boulevard is an east-west street located one block north of the Project Site. In the vicinity of the Project Site, it is classified as a Modified Major Class II Highway. Olympic Boulevard is a two-way street with three travel lanes in each direction. On-street parking is allowed along the northern side of the street with some restrictions.

<u>Pico Boulevard</u>—Pico Boulevard is an east-west street that bisects the Project Site. In the City's General Plan, it is classified as a Modified Secondary Highway. This facility provides a total of five travel lanes west of Figueroa Street (two westbound and three eastbound). East of Figueroa Street, Pico Boulevard provides two travel lanes in both directions. In the vicinity of the Project Site, on-street parking is prohibited along both sides of the street.

<u>Venice Boulevard</u>—Venice Boulevard is an east-west street located south of the Project Site. The City's General Plan classifies this street as a Modified Secondary Highway. It consists of two travel lanes in each direction in the vicinity of the Project Site. On-street parking is prohibited west of Figueroa Street. East of Figueroa Street, on-street parking is generally allowed with some restrictions.

<u>Washington Boulevard</u>—Washington Boulevard is an east-west street located south of the Project Site. The City's General Plan classifies this facility as a Major Class II Highway. In the vicinity of the Project Site, Washington Boulevard has three travel lanes in each direction. On-street parking is generally prohibited along both sides of the street.

Other Streets Serving the Project Area

<u>Hope Street</u>—Hope Street is a north-south street located east of the Project Site. In the City's General Plan, this facility is classified as a Modified Secondary Highway. Hope Street is a two-way street providing two travel lanes in each direction. South of Pico Boulevard, Hope Street narrows to one travel lane in each direction. On-street parking is allowed along both sides of the street with some restrictions.

<u>Chick Hearn Court/11th Street</u>—Chick Hearn Court is an east-west street on the north edge of the Project Site between L.A. Live Way and Figueroa Street. In the vicinity of the Project Site, this facility is classified as a Modified Collector Street. West of the SR-110

Freeway it is called 11th Street and is a two-lane Collector Street. East of Figueroa Street it is also called 11th Street. Between the I-110 Freeway and Flower Street, Chick Hearn Court/11th Street is a two-way street with two travel lanes in both directions, except east of Figueroa Street where there is only one eastbound lane. On-street parking is prohibited along both sides of the street. East of Flower Street, this facility becomes a one-way westbound street. It consists of two westbound travel lanes. On-street parking is allowed along both sides with some restrictions.

<u>12th Street</u>—12th Street is an east-west street that is located both west and east of the Project Site. From Albany Street to L.A. Live Way, 12th Street is classified as a Collector Street in the City's General Plan. This section consists of one travel lane in each direction. On-street parking is allowed along both sides of the street with some restrictions. East of Figueroa Street, 12th Street is classified as a Modified Collector Street. The segment between Figueroa Street and Flower Street is a two-way street with two eastbound travel lanes and one westbound travel lane. On-street parking is prohibited along both sides of the street. East of Flower Street, this facility becomes a one-way eastbound street with two travel lanes. On-street parking is allowed along both sides of the street with some restrictions.

L.A. Live Way (formerly Cherry Street) is a north-south street that bisects the Project Site. The City's General Plan classifies this street as a Collector Street. This street is a two-way facility with two travel lanes in each direction and a central turn lane. On-street parking is prohibited along both sides of the street.

c. Existing Access to Project Site

<u>Vehicular Access</u>. Primary vehicle access to the Project Site is from Figueroa Street from the north and south; Olympic Boulevard, Pico Boulevard, and Venice Boulevard from the east and west; and freeway ramps exiting the SR-110 Harbor Freeway and I-10 Santa Monica Freeway. Existing driveway and bus/shuttle and taxi/limousine access is illustrated in Figure IV.B.1-2 on page IV.B.1-297, and discussed in detail below under Section IV.B.1.13 (Project Access) of this Draft EIR.

Convention Center buses currently access the Convention Center at a number of locations, including Gilbert Lindsay Plaza (where there are eight bus bays) and buses currently access the Plaza from: Figueroa Street and Pico Boulevard; Figueroa Drive (west side of and adjacent to Figueroa Street between Pico Boulevard & 15th Place) where there is room for approximately eight buses with ingress and egress from Figueroa Street; and, sometimes, Pico Drive (south side and adjacent to Pico Boulevard) where there is room for approximately ten buses and with access via L.A. Live Way and Convention Center Drive. Note that Figueroa Drive, 15th Place, and Pico Drive are internal private streets, and are not public roadways. These areas are used by shuttle buses (motor coaches) that convey

convention attendees from their hotels to the Convention Center, so the level of use depends on the type and size of convention or trade show.

d. Transit Service Facilities

The Project Site is located at the hub of the regional rail and bus transit system in the metropolitan Los Angeles area. There is thus an extensive amount of existing rail and bus transit service to the Project Area, with service provided by a number of local and regional operators. The Project Area is currently served by a total of nine local and intercity transit operators, as discussed below. Within a five- to six-block radius of the Project Site, Metro (Los Angeles County Metropolitan Transportation Authority) operates three rail lines and 42 bus lines; LADOT operates four local DASH routes and seven Commuter Express lines; and Foothill Transit, Orange County Transit Authority (OCTA), Montebello Bus Lines, Torrance Transit, and Santa Monica Transit together operate a total of 15 bus lines. Convenient transit connections are also available to/from Los Angeles Union Station, which is the hub for the regional rail system in Southern California, including the Metrolink commuter rail system and Amtrak train service.

Figure IV.B.1-3 on page IV.B.1-298 shows the existing Los Angeles County Metro rail system serving downtown, while Figure IV.B.1-4 on page IV.B.1-299 shows the regional Metrolink rail system serving Southern California and connecting to Union Station. Table IV.B.1-1 on page IV.B.1-192 also provides a Summary of Public Transit Service Operations in Vicinity of Project Area. Table 2.7.1 in the Transportation Study (see Appendix I of this Draft EIR) lists the individual rail and bus lines serving the Project Area, and indicates the frequency of service (headways) during the key analysis times. Table 2.7.2 in the Transportation Study provides a summary of existing weekday headways for the key analysis time periods, as well as the time of the last service from the nearest stop in the vicinity of the Proposed Project.

A description of public transit is provided below, with greater detail provided in the Transportation Study (see Appendix I of this Draft EIR).

<u>Metro Rail Service:</u> Metro operates three rail lines in the Project area. The Metro Red Line and Purple Line serve the subway rail station at 7th Street Metro Center (with entrances at 7th Street & Figueroa Street, 7th Street and Flower Street, and 7th Street and Hope Street). The station is located four blocks north of, and within easy walking distance of, the Project Site via Figueroa Street, Flower Street and Hope Street. The Metro Red Line provides service from the San Fernando Valley, North Hollywood, Hollywood and Mid-Wilshire areas to downtown Los Angeles, and Union Station. The Purple Line provides and Union Station.

The Red and Purple rail lines connect at Union Station to the regional Metrolink commuter rail service (with lines to Santa Clarita/Palmdale in North Los Angeles County, to Orange County and Oceanside in San Diego County, to Riverside in Riverside County, to San Bernardino in San Bernardino County, and to Oxnard in Ventura County), as well as to Pasadena via the Metro Gold Line, and to East Los Angeles via the Metro Gold Line. The Red and Purple Lines also connect to the Metro Blue Line at 7th Street Metro Center.

The Metro Blue Line runs north-south between downtown Los Angeles and downtown Long Beach, connecting with the Metro Green Line (which operates between Norwalk and Redondo Beach) at the Imperial/Wilmington station. The Metro Blue Line Pico Station is located one block east of the Project Site on Flower Street between 12th Street & Pico Street.

<u>Metro Bus Service</u>: Metro operates a total of 42 bus lines in the vicinity of the Project, as shown in Figure IV.B.1-5 on page IV.B.1-300. Metro bus services operating in the study area include: The Metro Silver Line (runs from the Artesia Transit Center on the Harbor Freeway Transitway, through downtown, and via the El Monte Transitway to the El Monte Transit Center); nine Metro Rapid Service lines; eight Express Lines; and 36 Local Service lines (including some limited stop service). Sixteen local lines serving the Project Area operate 24-hour "Owl" service. Generally, Metro buses operate daily including evenings and weekends, although with reduced service frequencies during those periods compared to weekday peak period service (see Table IV.B.1-1 on page IV.B.1-192).

<u>LADOT—Commuter Express</u>: LADOT operates four Commuter Express bus lines (CE 437, 438, 448 and 534) serving downtown Los Angeles in the Project Area. These lines operate during weekday peak periods but do not operate weekday evenings or during the weekends.

LADOT—DASH: LADOT operates the Downtown Los Angeles DASH local bus circulator system, comprised of five routes, as shown in Figure IV.B.1-6 on page IV.B.1-301. Four of these lines serve the Project area (DASH A, D, E, and F). The DASH service typically operates between 6:00 A.M. and 6:55 P.M. on weekdays, and service runs at 5- to 10-minute headways during weekday afternoons. DASH Routes A and D do not operate on weekends, whereas DASH Routes E and F operate on 6- to 20-minute headways during the weekend midday/afternoon time period.

There are several other regional transit operators that service the Project Site, as described below. In general, while these operate during weekday peak periods they often do not operate during the evenings or weekends.

<u>Foothill Transit</u>: Operates seven lines through downtown and terminates at 9th Street, with buses on Figueroa Street and Hope Street in the Project vicinity. Only line FT-SS operates in the weekday evening and during weekend midday/afternoons.

<u>Orange County Transportation Authority (OCTA)</u>: Operates two lines between Huntington Beach and downtown Los Angeles, including through the Project area. These lines do not operate on weekday evenings or on weekends. They operate on Figueroa Street and Flower Street in the vicinity of the Project Site.

<u>Montebello Bus Lines</u>: Operates one bus line between Montebello and downtown Los Angeles on weekday and Saturdays, and on Hill Street in the Project vicinity. The service operates infrequently on weekday evenings and Saturday midday/afternoon. This service does not operate on Sundays.

<u>Torrance Transit</u>: Operates two bus lines on weekdays only, connecting the Del Amo Mall in Torrance through Gardena and/or Carson to Union Station, and on Olive Street and Hill Street in the Project vicinity. There is no weekday evening service. One line operates infrequently during the Saturday midday/afternoon period. There is no service on Sunday.

<u>Santa Monica Transit</u>: Operates one Freeway Express line (Big Blue Bus (BBB) 10) from Santa Monica to Downtown L.A., provides service to the 7th Street/Metro Center Station and Union Station, and travels along Grand Avenue and Olive Street in the Project vicinity. This line does not operate on weekday evenings. During weekends, this one line operates during the midday/afternoon/evening periods.

<u>Antelope Valley Transit</u>: Antelope Valley Transit Authority operates an express line (Route 785) that travels from Lancaster and Palmdale to downtown Los Angeles. This line provides service to Union Station and the 7th Street/Metro Center station. It travels along Figueroa Street and 8th Street in the vicinity of the Project Site. This service does not operate in the evenings or during weekends.

<u>Santa Clarita Transit</u>: Santa Clarita Transit operates a weekday express line (Route 799) that travels from Valencia and Newhall to downtown Los Angeles. This line provides service to Union Station and the 7th Street/Metro Center station. It travels along Figueroa Street and 8th Street in the vicinity of the Project Site. This service is operated during the weekday P.M. peak hour. This service does not operate during weekends.

Transit service on the major streets closest to the Project is summarized below.

Figueroa Street/Flower Street: The Metro Blue line travels north-south along Flower Street with the Pico Station located one block east of the Project Site. Figueroa Street and Flower Street, adjacent to the Project Site, carry one Transitway Line (Silver Line 910), three Metro Express lines (445, 450X, and 460), one Metro Local line (81), two LADOT Commuter Express lines (CE 438 and CE 448), one Dash line (Dash F), five Foothill Transit lines (FT 493, FT 497, FT 498, FT 499, and FT 699) and two OCTA lines (OC 701 and OC 721), in the north-south directions.

Grand Avenue/Olive Street: Three to four blocks east of the Project Site, Grand Avenue and Olive Street carry one Metro Rapid line (770), one Metro Express line (485), ten Metro Bus lines (14, 37, 38, 70, 71, 76, 78/79/ 378, and 96), one Foothill Transit line (FT Silver Streak) and one Santa Monica Transit line (BBB 10) in the north-south directions.

Olympic Boulevard: One block north of the Project Site, Olympic Boulevard carries one Metro Rapid line (728), one Metro Bus line (28) and one Commuter Express line (CE 534) in an east-west direction.

Pico Boulevard: Adjacent to the Project Site, Pico Boulevard carries one Metro Rapid (730), one Metro Express line (439), two Metro Bus lines (30, 96) and one LADOT Dash line (Dash D) in an east-west direction.

3. Approach and Methodology

This section addresses the approach and methodology used in the Transportation Study for assessing transportation related impacts of the various Project scenarios.

a. Key Scenarios Analyzed

As discussed in detail in Section II (Project Description) of this Draft EIR, the Event Center would be a multi-purpose facility that would hold exhibition and spectator events. The event types are also summarized briefly below, to set the context for the traffic analysis.

Exhibition Events: The Convention Center would continue to hold events of similar type and size as it does currently. Many of the current events do not use the entire facility nor do they use all the parking. Many of the events are trade shows and conventions for out-of-town attendees, which typically occur more on weekdays between 9 A.M. and 5 P.M. or 6 P.M., and use the least amount of parking. Consumer shows, which are less frequent, occur primarily on weekends, may sometimes be open in the evenings, and have higher parking needs because they serve the local population. The creation of a larger and more

efficient contiguous exhibit and meeting space is expected to make the Convention Center more competitive nationally and allow the Convention Center to attract and book more events. It is expected that the majority of new events would be trade shows and conventions (attracting largely out-of-town visitors), rather than consumer shows (which attract more locally-based visitors). Typically this would increase the number of times the Convention Center is used, but would not necessarily significantly increase the event size over those currently staged, though some increases in the size of events would occur.

Spectator Events: The 72,000-seat Event Center would also operate as a stadium and would accommodate a variety of events, including NFL games for up to two local NFL teams, a college football championship game or bowl game, international soccer matches, MLS soccer championship games, special holiday events/games (e.g., Los Angeles Lakers Christmas Day game), rodeos, music concerts or festivals, religious gatherings, X-Games events (already held at STAPLES Center and L.A. LIVE), boxing, motor sports (monster truck and super cross), and high school football championships. For occasional major events, the stadium would be expandable to 76,250 seats, and could host major sporting events like an NFL Super Bowl and an NCAA Final Four Tournament, although such events would probably occur only every four to five years. While many events would be full attendance events, there would also be events where the attendance could be substantially less than the 72,000 seat capacity. It is expected that about 50 Spectator Events a year would be held at the Event Center. While these would occur primarily on weekends (Saturday or Sunday, daytime or evening), a small number of events each year could occur on weekday evenings (primarily NFL games which could occur up to 2-3 times per year and some music events).

Key Event Scenarios and Hours: An evaluation of the possible range, type, and size of events discussed above identified the following key event scenarios:

- <u>Sunday Day Event</u>: The Sunday Day Event scenario represents a Sunday daytime event, typically an NFL game, starting at 1:00 P.M. and ending at 4:30 P.M. This would be the most common time frame for events as the majority of events including most NFL games occur on a Sunday. The analysis addresses the pre-event hour (12:00–1:00 P.M.) when all Project-related travel would be inbound, and the post-event hour (4:30–5:30 P.M.) when all Project-related travel related travel would be outbound.
- <u>Saturday Day Event</u>: The Saturday Day Event scenario represents a Saturday Daytime event, potentially an NFL game or other major event, typically starting at 1:00 P.M. and ending at 4:30 P.M. This scenario would represent the highest combination of event attendance and background traffic on the roadway system on a Saturday. The analysis addresses the pre-event hour (12:00–1:00 P.M.) when all Project-related travel would be inbound, and the post-event hour (4:30–5:30 P.M.) when all Project-related travel would be outbound.

• <u>Weekday Evening Event</u>: The Weekday Evening Event scenario represents a Weekday Evening event, typically an NFL game, starting at 5:30 P.M. and ending at 9:00 P.M. This event scenario would be the least frequent occurrence and would only occur a few times every year. This scenario would represent the highest combination of event attendance and background traffic on the roadway system on a weekday, and because of weekday commute traffic would be the event scenario with the highest background traffic on the roadway and freeway system. The analysis addresses the pre-event hour (4:30–5:30 P.M.) when all Project-related travel would be inbound, and the post-event hour (9:00–10:00 P.M.) when all Project-related travel would be outbound.

Pre-Event Hours and Post-Event Hour: These three event scenarios (Sunday, Saturday, and Weekday Evening) represent the highest likely combination of event attendance and background traffic on the road system. Other event scenarios would either draw lower attendances or occur at times when background traffic levels are lower than those identified above. The traffic analysis focuses on Spectator Events as they would be the ones with the highest number of attendees at any one time. When the Event Center is used for a Spectator Event, concurrent Convention Center events would use the same amount of overall exhibit space as currently exists today. If the Event Center were to be used for exhibit space, even in conjunction with the remainder of the Convention Center space, the attendee level at any one time would not exceed that of a sold-out spectator event at the Event Center. The analysis of these event scenarios focuses on the immediate pre-event hour and post-event hour, representing the hours of maximum access and egress activity to events as follows:

- Sunday Day Pre-Event Hour (12:00–1:00 P.M.)
- Sunday Day Post-Event Hour (4:30–5:30 P.M.)
- Saturday Day Pre-Event Hour (12:00–1:00 P.M.)
- Saturday Day Post-Event Hour (4:30–5:30 P.M.)
- Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)
- Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

b. Study Intersections

A total of 177² study intersections were identified for analysis in coordination with LADOT, as shown in Figure IV.B.1-7 on page IV.B.1-302. These locations were identified to be those through which Project trips would travel before dispersing to multiple routes, and thus those locations where potential traffic impacts were most likely to occur. All intersections are signalized and located within the City of Los Angeles. Figure 2.4.2 provided in the Transportation Study (Appendix I) illustrates the existing lane configurations at each intersection.

c. Existing Traffic Volumes

<u>Traffic Count Baseline Condition</u>: In order to provide a consistent basis for the transportation analysis and direct the traffic counts, the following baseline condition was established for the existing traffic counts:

Regular (Ongoing) Activity at L.A. LIVE: This represents the regular day to day activities occurring at L.A. LIVE on a typical day.

<u>No Concurrent Event at STAPLES Center</u>: Because a Project Design Feature provides that no events would be scheduled at STAPLES Center at the same time as a ticketed full attendance spectator event in the Event Center, the baseline condition for the Project impact analysis excludes a concurrent STAPLES Center event.

<u>Concurrent Event at the Los Angeles Convention Center (Convention Center)</u>: The Transportation Study assumed that an event in the Event Center would not preclude a concurrent event occurring at the Convention Center. It is therefore necessary to assume a Convention Center event in the baseline condition. For a weekday, the Transportation Study assumed a typical high attendance tradeshow or convention event was assumed to occur. For the weekend, a typical high attendance consumer show was assumed to occur. A typical high attendance event was defined as the 90th percentile (i.e., exceeded only 10 percent of the time).

<u>**Traffic Data Collection</u>**: Sunday, Saturday, and Weekday traffic counts were conducted at all 177 analyzed intersections shown on Figure IV.B.1-7 on page IV.B.1-302. The weekend counts were conducted on Saturday, March 5, and Sunday, March 6, 2011,</u>

² Ibid.

from 11:00 A.M.–1:00 P.M. and from 4:30–6:30 P.M. The traffic counts were thus collected for the two hours before and two hours after the key event scenarios identified for analysis. The weekday counts were conducted on Tuesday, March 15, 2011, from 3:30–5:30 P.M. and from 9:00–11:00 P.M.

Due to the myriad combinations of events at the facilities at the Project Site, it was not possible to identify a specific day with all of the above conditions occurring simultaneously. However, traffic counts were conducted at all analysis locations on the same days, so that the same baseline conditions were represented at all intersections.

The three days when traffic counts were conducted represented those days when event scenarios were closest to baseline conditions and represent days when no event occurred at STAPLES Center, and when typical activities occurred at L.A. LIVE. An exception was the Saturday Day period when there was an L.A. Kings hockey game at STAPLES Center starting at 1:00 P.M., so Saturday midday traffic counts included the STAPLES Center traffic. This traffic was estimated and subtracted out from the midday counts to represent a no-STAPLES Center event condition. This adjustment accounted for the trip-generation and trip-distribution characteristics of an L.A. Kings game, and is described further in Appendix 2 of the Transportation Study.

For the days selected for traffic counts with no STAPLES Center event, it was not possible to find a day when typically high attendance events at the Convention Center were scheduled on the same day. It was therefore decided to collect traffic data when there were no events at the Convention Center, so that typical high events (or any other type of event) could be simulated and added to the traffic counts to represent the baseline condition. The traffic characteristics of typical high weekday and weekend events at the Convention Center were therefore estimated based on available event data and added to the traffic counts to represent traffic conditions with a Convention Center Event. This process is also described further in Appendix 2 of the Transportation Study.

Finally, based on an analysis of typical NOKIA Theater events and start and end times, and frequency of events, it was determined that an adjustment was necessary for these events for certain time periods being studied. The Saturday and Sunday Day event analysis hours were adjusted to account for a typical NOKIA Theater event on weekend afternoons (family-oriented show starting at 1:00 P.M.). This process is described further in Appendix A in the Transportation Study. In summary, the traffic volumes for existing conditions represent the baseline condition, obtained through collecting traffic count data for the six analysis periods, and making adjustments for certain events, as described above. The existing traffic volumes for the Sunday, Saturday and Weekday time periods are illustrated in Appendix 2 of the Transportation Study in Figures A.2.5.1 through A.2.5.6 respectively, for each of the analyzed intersections.

d. Existing Intersection Level of Service (LOS)

Level of Service Methodology. Level of Service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent (free-flow) conditions at LOS A to overloaded (stop and go) conditions at LOS F. While the City of Los Angeles has no established standards, LOS D is typically recognized by many cities as an acceptable service level in urban areas, and LOS E is often recognized by many cities as an acceptable standard in downtown areas, major commercial areas, and at freeway ramp intersections. (See Section 6 below, Thresholds of Significance, for the City's definition of significant impact criteria for intersection LOS).

The "Critical Movement Analysis (CMA)–Planning Method" (Transportation Research Board, 1980) method of intersection capacity analysis was used to determine the intersection volume-to-capacity (V/C) ratio and corresponding level of service for the turning movements and intersection characteristics at each of the analyzed intersections. This method of analysis is required by LADOT, and their CMA software was used for all intersection LOS calculations. Table IV.B.1-2 on page IV.B.1-194 defines the ranges of V/C ratios and their corresponding levels of service for signalized intersections.

Computerized Traffic Signal Control System. The City of Los Angeles currently operates a computerized traffic control system called ATSAC (Automated Traffic Surveillance and Control) which is a centralized control system that provides for the coordination of traffic signal timing to maximize the street capacities and to minimize traffic delays on City streets. LADOT estimates that implementation of this system improves intersection capacity by an average of 7 percent. In addition to ATSAC, the City is also in the process of implementing the second generation ATCS (Adaptive Traffic Control System) in some areas, which uses enhanced surveillance and control technologies to adapt traffic signal timings to respond to actual traffic conditions on the ground to further improve the effectiveness of the ATSAC system by minimizing the number of stops and the amount of delay with improved traffic signal coordination throughout the network. LADOT estimates that implementation of this system additional 3 percent over those operating under the ATSAC system alone.

A total of 51 of the 177 signalized study intersections are currently controlled by the City of Los Angeles' ATSAC system. In accordance with standard LADOT procedures, a capacity increase of 7 percent was applied to reflect the benefits of ATSAC control at these intersections. The remaining 126 intersections currently operate under the City's ATCS system. For these intersections, a total capacity increase of 10 percent was applied per LADOT procedures to reflect the benefit of both ATSAC and ATCS control at these intersections.

e. Freeways (Segments and Ramps)

The analysis of freeways addresses potential impacts of freeway mainline³ locations (segments), and freeway off-ramps and on-ramps that would be used by Proposed Project traffic.

Freeway Segments Analysis Locations

To identify potential impacts the Proposed Project may have on the freeway system, a total of twenty freeway locations were identified for analysis, in conjunction with Caltrans. Seventeen locations are on the freeway mainline and three are on High-Occupancy Vehicle (HOV) facilities. The trip-generation characteristics of the Proposed Project are very directional in nature; therefore, the freeway analysis was conducted on the directional segment of each location that traffic generated by the Proposed Project would use during that specific scenario (i.e., inbound direction during the Pre-Event Hour and outbound direction during the Post-Event Hour). This approach was applied to 19 of the 20 freeway locations identified for analysis. The only exception was Location #4—SR-110 between James Wood Boulevard and Olympic Boulevard. At this location, both before and after events, therefore directional segments were analyzed. For informational purposes, traffic data is shown for both directions, and the direction affected by Proposed Project traffic is highlighted.

The locations selected for freeway segment level of service analysis are shown in Figure IV.B.1-8 on page IV.B.1-303 and are as follows:

- 1. I-10 West of Vermont Avenue
- 2. I-10 East of San Pedro Street
- 3a. I-110 South of Martin Luther King Jr. Boulevard (Mainline)
- 3b. I-110 North of Martin Luther King Jr. Boulevard (HOV)
- 4N. SR-110 Between James Wood Boulevard and Olympic Boulevard
- 4S. SR-110 Between James Wood Boulevard and Olympic Boulevard
- 5. SR-110 South of US-101
- 6. SR-110 North of Alpine Street
- 7. US-101 North of Vignes Street
- 8. US-101 at Glendale Boulevard
- 9a. I-10 Between I-5 and US-101 (Mainline)
- 9b. I-10 Between I-5 and US-101 (HOV)
- 10. I-5 West of Indiana Street

³ A freeway mainline is a freeway segment between ramps..

- 11. SR-60 East of Indiana Street
- 12a. I-110 at Vernon Avenue (Mainline)
- 12b. I-110 at Slauson Avenue (HOV)
- 13. I-10 East of Crenshaw Boulevard
- 14. US-101 South of Vermont Avenue
- 15. I-5 South of Stadium Way
- 16. SR-110 South of Avenue 43

Freeway Segments Analysis Methodology

Existing traffic volumes on these freeway segments for the six analysis time periods were obtained from either the Caltrans California Freeway Performance Measurement System (PeMS) or the Caltrans Annual Average Daily Traffic Volume Report and the Caltrans Peak Hour Volume Data Report.

Future year 2017 freeway traffic volumes Without the Project were forecast by factoring existing volumes using specific growth factors developed for each freeway corridor. These growth factors were obtained from the 2010 Congestion *Management Plan (CMP) for Los Angeles County* (LACMTA) and calculated from averaging the appropriate sub-regional growth factors in the CMP from 2011 to 2017 for each of the freeway corridors. The growth factors are shown in Table IV.B.1-3 on page IV.B.1-195.

Level of service for freeway segments is based on the total volume of traffic, or demand, traveling along a freeway segment compared to the capacity of that specific location. The following lane capacities, as identified in conjunction with Caltrans, were used to calculate the total capacity of the freeway segments that were analyzed: 2,000 vehicles per hour per lane (vphpl) for a freeway mainline lane, collector-distributor lane, and connector lane; 1,650 vphpl for a freeway HOV lane; and, 1,000 vphpl for a freeway auxiliary lane.

The overall capacity of a specific freeway segment is calculated by multiplying the individual capacities by the total number of lanes in that segment. Freeway level of service (LOS) is then determined by comparing the total number of vehicles traveling along a specific freeway segment to the capacity of that segment as calculated above. These demand/capacity (D/C) ratios are then rated for levels of service using the definitions shown in Table IV.B.1-4 on page IV.B.1-196.

Freeway Off-Ramps Analysis Locations

A total of 23 freeway off-ramps were identified for analysis as locations that could be used by Proposed Project traffic. These are off-ramps that could be used to access the distributed parking zones discussed in Section IV.B.2., Parking, of this Draft EIR. These locations are shown in Figure IV.B.1-9 on page IV.B.1-304 and are as follows:

From I-10 East: ⁴	1. 2.	Spring Street NB Off-Ramp Grand Avenue NB Off-Ramp
From I-10 East (from I-5 & SR-60):	3. 4. 5. 6.	Los Angeles Street WB Off-Ramp San Pedro Street WB Off-Ramp Central Avenue WB Off-Ramp Pico Boulevard WB Off-Ramp
From I-110 South:	7. 8. 9. 10. 11. 12.	Martin Luther King Jr. Blvd NB Off-Ramp 39th Street HOV NB Off-Ramp 37th Street NB Off-Ramp Adams Boulevard HOV NB Off-Ramp Adams Boulevard NB Off-Ramp Pico Boulevard NB Off-Ramp
From I-10 West:	13. 14. 15. 16.	9th Street NB Off-Ramp (via SR-110) Vermont Avenue EB Off-Ramp Hoover Street EB Off-Ramp Grand Avenue EB Off-Ramp
From US-101 Northwest:	17. 18. 19.	Alvarado Street SB Off-Ramp Glendale Boulevard SB Off-Ramp Hope Street EB Off-Ramp
From SR-110 North:	20. 21. 22. 23.	Hill Street SB Off-Ramp 6th Street SB Off-Ramp 9th Street SB Off-Ramp Olympic Boulevard SB Off-Ramp

Freeway Off-Ramp Analysis Methodology

Existing traffic volumes on these freeway off-ramps were obtained from traffic counts conducted as part of the overall traffic count program described above. Analysis of ramp traffic conditions is based on a queue analysis at the end of the ramp intersection, using the Highway Capacity Manual (HCM) 2000 Operations methodology, and determining the 85th percentile queue length (the vehicle queue length that would be exceeded only 15 percent of the time, which is a common measure used to evaluate queues).

⁴ Represents corridor that patrons would be arriving from.

Freeway On-Ramps Analysis Locations

A total of 26 freeway on-ramp locations were identified for analysis as locations that could be used by Proposed Project traffic, including on-ramps that could be used to egress the distributed parking zones. These locations, which are shown in Figure IV.B.1-10 on page IV.B.1-305 are as follows:

To I-10 East: ⁵	1. 2.	Los Angeles Street EB On-Ramp Hope Street EB On-Ramp
To I-10 East (from I-5 & SR-60):	3. 4. 5. 6.	Los Angeles Street EB On-Ramp San Pedro Street EB On-Ramp Central Avenue EB On-Ramp Flower Street EB On-Ramp
To I-110 South:	7. 8. 9. 10. 11. 12. 13. 14.	Martin Luther King Jr. Blvd SB On-Ramp 39th Street HOV SB On-Ramp 37th Street SB On-Ramp Flower Street HOV SB On-Ramp Washington Boulevard SB On-Ramp Blaine Street SB On-Ramp 8th Street SB On-Ramp 5th Street SB On-Ramp
To I-10 West:	15. 16. 17.	Vermont Avenue WB On-Ramp Hoover Street WB On-Ramp Grand Avenue WB On-Ramp
To US-101 Northwest:	18. 19. 20.	Alvarado Street NB On-Ramp Glendale Boulevard NB On-Ramp Avenue NB On-Ramp
To SR-110 North:	21. 22. 23. 24. 25. 26.	Street NB On-Ramp 3rd Street NB On-Ramp 5th Street NB On-Ramp 8th Street NB On-Ramp 9th Street NB On-Ramp 11th Street NB On-Ramp

⁵ Represents corridor that patrons would be departing to.

Freeway On-Ramp Analysis Methodology

Existing traffic volumes on these freeway on-ramps were obtained from traffic counts conducted as part of the overall traffic count program described above. The analysis compares forecast traffic volumes on the on-ramps to the ramp capacities, in accordance with Caltrans methodology, which identifies the maximum capacity of an on-ramp at 900 vehicles per hour per lane based on on-ramp metering.

The capacity discussed above may be conservatively low in certain cases. First, not all ramps are metered so the ramp capacity could be higher (metering limits capacity), and second, for event scenarios other than the Weekday Evening Pre-Event Hour (coinciding with the weekday P.M. peak hour), the ramp meters may not be turned on because freeway traffic volumes are generally lower in the late evening and at weekends (the other time periods for this analysis). Nevertheless, for purposes of preparing a conservative on-ramp analysis, a capacity of 900 vphpl was assumed.

f. Congestion Management Plan Requirements

<u>CMP Intersection Analysis</u>. The Los Angeles County Congestion Management Plan requires that new development projects analyze potential project impacts on CMP monitoring locations if an EIR is prepared for the project. The CMP requires that the Traffic Study analyze traffic conditions at all CMP arterial monitoring intersections where the Proposed Project will add 50 or more trips during either the A.M. or P.M. weekday peak hours of adjacent street traffic. If, based on this threshold, the Traffic Study identifies no facilities for study, no further traffic analysis is required.

A review of the 2010 CMP indicated a number of arterial intersection monitoring stations where CMP impacts could potentially occur due to the Proposed Project. The number of Proposed Project vehicle trips expected to pass through these intersections was estimated based on the Proposed Project trip generation and the Proposed Project trip distribution. This identified nine intersection monitoring stations where 50 or more project trips would be added during the Weekday Evening Pre-Event Hour. These nine locations and the number of Proposed Project trips expected to travel through these locations are as follows (with the number of Proposed Project trips in parenthesis):

1.	Alameda Street at Washington Boulevard	(146)
2.	Alvarado Street at Sunset Boulevard	(50)
3.	Western Avenue at 9th Street/James M. Wood Boulevard	(59)
4.	La Brea Avenue at Wilshire Boulevard	(86)
5.	La Cienega Boulevard at Wilshire Boulevard	(54)
6.	La Cienega Boulevard at Venice Boulevard	(64)

7.	La Cienega Boulevard at Jefferson Boulevard	(64)
8.	Alvarado Street at Wilshire Boulevard	(85)
9.	Western Avenue at Wilshire Boulevard	(111)

As these volumes are all equal to or greater than the CMP threshold of 50 or more trips in the Weekday Evening Pre-Event hour, all nine locations were analyzed to determine if the Proposed Project would cause any significant traffic impacts.

<u>CMP Freeway Segment (Mainline) Analysis</u>. The CMP also requires that the Traffic Study analyze traffic conditions at all CMP mainline freeway monitoring locations where the project will add 150 or more trips in either direction during either A.M. or P.M. weekday peak hours. (A freeway mainline is the freeway segment between the ramps). If based on this criterion the Traffic Study identifies no facilities for study, then no further traffic analysis is required. At locations on the mainline freeways nearest the Project Site and surrounding the downtown area, traffic generated by the Proposed Project would be expected to be more highly concentrated and more likely to cause potential traffic impacts. At locations further from the Project Site, Proposed Project traffic would be more dispersed and far less likely to cause impacts. However, in order to fully investigate the potential impact of the Proposed Project on the Los Angeles County Congestion Management System, all 81 of the CMP freeway monitoring locations were analyzed.

g. Transit Facilities and Ridership

Existing transit service characteristics were obtained from the transit operators (Metro and Metrolink⁶) using service schedules. The existing capacity of the transit lines was determined by multiplying the number of trains/buses by the capacities of each vehicle. Vehicle capacities were obtained from Metro and Metrolink, and are shown in Table IV.B.1-5 on page IV.B.1-197. Existing transit ridership was obtained from ridership data provided by Metro and Metrolink.⁷ Ridership was identified by transit line for each of the analysis time periods to obtain the total number of passengers on each train and bus serving the Project Site.

⁶ For the Metrolink system, only trains on the San Bernardino Line were included in the analysis, as this is the only line with currently scheduled service that would allow patrons to use Metrolink after events. Similarly, transit service for operators other than Metro and Metrolink was not included in the analysis as such transit service is not currently available in the late weekday evening or at weekends to allow patrons to use transit to get both to and from the Event Center.

⁷ Metro bus ridership data from reports for March 2011. Metro train ridership data from reports for 2010-2011. Metrolink ridership data from reports for May 2011. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, Table 5.1.2.2.

To prepare a conservative analysis, the maximum ridership was identified for each line's maximum load point (the point along a line's route that has the highest number of passengers). A load factor was then determined for each transit line, by dividing passengers by capacity. The load factor is an operational measure used by transit agencies to express the ridership levels compared to the maximum capacity of buses or trains, since the maximum capacity includes both seated passengers and standees. A load factor of 1.0 represents the situation when all seats are occupied. A load factor above 1.0 indicates there are standees on the vehicle. Both Metro and Metrolink have set policy load factors for the maximum acceptable capacity on transit vehicles by type of vehicles, as shown in Table IV.B.1-5 on page IV.B.1-197. For example, the Metro policy load factors are 1.30 for buses and 2.30 for heavy rail/subway (which allow for more standees on the rail system than on the bus system). For Metrolink, the policy load factor is 1.0, even though standees are allowed, due to the longer distance trips occurring on Metrolink.

4. Existing Levels of Service

a. Existing Intersection Levels of Service

Tables IV.B.1-6 through IV.B.1-8 on pages IV.B.1-198 through IV.B.1-210 provide the existing Sunday, Saturday and Weekday V/C ratios and corresponding LOS for the Pre-Event and Post-Event Hours, respectively. Below is a brief summary of the LOS information provided in the above-referenced tables:

<u>Sunday Day Pre-Event Hour (12:00–1:00 P.M.)</u>: Nearly all studied intersections (174) currently operate at LOS A during the Sunday Day Pre-Event Hour (12:00–1:00 P.M.) with two intersections operating at LOS B and one at LOS D.

<u>Sunday Day Post Event Hour (4:30–5:30 P.M.)</u>: Nearly all studied intersections (170) currently operate at LOS A during the Sunday Day Post-Event Hour (4:30–5:30 P.M.) with none of the intersections operating worse than LOS C.

<u>Saturday Day Pre-Event Hour (12:00–1:00 P.M.)</u></u>: The majority of studied intersections (164) currently operate at LOS A during the Saturday Day Pre-Event Hour (12:00–1:00 P.M.) with eight intersections operating at LOS B, four operating at LOS C, and one operating at LOS D.

<u>Saturday Day Post-Event Hour (4:30–5:30 P.M.)</u>: The majority of studied intersections (164) currently operate at LOS A during the Saturday Day Post-Event Hour (4:30–5:30 P.M.), with twelve intersections operating at LOS B and one intersection operating at LOS C.

<u>Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)</u>: The majority of studied intersections (174) currently operate at LOS D or better during the Weekday Evening Pre-Event Hour (4:30–5:30 P.M.) with nearly one-third of the intersections operating at LOS B or LOS C and seven operating at LOS D. Three intersections currently operate at LOS E, as follows:

93.	Figueroa Street & Wilshire Boulevard	(LOS E)
120.	Beaudry Avenue & Sunset Boulevard	(LOS E)
132.	Glendale Boulevard & Temple Street	(LOS E)

<u>Weekday Evening Post-Event Hour (9:00–10:00 P.M.)</u>: All studied intersections currently operate at LOS A during the Weekday Evening Post-Event Hour (9:00–10:00 P.M.).

b. Freeway Segments

The existing LOS for the analyzed freeway segments is summarized below in Section IV.B.1.4(b), Freeway Segments, of this Draft EIR. The existing LOS and Demand/Capacity (D/C) ratio for the analyzed freeway segments are provided in the Transportation Study (see Appendix I of this Draft EIR) in the following tables: Tables 5.1.5.3 and 5.1.5.4 for the Sunday Pre- and Post-Hour Events, respectively; Tables 5.2.5.1 and 5.2.5.2 for the Saturday Pre- and Post-Hour Events, respectively; and, Tables 5.3.5.1 and 5.3.5.2 for the Weekday Evening Pre- and Post-Hour Events, respectively.

<u>Sunday Day Pre-Event Hour (12:00–1:00 р.м.)</u>

Of the 20 freeway segment locations analyzed, 19 currently operate at LOS D or better and one mainline location (US-101 South of Vermont Avenue) operates at LOS E.

Sunday Day Post-Event Hour (4:30–5:30 р.м.)

All 20 freeway locations currently operate at LOS D or better.

Saturday Day Pre-Event Hour (12:00–1:00 р.м.)

Of the 20 freeway locations analyzed, 19 currently operate at LOS D or better. One mainline location (US-101 South of Vermont Avenue) currently operates at LOS E.

Saturday Day Post-Event Hour (4:30-5:30 P.M.)

Nineteen of the freeway locations currently operate at LOS D or better in the Saturday Day Post-Event Hour. One mainline location (SR-110 NB between James Wood Boulevard and Olympic Boulevard) currently operates at LOS E.

Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

Four mainline and all three HOV locations currently operate at LOS D or better in the Weekday Pre-Event Hour. Six mainline locations currently operate at LOS E and seven mainline locations operate at LOS F (five at LOS F(0), one at LOS F(1), and one at LOS F(3)).

Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

All twenty of the freeway locations analyzed currently operate at LOS D or better in the Weekday Evening Post-Event Hour.

5. Regulatory Framework

a. Local Plans

General Plan Framework Element, Transportation: The primary goals of the Framework Element's Transportation Chapter, which are also set forth in the Transportation Element of the General Plan, are to provide adequate accessibility to commerce, work opportunities, and essential services, and to maintain acceptable levels of mobility for all those who live, work, travel, or move goods in Los Angeles. Attainment of these goals requires a comprehensive program of physical infrastructure improvements, traffic management techniques, and behavioral changes that reduce vehicle trips. These are linked to an integrated hierarchy of movement modes that encompasses pedestrians, bicycles, automobiles, local shuttles, buses, and rail transit. Specific policies call for: the completion of the Metro rail system; increasing bus service along high-demand routes; use of automated traffic surveillance and control systems by the City to enhance traffic flow; provision of high-occupancy vehicle (carpool) lanes by the City on arterials; implementation of shared parking, peripheral parking, and parking price strategies; enhancing pedestrian circulation and bicycle access; and encouraging public agencies to continue to expand the role of Union Station as the major regional hub for Amtrak, Metrolink, Metrorail, and, potentially, high-speed rail service. Consistency of the Project with these policies is addressed in the analysis provided in Section IV.A (Land Use) of this Draft EIR.

b. Regional Plans

SCAG's 2008 Regional Transportation Plan. This Plan, adopted in May 2008, presents a long-term vision for the region's transportation system through the year 2035. Specific issues and goals within the 2008 RTP address: corridor preservation; mobility and accessibility; sustainability, including promoting transit-oriented development growth patterns; environmental protection, which addresses air quality and energy efficiency; transportation financing, security, and safety; environmental justice and mitigation; revenues and expenditures; transportation conformity, implementation, and monitoring; and future connections and growth. The RTP provides a basic policy and program framework for long-term investment in the regional transportation system in a coordinated, cooperative, and continuous manner. By law, transportation investments in the SCAG region that receive State or federal transportation funds must be consistent with the RTP and must be included in the Regional Transportation Improvement Program (RTIP). Please refer to Table 3 in Section IV.A (Land Use) of this Draft EIR for a discussion of the Project's consistency with the RTP. As demonstrated therein, the Proposed Project would be consistent with the RTP goals.

<u>Metropolitan Transportation Authority (Metro) Congestion Management Plan</u> (<u>CMP</u>). Within Los Angeles County, the Los Angeles County Metropolitan Transportation Authority (Metro) is responsible for planning and managing vehicular congestion and coordinating regional transportation policies. Metro prepared the 2010 Congestion Management Plan for Los Angeles County, in accordance with Section 65089 of the California Government Code. The CMP is intended to address vehicular congestion relief by linking land use, transportation and air quality decisions. The program also seeks to propose transportation projects eligible to compete for state gasoline tax funds and to develop a partnership among transportation decision-makers to devise appropriate transportation solutions that include all modes of travel. Proposition 111, passed by the electorate in 1990, provides state gasoline tax revenue for transportation improvements and requires cities, counties, and other eligible agencies to implement the requirements of the CMP. The Proposed Project's Transportation Analysis was prepared in accordance with the requirements set forth in the CMP and the LADOT Guidelines.

c. Senate Bill 292

On September 9, 2011, the California Legislature approved Senate Bill (SB 292) pertaining specifically to the Proposed Project. This law added Section 21168.6.5 to the California Public Resources Code. As discussed in Section II.B (Project Description) of this Draft EIR, SB 292 contains provisions related to legislative review and requires the Proposed Project to take steps to reduce traffic congestion and global climate change impacts that may result from private automobile trips to the Event Center. Specifically, the

Proposed Project must: (1) achieve and maintain carbon neutrality by reducing to zero the net emissions of greenhouse gases from private automobile trips to the Event Center; and (2) achieve and maintain a vehicle trip ratio (defined as the total annual number of private automobiles arriving at the Event Center for spectator events divided by the total annual number of spectators at the events) that is no more than 90 percent of the trip ratio at any other stadium serving a team in the National Football League. The bill also includes provisions for the implementation and reporting of these requirements. A complete copy of SB 292 is provided in Appendix C to this Draft EIR.

6. Thresholds of Significance

The following transportation-related thresholds of significance were used in the assessment of the level of significance of impacts of the Proposed Project:

a. State CEQA Guidelines

Appendix G of the State CEQA Guidelines provides the following sample questions with regard to Transportation related impacts:

Would the project:

- a. 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?
- b. 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?
- c. 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?
- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e. Result in inadequate emergency access?

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

Please note that the Initial Study determined that the Proposed Project would have no impact with respect to Item (c) related to air traffic patterns and therefore, this issue is not addressed in this Draft EIR. Please refer to Section IV.K., Public Services, of this Draft EIR for further discussion regarding the Proposed Project's impact in relation to item (e) emergency access.

b. City of Los Angeles Significance Thresholds

(1) Intersection Capacity

The City of Los Angeles CEQA Thresholds Guide and Los Angeles Department of Transportation criteria state that a project would normally have a significant impact on signalized intersection capacity if the project traffic causes an increase in the V/C ratio at the intersection based on the following sliding scale:

Intersection Conditions With Project Traffic		
Level of Service	Volume-to-Capacity (V/C)	Project-related Increase in Volume-to-Capacity (V/C) Ratio
С	0.701–0.800	Equal to or greater than 0.04
D	0.801–0.900	Equal to or greater than 0.02
E, F	> 0.900	Equal to or greater than 0.01

This threshold has been used to evaluate intersection capacity at all signalized study intersections.

(2) Los Angeles County Congestion Management Program

(a) Arterial Monitoring Stations

For Los Angeles County Congestion Management Program arterial monitoring intersections, a significant Project-related impact would occur if the Project adds 50 or more trips during either the morning or afternoon peak hour at a CMP arterial monitoring station, the CMP facility is projected to operate at Level of Service F (V/C > 1.00), and Project traffic causes an incremental change in the V/C ratio of 0.02 or greater. The Project would not have a regionally significant impact, regardless of the increase in V/C ratio, if the study facility is projected to operate at Level of Service E or better after the addition of Project traffic.

(b) Freeway Segments

For Los Angeles County Congestion Management Program freeway segments, a significant Project-related impact would occur if the Project adds 150 or more trips, in either direction at a CMP freeway monitoring segment, during either the morning or afternoon peak hour and Project-related traffic causes an increase in the V/C ratio on a freeway segment or freeway on- or off-ramp of two percent or more capacity (V/C increase >0.02), which causes or worsens Level of Service F conditions (V/C >1.00).

(3) Transit System Capacity

The City of Los Angeles CEQA Thresholds Guide states that the determination of significance shall be made on a case-by-case basis, considering the projected number of additional transit passengers expected with implementation of the proposed project and available transit capacity. As stated previously, the Project meets the Los Angeles County Congestion Management Program requirements to prepare a Traffic Impact Analysis that includes (among other things) identification of the transit lines that would serve the Project and an estimation of the number of transit trips that would be generated by the Project. However, the County does not have an impact significance threshold.

Based on these factors, the Project would have a significant impact if transit trips generated by the Project could not be accommodated within the capacity of the existing bus and rail transit lines serving the Project Site.

(4) Neighborhood Intrusion Impacts to Local Residential Streets

LADOT guidelines indicate that a local residential street can potentially be impacted through increased vehicle trips if traffic uses local residential streets as cut-through routes to bypass a congested arterial roadway. The guidelines further state that when selecting street segments for analysis, all of the following conditions must be present:

- The proposed project is a non-residential development and not a school;
- The arterial is sufficiently congested, such that motorists traveling on the arterial may opt to divert to a parallel route through a residential street; the congestion level of the arterial is based on the estimated level of service (LOS) under project conditions of the study intersections; LOS E and F are considered to represent congested conditions;
- The local residential street(s) provide motorists with a viable alternative route; and

• The project is projected to add a significant amount of traffic to the congested arterial that can potentially shift to an alternative route; project traffic would need to exceed the daily minimum significance thresholds listed below under "Project-Related Increase in ADT".

If all of the above factors are met, the Project would have a significant impact to a local residential street if the Project's contribution to an increase in Average Daily Traffic on the local residential street exceeded the daily minimum thresholds set forth below:

Definition of Significant Impact Criteria for Local Streets

A local residential street shall be deemed significantly impacted based on an increase in projected Average Daily Traffic (ADT) volumes on the street as follows:		
Projected Average Daily Traffic with Project (Final ADT*)	Project-Related Increase in ADT	
0 to 999	120 trips or more	
1,000 to 1,999	12% or more of final ADT	
2,000 to 2,999	10% or more of final ADT	
3,000 or more	8% or more of final ADT	

*Final Average Daily Traffic (ADT) is defined as the total projected future daily traffic volume including project, ambient, and related project growth trips. Source: LADOT.

(5) Project Access (Operational)

The City of Los Angeles CEQA Thresholds Guide states that a project would normally have a significant access impact if the intersection(s) nearest the primary site access is/are projected to operate at Level of Service E or F during the morning or afternoon peak hour, under Future-with-Project conditions. With regard to the issue of transit access, the City of Los Angeles CEQA Thresholds Guide does not provide guidance as to an appropriate significance threshold or factors to consider in developing a significance threshold. Building upon the guidance provided with regard to In-Street Construction Impacts (see next section below), a significant impact to transit access would occur if an existing bus route is rerouted by more than three blocks.

(6) In-Street Construction Impacts

The City of Los Angeles CEQA Thresholds Guide states that the determination of significance shall be made on a case-by-case basis, considering the following factors:

(a) Temporary Traffic Impacts

 The length of time of temporary street closures or closures of two or more traffic lanes;

- The classification of the street (major arterial, state highway) affected;
- The existing traffic levels and Level of Service on the affected street segments and intersections;
- Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
- Potential safety issues involved with street or lane closures; and
- The presence of emergency services (fire, hospital, etc) located nearby that regularly use the affected street.

(b) Temporary Loss of Access

- The length of time any loss of vehicular or pedestrian access to a parcel fronting the construction area;
- The availability of alternative vehicular or pedestrian access within ¼ mile of the lost access; and
- The type of land uses affected, and related safety, convenience, and/or economic issues.

(c) Temporary Loss of Bus Stops or Rerouting of Bus Lines

- The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
- The availability of a nearby location (within a ¼ mile radius) to which the bus stop or route can be temporarily relocated;
- The existence of other bus stops or routes with similar routes/destinations within a 0.25-mile radius of the affected stops or routes; and
- Whether the interruption would occur on a weekday, weekend, or holiday, and whether the existing bus route typically provides service on that/those day(s).

(d) Temporary Loss of On-Street Parking

- The current use of on-street parking;
- The availability of alternative parking locations or public transit options (e.g., bus, train) within a 0.25-mile radius of the project site; and
- The length of time that existing parking spaces would be unavailable.

Based on all of the above factors, the Project would have a significant impact related to construction activities if, for any of the impact areas identified above, it would:

- Cause substantial delays or disruption of existing traffic flow or access;
- Require temporary relocation of existing bus stops to more than 0.25 mile from their existing stops; or
- Would result in the substantial loss of on-street parking such that the parking needs of the Project area would not be met.

c. Caltrans Freeway On-Ramps and Off-Ramps

(1) Off-Ramps

A significant impact would occur to a freeway off-ramp if the queue length (85th percentile) exceeds the total storage length available on the off-ramp and results in queues backing into mainline travel lanes. This threshold is consistent with other recent studies in the Los Angeles area. Ramp conditions were also evaluated using a second level of analysis where an impact would occur if the queue length (85th percentile) exceeds the storage length of an individual ramp lane. However, in these cases the queue would not necessarily back into the mainline travel lanes unless identified as such. This threshold is consistent with other recent studies in the Los Angeles area.

(2) On-Ramps

The criteria for determining a significant impact was if the addition of traffic generated by the Proposed Project using the on-ramp caused the total traffic to exceed the capacity of the on-ramp. This threshold is consistent with other recent studies in the Los Angeles area.

7. Project Design Features

a. Overall Transportation Strategy for the Proposed Project

The overall transportation strategy for the Proposed Project is summarized below and would be comprehensive and focus on the following: (1) encouraging the maximum use of transit and other non-auto modes, and minimizing auto use; (2) the efficient use of existing parking resources in the downtown area, and distributing traffic over many access/egress routes; and (3) the effective use of traffic management to maximize the capacity of existing transportation facilities during events. For additional detail, please refer to the discussion of the proposed project design features and mitigation measures provided at page IV.B.1-162 of this Section, and described in further detail in Chapter X of the Transportation Study (see Appendix I to this Draft EIR) for further information.

The overall transportation strategy for the Proposed Project would include, but not be limited to, the following key elements:

1. <u>Encourage and Facilitate the Use of Transit</u>: The location of the Proposed Project provides a strong unique opportunity for the significant use of transit, particularly high-capacity rail transit, to access the Event Center. The use of transit will be heavily promoted as the central focus of the transportation strategy for the Proposed Project.

2. <u>Minimize Automobile Trips</u>: The Proposed Project will pursue policies and programs to reduce auto trips, through promoting and encouraging increased auto vehicle occupancies, and encouraging walking and bicycling. The Proposed Project will develop a Streetscape and Open Space Plan that will enhance the pedestrian environment in the area of the Proposed Project and build on the existing LASED Streetscape Plan to develop guidelines for streetscape improvements on streets leading to and from the Project Site. The Proposed Project will also encourage the use of bicycling through the provision of bicycle parking and bicycle valets, and coordinating with the current plans for a Bike Station at or adjacent to the Project Site, as well as the concept proposal in the current Figueroa Corridor Study for adding bike lanes on Figueroa Street.

3. <u>Use the Existing Distributed Parking Supply in Downtown</u>: The existing and proposed supply of parking on-site, as well as the existing extensive supply of parking offsite in the downtown area, will provide a significant parking resource for the Proposed Project. This parking is distributed over a large geographic area so will facilitate a strategy of distributing traffic over many routes, thereby reducing congestion on individual routes.

4. <u>Continue Existing Strategies of Distributed Access and Egress Routes to</u> <u>Parking</u>: Access and egress routes from freeways to parking areas will be able to use over forty off-ramps and on-ramps, thereby allowing traffic to be dispersed across many access/egress routes rather than being focused on only a few corridors. This distributed parking and access has worked successfully for STAPLES Center and L.A. LIVE, and will be accomplished through the use of directional signage, and extensive information identifying parking zones and access routes, and bundling parking with ticket sales for the efficient management of distributed parking. Proposed access with the Project is shown in Figure IV.B.1-11 on page IV.B.1-306 and briefly discussed below. Access is discussed in greater detail in Section IV.B.1.13 of this Draft EIR Section. Information will be distributed via many sources including web sites, media advertising, and smartphone applications. 5. <u>Use Effective Traffic Management to Maximize the Capacity of Existing Facilities</u>: Building on the success of traffic management for STAPLES Center and the Convention Center, the Event Center will use traffic management techniques, including directional signage, event traffic signal timing programs, and use of traffic control officers to gain the maximum efficiencies from the existing circulation system and to handle the relatively infrequent peak event loads.

6. <u>The Extensive Use of Information Systems to Inform Patrons of Transportation</u> <u>Options and Preferred Transportation Methods and Operations</u>: The extensive use of information systems will be employed by the Proposed Project, similar to that currently done for STAPLES Center and L.A. LIVE, to inform patrons of all transportation options. This would include the use of traditional methods such as print and broadcast media, as well as the latest digital distribution technology including methods in real time to mobile personal devices (e.g., smart phones, and in-car navigation systems) where feasible.

In addition, a comprehensive Transportation Management Plan (TMP), which is identified as a Proposed Project mitigation measure, would be developed and implemented for the Proposed Project in coordination with LADOT, Metro, Caltrans, Metrolink, and other agencies as necessary, and using the results from the Transportation Study.

b. Project Access

<u>Vehicular Access</u>: Five driveways would be provided to the new L.A. Live Way Garage that would replace the existing Cherry Street garage. There would be one driveway on Pico Boulevard, two driveways on L.A. Live Way (at similar locations as the current Cherry Street Garage), and two driveways on 12th Street between L.A. Live Way and Blaine Street (inbound traffic could access the garage from Blaine Street). As this garage would bridge over 12th Street (in similar fashion to the existing garage), the internal circulation would allow cars to enter and exit from any of the driveways, thus providing for flexible and efficient operation of this garage. None of the garage driveways would be signalized, though all driveways would be all movement driveways (i.e., all turning movements in and out of the driveway will be permitted). Two driveways would be provided to the new Bond Street Garage; one at the signalized intersection of L.A. Live Way & Bond Street, and one on Pico Boulevard.

Access/egress for the existing South Hall Garage and Venice Garage at the Convention Center would remain as currently located and configured. Access to the existing L.A. LIVE garages would remain unchanged, with driveways on Chick Hearn Court and West Road for the Olympic West Garage, and at Olympic Boulevard and Francisco Street for the Olympic East Garage.

<u>Convention Center Bus Access</u>: The Figueroa Drive and Pico Drive areas would remain the same with the Proposed Project, with the same ingress/egress routes. The

Gilbert Lindsay Plaza area will be replaced by open space and landscaping, and thus would no longer be used for day-to-day bus loading/unloading. However, within the open space plan for Gilbert Lindsay Plaza, a paved area adjacent to the Convention Center would be able to provide for bus access to the Convention Center when necessary for Convention Center events. It is expected that this area will be largely replaced by enhancement to the Pico Drive area, including potentially reconfiguring that area to include diagonal bus bays to increase the bus-handling capacity of that area. A bus loading/ unloading area on the north side of Pico Boulevard, opposite and similar to Pico Drive, will also be provided as part of the Convention Center improvements (see Figure II-16 in Section II, Project Description, of this Draft EIR).

Event Center Bus Access: To the extent that private buses serve the Event Center (such as event-specific bus service that could include charter buses, or other special event buses), they could use the Figueroa Drive and Pico Drive areas, unless the Convention Center was using those zones for its events. Additional areas identified for bus loading/unloading for the Event Center are the west side of Convention Center Drive (which could be used for diagonal bus bays), and the ground floor of the Bond Street Garage (which is being designed with a high level ground floor to accommodate trucks and buses).

<u>Convention Center Taxis and Limousines</u>: Taxis currently use two areas for pick-up and drop off at the Convention Center: on Gilbert Lindsay Plaza (northbound); and, on Pico Drive (eastbound). Taxis would no longer use Gilbert Lindsay Plaza on a day-to-day basis but would continue to use Pico Drive. Limousines currently access the Convention Center on Gilbert Lindsay Plaza southbound, and at the south end of Figueroa Drive. Limousines would also no longer use Gilbert Lindsay Plaza on a day-to-day basis, but could use it for certain special events. Limousines would continue to use the Figueroa Drive area, as well as a new area on the north side of Pico Boulevard.

<u>Event Center Taxis and Limousines</u>: A limousine zone is planned for the east curb of L.A. Live Way adjacent to the Event Center, to provide easy access to VIP entrances on L.A. Live Way. Limousines would access this zone via Pico Boulevard westbound, via L.A. Live Way northbound (from the Pico Boulevard off-ramps at Bond Street from I-110 northbound and I-10 westbound), and via Convention Center Drive to Bond Street to L.A. Live Way northbound.

<u>Convention Center Loading Access</u>: Loading to the Convention Center would continue to be provided at the rear of the South Hall via access from Pico Boulevard and L.A. Live Way and the existing ramp to the upper loading level. The current access from L.A. Live Way to the loading docks on the west side of the West Hall would no longer be necessary and would be demolished. They would be replaced with new loading docks at

the south west corner of the New Hall that would be accessed via the existing ramp to the upper level of the South Hall.

<u>Event Center Loading Access</u>: Loading to the Event Center would be provided by a driveway on Pico Boulevard, west of Figueroa Street. This would lead to an underground loading dock at the northeast corner of the Event Center. This driveway would be signalized to replace the existing mid-block signal currently located slightly to the west that serves the driveway for West Hall parking and truck deliveries. This driveway would also provide access to the existing loading dock under STAPLES Center and would replace the current access from Chick Hearn Court at Georgia Street. It would also share access to the surface loading area for the Convention Center on the north side of Pico Boulevard.

c. Street Closures

Certain street closures are planned as project design features for major events at the Event Center to eliminate vehicular conflicts with pedestrians, and to enhance pedestrian circulation. L.A. Live Way would be closed to through traffic between Pico Boulevard and Chick Hearn Court, except for local traffic (i.e., event traffic accessing the L.A. Live Way and Olympic West Garages, limousines, and transit vehicles). Chick Hearn Court would be closed to all traffic between Figueroa Street and Georgia Street (in similar fashion to the closures that take place today for STAPLES Center and L.A. LIVE), and to through traffic between Georgia Street and L.A. Live Way except for local access (i.e., traffic accessing the Olympic West Garage). Event traffic heading to these parking garages would be required to prominently display windshield hangers to demonstrate authorized parking access.

Other street closures may need to be implemented during all or part of the postevent hour as defined in the Transportation Management Plan, as necessary or desirable.

8. Project Trip-Generation Assumptions and Forecasts

The assumptions and methodology used for determining Proposed Project trip generation is discussed in Section 4.2 of the Transportation Study (see Appendix I of this Draft EIR) and summarized below.
a. Project Trip Generation

(1) Event Center Trip Generation

The transportation analysis addresses the 72,000-permanent-seat Event Center (the capacity for the vast majority of events).

For major events, the Event Center would be expandable to 76,250 seats, and could host major sporting events, like an NFL Super Bowl or an NCAA Final Four Tournament, although such events would probably occur only every four to five years. Such events were not addressed in the transportation analysis due to: (1) their infrequent occurrence; and (2) the fact that their transportation characteristics are very different from the normal events that would take place at the Event Center. In those instances of a 76,250-seat event, a far higher proportion of attendees would be from out of town and would therefore take organized bus and shuttle transportation from hotels than would be the case for regular normal events when the vast majority of attendees would be from the local Southern California area and thus be far more likely to drive. Auto trips for the infrequent major sporting events would therefore likely be lower than for a regular event, which accompanied by the fact that arrivals and departures would typically be spread out over a longer period of time than for normal events, would lead to fewer traffic impacts than for normal events. In order to address the different transportation patterns for major events, existing practice elsewhere is that special transportation management plans are prepared for these major sporting events. These plans are prepared in close coordination with the requirements of the NFL and the NCAA, and such special plans would also be prepared for such events at the Event Center, as necessary.

Estimates of trip generation for events at the Event Center were based on a consideration of other professional sports facilities around the country, experience at local sports stadiums, previous studies of stadiums in the Los Angeles area, and the transportation system serving the Project Area and Downtown Los Angeles.

The Project Site is notable in Southern California in not only being located in Downtown Los Angeles, but also located at the heart of the regional transit system. Unlike the typical suburban locations for football stadia, there is thus a much higher potential for patrons to use alternate modes to travel to the stadium, including walking from downtown locations and using transit.

Trip generation depends on a number of spectator travel characteristics such as mode split (percent using transit and walk modes), automobile occupancies, and arrival/departure patterns, as described below. Separate trip estimates were prepared for Sunday, Saturday, and Weekday events.

Walking: It is estimated that approximately 7.0 percent of spectators would walk-in for a Weekday event and 3.5 percent would walk-in on a Weekend event. These would be people staying in downtown hotels, working in downtown, or living in downtown. These estimates include a modest use of bicycles to travel to the stadium. As shown in Table 4.2.1 of the Transportation Study, the difference between the two rates can be attributed to the difference in travel behavior in downtown Los Angeles on a weekday and a weekend. On a weekday, more potential spectators would already be located in downtown for their jobs and would travel to the stadium by foot rather than drive their personal vehicle. For a weekday, these estimates assume approximately 2,000 patrons would be staying in downtown hotels, 2,500 patrons would work downtown, and 250 patrons would live downtown, all of whom would walk to the Event Center, and that 250 patrons would bike to the Event Center . For the weekend, the same assumptions are made, except it is conservatively assumed that no patrons would be working downtown on the weekends.

<u>**Transit</u>**: Given the proximity of the Event Center to an extensive system of rail and bus transit, it is conservatively estimated that 20 percent of patrons would use transit on a weekday and 15 percent on a weekend. These levels of transit usage are concluded to be conservative as Proposed Project compliance with the provisions of SB 292 are anticipated to result in higher levels of transit usage. The service frequency for most types of transit is greater during a weekday than on weekends, and people have a higher tendency to use transit on weekdays for work when traffic volumes on the roadways are higher.</u>

These estimates are considered reasonable given the extensive amount of transit service to the Project Site, and experience at other stadiums across the country. The use of non-auto modes (primarily transit) at sports stadiums in the U.S. ranges from 5 percent to over 30 percent. A review of various information sources is documented in Section 4.2 of the Transportation Study. They include, for example, that about 18 percent to 20 percent of patrons use transit at Qualcomm Stadium⁸ in San Diego, which is served by fewer transit lines (one trolley line, and buses) than the Proposed Project site. In addition, between 25 percent and 30 percent of attendees use non-auto modes at CenturyLink Field⁹ adjacent to downtown Seattle (the stadium is close to light rail, Amtrak rail, Sounder Commuter Rail, express bus, and ferry).

⁸ Citizens' Task Force on Chargers Issues, Facilities & Redevelopment Committee, City of San Diego, 2003. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-16.

⁹ Mitigating Traffic Congestion, The Role of Demand Side Strategies, US Department of Transportation, Federal Highway Administration, October 2004. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-16.

<u>Charter Buses</u>: The use of charter buses is another potential method of transporting spectators to a sports facility. Usage rates ranging from 7 to 10 percent have been observed or forecasted at other venues across the country (e.g., 10 percent at Candlestick Park for the San Francisco 49ers¹⁰). However, to provide a more conservative analysis, it was assumed that no spectators would arrive by charter bus.

<u>Auto Occupancy</u>: The Transportation Study (see Appendix I of this Draft EIR) estimates that the average vehicle occupancy for those arriving by car would be 2.7 for weekday events, and 3.0 for weekend events, when people tend to travel with friends and family to the game. For comparison purposes, rates of between 2.5 and 3.3 have been observed or estimated at other stadiums across the country. For example, a vehicle occupancy of 2.5 persons per car was observed at Candlestick Park in San Francisco¹¹—a stadium in an isolated location without significant transit service, while another study cited an occupancy of 3.0 per car.¹² A study for the Arizona Cardinals new stadium used an average auto occupancy of 3.0 based on studies of NFL stadiums that showed an average vehicle occupancy range of 3.2 to 3.3 for NFL games.¹³ Previous studies of NFL stadiums in the Los Angeles area have assumed vehicle occupancies of 2.7 (Los Angeles Coliseum Renovation Project¹⁴), and 3.0 for general attendance and 3.5 for suites and club seats (City of Industry Stadium¹⁵ and Pasadena Rose Bowl Renovation Project¹⁶).

Percentage Arrival/Departure in Pre-Event and Post-Event Hours: Spectators at an event tend to arrive and depart over a period of time, with some arriving early (e.g., to "beat the rush," have a meal, etc.). After an event, some also like to linger and take their time departing, again either to avoid the post-event rush or to visit a restaurant or bar.

¹⁴ Ibid.

¹⁰ 49ers Santa Clara Stadium Project DEIR, July 2009. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-17.

¹¹ Mitigating Traffic Congestion, The Role of Demand Side Strategies, US Department of Transportation Federal Highway Administration, October 2004. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-17.

¹² 49ers Santa Clara Stadium Project, Final EIR, City of Santa Clara, November 2009. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-17.

¹³ Los Angeles Memorial Coliseum Renovation Project, Draft EIR, County of Los Angeles, 2003. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-17.

¹⁵ City of Industry Stadium EIR, City of Industry, 2008. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-17.

¹⁶ Rose Bowl Stadium Renovation Project, Draft EIR, City of Pasadena, April 2005. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-17.

There are many restaurant and bar opportunities at L.A. LIVE adjacent to the Event Center and in the surrounding areas of Downtown. The Transportation Study (see Appendix I of the Draft EIR) assumed that 50 percent of patrons would arrive in the hour immediately preceding the event, and that 75 percent would leave in the hour immediately following the event for both weekday and weekend events.

These estimates are consistent with other past studies of NFL stadiums in the Los Angeles area which have assumed about 40 percent to 50 percent of patrons arrive in the hour immediately preceding the event (50 percent for the Los Angeles Coliseum,¹⁷ 40 percent Sunday and 50 percent weeknight for the City of Industry Stadium,¹⁸ and 45 percent for the Rose Bowl),¹⁹ and that about 55 percent to 75 percent leave in the hour immediately after the event (60 percent Sunday and 75 percent weeknight for the City of Industry Stadium, and 55 percent for the Rose Bowl).

Event Center Patron Trip-Generation Estimates

The trip-generation estimates for the Proposed Project took all the above factors into consideration. Event Center trip-generation estimates are provided in Table IV.B.1-9 on page IV.B.1-216 and summarized below.

Weekend Day Event (NFL Game or Other Event)

For a Weekend Day event, it is estimated that approximately 2,520 patrons would walk or bike to the stadium, about 10,800 would take transit, and the remaining 58,680 would arrive by car in approximately 19,560 cars. Therefore, there would be 19,560 auto vehicle trips both to and from the event. A total of 9,780 trips would occur in the Pre-Event Hour (12:00–1:00 P.M.), and 14,670 trips would occur in the Post-Event Hour (4:30– 5:30 P.M.).

Weekday Evening Event (NFL Game)

For a Weekday Evening event (Saturday or Sunday), it is estimated that approximately 5,040 patrons would walk or bike to the stadium, about 14,400 would take

¹⁷ Los Angeles Memorial Coliseum Renovation Project, Draft EIR, County of Los Angeles, 2003. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-16.

¹⁸ City of Industry Stadium EIR, City of Industry, 2008. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-16.

¹⁹ Rose Bowl Stadium Renovation Project, Draft EIR, City of Pasadena, April 2005. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 4-16.

transit, and the remaining 52,560 would arrive by car in approximately 19,467 cars. There would thus be 19,467 auto vehicle trips both to and from the event. A total of 9,733 trips would occur in the Pre-Event Hour (4:30–5:30 P.M.), and 14,600 trips would occur in the Post-Event Hour (9:00–10:00 P.M.).

Employee Trips: There would be up to an estimated 3,600 employees for a full attendance event at the Event Center. The analysis assumed no employee trips during the Pre-Event Hour because all employees would need to be at the Event Center before that time. The analysis also assumed that up to 40 percent of employees could depart the Event Center during the Post-Event Hour. Based on experience at STAPLES Center and L.A. LIVE, it is estimated that approximately 25 percent would take transit, 15 percent would be dropped off or walk, and 60 percent would drive. This would result in 360 transit trips and 634 vehicle trips during the Post-Event Hour. These trip totals were included in the trip-generation numbers for the analysis of Proposed Project impacts.

(2) Los Angeles Convention Center Trip Generation

The existing level of activity for the Convention Center was determined based on surveys and analysis of parking occupancy conditions at the Convention Center on a weekday and weekend day when on-site activities were limited to those occurring at the Convention Center. Based on this data and the range of activities occurring at the time, the 90th percentile event was used to establish baseline conditions for analyzing the Project's impacts. The 90th percentile event refers to an activity level that is not exceeded 90 percent of the time. The Project's impacts are analyzed based on the baseline 90th percentile event plus the projected growth.

The New Hall would enhance the functionality of the Convention Center due to its contiguous configuration, and it is anticipated to attract more trade shows and conventions compared to existing levels. Based on the activity forecasts for the Convention Center, it is estimated that the baseline event attendance included in the traffic analysis could increase by 15 percent in the future for a weekday event with the Proposed Project, and by 7 percent for a weekend event.²⁰ The existing Convention Center trips occurring during the

²⁰ The activity forecasts for the Convention Center indicate that the average attendance for a citywide convention (weekdays) would increase by about 29% with the Proposed Project, and that the average attendance for a consumer show (weekends) would increase by 14 percent to 15 percent. However, the growth in the size of peak attendance events (such as the 90th percentile events included in the traffic background data) would be less than the average growth and would be about half of the growth in average events (conversations with PKF Consulting, July 2011). For the transportation analysis, it was assumed that a weekday event would increase in size by 15 percent and that a weekend event would increase in size by 7 percent due to the Proposed Project.

hours analyzed in this study were thus increased by these amounts for analysis of Proposed Project impacts. This would result in the following additional trips: 61 vehicle trips during the Sunday Day Pre-Event Hour (12:00–1:00 P.M.), 80 vehicle trips in the Sunday Day Post-Event Hour (4:30–5:30 P.M.), 64 trips in the Saturday Day Pre-Event Hour (12:00–1:00 P.M.), 83 trips in the Saturday Day Post-Event Hour (4:30–5:30 P.M.), 269 trips in the Weekday Evening Pre-Event Hour (4:30–5:30 P.M.).

(3) Total Vehicular Trip Generation

The total auto trip generation for the event scenarios with the Proposed Project is shown in Table IV.B.1-10 on page IV.B.1-217 and includes Event Center patrons, Event Center employees, and Convention Center trip increases during Event Center events. As can be seen, the employee trips and Convention Center trip increases are relatively minor totals compared to trips from Event Center patrons, which would comprise the vast majority of all trips from the Proposed Project.

(4) Transit System Trip Generation

It is estimated that 10,800 event attendees would use transit for a weekend game, and 14,400 event attendees would use transit for a weekday evening game. The analysis used the estimation that 50 percent of people would arrive in the Pre-Event Hour and 75 percent would depart in the Post-Event Hour. This results in 5,400 attendees arriving by transit in the weekend day Pre-Event Hour (12:00–1:00 P.M.), and 8,100 attendees departing in the weekend day Post-Event Hour (4:30–5:30 P.M.). This would also result in 7,200 attendees arriving by transit in the weekday evening pre-event hour (4:30–5:30 P.M.), and 10,800 attendees departing in the weekday post-event hour (9:00–10:00 P.M.).

b. Project Trip Distribution

(1) Event Center Trip Distribution

The estimated trip distribution is shown in Figure IV.B.1-12 on page IV.B.1-307 for a weekday event and Figure IV.B.1-13 on page IV.B.1-308 for a weekend event. In summary, it is estimated that the proportion of trips approaching from each direction is as follows:

West:	Santa Monica Freeway Corridor & West Arterials	18%
North:	Hollywood, Glendale, Pasadena Freeways & North Arterials	29%

East:	San Bernardino, Pomona, and Santa Ana Freeways & East Arterials (incl. 15% to the Santa Ana Freeway heading South)	34%
South:	Harbor Freeway Corridor & South Arterials	19%

Based on the freeway and street system serving the Project Site and the Downtown Area, it is estimated that 88 percent of traffic would approach by freeway, and that 12 percent would approach by surface streets. The trip distribution estimates were derived from an analysis of various sources, discussed below.

<u>Ticket Purchase Origins for STAPLES Center and NOKIA Theater L.A. LIVE</u>. Data on the zip code of purchase location for STAPLES Center suites & premium seats, LA Kings season tickets, LA Lakers season tickets, LA Clippers season tickets, and nonsporting events for STAPLES Center were analyzed for 2010. The analysis indicated only small differences (one to three percentage points) in the distribution of origins between sporting and non-sporting events.

This data provides a good indication of the locations from where tickets were purchased, which in many cases is also probably the location from where attendees would travel. However, for some ticket holders it probably does not represent the origin location of travel to an event at STAPLES Center. This is for a number of reasons, including the fact that patrons may be coming from work, or they may have passed the tickets on to someone else who might come from a different direction. This data also relates to smaller facilities of 7,100 seats (NOKIA Theater) and 19,000 seats (STAPLES Center), whereas the Event Center would seat 72,000, and the larger capacity would be expected to draw from a larger geographic area. Nevertheless, it is one source from which to estimate trip distribution.

<u>General Population Distribution</u>. Population data by city in Southern California from the 2000 Census was analyzed to provide a distribution of population. In order to account for the lower likelihood of traveling longer distances to an event, the distribution also weighted population from cities more than 35 miles from the Project Site by 50 percent. The analysis indicated only small differences between the two overall and weighted distributions. This data also provides a good indication of potential trip distribution as it is based on the general population. Because of the large populations in the San Fernando Valley, the Inland Empire and Orange County, this distribution is less oriented to the Westside of Los Angeles, and because it represents actual population, it is more heavily oriented to the east and south. LACMTA Congestion Management Plan (CMP) Trip Distribution Data. The data from the 2010 CMP showing distribution origins for trips destined to the Central Los Angeles area for non-residential non-work trips (closest category to event/entertainment trips) was analyzed. This distribution was much closer to the zip code data from STAPLES Center and NOKIA Theater at L.A. LIVE than to the general population data, although the data does not represent trips to a major entertainment facility like the Event Center.

Conclusion. It was concluded that the trip distribution of spectator events in the Event Center would be partly similar to the zip code data distribution for STAPLES Center/NOKIA Theater L.A. LIVE patrons (economic base of West LA and the San Fernando Valley) and partly similar to the general population distribution (due to the fact that people are likely to travel longer distances to a football game and larger event, and come from a broader geographic area). The resulting estimated distribution assumptions, shown in Figures 12 and 13 on pages IV.B.1-307 and IV.B.1-308, were therefore a hybrid of these two data sources.

As attendees are expected to be drawn from a large area, they would tend to use freeways rather than surface streets due to the distances travelled. The exception would be to the west of the Event Center, where a number of established major arterial surface streets connect downtown to the Westside of Los Angeles. As these streets are often used to access downtown from the west, it is assumed they would be used to access the Project Site. The percentage of traffic using these streets is assumed to be higher on weekdays, when there is more traffic on the freeway system and when some people take arterial streets instead to avoid congestion.

For comparison purposes, trip distribution assumptions from these sources, as well as and from previous relevant studies in the general area are shown in Table 4.3.1 of the Transportation Study. The trip distribution estimates for the Proposed Project are within the range of the various sources used and present a reasonable estimate of trip distribution for the Proposed Project.

(2) Transit System Trip Distribution

Transit riders were distributed to the available transit lines on the basis of the geographic trip distribution of attendees and the geographic location of the transit service, (rail lines and bus lines).

(3) Convention Center Trip Distribution

The Proposed Project would lead to small increases in existing Convention Center event traffic during the analysis scenario hours. These additional trips were added to the

roadway system using a trip distribution pattern based on the general population distribution in Southern California as discussed above.

9. Future Without Project Conditions

a. Introduction

In order to evaluate the potential traffic impacts of the Proposed Project, it is necessary to first estimate future traffic conditions without the Project. The future traffic forecasts represent the growth in traffic projected to occur between 2011 and 2017, and were estimated using two components of traffic growth in the study area: ambient growth and traffic from related projects. Both of these components are discussed below. After the application of the ambient growth factor, the trip-generation forecasts for the related projects were added to the street network in the study area to obtain traffic forecasts for 2017, representing the future background condition without the Proposed Project. Tables IV.B.1-6 through IV.B.1-8 on pages IV.B.1-198 through IV.B.1-210 provide the V/C ratio and Intersection LOS for all 177 study intersections for all event scenarios for both Existing Conditions and for the Future Without Project Conditions. The Future Without Project traffic volumes are illustrated in Appendix 3 of the Transportation Study in Figures A.3.4.1 through A.3.4.6.

<u>Ambient Traffic Growth</u>. The ambient growth rate represents the residual growth in traffic unrelated to the specific cumulative projects identified below, and that reflects potential minor new developments, as well as growth in traffic passing through the study area. The determination of the ambient growth rate was based on a review of the traffic volume growth factors shown in the most recent CMP for Los Angeles County (*Draft 2010 Congestion Management Program, Los Angeles County Metropolitan Transportation Authority, 2010*). This document identifies traffic volume growth factors for numerous subareas in Southern California based on the most recent travel modeling forecasts prepared by Metro (LACMTA), which also account for planned highway and transit improvements to the regional transportation system.

For the Downtown Los Angeles subarea, these traffic volume growth factors show a total annual growth rate of 0.20 percent per year between 2011 and 2017. Over the period of six years between 2011 and 2017, this annual growth yields a total growth of 1.21 percent. This growth was therefore applied to the 2011 existing traffic volumes to represent regional traffic growth.

<u>Related Projects Trip Generation and Distribution</u>. A total of 140 potential related (cumulative) development projects that could add trips to the Project Study Area were identified for inclusion in the Transportation Study. These related projects are listed in

Section III.B (Overview of Environmental Setting) of this Draft EIR. To provide a conservative (worst case) forecast, the future baseline forecast assumes that all of the related projects are fully built out by 2017, although some of the related projects may not actually be built out by 2017, or may be approved and built at reduced densities.

Trip-generation estimates for the related projects are shown in Table 3.2.2 of the Transportation Study (Appendix I) and summarized below. The trip-generation rates and estimates were generally obtained from the LADOT list of related projects, or from environmental and/or traffic studies for other individual projects. Where the information was not available from these sources, the trip generation was estimated using trip rates in *Trip Generation—8th Edition (Institute of Transportation Engineers, 2008).* The information available for the weekday P.M. peak hour was used to represent the Weekday Evening Pre-Event Hour (4:30–5:30 P.M.). Typically, trip-generation information was not available from the LADOT list or from other studies for the other five time periods being analyzed. For these time periods, trip generation was estimated based on a methodology approved by LADOT, which included using trip rates in *Trip Generation—8th Edition*, and using reasonable assumptions and interpretations and professional judgment. This generally involved estimating the percent of daily trips that would occur in the specific analysis hour, or by using the trip rate for the "peak hour of generator."²¹ The trip rates used in the analysis are presented in Appendix 3 of the Transportation Study.

The Related Projects would generate the following total vehicle trips:

- 205,731 daily Sunday vehicle trips
 - 20,870 vehicle trips in the Sunday Day Pre-Event Hour (12:00–1:00 P.M.)
 - 21,344 vehicle trips in the Sunday Day Post-Event Hour (4:30–5:30 P.M.)
- 288,200 daily Saturday vehicle trips
 - 27,875 vehicle trips in the Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

²¹ ITE trip rates are usually provided for the peak hour of street traffic (A.M. and P.M. peak hour), and the "peak hour of generator"; i.e., the hour of highest trip generation for the land use. For the Saturday and Sunday analysis time periods, this peak hour of generator trip rate was used when considered to appropriately represent the analysis time period, though in some cases may result in a conservatively high estimate. In cases where it was considered that the peak hour of generator rate was not applicable, the trip rate for the analysis time period was based on estimates using similar or comparable land uses, or by estimating the percent of daily trips that would occur in the analysis time period and based on professional judgment from available data from other time periods.

- 27,899 vehicle trips in the Saturday Day Post-Event Hour (4:30–5:30 P.M.)
- 343,710 daily weekday vehicle trips
 - 31,467 vehicle trips in the Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)
 - 18,161 vehicle trips in the Weekday Evening Post-Event Hour (9:00– 10:00 P.M.)

Similarly, trip distribution assumptions for these projects were also taken from previous studies where available, or if not available were estimated based on trip distribution estimates for other similar and comparable projects/studies as well as an understanding of the type of the project and its relation to regional population and employment with respect to trip origins and destinations, and its location with respect to the local roadway and circulation system.

Transit Ridership Growth. Future Without Project transit ridership projections were obtained by applying growth rates of 1 percent per year to each existing transit line as directed by Metro staff. The projected ridership for the Exposition Line was obtained from the Exposition Line Final EIR.

b. Future Base Transportation System Improvements

The Transportation Study incorporated, where appropriate and in coordination with LADOT, the following transportation system improvements that are funded and would occur prior to the future analysis year of 2017. Additional detail regarding these projects can be found in the Transportation Study provided as Appendix I of this Draft EIR.

(1) Transportation Improvements Included in Transportation Study

Harbor Freeway (SR-110) Construction of Auxiliary Lanes (Caltrans): This Caltrans Project, currently under construction, would improve the SR-110 Freeway between the I-10 and 6th Street. On the southbound side, portions would be widened to provide an additional lane between Olympic Boulevard and 11th Street, and a reconfiguration of traffic lanes along this segment. On the northbound side, some widening would also occur to provide an additional lane between Olympic Boulevard and 8th Street and a reconfiguration of the traffic lanes in both the mainline and collector-distributor lanes. These improvements would improve weave/merge areas to/from the freeway on- and off-ramps, and between freeways, and would provide for smoother traffic flows. This project is scheduled for completion in 2013.

Metro Express Lanes (Metro, Caltrans): The Metro Express Lanes Project provides a package of solutions to improve traffic flow and provide enhanced travel options on the I-10 and I-110 freeways. This project would be completed in late 2012.²² It includes the introduction of congestion pricing by converting existing High-Occupancy Vehicle (HOV) lanes to High-Occupancy Toll (HOT) lanes on the I-10 (from the I-605 to Alameda Street) and on the I-110 (from SR-91 to Adams Blvd.) freeways; the improvement of transit services and other alternatives to driving; the updating of transit facilities; and the implementation of a more effective parking management system in Downtown Los Angeles (ExpressPark). The congestion pricing will allow continual adjustment of the tolls according to traffic conditions to maintain free-flowing traffic on the HOT lanes (prices will increase when the HOT lanes are relatively full, and decrease when the lanes are less full). Roadway improvements will include restriping to add a HOT lane on the I-10 between I-605 and I-710; widening and restriping the I-110 off-ramp at Adams Boulevard to create a second right hand turn lane; expanding transit signal priority in Downtown Los Angeles; and creating new access transition lanes between the HOT lanes and general purpose lanes on the I-110. The physical characteristics of this project were included in the analysis where appropriate. The Program will also include purchasing alternative fuel buses, increasing transit service on the Express Lanes, and the formation of new vanpools, as well as a direct connection to Patsaouras Transit Plaza at Union Station.

<u>Adaptive Traffic Control System—ATCS (LADOT)</u>: ATCS is a second generation computer-based traffic signal control system to enhance ATSAC and uses enhanced surveillance and control technologies to adapt traffic signal timing to respond to actual traffic conditions, and to further enhance the effectiveness of the ATSAC system by minimizing the number of stops and the amount of delay throughout the network. LADOT estimates that implementation of this system improves intersection capacity by an additional 3 percent over those operating under the ATSAC system alone. The City has State funding to implement ATCS at all signalized intersections in the city. Per LADOT procedures, all study intersections were assumed to operate with ATCS in the future.

Downtown ExpressPark Program (LADOT): Please refer to Section IV.B.2, Parking, of this Draft EIR, for information regarding this program.

<u>Metro Exposition Line Light Rail (Metro)</u>: The Exposition (Expo) Line is a primarily at-grade light rail project. Phase 1 will run 8.6 miles and connect Downtown and Culver City, sharing a track with the Metro Blue Line from 7th Street/Metro Center Station to Washington Boulevard. It will then run along Flower Street until Exposition Boulevard

²² Metro ExpressLanes Program Fact Sheet, April 2011, Los Angeles Metropolitan Transportation Authority.

where it will turn and run west along the MTA-owned Exposition railroad right-of-way until reaching Venice Boulevard. It will include ten new stations and share two, Pico and 7th Street/Metro Center, with the Blue Line. Phase I of the project will begin service early 2012. Phase II will extend the line to Santa Monica and is scheduled to open in 2015.²³

<u>Wilshire Bus Rapid Transit (BRT) Project (Metro)</u>: The Wilshire BRT project will provide peak period curbside bus-only lanes along a 7.7 mile stretch of Wilshire Boulevard within the City of Los Angeles. The BRT project will include some restriping of traffic lanes, conversion of existing curb lanes to peak period bus lanes in each direction (7 A.M. to 9 A.M. and 4 P.M. to 7 P.M.), lane repaving, traffic signal bus priority upgrades along Wilshire Boulevard, and the installation of traffic/transit signage and paving markings, in order to reduce bus journey times. The Metro Board of Directors approved the 7.7 mile alternative in May 2011. The project is scheduled to open by 2015.²⁴

<u>Metro Gold Line Foothill Light Rail Transit Extension (Metro)</u>: This project will extend the Foothill Gold Line from Pasadena to Montclair in two phases. Phase 2A, scheduled for completion by late 2014,²⁵ will extend the existing line that runs from Union Station to East Pasadena, by 11.5 miles to Azusa, and will add six stations. Phase 2B, scheduled for completion by 2017,²⁶ will extend the Metro Gold Line another 12.6 miles to Montclair and add six more stations.

(2) Transportation Projects <u>Not</u> Included in the Transportation Analysis

A number of other potential transportation improvements are planned in the Downtown area, but are not planned for completion until after 2017, or are not yet approved, finally defined, or fully funded. Therefore, these projects were <u>not</u> included in the traffic analysis. However, these projects are listed below for informational purposes and described further in the Transportation Study contained as Appendix I of this Draft EIR:

Regional Connector Transit Corridor (Metro): A 1.9-mile underground light-rail transit line that will connect the Metro Gold Line to the Metro Blue Line and the soon-to-be

²³ 2009 Long Range Transportation Plan, Los Angeles County Metropolitan Transportation Authority, 2010.

²⁴ Refer to Appendix I.1 - Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 3-30.

²⁵ Metro Gold Line Foothill Extension Construction Authority, www.foothillextension.org/construction_ phases/pasadena_to_azusa/, accessed on March 23, 2012.

²⁶ Metro Long Range Transportation Plan, 2009.

completed Metro Expo Line, with new stations at 2nd Street/Flower Street, and at 2nd Street/Broadway/Spring Street. This will enable the provision of continuous service between the Blue/Exposition Lines and the Gold Line through Downtown, and will improve the connectivity of the regional transit system and improve access to Downtown from the region. Metro expects completion of this project by 2019.

Los Angeles Streetcar (Restoration of Historic Streetcar Service in Downtown Los Angeles) (CRA/Metro/Los Angeles Streetcar Inc.): This project to restore historic streetcar service in Downtown is currently being studied and could connect the various Downtown areas with L.A. LIVE and the Los Angeles Convention Center. At this time the project is not fully funded, and an alignment has not been determined. While there is no scheduled date for completion, the earliest that the line could be open is projected to be 2015.

<u>City of Los Angeles Bicycle Plan (City of Los Angeles)</u>: This Plan was adopted as a component of the Transportation Element of the City's General Plan and recommends bike lanes along Figueroa Street, Flower Street, Main Street, 7th Street, Venice Boulevard, and certain segments of Pico and Washington Boulevards in Project area. Please refer to Section IV.B.3 regarding bicycle circulation in this Draft EIR for further detail.

Figueroa Corridor Streetscape Project (CRA/LA): This is a project to study, identify, and implement streetscape improvements along Figueroa Street between 7th Street and Exposition Boulevard (41st Street) to enhance pedestrian, bicycle and transit facilities. While this Project is funded with \$30 million from Proposition 1C and other grants, there is currently no final recommended or adopted plan, or street configuration for Figueroa Street, 11th Street, or Gilbert Lindsay Plaza, and therefore it could not be included in this analysis.

c. Intersection LOS—Future (2017) Without Project

The Future Without Project traffic forecasts were evaluated to determine the V/C ratio and LOS for the analyzed intersections in 2017 for the six analysis time periods. The results are shown in Tables IV.B.1-6, IV.B.1-7, and IV.B.1-8 on pages IV.B.1-198, IV.B.1-204, and IV.B.1-210 for the Sunday, Saturday and Weekday periods respectively, which summarize the Future Without Project intersection LOS in comparison to the Existing Conditions LOS. The analysis includes any changes to intersection lane configurations and/or traffic signal management systems (e.g., addition of ATCS) that would occur by 2017, as previously discussed. The findings of these tables are summarized below for the Future Without Project conditions:

Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

The majority of studied intersections (166) would continue to operate at LOS A during the Sunday Day Pre-Event Hour (12:00–1:00 P.M.) for the Future Without Project, with seven intersections expected to operate at LOS B, two at LOS C and two at LOS D in 2017.

Sunday Day Post-Event Hour (4:30–5:30 P.M.)

The majority of studied intersections (162) would continue to operate at LOS A during the Sunday Day Post-Event Hour (4:30–5:30 P.M.) with eleven expected to operate at LOS B, two at LOS C and two at LOS D in 2017.

Saturday Day Pre-Event Hour (12:00–1:00 р.м.)

The majority of studied intersections (136) would continue to operate at LOS A during the Saturday Day Pre-Event Hour (12:00–1:00 P.M.) in 2017. Nearly one-fifth of the intersections would operate at LOS B and LOS C. The following three intersections are forecasted to operate at either LOS E or LOS F, with the future LOS shown in parentheses:

63.	Figueroa Street & Adams Boulevard	(LOS E)
164.	Vermont Avenue & I-10 EB Ramps	(LOS E)
146.	Vermont Avenue & Olympic Boulevard	(LOS F)

Saturday Day Post-Event Hour (4:30–5:30 P.M.)

The majority of the studied intersections (138) would continue to operate at LOS A during the Saturday Day Post-Event Hour (4:30–5:30 P.M.) in 2017. Nearly one-fifth would operate at LOS B and LOS C. The one intersection that is expected to operate at LOS E is as follows:

63. Figueroa Street & Adams Boulevard (LOS E)

Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

While traffic conditions would worsen in the future due to the additional traffic growth, the majority of intersections would continue to operate at LOS D or better during the Weekday Evening Pre-Event Hour in 2017. Nine intersections would operate at LOS E and ten intersections would operate at LOS F as listed below:

3.	Figueroa Street & Olympic Boulevard	(LOS E)
96.	Figueroa Street & 6th Street	(LOS E)
111.	Grand Avenue & 1st Street	(LOS E)
119.	Grand Avenue & US-101 NB Ramps	(LOS E)
139.	Normandie Avenue & Wilshire Boulevard	(LOS E)
144.	Western Avenue & Olympic Boulevard	(LOS E)
146.	Vermont Avenue & Olympic Boulevard	(LOS E)
158.	Hoover Street & Venice Boulevard	(LOS E)
161.	Vermont Avenue & Washington Boulevard	(LOS E)
9.	Main Street & Olympic Boulevard	(LOS F)
32.	Main6 Street & Pico Boulevard	(LOS F)
63.	Figueroa Street & Adams Boulevard	(LOS F)
86.	Bixel Street & 8th Street	(LOS F)
88.	Figueroa Street & 8th Street	(LOS F)
93.	Figueroa Street & Wilshire Boulevard	(LOS F)
102.	Figueroa Street & 5th Street	(LOS F)
120.	Beaudry Avenue & Sunset Boulevard	(LOS F)
132.	Glendale Boulevard & Temple Street	(LOS F)
140.	Vermont Avenue & Wilshire Boulevard	(LOS F)

Weekday Evening Post-Event Hour (9:00-10:00 P.M.)

Virtually all of the studied intersections would continue to operate at LOS A during the Weekday Evening Post-Event Hour (9:00–10:00 P.M.) with only one intersection (Vermont & Olympic) expected to operate at LOS B in 2017.

d. Freeway Segments—Future (2017) Without Project

Sunday Day Pre-Event Hour (12:00–1:00 Р.м.)

A total of 17 freeway locations are expected to operate at LOS D or better with the remaining three locations expected to operate at LOS E. One location would operate at LOS E (US-101 South of Vermont Avenue), the same as under Existing Conditions. Two locations (US-101 at Glendale Boulevard and I-5 South of Stadium Way) would worsen from LOS D to LOS E.

Sunday Day Post-Event Hour (4:30–5:30 р.м.)

Under Future Without Project conditions, a total of 18 freeway locations are expected to operate at LOS D or better. The remaining two mainline locations (SR-110 NB

between James M. Wood Boulevard and Olympic Boulevard Northbound, and I-5 South of Stadium Way) would operate at LOS E.

Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

A total of 18 freeway locations are expected to continue to operate at LOS D or better, with the remaining two locations operating at LOS E (US-101 South of Vermont Avenue and I-5 South of Stadium Way).

Saturday Day Post-Event Hour (4:30–5:30 P.M.)

A total of 16 freeway locations would operate at LOS D or better, with three of the remaining locations expected to operate at LOS E and one location expected to operate at LOS F (SR-110 NB between James M. Wood Boulevard and Olympic Boulevard).

Weekday Evening Pre-Event Hour (4:30–5:30 Р.м.)

Three freeway mainline locations and all three freeway HOV locations are expected to continue to operate at LOS D or better. Three mainline locations are expected to operate at LOS E and eleven mainline locations are expected to operate at LOS F (eight at LOS F(0), two at LOS F(1), and one at LOS F(3)).

Weekday Evening Post-Event Hour (9:00–10:00 р.м.)

All twenty freeway locations are expected to continue to operate at LOS D or better in the Weekday Evening Post-Event Hour.

e. Transit—Future (2017) Without Project

Known future changes to transit service were incorporated for the 2017 Future Without Project scenario. This information was obtained from the transit agencies, and included known changes in transit lines or frequencies of service (e.g., service reductions or line eliminations, along with expected additional service), as well as the introduction of any new service. Most notably, it included the addition of the Metro Exposition Line from downtown Los Angeles to Santa Monica which is scheduled to begin service in 2015.

Future ridership projections were obtained by applying growth rates of 1 percent per year to each existing transit line as directed by Metro staff. The projected ridership for the Exposition Line was obtained from the Exposition Line Final Environmental Impact Report.²⁷

Ridership and capacities for Future Without Project conditions are provided in the Transportation Study (see Appendix I of this Draft EIR) in the following Tables: Tables 5.1.2.2 and 5.1.2.3 for the Sunday Pre-Event and Post-Event hours, respectively; Tables 5.2.2.1 and 5.2.2.2 for the Saturday Pre-Event and Post-Event Hours, respectively; and Tables 5.3.2.1 and 5.3.2.2 for the Weekday Pre-Event and Post-Event hours, respectively.

Overall, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 17,460 riders in the Sunday Pre-Event Hour and 18,199 riders in the Sunday Post-Event Hour. For Saturday, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 19,139 riders in the Saturday Pre-Event Hour and 19,308 riders in the Saturday Post-Event Hour (slightly higher than for a Sunday Post-Event Hour). The transit system operates the most intensive schedules on weekday peak periods, so system capacity is at its highest during the Weekday Pre-Event Hour. Overall, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 37,248 riders in the Weekday Pre-Event Hour. Because the transit system operates reduced schedules on weekday nights, system capacity is lower than for the Weekday Post-Event Hour with a projected passenger-carrying capacity of 9,225 riders in the Weekday Post-Event Hour.

f. Congestion Management Plan—Future (2017) Without Project

The 2017 Future Without Project base freeway traffic volumes were projected by increasing existing volumes by the regional growth factors discussed in subsection IV.B.1.8.1 above. These future base volumes, along with D/C ratios and levels of service, are also shown in Table 5.4.2.1 of the Transportation Study (see Appendix I of this Draft EIR).

²⁷ Exposition Corridor Transit Project Phase 2, Final Environmental Impact Report, Exposition Metro Line Construction Authority, December 2009 Refer to Appendix I.1, Tables 5.1.2.2, 5.1.2.2a, 5.1.2.2b, 5.1.2.3, 5.1.2.3a, and 5.1.2.3b, pages 5-19 to 5-22.

10. 2017 Future With Project Condition

a. Introduction

This section addresses potential transportation impacts of the Proposed Project for the 2017 Future With Project Condition for the Pre-Event Hour and Post-Event Hour for each of the three key event scenarios (Sunday Day, Saturday Day, and Weekday Evening). This impact analysis addresses potential impacts of the 2017 Future with Project Condition on the 177 study intersections, the transit system, freeways, and Congestion Management Plan. The methodologies used for all event scenarios are described in Section IV.B.1.3 of this Draft EIR. The significant impact criteria/thresholds used to determine level of significance of impacts are described in Section IV.B.1.6.

Table IV.B.1-11 on page IV.B.1-218 provides a Project Impact Summary of the 2017 Future with Project Condition for each event scenario and includes the following: the number of intersections affected and their LOS for the year 2017 for both the With Project and Without Project Conditions; a summary of key impact locations or issues; impacts on Transit, Parking, Pedestrian Circulation, Freeway Segments, and Freeway On- and Off-Ramps; and CMP Impacts.

The transportation impact analysis of the Proposed Project is conservative for a number of reasons. The Future Without Project scenario includes a long list of cumulative/related development projects that may never be built or may be built at much reduced levels and/or densities. The actual future traffic volumes may therefore be lower than the conservatively high traffic forecasts identified for the Future Without Project conditions identified above if future developments are not built as identified. The analysis also assumes that none of the cumulative/related development projects would implement any mitigation or trip reduction measures. In fact, it is likely that, if approved, the decision-makers would impose mitigation requirements.

The proportion of Event Center attendees using public transportation is considered to be lower than is expected to actually occur, for purposes of preparing a conservative analysis. Due to the proposed trip reduction programs that would be implemented to increase transit use and auto occupancies and to address the requirements of SB 292, the number of actual auto trips associated with Event Center spectator events would be less than the levels identified above. Therefore the traffic impacts on the freeway system and the surface street system would be less than identified in the following conservative analysis.

The analysis conservatively assumes that 50 percent of attendees would arrive in the one hour before an event and 75 percent would depart in the one hour following an

event. It is anticipated that arrivals and departures would be more spread out over time, partly because of the wide range of other activities in the area including restaurants and bars, and because there may be other pre-game and post-game entertainment. These would provide a game day experience for patrons and reduce the trip peaking characteristics, similar to the existing experience with L.A. LIVE for STAPLES Center and NOKIA Theater. Therefore, the actual number of auto trips in any given hour are likely to be lower, in which case the traffic impacts would be correspondingly lower as well.

It should also be noted that event centers (stadiums) by their nature do not operate on a regular daily basis at fixed times, unlike most other land uses, which have predictable and regular daily and temporal activity and travel patterns. Event centers stage events for large numbers of people only every so often. Because stadiums provide capacity for large numbers of people to gather, they create high peaks of travel demand which typically cause temporary "peaked" impacts for a short period of time on the transportation system. Further, it is not practical or feasible to provide additional freeway or roadway infrastructure improvements just to handle event traffic for short periods of time. Transportation impacts at event centers and stadiums due to these temporarily high peaks are therefore normal, are typically expected, and are generally accepted by event attendees. The prevailing strategy at event centers and stadiums around the country is to reduce such impacts to the extent feasible through transportation management measures.

Traffic impacts are generally evaluated on accepted principles against thresholds for significant impacts (and in the City of Los Angeles specifically per LADOT guidelines, which are similar to many other jurisdictions). These thresholds were developed for typical development projects and for land uses that have more predictable and regular daily and temporal activity and travel patterns. These thresholds are not necessarily directly applicable to, or transferable to, event centers. Arguably, different thresholds should apply for the reasons described above. Nevertheless, rather than developing new thresholds, the traffic analysis used the City's standard thresholds for significant impacts. In that context the analysis is considered to be very conservative.

The conclusions of this conservative traffic analysis are summarized below and organized by each of the three event scenarios analyzed, beginning with the Sunday Day Event. Within each event scenario, the analysis is documented for both the Pre-Event Hour and the Post-Event Hour. Where intersections are listed, the resultant LOS is also shown in parenthesis. Where freeway segments are listed, the resultant direction, D/C ratio, and LOS are shown in parentheses.

b. Sunday Day Event, Future With Project

This event scenario represents a Sunday daytime event, typically an NFL game, starting at 1:00 P.M. and ending at 4:30 P.M. This would be the most common event scenario as the majority of events would occur on a Sunday. The analysis addresses the Pre-Event hour (12:00–1:00 P.M.) when all Project-related travel would be inbound, and the Post-Event hour (4:30–5:30 P.M.) when all Project-related travel would be outbound.

(1) Roadway Intersections, Future With Project

Traffic forecasts for the Future Without Project conditions are described in Section IV.B.1.8 of this Draft EIR and forecasts of traffic that would be generated by the Proposed Project are described in Section IV.B.1.7. The Project-Only traffic volumes forecast at the study intersections are shown in Appendix 5 of the Transportation Study on Figure A.5.1.1.1 for the Sunday Day Pre-Event Hour and Figure A.5.1.1.2 for the Sunday Day Post-Event Hour. The future total traffic volumes for the study intersections are shown in Appendix A in Figure A.5.1.1.3 for the Sunday Day Pre-Event Hour and Figure A.5.1.1.4 for the Sunday Day Post-Event Hour.

The potential impacts of the Proposed Project on the street system were evaluated by analyzing these forecast conditions and comparing projected levels of service at the study intersections for the Future Without Project and Future With Project conditions, to identify any significant impacts to levels of service.

The intersection level of service analysis for the Future With Project conditions is summarized in Table IV.B.1-12 on page IV.B.1-225 and discussed below. Table IV.B.1-12 compares the level of service for Future Without Project and Future With Project conditions, shows the increase in V/C ratio at each intersection due to the Proposed Project, and identifies significant impacts according to LADOT criteria. The locations of significant impacts at study intersections are shown in Figure IV.B.1-14 on page IV.B.1-309 and Figure IV.B.1-15 on page IV.B.1-310 for the Pre-Event and Post-Event Hours, respectively.

(a) Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following 11 intersections in the Sunday Day Pre-Event Hour.

35.	Blaine Street & 11th Street	(LOS C)
88.	Figueroa Street & 8th Street	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)

164.	Vermont Avenue & I-10 EB Ramps	(LOS C)
43.	Hill Street & 17th Street	(LOS D)
44.	Broadway & 17th Street	(LOS D)
45.	Main Street & 17th Street	(LOS D)
46.	Los Angeles Street & 17th Street	(LOS D)
152.	Alvarado Street & Pico Boulevard	(LOS D)
42.	Olive Street & 17th Street	(LOS E)
146.	Vermont Avenue & Olympic Boulevard	(LOS E)

Of the 11 impacted intersections listed above, nine will continue to operate at LOS D or better, and two would operate at LOS E with the Proposed Project. Half of the impacted intersections, including the LOS E locations, would be located along 17th Street leading from the I-10 westbound off-ramp at Los Angeles Street.

(b) Sunday Day Post-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 18 intersections in the Sunday Day Post-Event Hour.

51.	Broadway & 18th Street	(LOS C)
78.	Figueroa Street & Martin Luther King Jr. Boulevard	(LOS C)
79.	I-110 SB Ramps & Martin Luther King Jr. Boulevard	(LOS C)
111.	Grand Avenue & 1st Street	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)
158.	Hoover Street & Venice Boulevard	(LOS C)
163.	I-10 WB Ramps & 20th Street	(LOS C)
52.	Main Street & 18th Street	(LOS D)
119.	Grand Avenue & US-101 NB Ramps	(LOS D)
144.	Western Avenue & Olympic Boulevard	(LOS D)
146.	Vermont Avenue & Olympic Boulevard	(LOS D)
152.	Alvarado Street & Pico Boulevard	(LOS D)
153.	Union Avenue & Pico Boulevard	(LOS D)
43.	Hill Street & 17th Street	(LOS E)
166.	Hill Street & 16th Street	(LOS E)
35.	Blaine Street & 11th Street	(LOS F)
50.	Hill Street & 18th Street	(LOS F)
53.	Los Angeles Street & 18th Street	(LOS F)

Of the 18 impacted intersections listed above, 13 would operate at LOS D or better, two would operate at LOS E, and three intersections (Blaine Street & 11th Street, Hill

Street & 18th Street, and Los Angeles Street & 18th Street) would operate at LOS F with the Proposed Project. One-third of the impacted intersections, including most of the LOS E and LOS F intersections, would be located on Hill Street near the I-10 freeway and along 18th Street leading to the I-10 eastbound on-ramp at Los Angeles Street.

(2) Transit Facilities, Future With Project

(a) Sunday Pre-Event Hour (12:00–1:00 P.M.)

The transit system analysis for the Sunday Pre-Event Hour shows ridership and capacities for existing conditions, ridership and capacities for Future Without Project conditions, and projected additional transit trips due to the Proposed Project, and then compares ridership and system capacity for the Future with Project conditions (refer to Table 5.1.2.2 in the Transportation Study). The information is presented for each rail line that would carry Proposed Project trips, and by the three main categories of bus service (Rapid Bus, Express Bus, and Local Bus) and summarized below.

The transit system operates reduced schedules at weekends, so system capacity is lower than on weekdays. Overall, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 17,460 riders in the Sunday Pre-Event Hour. The total ridership in the Sunday Pre-Event Hour (including 5,400 trips from the Proposed Project) would be 14,078 riders. Therefore, there would be sufficient overall transit capacity to accommodate the Proposed Project in the Sunday Day Pre-Event Hour. However, the policy load factors (capacities) would be slightly exceeded on the Blue line, the Metrolink, the Silver Line (both directions), and Express buses, as shown in the list below. This is considered a potentially significant impact.

The list below also shows the additional number of rail transit cars or buses that would be needed to meet the policy load factors. For rail transit, this is presented as additional rail cars rather than trains in order to provide future flexibility (additional rail cars could be provided by either adding cars to existing scheduled trains or by adding whole trains).

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Blue Line	3
Metrolink	1
Metro Silver Line (South)	2
Metro Silver Line (North)	2
Express Bus	2

In conclusion, there would be significant transit impacts on five lines during the Sunday Pre-Event Hour. These impacts could therefore be reduced to less than significant by relatively small increases in transit service as shown above, and as detailed in Section IV.B.1.16 (Project Design Features and Mitigation Measures) of this Draft EIR.

(b) Sunday Post Event Hour (4:30–5:30 P.M.)

The transit system analysis for the Sunday Post-Event Hour is provided in Table 5.1.2.3 of the Transportation Study and summarized below. Overall, the transit system serving the Proposed Project would have a projected passenger-carrying capacity of 18,199 riders in the Sunday Post-Event Hour. The total ridership in the Sunday Post-Event Hour (including 8,460 trips from the Proposed Project) would be 17,095. Therefore, there would be sufficient overall capacity to accommodate the Proposed Project. However, the policy load factors (capacities) would be exceeded on the Red, Blue, and Expo lines, the Metrolink, the Silver Line (both directions), and on Rapid and Express buses, as shown below. This is considered a potentially significant impact on these facilities.

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	6
Metro Blue Line	8
Expo Line	1
Metrolink	2
Metro Silver Line (South)	3
Metro Silver Line (North)	3
Rapid Bus	1
Express Bus	3

The list below also shows the additional number of rail transit cars or buses that would be needed to meet the policy load factors.

Additional capacity could be provided during the Sunday Post-Event Hour, and these impacts could therefore be reduced to less than significant by relatively small increases in transit service as shown above, and as detailed in Section IV.B.1.16 (Project Design Features and Mitigation Measures) of this Draft EIR.

(3) Freeway Future With Project

Traffic volumes generated by the Proposed Project were assigned to the freeway system based on the trip distribution described for the Proposed Project, to obtain forecasts

of total traffic for the Future With Project Conditions. The LOS and D/C data for each analyzed Project Freeway Segment are provided in Tables 5.1.5.3 and Table 5.1.5.4 of the Transportation Study for the Pre- and Post-Hour Events, respectively, for the Future With Project Sunday Day scenario. The conclusions of this analysis are provided below.

(a) Freeway Segments

(i) Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

Of the 20 freeway locations analyzed, a total of 12 would operate at LOS D or better, four would operate at LOS E, and four would operate at LOS F(0) with the Proposed Project. Three of the locations that would operate at LOS F(0) would operate at LOS E without the Proposed Project. Therefore, the Proposed Project would result in a significant traffic impact at the following four freeway mainline locations in the Sunday Day Pre-Event hour.

SR-110 North of Alpine Street (SB)	(1.005)	F(0)
I-5 South of Stadium Way (SB)	(1.040)	F(0)
US-101 at Glendale Boulevard (SB)	(1.094)	F(0)
US-101 South of Vermont Avenue (SB)	(1.180)	F(0)
	SR-110 North of Alpine Street (SB) I-5 South of Stadium Way (SB) US-101 at Glendale Boulevard (SB) US-101 South of Vermont Avenue (SB)	SR-110 North of Alpine Street (SB)(1.005)I-5 South of Stadium Way (SB)(1.040)US-101 at Glendale Boulevard (SB)(1.094)US-101 South of Vermont Avenue (SB)(1.180)

The D/C ratio would be less than 1.10 at three of the four impacted freeway locations, and would be between 1.10 and 1.20 at the one remaining location.

(ii) Sunday Day Post-Event Hour (4:30–5:30 P.M.)

With the Proposed Project, eight of the freeway locations would operate at LOS D or better, three would operate at LOS E, and nine would operate at LOS F(0). Two of these LOS F(0) locations would operate at LOS E without the addition of Proposed Project traffic. In summary, the Proposed Project would result in a significant traffic impact at the following nine freeway mainline locations in the Sunday Day Post-Event Hour.

12a.	I-110 at Vernon Avenue (Mainline) (SB)	(1.010)	F(0)
15.	I-5 South of Stadium Way (NB)	(1.013)	F(0)
4N.	SR-110 Between James M. Wood Blvd & Olympic Blvd. (NB)	(1.059)	F(0)
1.	I-10 West of Vermont Avenue (WB)	(1.060)	F(0)
14.	US-101 South of Vermont Avenue (NB)	(1.072)	F(0)
7.	US-101 North of Vignes Street (SB)	(1.081)	F(0)
10.	I-5 West of Indiana Street (SB)	(1.121)	F(0)
8.	US-101 at Glendale Boulevard (NB)	(1.138)	F(0)
5.	SR-110 South of US-101 (NB)	(1.243)	F(0)

The D/C ratio would be less than 1.10 at six of the nine impacted freeway locations, between 1.10 and 1.20 at two locations, and greater than 1.2 at the one remaining location.

(b) Freeway Off-Ramps

As noted previously, a total of 23 freeway off-ramps were identified for analysis as locations that could be used by Proposed Project traffic (see Figure IV.B.1-9 on page IV.B.1-304). Proposed Project traffic would only be added to the freeway off-ramps during the Pre-Event Hour (inbound traffic traveling to the Event Center). The freeway off-ramp analysis for the Existing Conditions, Future Without Project, and Future With Project scenarios is summarized in Table 5.1.5.5 of the Transportation Study (see Appendix I of this Draft EIR). The distributed nature of the parking supply in the downtown area would allow incoming traffic to use many different off-ramps to access parking locations.

(i) Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

Although the traffic queues on the majority of the off-ramps would not exceed the storage capacities of the ramps for the Sunday Day Pre-Event Hour, the Proposed Project would result in a significant traffic impact at four freeway off-ramps in the Sunday Day Pre-Event peak hour. At three locations, the 85th percentile queue would exceed the storage capacity of an individual lane, and at one location it would exceed the overall capacity of the ramp.²⁸ The four off-ramps are as follows, with the type of significant impact shown in parentheses:

3.	I-10: Los Angeles Street WB Off-Ramp	(Mainline)
2.	US 101: Grand Avenue NB Off-Ramp	(Lane)
13.	SR 110: 9th Street NB Off-Ramp	(Lane)
15.	I -10: Hoover Street EB Off-Ramp	(Lane)

(c) Freeway On-Ramps

(i) Sunday Day Post-Event Hour (4:30–5:30 P.M.)

As noted previously, a total of 26 freeway on-ramp locations were identified for analysis as locations that could be used by Proposed Project traffic (see Figure IV.B.1-10 on page IV.B.1-305). There are on-ramps that could be used to egress the distributed parking zones. Project traffic would only be added to the on-ramps during the post-event

²⁸ At ramp locations where the 85th percentile queue would back into the mainline, any "lane" impacts are not noted as they are included in the impact to the mainline.

hour (outbound traffic leaving the Event Center). The freeway on-ramp level of service analysis for the Existing Conditions, Future Without Project, and Future With Project scenarios is summarized in Table 5.1.5.6 in the Transportation Study (see Appendix I), which also shows the ramp capacities and the ramp volumes during the Sunday Day Post-Event Hour.

The Proposed Project would result in a significant traffic impact at the following seven freeway on-ramps during the Sunday Day Post-Event hour. At three of these locations, volumes would exceed ramp capacities by less than 10 percent.

- 3. I-10: Los Angeles Street EB On-Ramp
- 11. I-10: Washington Boulevard SB On-Ramp
- 12. SR 110: Blaine Street SB On-Ramp
- 13. SR 110: 8th Street SB On-Ramp
- 23. SR 110: 5th Street NB On-Ramp
- 24. SR 110: 8th Street NB On-Ramp
- 26. SR 110: 11th Street NB On-Ramp

c. Saturday Day Event, Future With Project

This event scenario represents a Saturday Daytime event, potentially an NFL game or other major event, typically starting at 1:00 P.M. and ending at 4:30 P.M. This scenario would represent the highest combination of event attendance and background traffic on the roadway system on a Saturday. The analysis addresses the pre-event hour (12:00–1:00 P.M.) when all Project-related travel would be inbound, and the post-event hour (4:30–5:30 P.M.) when all Project-related travel would be outbound.

(1) Roadway Intersections, Future With Project

The Project-Only traffic volumes forecast at the study intersections are shown in Appendix 5 of the Transportation Study in Figure A.5.2.1.1 for the Saturday Day Pre-Event Hour and Figure A.5.2.1.2 for the Saturday Day Post-Event Hour. The total traffic volumes forecast for the analysis locations are also shown in Figure A.5.2.1.3 for the Saturday Day Pre-Event Hour and Figure A.5.2.1.4 for the Saturday Day Post-Event Hour.

The intersection level of service analysis for the Future With Project conditions is summarized in Table IV.B.1-13 on page IV.B.1-239 and discussed below. The locations of significant impacts at study intersections are shown in Figure IV.B.1-16 on page IV.B.1-311 and Figure IV.B.1-17 on page IV.B.1-312 for the Pre-Event and Post-Event Hours, respectively.

(a) Saturday Pre-Event Hour (12:00–1:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following 31 intersections in the Saturday Day Pre-Event Hour.

6.	Olive Avenue & Olympic Boulevard	(LOS C)
35.	Blaine Street & 11th Street	(LOS C)
67.	Hill Street & Adams Boulevard	(LOS C)
89.	Flower Street & 8th Street	(LOS C)
94.	Lucas Avenue & 6th Street	(LOS C)
123.	Spring Street & Cesar Chavez Avenue	(LOS C)
132.	Glendale Boulevard & Temple Street	(LOS C)
138.	Western Avenue & Wilshire Boulevard	(LOS C)
148.	Union Avenue & Olympic Boulevard	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)
157.	Vermont Avenue & Venice Boulevard	(LOS C)
158.	Hoover Street & Venice Boulevard	(LOS C)
162.	Hoover Street & Washington Boulevard	(LOS C)
166.	Hill Street & 16th Street	(LOS C)
3.	Figueroa Street & Olympic Boulevard	(LOS D)
65.	I-110 NB Off-Ramp & Adams Boulevard	(LOS D)
147.	Alvarado Street & Olympic Boulevard	(LOS D)
161.	Vermont Avenue & Washington Boulevard	(LOS D)
165.	Hoover Street & I-10 EB Ramps	(LOS D)
170.	San Pedro Street & 16th Street	(LOS D)
4.	Flower Street & Olympic Boulevard	(LOS E)
33.	Blaine Street & Olympic Boulevard	(LOS E)
88.	Figueroa Street & 8th Street	(LOS E)
152.	Alvarado Street & Pico Boulevard	(LOS E)
164.	Vermont Avenue & I-10 EB Ramps	(LOS E)
42.	Olive Street & 17th Street	(LOS F)
43.	Hill Street & 17th Street	(LOS F)
44.	Broadway & 17th Street	(LOS F)
45.	Main Street & 17th Street	(LOS F)
46.	Los Angeles Street & 17th Street	(LOS F)
146.	Vermont Avenue & Olympic Boulevard	(LOS F)

Of the 31 impacted intersections, 20 would operate at LOS D or better with the Proposed Project, five would operate at LOS E, one of which would also operate at LOS E without the Proposed Project (Vermont Avenue & I-10 EB Ramps), and six would operate at LOS F with the Proposed Project, one of which would operate at LOS F without the Proposed Project (Vermont Avenue & Olympic Boulevard). Seven of the impacted

intersections, and virtually all of the LOS F locations, would be along the 17th Street corridor leading from the I-10 westbound off-ramp at Los Angeles Street. Four intersections would be at the end of off-ramps (San Pedro Street, Adams Boulevard, Vermont Avenue, and Hoover Street). Seven of the impacted intersections would be in the downtown area. The remaining 13 impacted intersections would be located on arterial roadways approaching downtown, of which 11 would operate at LOS D or better.

(b) Saturday Post-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 36 intersections in the Saturday Day Post-Event Hour.

30.	Hill Street & Pico Boulevard	(LOS C)
38.	Flower Street & Venice Boulevard	(LOS C)
41.	Grand Avenue & 17th Street	(LOS C)
54.	Figueroa Street & Washington Boulevard	(LOS C)
78.	Figueroa Street & Martin Luther King Jr. Boulevard	(LOS C)
79.	I-110 SB Ramps & Martin Luther King Jr. Boulevard	(LOS C)
81.	Georgia Street & 9th Street	(LOS C)
88.	Figueroa Street & 8th Street	(LOS C)
129.	Hill Street & College Avenue	(LOS C)
144.	Western Avenue & Olympic Boulevard	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)
153.	Union Avenue & Pico Boulevard	(LOS C)
170.	San Pedro Street & 16th Street	(LOS C)
176.	Arlington Avenue & Venice Boulevard	(LOS C)
1.	Georgia Street & Olympic Boulevard	(LOS D)
3.	Figueroa Street & Olympic Boulevard	(LOS D)
4.	Flower Street & Olympic Boulevard	(LOS D)
33.	Blaine Street & Olympic Boulevard	(LOS D)
93.	Figueroa Street & Wilshire Boulevard	(LOS D)
111.	Grand Avenue & 1st Street	(LOS D)
132.	Glendale Boulevard & Temple Street	(LOS D)
147.	Alvarado Street & Olympic Boulevard	(LOS D)
158.	Hoover Street & Venice Boulevard	(LOS D)
162.	Hoover Street & Washington Boulevard	(LOS D)
163.	I-10 WB Ramps & 20th Street	(LOS D)
37.	Figueroa Street & Venice Boulevard	(LOS E)
146.	Vermont Avenue & Olympic Boulevard	(LOS E)
152.	Alvarado Street & Pico Boulevard	(LOS E)
35.	Blaine Street & 11th Street	(LOS F)
43.	Hill Street & 17th Street	(LOS F)

50.	Hill Street & 18th Street	(LOS F)
51.	Broadway & 18th Street	(LOS F)
52.	Main Street & 18th Street	(LOS F)
53.	Los Angeles Street & 18th Street	(LOS F)
119.	Grand Avenue & US-101 NB Ramps	(LOS F)
166.	Hill Street & 16th Street	(LOS F)

Of the 36 impacted intersections, 25 would operate at LOS D or better with the Proposed Project, three would operate at LOS E, and the remaining eight would operate at LOS F. Ten of the impacted intersections, including virtually all of the LOS F intersections, would be located along the I-10 corridor on the south end of downtown between Figueroa Street and San Pedro Street, primarily with outbound traffic accessing the I-10 eastbound freeway. Eleven of the impacted intersections would be on arterials serving the downtown area, and the remaining 15 intersections would be on arterials serving the downtown area, with the majority of these intersections operating at LOS D or better.

(2) Transit, Future With Project

(a) Saturday Pre-Event Hour (12:00–1:00 P.M.)

The transit system analysis for the Saturday Pre-Event Hour is summarized in Table 5.2.2.1 in the Transportation Study and summarized below. As was discussed for Sunday Events, the transit system operates reduced schedules at weekends, so system capacity is lower than on weekdays. Overall, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 19,139 riders in the Saturday Pre-Event Hour (slightly higher than for a Sunday Pre-Event Hour). The total ridership in the Saturday Pre-Event Hour (including 5,400 trips from the Proposed Project) would be 17,406 riders. Although there would be sufficient capacity overall to accommodate the Proposed Project, the policy load factors (capacities) would be slightly exceeded on the Red and Blue lines, the Silver Line (both directions), and on Express and Local buses, as shown below. These impacts are considered potentially significant.

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	1
Metro Blue Line	4
Metro Silver Line (South)	1
Metro Silver Line (North)	1
Rapid Bus	1
Express Bus	1

These impacts could be reduced to less than significant by relatively small increases in transit service as shown above and as detailed in Section IV.B.1.16 (Project Design Features and Mitigation Measures) of this Draft EIR.

(b) Saturday Post Event Hour (4:30–5:30 P.M.)

The transit system analysis for the Saturday Post-Event Hour is summarized in Table 5.2.2.2 in the Transportation Study and summarized below. Overall, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 19,308 riders in the Saturday Post-Event Hour (slightly higher than for a Sunday Post-Event Hour). The total ridership in the Saturday Post-Event Hour, including 8,460 trips from the Proposed Project, would be 18,455 riders. Although there would be sufficient capacity overall to accommodate the Proposed Project, the policy load factors (capacities) would be exceeded on the Metro Red, Blue, and Expo lines, the Silver Line (both directions), the Metrolink, and on Express buses, as shown below. These impacts are considered potentially significant:

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	5
Metro Blue Line	9
Expo Line	1
Metrolink	1
Metro Silver Line (South)	2
Metro Silver Line (North)	2
Express Bus	2

These impacts would occur during reduced transit schedules on weekends, when additional capacity could be provided during the Saturday Post-Event Hour. Therefore, these impacts could be reduced to less than significant by relatively small increases in transit service as shown above and as detailed in Section IV.B.1.16 (Project Design Features and Mitigation Measures) of this Draft EIR.

(3) Freeways, Future With Project

(a) Freeway Segments

The freeway segment analysis is summarized in Tables 5.2.5.1 and 5.2.5.2 of the Transportation Study (see Appendix I), which show the LOS and D/C ratios for Existing Conditions, Future Without Project and Future With Project Conditions for the Saturday Day Pre-Event Hour and the Saturday Day Post-Event Hour, respectively.

(i) Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

With the Proposed Project, a total of eight freeway segments would operate at LOS D or better, six locations would operate at LOS E, five locations would operate at LOS F(0), and one would operate at LOS F(1). The Proposed Project would result in a significant traffic impact at the following four freeway mainline locations and two freeway HOV locations in the Saturday Day Pre-Event hour.

15.	I-5 South of Stadium Way (SB)	(1.011)	F(0)
3b.	I-110 North of Martin Luther King Jr. Blvd (HOV) (NB)	(1.015)	F(0)
8.	US-101 at Glendale Boulevard (SB)	(1.064)	F(0)
7.	US-101 North of Vignes Street (NB)	(1.067)	F(0)
14.	US-101 South of Vermont Avenue (SB)	(1.150)	F(0)
12b.	I-110 at Slauson Avenue (HOV) (NB)	(1.252)	F(1)

The majority of D/C ratios at LOS F locations would be less than 1.10. At one location, the D/C ratio would be between 1.10 and 1.20, and at one location it would be greater than 1.20.

(ii) Saturday Day Post-Event Hour (4:30–5:30 P.M.)

Under Future With Project conditions, seven of the freeway segments would operate at LOS D or better, and thirteen would operate at LOS F(0). Therefore, the Proposed Project would result in a significant traffic impact at the following 11 freeway mainline and two freeway HOV locations in the Saturday Day Post-Event hour.

1.	I-10 West of Vermont Avenue (WB)	(1.044)	F(0)
15.	I-5 South of Stadium Way (NB)	(1.055)	F(0)
14.	US-101 South of Vermont Avenue (NB)	(1.084)	F(0)
2.	I-10 East of San Pedro Street (EB)	(1.088)	F(0)
12a.	I-110 at Vernon Avenue (Mainline) (SB)	(1.089)	F(0)
3b.	I-110 North of Martin Luther King Jr. Blvd (HOV) (SB)	(1.093)	F(0)
10.	I-5 West of Indiana Street (SB)	(1.112)	F(0)
12b.	I-110 at Slauson Avenue (HOV) (SB)	(1.119)	F(0)
6.	SR-110 North of Alpine Street (NB)	(1.129)	F(0)
8.	US-101 at Glendale Boulevard (NB)	(1.140)	F(0)
4.	SR-110 Between James Wood Blvd & Olympic Blvd (NB)	(1.162)	F(0)
7.	US-101 North of Vignes Street (SB)	(1.174)	F(0)
5.	SR-110 South of US-101 (NB)	(1.237)	F(0)

The D/C ratio would be less than 1.10 at six of the impacted locations, between 1.10 and 1.20 at another six locations, and greater than 1.20 at the one remaining impacted location.

(b) Freeway Off-Ramps

The freeway off-ramp analysis for the Existing Conditions, Future Without Project and Future With Project scenarios is summarized in Table 5.2.5.3 of the Transportation Study, which also provides the ramp volumes and resultant queue lengths during the Pre-Event hour.

(i) Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following five freeway off-ramps in the Saturday Day Pre-Event hour.

- 3. I-10: Los Angeles Street WB Off-Ramp (Mainline) 15. I-10: Hoover Street EB Off-Ramp (Mainline) 2. US 101: Grand Avenue NB Off-Ramp (Lane) 11. (Lane)
- I-110: Adams Boulevard NB Off-Ramp
- 13. SR 110: 9th Street NB Off-Ramp
 - (c) Freeway On-Ramps

The freeway on-ramp level of service analysis for the Existing Conditions, Future Without Project and Future With Project scenarios is summarized in Table 5.2.5.4 of the Transportation Study, which also provides the ramp volumes during the Saturday Day Post-Event Hour.

(i) Saturday Day Post-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 11 freeway on-ramps in the Saturday Day Post-Event hour.

- 1. US 101: Los Angeles Street EB On-Ramp
- I-10: Los Angeles Street EB On-Ramp 3.
- 11. I-10: Washington Boulevard SB On-Ramp
- 12. SR 110: Blaine Street SB On-Ramp
- 13. SR 110: 8th Street SB On-Ramp
- 17. I-10: Grand Avenue WB On-Ramp
- 19. US 101: Glendale Boulevard On-Ramp
- 23. SR 110: 5th Street NB On-Ramp

(Lane)

24. SR 110: 8th Street NB On-Ramp25. SR 110: 9th Street NB On-Ramp26. SR 110: 11th Street NB On-Ramp

At three of these locations, volumes would exceed ramp capacities by less than 10 percent, as follows: 1. Los Angeles EB On-Ramp to US 101; 19. Glendale NB On-Ramp to US 101 NW; and 25. 9th Street NB On-Ramp to SR 110 N.

d. Weekday Evening Event, Future With Project

This event scenario represents a Weekday Evening event, typically an NFL game, starting at 5:30 P.M. and ending at 9:00 P.M. This scenario would represent the highest combination of event attendance and background traffic on the roadway system on a weekday, and because of weekday commute traffic, would be the event scenario with the highest background traffic on the roadway and freeway system. The analysis addresses the pre-event hour (4:30–5:30 P.M.) when all Project-related travel would be inbound, and the post-event hour (9:00–10:00 P.M.) when all Project-related travel would be outbound.

It should be noted that the Weekday Evening Event scenario would be the least frequent occurrence of events and the traffic impacts identified below would not occur on a regular basis, but would occur only a few times a year between September and early January. Other weekday evening events would also occur only infrequently during the year, but would start and finish later (typically 7:30 pm start) so background traffic levels would be lower and traffic impacts correspondingly lower for such events.

(1) Roadway Intersections, Future With Project

The Project-Only traffic volumes forecast at the study intersections are shown in the Transportation Study in Appendix 5 (Figure A.5.3.1.1 for the Weekday Evening Pre-Event Hour and Figure A.5.3.1.2 for the Weekday Evening Post-Event Hour). The total traffic volumes forecast for the study intersections are shown in the Transportation Study in Figure A.5.3.1.3 for the Weekday Evening Pre-Event Hour and Figure A.5.3.1.4 for the Weekday Evening Post-Event Hour). Due to the different travel patterns and volumes occurring during the weekday Pre-Event Hour, ten additional intersections were analyzed. These ten intersections are located along Crenshaw Boulevard (five additional intersections), La Brea Avenue (three additional intersections), as well as the individual intersections of San Vicente Boulevard & Venice Boulevard and Fairfax Avenue & Olympic Boulevard.

The intersection level of service analysis for the Future With Project conditions is summarized in Table IV.B.1-14 on page IV.B.1-253 and discussed below. The locations of

significant impacts at study intersections are shown in Figure IV.B.1-18 on page IV.B.1-313 and Figure IV.B.1-19 on page IV.B.1-314 for the Pre-Event and Post Event Hours, respectively.

(a) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 77 intersections in the Weekday Evening Pre-Event Hour:

1.	Georgia Street & Olympic Boulevard	(LOS C)
6.	Olive Street & Olympic Boulevard	(LOS C)
18.	Grand Avenue & 11th Street	(LOS C)
27.	Flower Street & Pico Boulevard	(LOS C)
30.	Hill Street & Pico Boulevard	(LOS C)
56.	Grand Avenue & Washington Boulevard	(LOS C)
57.	Olive Street & Washington Boulevard	(LOS C)
58.	Hill Street & Washington Boulevard	(LOS C)
81.	Georgia Street & 9th Street	(LOS C)
83.	Figueroa Street & 9th Street	(LOS C)
104.	Olive Street & 5th Street	(LOS C)
145.	Normandie Avenue & Olympic Boulevard	(LOS C)
155.	Western Avenue & Venice Boulevard	(LOS C)
156.	Normandie Avenue & Venice Boulevard	(LOS C)
166.	Hill Street & 16th Street	(LOS C)
174.	Arlington Avenue & Olympic Boulevard	(LOS C)
177.	Arlington Avenue & Washington Boulevard	(LOS C)
4.	Flower Street & Olympic Boulevard	(LOS D)
8.	Broadway & Olympic Boulevard	(LOS D)
33.	Blaine Street & Olympic Boulevard	(LOS D)
34.	Blaine Street & SR-110 SB Off-Ramp	(LOS D)
41.	Grand Avenue & 17th Street	(LOS D)
54.	Figueroa Street & Washington Boulevard	(LOS D)
59.	Broadway & Washington Boulevard	(LOS D)
66.	Grand Avenue & Adams Boulevard	(LOS D)
80.	I-110 NB Ramps & Martin Luther King Jr. Blvd.	(LOS D)
95.	Bixel Street & 6th Street	(LOS D)
110.	Hope Street & 1st Street	(LOS D)
116.	Hope Street & Temple Street	(LOS D)
138.	Western Avenue & Wilshire Boulevard	(LOS D)
148.	Union Avenue & Olympic Boulevard	(LOS D)

151.	Vermont Avenue & Pico Boulevard	(LOS D)
153.	Union Avenue & Pico Boulevard	(LOS D)
157.	Vermont Avenue & Venice Boulevard	(LOS D)
164.	Vermont Avenue & I-10 EB Ramps	(LOS D)
165.	Hoover Street & I-10 EB Ramps	(LOS D)
170.	San Pedro Street & 16th Street	(LOS D)
172.	Central Avenue & Washington Boulevard	(LOS D)
184.	La Brea Avenue & Olympic Boulevard	(LOS D)
26.	Figueroa Street & Pico Boulevard	(LOS E)
37.	Figueroa Street & Venice Boulevard	(LOS E)
42.	Olive Street & 17th Street	(LOS E)
64.	Flower Street & Adams Boulevard	(LOS E)
65.	I-110 NB Off-Ramp & Adams Boulevard	(LOS E)
67.	Hill Street & Adams Boulevard	(LOS E)
123.	Spring Street & Cesar Chavez Avenue	(LOS E)
139.	Normandie Avenue & Wilshire Boulevard	(LOS E)
141.	Alvarado Street & Wilshire Boulevard	(LOS E)
147.	Alvarado Street & Olympic Boulevard	(LOS E)
152.	Alvarado Street & Pico Boulevard	(LOS E)
158.	Hoover Street & Venice Boulevard	(LOS E)
162.	Hoover Street & Washington Boulevard	(LOS E)
168.	Main Street & 16th Street	(LOS E)
176.	Arlington Avenue & Venice Boulevard	(LOS E)
179.	Crenshaw Boulevard & Olympic Boulevard	(LOS E)
181.	Crenshaw Boulevard & Venice Boulevard	(LOS E)
182.	Crenshaw Boulevard & Washington Boulevard	(LOS E)
3.	Figueroa Street & Olympic Boulevard	(LOS F)
9.	Main Street & Olympic Boulevard	(LOS F)
32.	Main Street & Pico Boulevard	(LOS F)
35.	Blaine Street & 11th Street	(LOS F)
43.	Hill Street & 17th Street	(LOS F)
44.	Broadway & 17th Street	(LOS F)
45.	Main Street & 17th Street	(LOS F)
46.	Los Angeles Street & 17th Street	(LOS F)
63.	Figueroa Street & Adams Boulevard	(LOS F)
86.	Bixel Street & 8th Street	(LOS F)
88.	Figueroa Street & 8th Street	(LOS F)
93.	Figueroa Street & Wilshire Boulevard	(LOS F)
94.	Lucas Avenue & 6th Street	(LOS F)
96.	Figueroa Street & 6th Street	(LOS F)
102.	Figueroa Street & 5th Street	(LOS F
------	---------------------------------------	--------
111.	Grand Avenue & 1st Street	(LOS F
140.	Vermont Avenue & Wilshire Boulevard	(LOS F
144.	Western Avenue & Olympic Boulevard	(LOS F
146.	Vermont Avenue & Olympic Boulevard	(LOS F
161.	Vermont Avenue & Washington Boulevard	(LOS F

Of the 77 impacted intersections, 39 would continue to operate at LOS D or better with the Proposed Project; 18 would operate at LOS E (three of which would operate at LOS E without the Proposed Project: Normandie Avenue & Wilshire Boulevard, Hoover Street & Venice Boulevard, and Crenshaw Boulevard & Venice Boulevard); 20 would operate at LOS F (eight of which would operate at LOS F without the Proposed Project: Figueroa Street & Adams Boulevard, Bixel Street & 8th Street, Figueroa Street & Wilshire Boulevard, Figueroa Street & 8th Street, Figueroa Street & Wilshire Boulevard, Figueroa Street & 5th Street, Main Street and Olympic Boulevard, Main Street and Pico Boulevard, and Vermont Avenue & Wilshire Boulevard) and six of which would operate at LOS E without the Proposed Project (Figueroa Street & Olympic Boulevard, Figueroa Street & 6th Street, Grand Avenue & 1st Street, Western Avenue & Olympic Boulevard, Vermont Avenue & Olympic Boulevard, and Vermont Avenue & Washington Boulevard).

Nine of the impacted intersections, including four LOS F intersections, would be located along the 17th Street (and 16th Street) corridor leading from the I-10 westbound ramps at Los Angeles Street and San Pedro Street. Twenty-seven of the impacted intersections, including nine LOS F intersections, would be located in the downtown area. Four intersections would be located at the ends of freeway off-ramps (at Vermont Avenue, at Hoover Street, at Adams Boulevard, and at Martin Luther King Jr. Boulevard—with three operating at LOS D or better and one operating at LOS E). The remaining 37 impacted intersections would be located on arterial roadways near or leading to downtown, with nineteen intersections operating at LOS D or better, twelve operating at LOS E and six operating at LOS F.

Because of the higher background traffic volumes without the project for this scenario, many intersection impacts represent increases in the V/C ratio, but no change in LOS designation, or worsening by one level of service. For example, of the 38 impacted intersections that would operate at LOS E or LOS F with the Proposed Project, at eight locations the LOS would change from LOS D to LOS E, at four locations it would remain at LOS E (without and with the Proposed Project), at five locations it would worsen from LOS E to LOS F, and at five locations it would remain at LOS E to LOS F.

(b) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

This time period would have the lowest background traffic of all the time periods studied. At this hour of the weekday evening, all but one of the study intersections would operate at LOS A without the Proposed Project.

The Proposed Project would result in a significant traffic impact at the following nine intersections in the Weekday Evening Post-Event Hour.

43.	Hill Street & 17th Street	(LOS C)
146.	Vermont Avenue & Olympic Boulevard	(LOS C)
51.	Broadway & 18th Street	(LOS D)
52.	Main Street & 18th Street	(LOS D)
119.	Grand Avenue & US-101 NB Ramps	(LOS E)
166.	Hill Street & 16th Street	(LOS E)
35.	Blaine Street & 11th Street	(LOS F)
50.	Hill Street & 18th Street	(LOS F)
53.	Los Angeles Street & 18th Street	(LOS F)

Of the nine impacted intersections, four would operate at LOS D or better, both with and without the Proposed Project; two would operate at LOS E, and three intersections (Blaine Street & 11th Street, Hill Street & 18th Street, and Los Angeles Street & 18th Street) would operate at LOS F with the Proposed Project. Six of the nine impacted intersections would be located on Hill Street near the I-10 freeway and along 18th Street leading to the I-10 eastbound on-ramp at Los Angeles Street. Two of the impacted intersections would be at on-ramp locations to the freeway system (Blaine Street southbound to the Harbor Freeway and Grand Avenue northbound to the Hollywood Freeway).

(2) Transit, Future With Project

(a) Weekday Pre-Event Hour (4:30–5:30 P.M.)

The transit system analysis for the Weekday Pre-Event Hour is summarized in Table 5.3.2.1 of the Transportation Study. The transit system operates the most intensive schedules on weekday peak periods, so system capacity is at its highest during the Weekday Pre-Event Hour. Overall, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 37,248 riders in the Weekday Pre-Event Hour. The total ridership in the Weekday Pre-Event Hour including 7,200 trips from the Proposed Project would be 25,063 riders, so overall there would be sufficient capacity to accommodate the Proposed Project. This is largely because trips to the Proposed

Project would be inbound to the downtown area, which is the non-peak load direction for transit service which is carrying the highest loads outbound from downtown in the evening commuter peak period. Transit vehicles inbound to downtown are thus carrying far fewer passengers and have more surplus capacity. The policy load factors (capacities) would not be exceeded on any component of the transit system, so there would be no significant impacts in the Weekday Pre-Event Hour.

(b) Weekday Post-Event Hour (9:00–10:00 P.M.)

The transit system analysis for the Weekday Post-Event Hour is summarized in Table 5.3.2.2 of the Transportation Study. The transit system operates reduced schedules on weekday nights, so system capacity is lower than for the Weekday Pre-Event Hour. Overall, the transit system serving the Proposed Project Site would have a projected passenger-carrying capacity of 9,225 riders in the Weekday Post-Event Hour. The total ridership in the Weekday Post-Event Hour, including 11,160 trips from the Proposed Project, would be 14,992 riders. Therefore, overall ridership would exceed available capacity. The policy load factors (capacities) would be exceeded on the Red, Red/Purple, Blue, Exposition, Green Line (both directions), and Gold lines, the Silver Line (both directions), and on Rapid and Express buses, as shown below. These impacts are considered potentially significant.

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	13
Metro Red/Purple Line	3
Metro Blue Line	18
Expo Line	10
Green Line (East)	5
Green Line (West)	4
Gold Line (Pasadena)	2
Gold Line (East L.A.)	4
Metro Silver Line (South)	3
Metro Silver Line (North)	3
Rapid Bus	7
Express Bus	5

Because of the reduced transit schedules at these times, additional capacity would need to be provided during the Weekday Post-Event Hour. Such capacity would be available and additional service could be provided during the Weekday Post-Event Hour as shown above (refer also to Section IV.B.1.16, Project Design Features and Mitigation Measures, of this Draft EIR). This additional capacity would reduce the impact to less than significant, as detailed in Section IV.B.1.16, Project Mitigation Measures, of this Draft EIR. The total service necessary to accommodate the Weekday Evening Post-Event Hour passenger loads would still be well below the service levels typically operated during the weekday peak periods.

(3) Freeways, Future With Project

(a) Freeway Segments

The freeway segment analysis is summarized in Tables 5.3.5.1 and 5.3.5.2 of the Transportation Study for the Pre-Event Hour and Post-Event Hour, respectively, and discussed below.

(i) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

With the Proposed Project, six of the 20 freeway analysis locations are expected to operate at LOS D or better during the Weekday Evening Pre-Event hour, and 14 would operate at LOS F (nine at LOS F(0), two at LOS F(1), two at LOS F(2), and one at LOS F(3)).

The Proposed Project would result in a significant traffic impact at the following 13 freeway mainline locations in the Weekday Evening Pre-Event Hour:

I-110 South of Martin Luther King Jr. Blvd (Mainline) (NB)	(1.025)	F(0)
I-5 South of Stadium Way (SB)	(1.082)	F(0)
SR-110 Between James Wood Blvd and Olympic Blvd (SB)	(1.102)	F(0)
US-101 at Glendale Boulevard (SB)	(1.136)	F(0)
I-5 West of Indiana Street (NB)	(1.142)	F(0)
I-110 at Vernon Avenue (Mainline) (NB)	(1.179)	F(0)
US-101 North of Vignes Street (NB)	(1.187)	F(0)
US-101 South of Vermont Avenue (SB)	(1.216)	F(0)
SR-110 North of Alpine Street (SB)	(1.227)	F(0)
I-10 East of San Pedro Street (WB)	(1.276)	F(1)
I-10 West of Vermont Avenue (EB)	(1.361)	F(2)
SR-110 South of US-101 (SB)	(1.374)	F(2)
I-10 East of Crenshaw Boulevard (EB)	(1.571)	F(3)
	 I-110 South of Martin Luther King Jr. Blvd (Mainline) (NB) I-5 South of Stadium Way (SB) SR-110 Between James Wood Blvd and Olympic Blvd (SB) US-101 at Glendale Boulevard (SB) I-5 West of Indiana Street (NB) I-110 at Vernon Avenue (Mainline) (NB) US-101 North of Vignes Street (NB) US-101 South of Vermont Avenue (SB) SR-110 North of Alpine Street (SB) I-10 East of San Pedro Street (WB) I-10 West of Vermont Avenue (EB) SR-110 South of US-101 (SB) I-10 East of Crenshaw Boulevard (EB) 	I-110 South of Martin Luther King Jr. Blvd (Mainline) (NB)(1.025)I-5 South of Stadium Way (SB)(1.082)SR-110 Between James Wood Blvd and Olympic Blvd (SB)(1.102)US-101 at Glendale Boulevard (SB)(1.136)I-5 West of Indiana Street (NB)(1.142)I-110 at Vernon Avenue (Mainline) (NB)(1.179)US-101 North of Vignes Street (NB)(1.187)US-101 South of Vermont Avenue (SB)(1.216)SR-110 North of Alpine Street (SB)(1.270)I-10 East of San Pedro Street (WB)(1.374)I-10 South of US-101 (SB)(1.374)I-10 East of Crenshaw Boulevard (EB)(1.571)

Of the 13 impacted freeway locations, two would have a D/C ratio less than 1.10; five would have a D/C ratio between 1.10 and 1.20; three would have a D/C ratio between 1.20 and 1.30; and, the remaining three would have a D/C ratio greater than 1.30. The level

of service at 10 of the 13 impacted locations would be LOS F without the Proposed Project. Of these 10 impacted locations, the increase in D/C ratio would be less than 10 percent at six locations, and in the 15 percent to 25 percent range at the other four locations.

(ii) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

With the Proposed Project, 17 locations would continue to operate at LOS D or better during the Weekday Evening Post-Event hour. Three locations would operate at LOS F(0). Therefore, the Proposed Project would result in a significant traffic impact at the following three freeway mainline locations in the Weekday Evening Post-Event Hour.

8.	US-101 at Glendale Boulevard (NB)	(1.014)	F(0)
5.	SR-110 South of US-101 (NB)	(1.016)	F(0)
10.	I-5 West of Indiana Street (SB)	(1.017)	F(0)

All three of impacted freeway locations would have a V/C ratio less than 1.02.

(b) Freeway Off-Ramps

The freeway off-ramp analysis for the Existing Conditions, Future Without Project and Future With Project scenarios is summarized in Table 5.3.5.3 of the Transportation Study, which shows the ramp capacities and ramp volumes during the Weekday Evening Pre--Event Hour.

(i) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following eight freeway off-ramps in the Weekday Evening Pre-Event Hour. At two locations these would be lane only impacts, and at six locations they would be overall ramp impacts.

2.	US 101: Grand Avenue NB Off-Ramp	(Mainline)
3.	I-10: Los Angeles Street WB Off-Ramp	(Mainline)
13.	SR 110: 9th Street NB Off-Ramp	(Mainline)
15.	I-10: Hoover Street EB Off-Ramp	(Mainline)
21.	SR 110: 6th Street SB Off-Ramp	(Mainline)
23.	SR 110: Olympic Boulevard SB Off-Ramp	(Mainline)
7.	I-110: Martin Luther King Jr. Boulevard NB Off-Ramp	(Lane)
11.	I-110: Adams Boulevard NB Off-Ramp	(Lane)

(c) Freeway On-Ramps

The freeway off-ramp level of service analysis for the Existing Conditions, Future Without Project and Future With Project scenarios is summarized in Table 5.3.5.4 in the Transportation Study, which shows the ramp capacities and ramp volumes during the Weekday Evening Post-Event Hour.

(i) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following six freeway on-ramps in the Weekday Evening Post-Event Hour.

- 3. I-10: Los Angeles Street EB On-Ramp
- 12. SR 110: Blaine Street SB On-Ramp
- 23. SR 110: 5th Street NB On-Ramp
- 24. SR 110: 8th Street NB On-Ramp
- 25. SR 110: 9th Street NB On-Ramp
- 26. SR 110: 11th Street NB On-Ramp

e. Congestion Management Plan, Future With Project

(1) CMP Intersection Analysis, Future With Project

A review of the 2010 CMP indicated a number of arterial intersection monitoring stations where CMP impacts could potentially occur due to the Proposed Project. The CMP addressed only the typical weekday P.M. peak hour commute period. As only the Weekday Evening Pre-Event Hour coincides with this time period, this CMP Intersection analysis is limited to the Weekday Evening Pre-Event Hour. The number of Proposed Project vehicle trips expected to pass through these intersections was estimated based on the Proposed Project trip generation and the Proposed Project trip distribution discussed in Sections IV.B.1.7(d) and IV.B.1.7(e), respectively, of this Draft EIR. This identified the following intersections where 50 or more Project trips would be added during the Weekday Evening Pre-Event Hour. The number of Proposed Project trips is shown in parenthesis.

- 1. Alameda Street at Washington Boulevard (146)
- 2. Alvarado Street at Sunset Boulevard (50)
- 3. Western Avenue at 9th Street
- 4. La Brea Avenue at Wilshire Boulevard (86)
- 5. La Cienega Boulevard at Wilshire Boulevard (54)
- 6. La Cienega Boulevard at Venice Boulevard (64)
- 7. La Cienega Boulevard at Jefferson Boulevard (64)
- 8. Alvarado Street at Wilshire Boulevard (85)

(59)

9. Western Avenue at Wilshire Boulevard (111)

As these volumes are all equal to or greater than the CMP threshold of 50 or more trips in the Weekday Evening Pre-Event hour, all nine locations were analyzed to determine if the Proposed Project would cause any significant traffic impacts.

The analysis of the nine CMP intersections identified above was based on existing traffic counts, forecasts of Future Without Project traffic volumes, and the addition of Proposed Project trips for the Future With Project conditions. The analysis is summarized in the Transportation Study in Table 5.4.1.1 and the existing D/C ratios and levels of service are shown in Table 5.4.2.1 of the Transportation Study for the Weekday Evening Pre-Event Hour.

While the Proposed Project would increase the V/C rates at most of the intersections, the incremental increase in V/C ratio would be less than the significant impact threshold of 0.02. Based on this analysis, the Proposed Project would not cause any significant traffic impacts at any of the nine CMP monitoring intersections.

(2) CMP Freeway Analysis, Future With Project

The CMP also requires that the Traffic Study analyze traffic conditions at all CMP mainline freeway monitoring locations where the project will add 150 or more trips in either direction during either A.M. or P.M. weekday peak hours. If, based on this criterion, the Traffic Study identifies no facilities for study, then no further traffic analysis is required.

At locations on the mainline freeways nearest the Proposed Project Site and surrounding the downtown area, traffic generated by the Proposed Project would be expected to be more highly concentrated and more likely to cause potential traffic impacts. At locations further from the Proposed Project Site, Proposed Project traffic would be more dispersed and far less likely to cause impacts. However, in order to fully investigate the potential impact of the Proposed Project on the Los Angeles County Congestion Management System, all eighty-one of the CMP freeway monitoring locations were analyzed.

Trips from the Proposed Project were assigned to the freeway system using the Proposed Project trip generation and distribution discussed previously. For locations further from the Proposed Project Site, the number of vehicles expected to travel along each of the freeway corridors was reduced in direct proportion to the decrease in overall population located along those corridors. These were added to the 2017 Future Without Project base volumes to obtain the 2017 Future With Project total volumes on the freeway segments. Both the Project only trips, and the total Future With Project trips, are shown in

Table 5.4.2.2 in the Transportation Study, along with the Future With Project D/C ratios and levels of service.

The Proposed Project would add 150 or more trips in either direction at 43 of the 81 CMP monitoring locations during the Weekday Evening Pre-Event Hour. According to CMP guidelines, no further CMP analysis is necessary at the 38 locations that do not exceed the 150 trips threshold. However, for purposes of providing a comprehensive review, all eighty-one freeway monitoring locations were investigated in the analysis.

The analysis concluded that the addition of vehicle trips generated by the Proposed Project would cause significant impacts according to CMP criteria²⁹ at the following 19 CMP freeway monitoring locations for the Weekday Evening Pre-Event Hour:

CMP Station No.	Freeway Segment
1002	I-5 at Lemoran Ave. (NB)
1003	I-5 at Ferris Ave. (NB)
1004	I-5 at Stadium Way (SB)
1005	I-5 south of Colorado Blvd. (SB)
1006	I-5 at Burbank Blvd. (SB)
1011	I-10 east of Overland Ave. (EB)
1012	I-10 east of La Brea Ave. (EB)
1013	I-10 at Budlong Ave. (EB)
1018	I-10 east of Puente Ave. (WB)
1019	I-10 at Grand Ave. (WB)
1036	US-101 North of Vignes St. (NB)
1037	US-101 south of Santa Monica Blvd. (SB)
1038	US-101 at Coldwater Canyon Ave. (SB)
1039	US-101 at Winnetka Ave. (SB)
1046	I-110 at Manchester Blvd. (NB)
1047	I-110 at Slauson Ave. (NB)
1048	SR-110 south of US-101 (SB)

²⁹ Under CMP criteria, a significant impact will result If the Project adds 150 or more trips, in either direction at a CMP freeway monitoring segment, during either the morning or afternoon peak hour and Projectrelated traffic causes an increase in the V/C ratio on a freeway segment or freeway on- or off-ramp of two percent or more capacity (V/C increase >0.02), which causes or worsens Level of Service F conditions (V/C >1.00).

1049	SR-110 north of Alpine St. (SB)
1067	I-405 south of I-110 at Carson Scales (NB)

11. Project Impact Analysis—Future With Project Compared to LACC Dark Conditions

a. Introduction

This section addresses potential transportation impacts of the Proposed Project for the 2017 Future With Project Compared to LACC Dark Conditions. Under this scenario, there would be no existing condition event at the Convention Center. Background traffic levels would therefore, be lower for this scenario for both the Existing Conditions and Future Without Project Conditions.

The existing level of activity for the Convention Center was determined based on surveys of parking occupancy conditions on a weekend day and analysis of conditions on a weekday at the Convention Center when on-site activities were limited to those occurring at the Convention Center. Based on this data and the range of activities occurring at the time, the 90th percentile of parking activity was used to establish baseline conditions for analyzing the impacts for this condition. The 90th percentile refers to that condition which would be exceeded only 10 percent of the time. The Project's impacts under this scenario are analyzed based on the 90th percentile baseline plus the projected growth.

The New Hall will enhance the functionality of the Convention Center due to its contiguous configuration and is anticipated to attract more trade shows and conventions compared to existing levels. Based on forecasts of the growth brought about by the Proposed Project, it was estimated that the baseline event attendance included in the traffic and parking analysis could increase by 7 percent for a weekend event and by 15 percent in the future for a weekday event. The potential environmental impacts analyzed for the Future With Project conditions included those forecast growths.

Despite the frequent use of the Convention Center for exhibition events, on some days between events relatively little or no activity occurs at the Convention Center. A day with no activity is referred to as an "LACC Dark Condition," which occurs from time to time during the year. For informational purposes only (and not to determine significant impacts of the Proposed Project), this section includes an analysis that compares the future traffic generated by the Proposed Project (including Convention Center traffic, as adjusted upward based on the projected weekday and weekend increases discussed above) to a day when there is no event occurring at the Convention Center. The Future With Project conditions for this scenario are exactly the same as for the Future With Project Scenario described in subsection IV.B.1.10 above, as the future total forecasts are the same. However, the incremental differences (and thus impacts) in net traffic under this scenario may be greater as Future With Project conditions are compared to a LACC Dark Condition. As such, this scenario presents a very conservative analysis.

Table IV.B.1-15 on page IV.B.1-260 provides a Project Impact Summary of the Future with Project Compared to LACC Dark Condition. The analyses presented are structured in the same manner, and use the same analytical methodologies and significant impact criteria as described above in subsections IV.B.1.3 and IV.B.1.6, respectively,

b. Sunday Day Event, Future With Project Compared to LACC Dark Conditions

(1) Roadway Intersections, Future With Project Compared to LACC Dark Conditions

The Project-Only traffic volumes forecast at the study intersections are shown in Appendix 7 of the Transportation Study (see Appendix I of this Draft EIR) in Figure A.7.1.1.1 for the Sunday Day Pre-Event Hour and Figure A.7.1.1.2 for the Sunday Day Post-Event Hour. The future total traffic volumes for the study intersections are the same as for the Future With Project scenario and are shown in the Transportation Study in Figure A.5.1.1.3 for the Sunday Day Pre-Event Hour and Figure A.5.1.1.4 for the Sunday Day Post-Event Hour.

As stated above, the Future With Project scenario is compared to a Future Without Project scenario that assumes an LACC Dark Condition. The intersection level of service analysis for the Future With Project Compared to LACC Dark Conditions is summarized in Table IV.B.1-16 on page IV.B.1-267. Table IV.B.1-16 shows the increase in V/C ratio at each intersection due to the Proposed Project, and identifies significant impacts according to the LADOT criteria. The locations of significant impacts at study intersections are shown in Figure IV.B.1-20 on page IV.B.1-315 and Figure IV.B.1-21 on page IV.B.1-316 for the Pre-Event and Post-Event Hours, respectively.

(a) Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following 11 intersections in the Sunday Day Pre-Event Hour:

35.	Blaine Street & 11th Street	(LOS C)
88.	Figueroa Street & 8th Street	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)

164.	Vermont Avenue & I-10 EB Ramps	(LOS C)
43.	Hill Street & 17th Street	(LOS D)
44.	Broadway & 17th Street	(LOS D)
45.	Main Street & 17th Street	(LOS D)
46.	Los Angeles Street & 17th Street	(LOS D)
152.	Alvarado Street & Pico Boulevard	(LOS D)
42.	Olive Street & 17th Street	(LOS E)
146.	Vermont Avenue & Olympic Boulevard	(LOS E)

Of the 11 impacted intersections, nine would continue to operate at LOS D or better and two would operate at LOS E. Half of the impacted intersections would be located along 17th Street leading from the I-10 westbound off-ramp at Los Angeles Street. Each of these 11 intersections would be significantly impacted under the Future With Project condition.

(b) Sunday Day Post-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 18 intersections in the Sunday Day Post-Event Hour:

51.	Broadway & 18th Street	(LOS C)
78.	Figueroa Street & Martin Luther King Jr. Blvd.	(LOS C)
79.	I-110 SB Ramps & Martin Luther King Jr. Blvd.	(LOS C)
111.	Grand Avenue & 1st Street	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)
158.	Hoover Street & Venice Boulevard	(LOS C)
163.	I-10 WB Ramps & 20th Street	(LOS C)
52.	Main Street & 18th Street	(LOS D)
119.	Grand Avenue & US-101 NB Ramps	(LOS D)
144.	Western Avenue & Olympic Boulevard	(LOS D)
146.	Vermont Avenue & Olympic Boulevard	(LOS D)
152.	Alvarado Street & Pico Boulevard	(LOS D)
153.	Union Avenue & Pico Boulevard	(LOS D)
43.	Hill Street & 17th Street	(LOS E)
166.	Hill Street & 16th Street	(LOS E)
35.	Blaine Street & 11th Street	(LOS F)
50.	Hill Street & 18th Street	(LOS F)
53.	Los Angeles Street & 18th Street	(LOS F)

Of the 18 impacted intersections listed above, 13 would operate at LOS D or better, two would operate at LOS E, and the remaining three intersections (Blaine Street & 11th

Street, Hill Street & 18th Street, and Los Angeles Street & 18th Street) would operate at LOS F. One-third of the intersections, including most of the LOS E and LOS F intersections, would be located on Hill Street near the I-10 freeway and along 18th Street leading to the I-10 eastbound on-ramp at Los Angeles Street. Each of these 18 intersections would be significantly impacted under the Future With Project condition.

(2) Transit, Future With Project Compared to LACC Dark Conditions

The transit analysis for the Future With Project Conditions determined significant impacts on Transit Facilities by comparing total transit riders to system capacity thresholds, rather than by evaluating any incremental increases. Because of negligible current use of public transit for Convention Center events, and because the future conditions are identical for both the Future With Project Condition and the Future With Project Compared to LACC Dark Conditions, the transit analysis for the Future With Project Condition. Refer to Section IV.B.1.9 of this Draft EIR for a discussion of the Future With Project Condition.

(3) Freeways, Future With Project Compared to LACC Dark Conditions

Traffic volumes for Existing Conditions With LACC Dark and Future Without Project With LACC Dark Conditions were based on the same traffic data as described in Section IV.B.1.9.b.(3) of this Draft EIR for the Project Impact Analysis Future with Project, except that no LACC event traffic was included in order to represent the LACC Dark Conditions.

(a) Freeway Segments

Levels of service and demand/capacity (D/C) ratios for Existing Conditions With LACC Dark, Future Without Project With LACC Dark, and Future With Project conditions are shown in the Transportation Study, Table 7.1.5.1 for the Sunday Pre-Event Hour and 7.1.5.2 for the Sunday Post-Event Hour.

(i) Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

With the Proposed Project, a total of 12 freeway analysis locations are expected to operate at LOS D or better, four locations would operate at LOS E, and four locations would operate at LOS F(0) during the Sunday Day Pre-Event hour. Three of the locations that would operate at LOS F(0) would operate at LOS E without the Proposed Project. Therefore, the Proposed Project would result in a significant traffic impact at the following four freeway mainline locations in the Sunday Day Pre-Event hour.

6. SR-110 North of Alpine Street (SB) (1.006) F(0)

15.	I-5 South of Stadium Way (SB)	(1.040)	F(0)
8.	US-101 at Glendale Boulevard (SB)	(1.094)	F(0)
14.	US-101 South of Vermont Avenue (SB)	(1.180)	F(0)

The D/C ratio would be less than 1.10 at three of the four impacted freeway locations, and between 1.10 and 1.20 at the fourth location. Each of these four freeway locations would be significantly impacted under the Future With Project condition.

(ii) Sunday Day Post-Event Hour (4:30–5:30 P.M.)

With the Proposed Project, eight of the freeway locations would operate at LOS D or better, three would operate at LOS E, and nine would operate at LOS F(0). Three of these LOS F(0) locations would operate at LOS E without the addition of Proposed Project traffic. In summary, the Proposed Project would result in a significant traffic impact at the following nine freeway mainline locations in the Sunday Day Post-Event Hour:

12a.	I-110 at Vernon Avenue (Mainline) (SB)	(1.010)	F(0)
15.	I-5 South of Stadium Way (NB)	(1.013)	F(0)
4N.	SR-110 Between James Wood Blvd & Olympic Blvd. (NB)	(1.059)	F(0)
1.	I-10 West of Vermont Avenue (WB)	(1.060)	F(0)
14.	US-101 South of Vermont Avenue (NB)	(1.072)	F(0)
7.	US-101 North of Vignes Street (SB)	(1.081)	F(0)
10.	I-5 West of Indiana Street (SB)	(1.121)	F(0)
8.	US-101 at Glendale Boulevard (NB)	(1.139)	F(0)
5.	SR-110 South of US-101 (NB)	(1.243)	F(0)

Of the nine impacted freeway locations above, the D/C ratio would be less than 1.10 at six locations, between 1.10 and 1.20 at two locations, and greater than 1.20 at one location. Each of these nine freeway locations would be significantly impacted under the Future With Project condition.

(b) Freeway Off-Ramps

Proposed Project traffic would only be added to the freeway off-ramps during the Pre-Event Hour (inbound traffic traveling to the Event Center). The freeway off-ramp analysis for the Existing Conditions, Future Without Project and Future With Project Compared to LACC Dark Conditions is summarized in Table 7.1.5.3 of the Transportation Study, which also provides the ramp volumes and resultant queue lengths during the Pre-Event Hour.

(i) Sunday Day Pre-Event Hour (12:00–1:00 Р.м.)

In general, the traffic queues on the majority of the off-ramps would not exceed the storage capacities of the ramps for the Sunday Day Pre-Event Hour. However, the Proposed Project would result in a significant traffic impact at the following four freeway off-ramps. At three locations, the 85th percentile queue would exceed the storage capacity of an individual lane, and at one location it would exceed the overall capacity of the ramp.³⁰ Each of these four off-ramps would be significantly impacted under the Future With Project conditions.

3.	I-10: Los Angeles Street WB Off-Ramp	(Mainline)
2.	US 101: Grand Avenue NB Off-Ramp	(Lane)
13.	SR 110: 9th Street NB Off-Ramp	(Lane)
15.	I-10: Hoover Street EB Off-Ramp	(Lane)

(c) Freeway On-Ramps

Project traffic would only be added to the on-ramps during the Post-Event Hour (outbound traffic leaving the Event Center). The freeway on-ramp level of service analysis for the Existing Conditions, Future Without Project, and Future With Project Compared to LACC Dark Conditions is summarized in Table 7.1.5.4 of the Transportation Study.

(i) Sunday Day Post-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following seven freeway on-ramps in the Sunday Day Post-Event hour.

- 3. I-10: Los Angeles Street EB On-Ramp
- 11. I-10: Washington Boulevard SB On-Ramp
- 12. SR 110: Blaine Street SB On-Ramp
- 13. SR 110: 8th Street SB On-Ramp
- 23. SR 110: 5th Street NB On-Ramp
- 24. SR 110: 8th Street NB On-Ramp
- 26. SR 110: 11th Street NB On-Ramp

³⁰ At ramp locations where the 85th percentile queue would back into the mainline, any "lane" impacts are not noted as they are included in the impact to the mainline.

At three of these locations, volumes would exceed ramp capacities by less than 10 percent. Each of these seven on-ramps would be significantly impacted under the Future With Project condition.

c. Saturday Day Event, Future With Project Compared to LACC Dark Conditions

(1) Roadway Intersections, Future With Project Compared to LACC Dark Conditions

The Project-Only traffic volumes forecast at the study intersections are shown in the Transportation Study in Appendix 7 in Figure A.7.2.1.1 for the Saturday Day Pre-Event hour and Figure A.7.2.1.2 for the Saturday Day Post-Event Hour. The total traffic volumes forecast for the analysis locations are the same as for the Future With Project scenario.

The intersection level of service analysis for the Future With Project Compared to LACC Dark Conditions is summarized in Table IV.B.1-17 on page IV.B.1-273. Table IV.B.1-17 compares the level of service for Future Without Project With LACC Dark and Future With Project conditions, shows the increase in V/C ratio at each intersection due to the Proposed Project, and identifies significant impacts according to LADOT criteria.

The locations of significant impacts at study intersections are shown in Figure IV.B.1-22 on page IV.B.1-317 for the Pre-Event Hour and Figure IV.B.1-23 on page IV.B.1-318 for the Post-Event Hour.

(a) Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following 32 intersections in the Saturday Day Pre-Event Hour.

6.	Olive Avenue & Olympic Boulevard	(LOS C)
35.	Blaine Street & 11th Street	(LOS C)
67.	Hill Street & Adams Boulevard	(LOS C)
89.	Flower Street & 8th Street	(LOS C)
94.	Lucas Avenue & 6th Street	(LOS C)
123.	Spring Street & Cesar Chavez Avenue	(LOS C)
132.	Glendale Boulevard & Temple Street	(LOS C)
138.	Western Avenue & Wilshire Boulevard	(LOS C)
148.	Union Avenue & Olympic Boulevard	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)
157.	Vermont Avenue & Venice Boulevard	(LOS C)

158.	Hoover Street & Venice Boulevard	(LOS C)
162.	Hoover Street & Washington Boulevard	(LOS C)
166.	Hill Street & 16th Street	(LOS C)
3.	Figueroa Street & Olympic Boulevard	(LOS D)
65.	I-110 NB Off-Ramp & Adams Boulevard	(LOS D)
147.	Alvarado Street & Olympic Boulevard	(LOS D)
161.	Vermont Avenue & Washington Boulevard	(LOS D)
165.	Hoover Street & I-10 EB Ramps	(LOS D)
170.	San Pedro Street & 16th Street	(LOS D)
4.	Flower Street & Olympic Boulevard	(LOS E)
33.	Blaine Street & Olympic Boulevard	(LOS E)
63.	Figueroa Street & Adams Boulevard	(LOS E)
88.	Figueroa Street & 8th Street	(LOS E)
152.	Alvarado Street & Pico Boulevard	(LOS E)
164.	Vermont Avenue & I-10 EB Ramps	(LOS E)
42.	Olive Street & 17th Street	(LOS F)
43.	Hill Street & 17th Street	(LOS F)
44.	Broadway & 17th Street	(LOS F)
45.	Main Street & 17th Street	(LOS F)
46.	Los Angeles Street & 17th Street	(LOS F)
146.	Vermont Avenue & Olympic Boulevard	(LOS F)

Of the 32 impacted intersections, 20 would operate at LOS D or better with the Proposed Project, six would operate at LOS E (two of which—Figueroa Street & Adams Boulevard and Vermont Avenue & I-10 EB Ramps—would operate at LOS E without the Proposed Project), and six would operate at LOS F (one of which—Vermont Avenue & Olympic Boulevard—would operate at LOS F without the Proposed Project). Except for #63, Figueroa Street & Adams, each of these 32 intersections would be significantly impacted under the Future With Project condition.

Six locations (virtually all of the LOS F locations) would be along the 17th Street corridor leading from the I-10 westbound off-ramp at Los Angeles Street. Four intersections would be at the end of off-ramps (Adams Boulevard, San Pedro Street, Vermont Avenue, and Hoover Street). Eight of the impacted intersections would be in the downtown area and the remaining 15 impacted intersections would be located on arterial roadways approaching downtown, of which thirteen would operate at LOS D or better.

(b) Saturday Day Post-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 36 intersections in the Saturday Day Post-Event Hour.

30.	Hill Street & Pico Boulevard	(LOS C)
38.	Flower Street & Venice Boulevard	(LOS C)
41.	Grand Avenue & 17th Street	(LOS C)
54.	Figueroa Street & Washington Boulevard	(LOS C)
78.	Figueroa Street & Martin Luther King Jr. Blvd.	(LOS C)
79.	I-110 SB Ramps & Martin Luther King Jr. Blvd.	(LOS C)
81.	Georgia Street & 9th Street	(LOS C)
88.	Figueroa Street & 8th Street	(LOS C)
129.	Hill Street & College Avenue	(LOS C)
144.	Western Avenue & Olympic Boulevard	(LOS C)
151.	Vermont Avenue & Pico Boulevard	(LOS C)
153.	Union Avenue & Pico Boulevard	(LOS C)
170.	San Pedro Street & 16th Street	(LOS C)
176.	Arlington Avenue & Venice Boulevard	(LOS C)
1.	Georgia Street & Olympic Boulevard	(LOS D)
3.	Figueroa Street & Olympic Boulevard	(LOS D)
4.	Flower Street & Olympic Boulevard	(LOS D)
33.	Blaine Street & Olympic Boulevard	(LOS D)
93.	Figueroa Street & Wilshire Boulevard	(LOS D)
111.	Grand Avenue & 1st Street	(LOS D)
132.	Glendale Boulevard & Temple Street	(LOS D)
147.	Alvarado Street & Olympic Boulevard	(LOS D)
158.	Hoover Street & Venice Boulevard	(LOS D)
162.	Hoover Street & Washington Boulevard	(LOS D)
163.	I-10 WB Ramps & 20th Street	(LOS D)
37.	Figueroa Street & Venice Boulevard	(LOS E)
146.	Vermont Avenue & Olympic Boulevard	(LOS E)
152.	Alvarado Street & Pico Boulevard	(LOS E)
35.	Blaine Street & 11th Street	(LOS F)
43.	Hill Street & 17th Street	(LOS F)
50.	Hill Street & 18th Street	(LOS F)
51.	Broadway & 18th Street	(LOS F)
52.	Main Street & 18th Street	(LOS F)
53.	Los Angeles Street & 18th Street	(LOS F)
119.	Grand Avenue & US-101 NB Ramps	(LOS F)
166.	Hill Street & 16th Street	(LOS F)

Of the 36 impacted intersections with the Proposed Project, 25 would operate at LOS D or better, 3 would operate at LOS E, and 8 would operate at LOS F. Ten of these impacted intersections, including virtually all of the LOS F intersections, would be located

along the I-10 corridor on the south end of downtown between Figueroa Street and San Pedro Street, primarily with outbound traffic accessing the I-10 eastbound freeway. Another 10 of the impacted intersections would be in Downtown, and the remaining 13 intersections would be on arterials serving the downtown area, with 11 operating at LOS D or better. Each of these 36 intersections would be significantly impacted under the Future With Project condition.

(2) Transit, Future With Project Compared to LACC Dark Conditions

The transit analysis for the Future With Project Conditions determined significant impacts on transit facilities by comparing total transit riders to system capacity thresholds, rather than by evaluating any incremental increases. Because of negligible current use of public transit for Convention Center events, and because the future conditions are identical for both the Future With Project Condition and the Future With Project Compared to LACC Dark Conditions, the transit analysis for the Future With Project Condition. Refer to Section IV.B.1.9 of this Draft EIR for a discussion of the Future With Project Condition.

- (3) Freeways, Future With Project Compared to LACC Dark Conditions
 - (a) Freeway Segments

The freeway segment analysis is summarized in Tables 7.2.5.1 and 7.2.5.2 of the Transportation Study for the Pre-Event and Post-Event Hour, respectively, for Existing Conditions With LACC Dark, Future Without Project With LACC Dark, and Future With Project Compared to LACC Dark Conditions.

(i) Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

With the Proposed Project, a total of eight freeway segments would operate at LOS D or better, six locations would operate at LOS E, five locations would operate at LOS F(0), and one would operate at LOS F(1). Therefore, the Proposed Project would result in a significant traffic impact at the following four freeway mainline locations and two freeway HOV locations in the Saturday Day Pre-Event hour.

15.	I-5 South of Stadium Way (SB)	(1.011)	F(0)
3b.	I-110 North of Martin Luther King Jr. Blvd (HOV) (NB)	(1.015)	F(0)
8.	US-101 at Glendale Boulevard (SB)	(1.064)	F(0)
7.	US-101 North of Vignes Street (NB)	(1.067)	F(0)
14.	US-101 South of Vermont Avenue (SB)	(1.150)	F(0)
12b.	I-110 at Slauson Avenue (HOV) (NB)	(1.252)	F(1)

Four of the LOS F locations would have a D/C ratio of less than 1.10. One location would be between 1.10 and 1.20, and one location would be greater than 1.20.

(ii) Saturday Day Post-Event Hour (4:30–5:30 P.M.)

Under Future With Project conditions, seven of the freeway segments would operate at LOS D or better, and thirteen would operate at LOS F(0). Therefore, the Proposed Project would result in a significant traffic impact at the following 11 freeway mainline and two freeway HOV locations in the Saturday Day Post-Event hour.

I-10 West of Vermont Avenue (WB)	(1.045)	F(0)
I-5 South of Stadium Way (NB)	(1.055)	F(0)
US-101 South of Vermont Avenue (SB)	(1.084)	F(0)
I-10 East of San Pedro Street (EB)	(1.088)	F(0)
I-110 at Vernon Avenue (Mainline) (SB)	(1.089)	F(0)
I-110 North of Martin Luther King Jr. Blvd (HOV) (SB)	(1.093)	F(0)
I-5 West of Indiana Street (SB)	(1.112)	F(0)
I-110 at Slauson Avenue (HOV) (SB)	(1.119)	F(0)
SR-110 North of Alpine Street (NB)	(1.129)	F(0)
US-101 at Glendale Boulevard (NB)	(1.140)	F(0)
SR-110 Between James Wood Blvd and Olympic Blvd (NB)	(1.162)	F(0)
US-101 North of Vignes Street (SB)	(1.174)	F(0)
SR-110 South of US-101 (NB)	(1.238)	F(0)
	I-10 West of Vermont Avenue (WB) I-5 South of Stadium Way (NB) US-101 South of Vermont Avenue (SB) I-10 East of San Pedro Street (EB) I-110 at Vernon Avenue (Mainline) (SB) I-110 North of Martin Luther King Jr. Blvd (HOV) (SB) I-5 West of Indiana Street (SB) I-110 at Slauson Avenue (HOV) (SB) SR-110 North of Alpine Street (NB) US-101 at Glendale Boulevard (NB) SR-110 Between James Wood Blvd and Olympic Blvd (NB) US-101 North of Vignes Street (SB) SR-110 South of US-101 (NB)	I-10 West of Vermont Avenue (WB) (1.045) I-5 South of Stadium Way (NB) (1.055) US-101 South of Vermont Avenue (SB) (1.084) I-10 East of San Pedro Street (EB) (1.088) I-110 at Vernon Avenue (Mainline) (SB) (1.089) I-110 North of Martin Luther King Jr. Blvd (HOV) (SB) (1.093) I-5 West of Indiana Street (SB) (1.112) I-110 at Slauson Avenue (HOV) (SB) (1.129) SR-110 North of Alpine Street (NB) (1.140) SR-110 Between James Wood Blvd and Olympic Blvd (NB) (1.162) US-101 North of Vignes Street (SB) (1.174) SR-110 South of US-101 (NB) (1.238)

The D/C ratio would be less than 1.10 at six of the impacted locations, and would be between 1.10 and 1.20 at a further six locations. The remaining one impacted location would have a D/C ratio greater than 1.20. Each of these 13 freeway locations would be significantly impacted under the Future With Project condition.

(b) Freeway Off-Ramps

The freeway off-ramp analysis for the Existing Conditions, Future Without Project With LACC Dark and Future With Project Compared to LACC Dark Conditions is summarized in Table 7.2.5.3 of the Transportation Study.

(i) Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following five freeway off-ramps in the Saturday Day Pre-Event hour. Each of these five off-ramps would be significantly impacted under the Future With Project condition.

City of Los Ang	jeles	Conventior	n and Event Center Project Dr
3.	I-10:	Los Angeles Street WB Off-Ramp	(Mainline)

- 15.I-10: Hoover Street EB Off-Ramp(Mainline)2.US 101: Grand Avenue NB Off-Ramp(Lane)11.I-110: Adams Boulevard NB Off-Ramp(Lane)13.SR-110: 9th Street NB Off-Ramp(Lane)
 - (c) Freeway On-Ramps

The freeway on-ramp level of service analysis for the Existing Conditions, Future Without Project With LACC Dark and Future With Project Compared to LACC Dark Conditions is summarized in Table 7.2.5.4 of the Transportation Study.

(i) Saturday Day Post-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 11 freeway on-ramps in the Saturday Day Post-Event hour.

- 1. US 101: Los Angeles Street EB On-Ramp
- 3. I-10: Los Angeles Street EB On-Ramp
- 11. I-10: Washington Boulevard SB On-Ramp
- 12. SR-110: Blaine Street SB On-Ramp
- 13. SR-110: 8th Street SB On-Ramp
- 17. I-10: Grand Avenue WB On-Ramp
- 19. US 101: Glendale Boulevard On-Ramp
- 23. SR 110: 5th Street NB On-Ramp
- 24. SR 110: 8th Street NB On-Ramp
- 25. SR 110: 9th Street NB On-Ramp
- 26. SR 110: 11th Street NB On-Ramp

At three of these locations, #1. Los Angeles Street EB On-Ramp (US-101), #19. Glendale Boulevard On-Ramp, and #25. 9th Street NB On-Ramp, volumes would exceed ramp capacities by less than 10 percent. Each of these 11 on-ramps would be significantly impacted under the Future With Project condition.

d. Weekday Evening Event, Future With Project Compared to LACC Dark Conditions

(1) Roadway Intersections, Future With Project Compared to LACC Dark Conditions

The total traffic volumes forecast for the study intersections are the same as for the Future With Project condition. The Project-Only traffic volumes at the study intersections

are shown in the Transportation Study in Appendix 7 in Figure A.7.3.1.1 for the Weekday Evening Pre-Event Hour and Figure A.7.3.1.2 for the Weekday Evening Post-Event Hour.

The intersection level of service analysis for the Future With Project Compared to LACC Dark Conditions is summarized in Table IV.B.1-18 on page IV.B.1-279. Table IV.B.1-18 compares the level of service for Future Without Project With LACC Dark and Future With Project Compared to LACC Dark Conditions, shows the increase in V/C ratio at each intersection due to the Proposed Project, and identifies significant impacts according to LADOT criteria.

The locations of significant impacts at study intersections are shown in Figure IV.B.1-24 on page IV.B.1-319 and Figure IV.B.1-25 on page IV.B.1-320 for the Pre-Event and Post-Event Hour, respectively.

(a) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following 79 intersections in the Weekday Evening Pre-Event Hour.

1.	Georgia Street & Olympic Boulevard	(LOS C)
6.	Olive Street & Olympic Boulevard	(LOS C)
18.	Grand Avenue & 11th Street	(LOS C)
27.	Flower Street & Pico Boulevard	(LOS C)
30.	Hill Street & Pico Boulevard	(LOS C)
56.	Grand Avenue & Washington Boulevard	(LOS C)
57.	Olive Street & Washington Boulevard	(LOS C)
58.	Hill Street & Washington Boulevard	(LOS C)
71.	Figueroa Street & Exposition Boulevard	(LOS C)
81.	Georgia Street & 9th Street	(LOS C)
83.	Figueroa Street & 9th Street	(LOS C)
104.	Olive Street & 5th Street	(LOS C)
145.	Normandie Avenue & Olympic Boulevard	(LOS C)
155.	Western Avenue & Venice Boulevard	(LOS C)
156.	Normandie Avenue & Venice Boulevard	(LOS C)
163.	I-10 WB Ramp & 20th Street	(LOS C)
166.	Hill Street & 16th Street	(LOS C)
174.	Arlington Avenue & Olympic Boulevard	(LOS C)
177.	Arlington Avenue & Washington Boulevard	(LOS C)
4.	Flower Street & Olympic Boulevard	(LOS D)
8.	Broadway & Olympic Boulevard	(LOS D)

33.	Blaine Street & Olympic Boulevard	(LOS D)
34.	Blaine Street & SR-110 SB Off-Ramp	(LOS D)
41.	Grand Avenue & 17th Street	(LOS D)
54.	Figueroa Street & Washington Boulevard	(LOS D)
59.	Broadway & Washington Boulevard	(LOS D)
66.	Grand Avenue & Adams Boulevard	(LOS D)
80.	I-110 NB Ramps & Martin Luther King Jr. Blvd.	(LOS D)
95.	Bixel Street & 6th Street	(LOS D)
110.	Hope Street & 1st Street	(LOS D)
116.	Hope Street & Temple Street	(LOS D)
138.	Western Avenue & Wilshire Boulevard	(LOS D)
148.	Union Avenue & Olympic Boulevard	(LOS D)
151.	Vermont Avenue & Pico Boulevard	(LOS D)
153.	Union Avenue & Pico Boulevard	(LOS D)
157.	Vermont Avenue & Venice Boulevard	(LOS D)
164.	Vermont Avenue & I-10 EB Ramps	(LOS D)
165.	Hoover Street & I-10 EB Ramps	(LOS D)
170.	San Pedro Street & 16th Street	(LOS D)
172.	Central Avenue & Washington Boulevard	(LOS D)
184.	La Brea Avenue & Olympic Boulevard	(LOS D)
26.	Figueroa Street & Pico Boulevard	(LOS E)
37.	Figueroa Street & Venice Boulevard	(LOS E)
42.	Olive Street & 17th Street	(LOS E)
64.	Flower Street & Adams Boulevard	(LOS E)
65.	I-110 NB Off-Ramp & Adams Boulevard	(LOS E)
67.	Hill Street & Adams Boulevard	(LOS E)
123.	Spring Street & Cesar Chavez Avenue	(LOS E)
139.	Normandie Avenue & Wilshire Boulevard	(LOS E)
141.	Alvarado Street & Wilshire Boulevard	(LOS E)
147.	Alvarado Street & Olympic Boulevard	(LOS E)
152.	Alvarado Street & Pico Boulevard	(LOS E)
158.	Hoover Street & Venice Boulevard	(LOS E)
162.	Hoover Street & Washington Boulevard	(LOS E)
168.	Main Street & 16th Street	(LOS E)
176.	Arlington Avenue & Venice Boulevard	(LOS E)
179.	Crenshaw Boulevard & Olympic Boulevard	(LOS E)
181.	Crenshaw Boulevard & Venice Boulevard	(LOS E)
182.	Crenshaw Boulevard & Washington Boulevard	(LOS E)
3.	Figueroa Street & Olympic Boulevard	(LOS F)
9.	Main Street & Olympic Boulevard	(LOS F)

32.	Main Street & Pico Boulevard	(LOS F)
35.	Blaine Street & 11th Street	(LOS F)
43.	Hill Street & 17th Street	(LOS F)
44.	Broadway & 17th Street	(LOS F)
45.	Main Street & 17th Street	(LOS F)
46.	Los Angeles Street & 17th Street	(LOS F)
63.	Figueroa Street & Adams Boulevard	(LOS F)
86.	Bixel Street & 8th Street	(LOS F)
88.	Figueroa Street & 8th Street	(LOS F)
93.	Figueroa Street & Wilshire Boulevard	(LOS F)
94.	Lucas Avenue & 6th Street	(LOS F)
96.	Figueroa Street & 6th Street	(LOS F)
102.	Figueroa Street & 5th Street	(LOS F)
111.	Grand Avenue & 1st Street	(LOS F)
140.	Vermont Avenue & Wilshire Boulevard	(LOS F)
144.	Western Avenue & Olympic Boulevard	(LOS F)
146.	Vermont Avenue & Olympic Boulevard	(LOS F)
161.	Vermont Avenue & Washington Boulevard	(LOS F)

Of the 79 impacted intersections, 41 would continue to operate at LOS D or better; 18 would operate at LOS E (two of which—Normandie Avenue & Wilshire Boulevard and Crenshaw Boulevard & Venice Boulevard—would operate at LOS E without the Proposed Project); and 20 would operate at LOS F (seven of which Main Street & Olympic Boulevard, Main Street & Pico Boulevard, Figueroa Street & Adams Boulevard, Bixel Street & 8th Street, Figueroa Street & Wilshire Boulevard, Figueroa Street & 5th Street, and Vermont Avenue & Wilshire Boulevard) would operate at LOS F without the Proposed Project). Nine of the impacted intersections, including four LOS F intersections, would be located along the 17th Street (and 16th Street) corridor leading from the I-10 westbound ramps at Los Angeles Street and San Pedro Street. Twenty-eight of the impacted intersections, including ten LOS F intersections, would be located in the downtown area. Four intersections would be located at the ends of freeway off-ramps (at Vermont Avenue, at Hoover Street, at Adams Boulevard, and at Martin Luther King Jr. Boulevard-with three operating at LOS D or better and one operating at LOS E). The remaining impacted intersections would be located on arterial roadways near or leading to downtown, with 18 intersections operating at LOS D or better, ten operating at LOS E and six operating at LOS F. Two locations would remain at LOS E (without and with the Proposed Project) and seven locations would remain at LOS F. Except for intersection # 71, Figueroa & Exposition Boulevard, and #163, I-10 WB Ramp & 20th Street, each of these 79 intersections would be significantly impacted under the Future With Project condition.

(b) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

This time period would have the lowest background traffic of all the time periods studied. At this hour of the weekday evening, all study intersections would operate at LOS A without the Proposed Project. The Proposed Project would result in a significant traffic impact at the following nine intersections in the Weekday Evening Post-Event Hour.

43.	Hill Street & 17th Street	(LOS C)
146.	Vermont Avenue & Olympic Boulevard	(LOS C)
51.	Broadway & 18th Street	(LOS D)
52.	Main Street & 18th Street	(LOS D)
119.	Grand Avenue & US-101 NB Ramps	(LOS E)
166.	Hill Street & 16th Street	(LOS E)
35.	Blaine Street & 11th Street	(LOS F)
50.	Hill Street & 18th Street	(LOS F)
53.	Los Angeles Street & 18th Street	(LOS F)

Of the nine impacted intersections, four would operate at LOS D or better, both with and without the Proposed Project; two would operate at LOS E; and the remaining three intersections (Blaine Street & 11th Street, Hill Street & 18th Street, and Los Angeles Street & 18th Street) would operate at LOS F. Each of these nine intersections would be significantly impacted under the Future With Project condition.

(2) Transit, Future With Project Compared to LACC Dark Conditions

The transit analysis for the Future With Project Conditions determined significant impacts on transit facilities by comparing total transit riders to system capacity thresholds, rather than by evaluating any incremental increases. Because of negligible current use of public transit for Convention Center events, and because the future conditions are identical for both the Future With Project Condition and the Future With Project Compared to LACC Dark Conditions, the transit analysis for the Future With Project Condition. Refer to Section IV.B.1.9 of this Draft EIR for a discussion of the Future With Project Condition.

- (3) Freeways, Future With Project Compared to LACC Dark Conditions
 - (a) Freeway Segments

The freeway segment analysis is summarized in Tables 7.3.5.1 and 7.3.5.2 of the Transportation Study for the Weekday Evening Pre-Hour and Post Hour Events,

respectively. These tables provide the LOS and D/C ratios for Existing Conditions With LACC Dark, Future Without Project With LACC Dark, and Future With Project Compared to LACC Dark Conditions.

(i) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

With the Proposed Project, six of the 20 freeway analysis locations are expected to operate at LOS D or better during the Weekday Evening Pre-Event hour, and 14 locations would operate at LOS F (nine at LOS F(0), two at LOS F(1), two at LOS F(2), and one at LOS F(3)). In summary, the Proposed Project would result in a significant traffic impact at the following 14 freeway mainline locations in the Weekday Evening Pre-Event Hour:

За.	I-110 South of Martin Luther King Jr. Blvd (Mainline) (NB)	(1.025)	F(0)
15.	I-5 South of Stadium Way (SB)		F(0)
4S.	SR-110 Between James Wood Blvd and Olympic Blvd (SB)	(1.102)	F(0)
8.	US-101 at Glendale Boulevard (SB)	(1.136)	F(0)
10.	I-5 West of Indiana Street (NB)	(1.142)	F(0)
12a.	I-110 at Vernon Avenue (Mainline) (NB)	(1.179)	F(0)
7.	US-101 North of Vignes Street (NB)	(1.187)	F(0)
14.	US-101 South of Vermont Avenue (SB)	(1.216)	F(0)
6.	SR-110 North of Alpine Street (SB)	(1.227)	F(0)
2.	I-10 East of San Pedro Street (WB)	(1.276)	F(1)
4N.	SR-110 Between James Wood Blvd & Olympic Blvd (NB)	(1.268)	F(1)
1.	I-10 West of Vermont Avenue (EB)	(1.361)	F(2)
5.	SR-110 South of US-101 (SB)	(1.374)	F(2)
13.	I-10 East of Crenshaw Boulevard (EB)	(1.571)	F(3)

Of the 14 impacted intersections, two would have a D/C ratio less than 1.10; five would have a D/C ratio between 1.10 and 1.20; four would have a D/C ratio between 1.20 and 1.30, and three would have a D/C ratio greater than 1.30. The level of service at 11 of the 14 impacted locations would be LOS F without the Proposed Project. Except for #4N, SR-110 Between James M. Woods Blvd. & Olympic Boulevard, Each of these 14 freeway locations would be significantly impacted under the Future With Project condition.

(ii) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

With the Proposed Project, a total of 17 of the 20 studied freeway locations are expected to continue to operate at LOS D or better during the Weekday Evening Post-Event hour. The remaining three locations would operate at LOS F(0). In summary, the Proposed Project would result in a significant traffic impact at the following three freeway mainline locations:

8.	US-101 at Glendale Boulevard	(1.014)	F(0)
5.	SR-110 South of US-101	(1.016)	F(0)
10.	I-5 West of Indiana Street	(1.017)	F(0)

All three of impacted freeway locations would have a V/C ratio less than 1.02. Each of these three freeway locations would be significantly impacted under the Future With Project condition.

(b) Freeway Off-Ramps

The freeway off-ramp analysis for the Existing Conditions With LACC Dark, Future Without Project With LACC Dark and Future With Project Compared to LACC Dark Condition is summarized in Table 7.3.5.3 of the Transportation Study and discussed below.

(i) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The Proposed Project would result in a significant traffic impact at the following eight freeway off-ramps in the Weekday Evening Pre-Event Hour. At two locations these would be lane only impacts, and at six locations they would be overall ramp impacts. Each of these eight off-ramps would be significantly impacted under the Future With Project condition.

2.	US 101: Grand Avenue NB Off-Ramp	(Mainline)
3.	I-10: Los Angeles Street WB Off-Ramp	(Mainline)
13.	SR 110: 9th Street NB Off-Ramp	(Mainline)
15.	I-10: Hoover Street EB Off-Ramp	(Mainline)
21.	SR 110: 6th Street SB Off-Ramp	(Mainline)
23.	SR 110: Olympic Boulevard SB Off-Ramp	(Mainline)
7.	I-110: Martin Luther King Jr. Boulevard NB Off-Ramp	(Lane)
11.	I-110: Adams Boulevard NB Off-Ramp	(Lane)

(c) Freeway On-Ramps

The freeway on-ramp level of service analysis for the Existing Conditions With LACC Dark, Future Without Project With LACC Dark, and Future With Project Compared to LACC Dark Conditions is summarized in Table 7.3.5.4 of the Transportation Study for the Weekday Evening Post-Event Hour.

(i) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

The Proposed Project would result in a significant traffic impact at the following six freeway on-ramps in the Weekday Evening Post-Event Hour. Each of these six on-ramps would be significantly impacted under the Future With Project condition.

- 3. I-10: Los Angeles Street EB On-Ramp
- 12. SR 110: Blaine Street SB On-Ramp
- 23. SR 110: 5th Street NB On-Ramp
- 24. SR 110: 8th Street NB On-Ramp
- 25. SR 110: 9th Street NB On-Ramp
- 26. SR 110: 11th Street NB On-Ramp

e. Congestion Management Plan Future With Project Compared to LACC Dark Conditions,

(1) CMP Intersection Analysis, Future With Project Compared to LACC Dark Conditions

The analysis was based on existing traffic counts, forecasts of Future Without Project With LACC Dark traffic volumes, and the addition of Proposed Project trips for the Future With Project conditions. As discussed earlier, for intersections and freeways, existing Convention Center event traffic was excluded from the Existing Conditions and Future Without Project Conditions traffic volumes. The analysis of the nine CMP intersections identified earlier is summarized in Table 7.4.1.1 in the Transportation Study. While the Proposed Project would increase the V/C ratios at most of the intersections, the incremental increase in V/C ratio would be less than the significant impact threshold of 0.02. Based on this analysis, the Proposed Project would not cause any significant traffic impacts at any of the CMP monitoring intersections.

(2) CMP Freeway Analysis, Future With Project Compared to LACC Dark Conditions

Traffic volumes for Existing Conditions With LACC Dark and for Future Without Project Conditions With LACC Dark were obtained by the same process described for the Future With Project condition, except that existing Convention Center event traffic volumes were excluded.

Proposed Project trips were added to the 2017 Future Without Project With LACC Dark base volumes to obtain the 2017 Future With Project Compared to LACC Dark Conditions total volumes on the freeway segments. Both the Project only trips, and the

total Future With Project trips, are shown in Table 7.4.2.1 of the Transportation Study, along with the Future With Project D/C ratios and levels of service.

The Proposed Project would add 150 or more trips in either direction at 43 of the 81 CMP monitoring locations during the Weekday Evening Pre-Event Hour. According to CMP guidelines, no further CMP analysis is necessary at the 38 locations that do not exceed the 150 trips threshold. However, for purposes of providing a comprehensive review, all 81 freeway monitoring locations were investigated in the analysis.

The analysis concluded that the addition of vehicle trips generated by the Proposed Project would cause significant impacts according to CMP criteria³¹ at the following 23 CMP freeway monitoring locations for the Weekday Evening Pre-Event Hour, except for CMP Station Nos. 1002 (I-5 at Lemoran Ave (SB)), 1003 (I-5 at Ferris Ave (SB)), 1037 (US-101 south of Santa Monica Blvd. (NB)), and 1048 (SR-110 south of US-101 (NB)), each of these 23 freeway monitoring locations would be significantly impacted under the Future With Project condition.

CMP Station No.	Freeway Segment
1002	I-5 at Lemoran Ave. (NB)
1002	I-5 at Lemoran Ave. (SB)
1003	I-5 at Ferris Ave. (NB)
1003	I-5 at Ferris Ave. (SB)
1004	I-5 at Stadium Way (SB)
1005	I-5 south of Colorado Blvd. (SB)
1006	I-5 at Burbank Blvd. (SB)
1011	I-10 east of Overland Ave. (EB)
1012	I-10 east of La Brea Ave. (EB)
1013	I-10 at Budlong Ave. (EB)
1018	I-10 east of Puente Ave. (WB)
1019	I-10 at Grand Ave. (WB)
1036	US-101 North of Vignes St. (NB)

³¹ Under CMP criteria, a significant impact will result If the Project adds 150 or more trips, in either direction at a CMP freeway monitoring segment, during either the morning or afternoon peak hour and Projectrelated traffic causes an increase in the V/C ratio on a freeway segment or freeway on- or off-ramp of two percent or more capacity (V/C increase >0.02), which causes or worsens Level of Service F conditions (V/C >1.00).

CMP Station No.	Freeway Segment
1037	US-101 south of Santa Monica Blvd. (NB)
1037	US-101 south of Santa Monica Blvd. (SB)
1038	US-101 at Coldwater Canyon Ave. (SB)
1039	US-101 at Winnetka Ave. (SB)
1046	I-110 at Manchester Blvd. (NB)
1047	I-110 at Slauson Ave. (NB)
1048	SR-110 south of US-101 (NB)
1048	SR-110 south of US-101 (SB)
1049	SR-110 north of Alpine St. (SB)
1067	I-405 south of I-110 at Carson Scales (NB)

As the large majority of Proposed Project trips would be generated by events at the Event Center, Proposed Project impacts using the representative baseline would be substantially similar to those under the Future With Project Compared to LACC Dark Conditions scenario.

12. Additional Traffic Scenarios

This section addresses the following two additional traffic scenarios that are provided for information purposes only: (1) Future With Project Conditions with Concurrent Los Angeles Coliseum (the Coliseum) and Dodger Stadium Events; and, (2) Future With Project Conditions with Concurrent Convention Center Auto Show Event (the Auto Show Event). The analysis for both of these scenarios is based upon the 2017 Future With Project conditions analyzed in Subsection IV.B.1.10 above. The evaluation provided for these two scenarios is provided for informational purposes and to provide guidance on addressing these potential concurrent event scenarios in the Transportation Management Plan that will be prepared for the Proposed Project. Because these two scenarios are only provided for informational purposes to guide the development of the Transportation Management Plan, these scenarios were not used to determine level of significance. Therefore, the Thresholds for Significance provided in Section 6 above, were not applied for these two scenarios.

a. Proposed Project With Concurrent Coliseum and Dodger Stadium Events

This subsection addresses the Future With Project conditions with concurrent events at the Los Angeles Coliseum and at Dodger Stadium. The analysis is based on the 2017

Future With Project conditions and addresses the same three event scenarios as the Proposed Project (Sunday Day Event, Saturday Day Event, Weekday Evening Event). The evaluation evaluates the likelihood of concurrent events occurring at both the Los Angeles Coliseum and at Dodger Stadium, estimates the transportation characteristics of events at both facilities, and evaluates the potential cumulative transportation conditions.

(1) Event Characteristics

(a) Coliseum Event.

The current capacity of the Coliseum is about 92,000 seats. Typical events at the Coliseum are USC College Football games and major soccer games. Other events, such as concerts, also occur at the Coliseum but occur relatively infrequently. Weekend events are usually USC football games, which almost always occur on Saturdays. Events at the Coliseum on Sundays are unusual. The start time varies and is usually set by television broadcast schedules. Games can start anytime between 12:00 P.M. and 7:00 P.M., with the most typical start times being 12:30 P.M., 5:00 P.M., or 7:00 P.M. College football games usually last about three hours. USC typically plays six games at the Coliseum during the season, between September and early December, which coincide with much of the NFL football season. The average attendance at USC football games over the last four years was 84,750 persons.

Weekday evening events at the Coliseum usually start at 7:00 P.M. or 7:30 P.M., and are usually soccer games that typically last about two hours. Soccer games are not a regular occurrence at the Coliseum, with usually only a few major international games being scheduled each year. While attendance varies considerably, the major soccer games at the Coliseum over the last 15 years have attracted attendances in the range of 88,000 to 91,600 people, and have averaged 90,500 persons. Soccer games can also occur on weekends, but not as frequently as they occur on weekdays.

(b) Dodger Stadium Event.

The current capacity of Dodger Stadium is about 56,000 seats. The typical event at Dodger Stadium is a Los Angeles Dodgers baseball game. Other events occur very infrequently and are usually concerts. The Dodgers play a total of 81 home games in a season, between April and September, and therefore the schedule only partially overlaps with the NFL season. Over a typical season, the vast majority of games (62 percent) are scheduled on weekday evenings, with about 5 percent scheduled on weekdays during the day, 17 percent on Saturdays, and 16 percent on Sundays. Most Saturday games are in the evenings and most Sunday games are in the daytime. The average attendance at Dodgers games over the last four years was 45,550 persons on weekdays and 47,000 persons on weekends. A typical Dodgers game lasts about three hours. Weekend daytime

games typically start at 1:10 P.M. and end around 4:15 P.M., and can occur on both Saturday and Sunday. Weekday daytime games usually start at 12:10 P.M. and end by 3:15 P.M. Weekday night games usually start at 7:10 P.M. and end around 10:15 P.M.

(c) Likelihood of Concurrent Events With the Event Center.

There would be a very low probability of a concurrent event at the Coliseum occurring with a spectator event at the Event Center. On Sundays, the day when the most events would occur at the Event Center, there is rarely an event at the Coliseum. On Saturdays, while there are typically six home USC games between early September and the end of November, NFL games are not regularly scheduled on Saturdays until December, and even then there would typically be only one game scheduled on a Saturday in that month. On weekdays, when the least events would be scheduled at the Event Center, there would be at most only a few NFL evening games between September and December, which would occur only on Monday or Thursday evenings. There are relatively few evening events at the Coliseum during the year, and those that are scheduled do not necessarily occur on Mondays and Thursdays.

There would be a higher probability of a concurrent event at Dodger Stadium, although this would be limited primarily to the month of September and perhaps October if the Dodgers were in the playoffs. During these times, the highest probability would occur for a Sunday Day event at the Event Center. Concurrent events on weekday evenings would be rare, as there would be few events at the Event Center.

The above discussion focuses on the sports events at the Event Center, which would be the most frequent major sold-out events. While there could be other events at the Event Center for the times discussed above, the chances of concurrent events on the same day and at the same time would also be low.

In summary, concurrent events would be quite rare and would be very much the exception rather than the rule. The probability of concurrent events at both the Coliseum and Dodger Stadium at the same time as an Event Center event would be extremely low. Nevertheless, for the purposes of preparing a conservative analysis, the Transportation Study (see Appendix I to the Draft EIR) addressed the potential for concurrent events at the Coliseum and at Dodger Stadium to occur with a major Event Center event. The findings of the Transportation Study are discussed below.

(d) Schedule of Concurrent Events with Event Center Event.

The schedule characteristics of events at the Coliseum and at Dodger Stadium were evaluated against the three event scenarios being studied for the Event Center and are discussed below. Tables 8.2.1 and 8.2.2 in the Transportation Study provide a comparison of event arrival and departure times, respectively.

(i) Event Center Sunday Daytime Event (1:00 P.M.–4:30 P.M.)

Events at the Coliseum rarely occur on Sundays, so a concurrent event with an Event Center Sunday Daytime Event was not analyzed. A concurrent weekend event at the Coliseum was instead addressed for a Saturday Daytime event at the Event Center (see discussion below). Because Dodgers games typically start at 1:10 P.M. on Sundays, a concurrent Dodgers event and Event Center event were analyzed.

Pre-Event Hour (12:00–1:00 P.M.)

Dodgers games typically start at 1:10 P.M. on Sundays, about the same time as a 1:00 P.M. start for an Event Center event, so a 100 percent overlap of Pre-Event Hours was assumed, and the concurrent analysis included the Pre-Event Hour for a Dodgers game. Similarly to the Event Center, 50 percent of arrivals at Dodgers games are estimated to occur in the Pre-Event Hour.

Post Event Hour (4:30–5:30 P.M.)

A Dodgers game typically ends around 4:10 P.M., a little earlier than an Event Center event ending at 4:30 P.M. This would constitute a 67 percent overlap between Post-Event Hours. There would also be a 33 percent overlap between the first twenty minutes of the Dodgers post-post-event hour and the Event Center post-event hour. So the concurrent analysis included these concurrencies with a Dodgers game post-event hour, and the estimated 55 percent of attendees leave a Dodgers game in the post-event hour, and 15 percent of attendees leave in the post-event hour, for a net 42 percent overlap of Dodgers traffic with the Event Center post-event hour.

(ii) Event Center Saturday Daytime Event (1:00 P.M.–4:30 P.M.)

Pre-Event Hour (12:00–1:00 P.M.)

A Saturday daytime event at the Coliseum is typically a USC football game. A common start time is 12:30 P.M., but games also start at other times as described above. It is unusual for a Coliseum event to start at 1:00 P.M. Therefore, the concurrent event analysis assumed a 50 percent overlap of a Coliseum Pre-Event Hour with the Event Center Pre-Event Hour. It is estimated that 40 percent of USC game attendees arrive in the Pre-Event Hour, so there would be a net 20 percent overlap of Coliseum traffic with the Event Center Pre-Event Hour. As Dodgers games typically start at 1:10 P.M. on Saturdays a 100 percent overlap of Pre-Event Hours was assumed, and the concurrent analysis

included the Pre-Event Hour for a Dodgers game with a 50 percent arrival rate of Dodgers traffic in the Dodgers Pre-Event Hour.

Post Event Hour (4:30–5:30 P.M.)

A USC football game in the Coliseum starting at 12:30 P.M. typically ends at about 3:30 P.M. This is a full hour earlier than the end of an Event Center event which would typically occur at about 4:30 P.M. While there would be no direct overlap between Post-Event Hours, not all USC game attendees typically leave in the Post-Event Hour. It is estimated that 30 percent of attendees at a USC game leave in the hour after the Post-Event Hour and concurrent with the Event Center Post-Event Hour, so the analysis assumed a 30 percent overlap with the Event Center Post-Event Hour. A Dodgers game typically ends at about 4:10 P.M., so the same overlap estimates were used as described above for the Sunday Post-Event Hour.

(iii) Event Center Weekday Evening Event (5:30 P.M.–9:00 P.M.)

Pre-Event Hour (4:30–5:30 P.M.)

A Coliseum event is unlikely to start at 5:30 P.M. as weekday evening events usually start at 7:00 P.M. or 7:30 P.M. For purposes of a conservative analysis, a 7:00 P.M. start time was assumed. While there would be no direct overlap between Pre-Event Hours, it is estimated that 25 percent of Coliseum attendees could arrive during the Event Center Pre-Event Hour, so that overlap with the Event Center Pre-Event Hour was assumed. As a Dodgers game typically starts at 7:10 P.M., there would be no direct overlap with an Event Center event starting at 5:30 P.M. However, because it is estimated that 17.5 percent of Dodgers attendees could arrive during the Event Center Pre-Event Hour, that overlap with the Event Center Pre-Event Hour, the Event Center Pre-Event Hour was assumed.

<u>Post Event Hour (9:00–10:00 р.м.)</u>

A Coliseum weeknight event is likely to be a soccer game that could finish at 9:00 P.M. Therefore, the Post-Event Hour would coincide with the finish of an Event Center event also at 9:00 P.M. The analysis therefore, assumed a 100 percent overlap of Post-Event Hours, with 75 percent of Coliseum traffic leaving in the Post-Event Hour. Dodgers games typically end around 10:10 P.M., so there would be no direct overlap with an Event Center event Post-Event Hour of 9:00–10:00 P.M. However, up to 30 percent of Dodgers fans typically leave early before the end of the game, so a 30 percent overlap of Dodgers traffic with the Event Center Post-Event Hour was assumed.

(e) Transportation Characteristics of Concurrent Events

At the Coliseum, a typical attendance of 84,750 persons was identified for a weekend USC game, and of 90,500 persons for a weekday soccer game. For the Coliseum, a transit mode split of between 10.0 percent for weekday evening soccer games and 17.5 percent for weekend USC games (including 10 percent walk-in from the USC campus) was estimated. This accounts for the fact that the Exposition Line would be fully operational in 2017, which would also connect the Coliseum to the other rail lines in the system in downtown. For Dodger Stadium, a transit mode split of 1.5 percent transit was estimated for weekday and weekend games, based on information available on the use of the Dodgers Shuttle to Union Station. The percentage of trips occurring in the Pre-Event Hour and the Post-Event Hour at both facilities were estimated based on available information. The estimated transportation characteristics and number of vehicle trips for concurrent events at the Coliseum and at Dodger Stadium are summarized in the Transportation Study in Table 8.3.1

For an Event Center Sunday Day Event, there could be an estimated 7,713 concurrent event trips in the Pre-Event Hour and 6,448 concurrent event trips in the Post-Event Hour. For an Event Center Saturday Day Event, there could be an estimated 12,374 concurrent event trips in the Pre-Event Hour and 13,440 concurrent event trips in the Post-Event Hour. For an Event Center Weekday Evening Event, there could be an estimated 8,389 concurrent event trips in the Pre-Event Hour and 21,862 concurrent event trips in the Post-Event Hour.

(f) Overview of Analysis of Concurrent Events

The analysis for concurrent events addresses the same event scenarios, time periods, and locations as addressed for the Future with Proposed Project Conditions for the Event Center. It builds on that analysis by adding estimated traffic loads in the Event Center Pre-Event and Post-Event Hours from events at the Coliseum and Dodger Stadium (as identified above) to the traffic forecasts identified for the Future With Proposed Project Conditions. This analysis is not an impact analysis of Coliseum and Dodger Stadium events, but rather demonstrates the effects of additional traffic from concurrent events at the Coliseum and at Dodger Stadium on those locations analyzed for the Event Center.

Traffic conditions at many of the street intersection locations analyzed for the Event Center would remain unchanged with concurrent events at the Coliseum and at Dodger Stadium because there is limited geographic overlap between the three areas. For surface streets, the geographic overlap of traffic access/egress between the Proposed Project and the Coliseum is generally limited to the area of the I-10 Freeway corridor and to the south, while the geographic overlap between the Proposed Project and Dodger Stadium is generally limited to the US-101 Freeway corridor and to the north. This is also the case for freeway ramps, where the geographic overlap is relatively limited to the ramps serving the Coliseum and Dodger Stadium areas. There is a wider geographic overlap of traffic on the mainline freeway system, as patrons would use many of the freeways in the downtown area to access all three venues.

(i) Sunday Day Event, With Concurrent Events

Roadway Intersections, With Concurrent Events

The roadway intersection analysis is summarized below and in Table 8.5.1.1 of the Transportation Study. The summary below and in Table 8.5.1.1 only addresses those intersections where the level of service would *worsen* between the Future With Project Conditions and the Future With Project with Concurrent Events Conditions. The detailed analysis of all study intersections for this scenario is presented in Table A.8.5.1.1 in Appendix 8 of the Transportation Study.

Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

The addition of concurrent event traffic to Future With Project Conditions would worsen the levels of service at the following three intersections in the Sunday Day Pre-Event Hour.

121.	Figueroa Street & Cesar Chavez Avenue	(LOS B)
134.	Alvarado Street & US-101 EB Ramps	(LOS D)
130.	Sunset Boulevard & Elysian Park Avenue	(LOS F)

Two of these intersections would continue to operate at LOS D or better. The intersection of Sunset Boulevard at Elysian Park Avenue would operate at LOS F. This is a key intersection for access to Dodger Stadium and is usually controlled by LADOT traffic officers during Dodgers games.

Sunday Day Post-Event Hour (4:30–5:30 P.M.)

The addition of concurrent event traffic to the Future With Project Conditions would result in worse levels of service at the following eight intersections in the Sunday Day Post-Event Hour.

121.	Figueroa Street & Cesar Chavez Avenue	(LOS B)
123.	Spring Street & Cesar Chavez Avenue	(LOS B)
129.	Hill Street & College Street	(LOS B)
133.	Alvarado Street & US-101 WB Ramps	(LOS B)
120.	Beaudry Avenue & Sunset Boulevard	(LOS C)
125.	Alameda Street & Cesar Chavez Avenue	(LOS C)

130.	Sunset Boulevard & Elysian Park Avenue	(LOS D)
119.	Grand Avenue & US-101 NB Ramps	(LOS E)

Seven of these intersections would continue to operate at LOS D or better. The intersection of Grand Avenue & US-101 NB Ramps Sunset Boulevard would operate at LOS E, due to the addition of eastbound Dodger Stadium traffic.

Transit, With Concurrent Events

Sunday Pre-Event Hour (12:00–1:00 P.M.)

The concurrent events would generate an additional 352 transit trips in the Event Center Pre-Event Hour. These would be trips to Dodger Stadium. The transit analysis is shown in Table A.8.5.2.1 in Appendix 8 of the Transportation Study

The transit system operates reduced schedules at weekends, so system capacity is lower than on weekdays. Overall, the transit system serving the Proposed Project site would have a projected passenger-carrying capacity of 17,460 riders in the Sunday Pre-Event Hour. The total ridership in the Sunday Pre-Event Hour, including 5,400 trips from the Proposed Project and 352 concurrent event trips, would be 14,431 riders. Therefore, there would be sufficient overall transit capacity to accommodate the Proposed Project in the Sunday Day Pre-Event Hour. However, as shown below, the policy load factors (capacities) would be slightly exceeded on the Metro Blue Line, the Metrolink, the Silver Line (both directions), and for Express buses. This is considered a potentially significant impact. These impacts are very similar to those of the Proposed Project, with this scenario needing one additional Metrolink car than the Proposed Project to meet the prescribed load factor.

	Additional Rail Cars/Buses
Line	Needed to Meet Load Factor
Metro Blue Line	3
Metrolink	2
Metro Silver Line (South)	2
Metro Silver Line (North)	2
Express Bus	2

Sunday Post Event Hour (4:30–5:30 P.M.)

The concurrent events would generate an additional 295 transit trips in the Event Center Post-Event Hour (see Table 8.3.1 in the Transportation Study). These would be trips leaving Dodger Stadium.
The transit system analysis for the Sunday Post-Event Hour is summarized in Table A.8.5.2.2 in Appendix 8 of the Transportation Study. Overall, the transit system serving the Proposed Project site would have a projected passenger-carrying capacity of 18,199 riders in the Sunday Post-Event Hour. The total ridership in the Sunday Post-Event Hour, including 8,460 trips from the Proposed Project and 295 concurrent event trips, would be 17,390. Therefore, there would be sufficient capacity to accommodate the Proposed Project. However the policy load factors (capacities) would be exceeded on the Red, Blue, and Expo lines, the Metrolink, the Silver Line (both directions), and for Rapid and Express buses, as shown below. This is considered a potentially significant impact. These impacts are very similar to those of the Proposed Project, with this scenario needing one additional Metrolink car than the Proposed Project to meet the prescribed load factor.

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	6
Metro Blue Line	8
Expo Line	1
Metrolink	3
Metro Silver Line (South)	3
Metro Silver Line (North)	3
Rapid Bus	1
Express Bus	3

Freeway Segments, With Concurrent Events

The freeway segment analysis is summarized below and in the Transportation Study in Table 8.5.5.1 for the Sunday Pre-Event Hour and in Table 8.5.5.2 for the Sunday Post-Event Hour. These two tables show the volumes, D/C ratios and LOS for the Future With Project and for the Future With Project With Concurrent Coliseum and Dodger Stadium Event Conditions, for those locations where the LOS designation would change with concurrent events. Detailed analysis of all freeway study locations is shown in Table A.8.5.5.1 and A.8.5.5.2 in Appendix 8 of the Transportation Study.

Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

With concurrent events, ten freeway analysis locations would operate at LOS D or better, three locations would operate at LOS E, six locations would operate at LOS F(0) and one location would operate at LOS F(1), during the Sunday Day Pre-Event Hour.

The addition of concurrent event traffic would result in worse levels of service at five freeway analysis locations during the Sunday Pre-Event Hour. These locations are as follows (with the direction and resultant D/C ratio and LOS in parentheses):

7.	US-101 North of Vignes Street (SB)	(0.952)	(LOS E)
10.	I-5 West of Indiana Street (SB)	(1.000)	(LOS F0)
9b.	I-10 Between I-5 and US-101 (HOV) (WB)	(1.042)	(LOS F0)
16.	SR-110 South of Avenue 43 (SB)	(1.106)	(LOS F0)
14.	US-101 South of Vermont Avenue (SB)	(1.344)	(LOS F1)

One analysis location would change to LOS E, three would change to LOS F(0) and one to LOS F(1).

Sunday Day Post-Event Hour (4:30–5:30 P.M.)

With concurrent events, seven freeway analysis locations would operate at LOS D or better, four locations would operate at LOS E, eight locations would operate at LOS F(0), and one location would operate at LOS F(1) during the Sunday Day Post-Event Hour.

The addition of concurrent event traffic would result in worse levels of service at four freeway analysis locations during the Sunday Post-Event Hour. These locations are as follows (with the direction and resultant D/C ratio and LOS in parentheses):

9a.	I-10 Between I-5 and US-101 (Mainline) (EB)	(0.865)	(LOS D)
16.	SR-110 South of Avenue 43 (NB)	(0.835)	(LOS D)
4S.	SR-110 Btw James Wood Blvd and Olympic Blvd (SB)	(0.943)	(LOS E)
8.	US-101 at Glendale Boulevard (NB)	(1.256)	(LOS F1)

Two analysis locations would change to LOS D, one location would change to LOS E, and one location would change to LOS F(1).

Freeway Off-Ramps, With Concurrent Events

The freeway off-ramp analysis for the Future With Project Conditions and Future With Project With Concurrent Coliseum and Dodger Stadium Event Conditions is summarized below and in Table 8.5.5.3 of the Transportation Study. Table 8.5.5.3 also provides the ramp volumes and resultant queue lengths during the Pre-Event Hour for those locations where queue lengths would change with concurrent events. The detailed analysis for all freeway off-ramps is shown in Table A.8.5.5.3 in Appendix 8 of the Transportation Study.

Sunday Day Pre-Event Hour (12:00–1:00 P.M.)

The addition of concurrent event traffic to the Future With Project traffic volumes would increase the vehicle traffic expected at two off-ramp locations (US-101 Grand Avenue NB Off-Ramp, and US-101 Alvarado Street SB Off-Ramp) in the Sunday Pre-Event Hour due to traffic accessing Dodger Stadium. At the US-101 Grand Avenue NB Off-Ramp location, the additional event traffic would cause the 85th percentile queue length to exceed the overall capacity of the ramp³² instead of the capacity of an individual lane as identified under Future With Project conditions. At the US-101 Alvarado Street SB Off-Ramp location, the additional traffic would cause the 85th percentile queue length to exceed the storage capacity of an individual lane. Traffic conditions at the other off-ramps studied in the Event Center analysis would remain unchanged with concurrent events.

Freeway On-Ramps, With Concurrent Events

The freeway on-ramp analysis for the Future With Project Conditions and Future With Project With Concurrent Coliseum and Dodger Stadium Event Conditions is summarized below and in Table 8.5.5.4 of the Transportation Study. Table 8.5.5.4 shows the ramp capacities and the ramp volumes during the Sunday Day Post-Event Hour where traffic volumes would change with a concurrent Coliseum and Dodger Stadium event. The detailed analysis for all freeway off-ramps is shown in Table A.8.5.5.4 in Appendix 8 of the Transportation Study.

Sunday Day Post-Event Hour (4:30–5:30 P.M.)

The addition of concurrent event traffic to the Future With Project traffic volumes would increase the vehicle traffic expected on two on-ramp locations (US-101 Hope Street EB On-Ramp and US-101 Alvarado Street NB On-Ramp) due to traffic leaving Dodger Stadium. However, the higher volumes would not exceed the capacity of either on-ramp location in the Sunday Day Post-Event Hour. Traffic conditions at the other on-ramps studied in the Event Center analysis would remain unchanged with concurrent events.

(ii) Saturday Day Event, With Concurrent Events

Roadway Intersections, With Concurrent Events

The analysis of roadway intersections is summarized below and in Table 8.6.1.1 of the Transportation Study. The information below and in Table 8.6.1.1 focuses on those

³² At ramp locations where the 85th percentile queue would back into the mainline, any "lane" impacts are not noted as they are included in the impact to the mainline.

intersections where the level of service would worsen between the Future With Project Conditions and the Future With Project With Concurrent Events Conditions. The detailed analysis of all study intersections is presented in Table A.8.6.1.1 in Appendix 8 of the Transportation Study.

Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

The addition of concurrent event traffic to Future With Project Conditions would result in worse levels of service at the following 19 intersections in the Saturday Day Pre-Event Hour.

60.	Main Street & Washington Boulevard	(LOS B)
66.	Grand Avenue & Cesar Chavez Avenue	(LOS B)
124.	Main Street & Cesar Chavez Avenue	(LOS B)
168.	Main Street & 16th Street	(LOS B)
171.	Central Avenue & 16th Street	(LOS B)
177.	Arlington Avenue & Washington Boulevard	(LOS B)
79.	I-110 SB Ramps & Martin Luther King Jr. Boulevard	(LOS C)
80.	I-110 NB Ramps & Martin Luther King Jr. Boulevard	(LOS C)
121.	Figueroa Street & Cesar Chavez Avenue	(LOS C)
129.	Hill Street & College Street	(LOS C)
149.	Western Avenue & Pico Boulevard	(LOS C)
159.	Western Avenue & Washington Boulevard	(LOS C)
78.	Figueroa Street & Martin Luther King Jr. Boulevard	(LOS D)
147.	Alvarado Street & Olympic Boulevard	(LOS E)
161.	Vermont Avenue & Washington Boulevard	(LOS E)
63.	Figueroa Street & Adams Boulevard	(LOS F)
130.	Sunset Boulevard & Elysian Park Avenue	(LOS F)
134.	Alvarado Street & US-101 EB Ramps	(LOS F)
164.	Vermont Avenue & I-10 EB Ramps	(LOS F)

Thirteen of the 19 intersections would continue to operate at LOS D or better. The level of service would worsen to LOS E at two intersections and to LOS F at four intersections. Three of the changes to LOS E and LOS F would result from the addition of traffic traveling to a Coliseum event and the other three would result from traffic traveling to Dodger Stadium.

Saturday Day Post-Event Hour (4:30–5:30 P.M.)

The addition of concurrent event traffic to Future With Project Conditions would result in worse levels of service at the following 26 intersections in the Saturday Day Post-Event Hour.

69.	Main Street & Adams Boulevard	(LOS B)
76.	Figueroa Street & 37th Street	(LOS B)
121.	Figueroa Street & Cesar Chavez Avenue	(LOS B)
156.	Normandie Avenue & Venice Boulevard	(LOS B)
172.	Central Avenue & Washington Boulevard	(LOS B)
60.	Main Street & Washington Boulevard	(LOS C)
71.	Figueroa Street & Exposition Boulevard	(LOS C)
73.	Hope Street & 37th Street	(LOS C)
80.	I-110 NB Ramps & Martin Luther King Jr. Boulevard	(LOS C)
120.	Beaudry Avenue & Sunset Boulevard	(LOS C)
123.	Spring Street & Cesar Chavez Avenue	(LOS C)
125.	Alameda Street & Cesar Chavez Avenue	(LOS C)
165.	Hoover Street & I-10 EB Ramps	(LOS C)
54.	Figueroa Street & Washington Boulevard	(LOS D)
72.	Flower Street & 37th Street	(LOS D)
78.	Figueroa Street & Martin Luther King Jr. Boulevard	(LOS D)
122.	Grand Avenue & Cesar Chavez Avenue	(LOS D)
130.	Sunset Boulevard & Elysian Park Avenue	(LOS D)
176.	Arlington Avenue & Venice Boulevard	(LOS D)
79.	I-110 SB Ramps & Martin Luther King Jr. Boulevard	(LOS E)
158.	Hoover Street & Venice Boulevard	(LOS E)
162.	Hoover Street & Washington Boulevard	(LOS E)
163.	I-10 WB Ramps & Hoover Street	(LOS E)
63.	Figueroa Street & Adams Boulevard	(LOS F)
152.	Alvarado Street & Pico Boulevard	(LOS F)
164.	Vermont Avenue & I-10 EB Ramps	(LOS F)

Nineteen of the 26 intersections would continue to operate at LOS D or better. The level of service would change to LOS E at four intersections and to LOS F at three intersections. All of the changes to LOS E and LOS F would result from the addition of traffic traveling from a Coliseum event.

Transit, With Concurrent Events

Saturday Pre-Event Hour (12:00–1:00 P.M.)

The concurrent events would generate an additional 1,624 transit trips in the Event Center Pre-Event Hour. The majority (1,271 trips) would be trips to the Coliseum, and the remainder (352 trips) would be to Dodger Stadium.

The transit system analysis for the Saturday Pre-Event Hour is summarized below and in Table A.8.6.2.1 in the Transportation Study. As was discussed for Sunday Events, the transit system operates reduced schedules at weekends, so system capacity is lower than on weekdays. Overall, the transit system serving the Proposed Project site would have a projected passenger-carrying capacity of 19,139 riders in the Saturday Pre-Event Hour (slightly higher than for a Sunday Pre-Event Hour). The total ridership in the Saturday Pre-Event Hour, including 5,400 trips from the Proposed Project and 1,624 concurrent event trips, would be 19,030 riders. Therefore, there would be sufficient capacity to accommodate the Proposed Project with concurrent events. However, the policy load factors (capacities) would be slightly exceeded on the Red, Blue, and Expo lines, Metrolink, the Silver Line (both directions), and for Express and Local buses, as shown below. These impacts are incrementally greater as compared to the Proposed Project for all of the lines listed below, except that additional needs with regard to the Metrolink and the Metro Expo lines do not occur under the Proposed Project without the concurrent events.

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	3
Metro Blue Line	6
Expo Line	1
Metrolink	2
Metro Silver Line (South)	3
Metro Silver Line (North)	2
Express Bus	2
Local Bus	3

Saturday Post Event Hour (4:30–5:30 P.M.)

The concurrent events would generate an additional 2,201 transit trips in the Event Center Post-Event Hour. The majority (1,907 trips) would be leaving the Coliseum, with the remainder (295 trips) leaving Dodger Stadium.

The transit system analysis for the Saturday Post-Event Hour is summarized in Table A.8.6.2.2 in the Transportation Study. Overall, the transit system serving the Proposed Project site would have a projected passenger-carrying capacity of 19,308 riders in the Saturday Post-Event Hour (slightly higher than for a Sunday Post-Event Hour). The total ridership in the Saturday Post-Event Hour, including 8,460 trips from the Proposed Project and 2,201 concurrent event trips, would be 20,656 riders. Therefore, there would not be sufficient capacity to accommodate the Proposed Project and concurrent events. In addition, the policy load factors (capacities) would be exceeded on the Red, Red/Purple, and Blue Lines, the Expo Line, the Silver Line (both directions), Metrolink, and on Express buses, as shown below. These impacts are incrementally greater as compared to the Proposed Project for all of the lines listed below, except that additional need with regard to

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	8
Metro Red/Purple Line	1
Metro Blue Line	11
Expo Line	6
Metrolink	3
Metro Silver Line (South)	5
Metro Silver Line (North)	4
Express Bus	3

the Metro Red/Purple line does not occur under the Proposed Project without the concurrent events.

Freeway Segments, With Concurrent Events

The freeway segment analysis is summarized below and in Tables 8.6.5.1 and 8.6.5.2 of the Transportation Study for those locations where the LOS designation would change with concurrent events. Detailed analysis of all freeway study locations is shown in Table A.8.6.5.1 and Table A.8.6.5.2 in Appendix 8 of the Transportation Study.

Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

With concurrent events, three freeway analysis locations would operate at LOS D or better, four would operate at LOS E, eleven would operate at LOS F(0), one would operate at LOS F(1), and one location would operate at LOS F(2).

The addition of concurrent event traffic would result in worse levels of service at ten freeway mainline locations and one freeway HOV location in the Saturday Day Pre-Event Hour. These locations are as follows (with the direction and resultant D/C ratio and LOS in parentheses):

12a.	I-110 at Vernon Avenue (Mainline) (NB)	(0.944)	(LOS E)
16.	SR-110 South of Avenue 43 (SB)	(0.944)	(LOS E)
2.	I-10 East of San Pedro Street (WB)	(0.952)	(LOS E)
10.	I-5 West of Indiana Street (NB)	(1.024)	(LOS F0)
13.	I-10 East of Crenshaw Boulevard (EB)	(1.037)	(LOS F0)
1.	I-10 West of Vermont Avenue (EB)	(1.040)	(LOS F0)
4S.	SR-110 bw James Wood Blvd and Olympic Blvd (SB)	(1.060)	(LOS F0)
6.	SR-110 North of Alpine Street (SB)	(1.060)	(LOS F0)
5.	SR-110 South of US-101 (SB)	(1.065)	(LOS F0)

9b.	I-10 Between I-5 and US-101 (HOV) (WB)	(1.241)	(LOS F0)
14.	US-101 South of Vermont Avenue (SB)	(1.390)	(LOS F2)

Three locations would worsen to LOS E, seven locations would worsen to LOS F(0), and one location would worsen to LOS F(2).

Saturday Day Post-Event Hour (4:30–5:30 P.M.)

With concurrent events, three freeway analysis locations would operate at LOS D or better, three locations would operate at LOS E, eight locations would operate at LOS F(0), four would operate at LOS F(1), and two locations would operate at LOS F(2). The addition of concurrent event traffic would result in worse levels of service at the following 10 freeway mainline locations in the Saturday Day Post-Event Hour.

4S.	SR-110 Btw James Wood Blvd and Olympic Blvd (SB)	(0.947)	(LOS E)
16.	SR-110 South of Avenue 43 (NB)	(0.959)	(LOS E)
9a.	I-10 Between I-5 and US-101 (Mainline) (EB)	(0.987)	(LOS E)
13.	I-10 East of Crenshaw Boulevard (WB)	(1.036)	(LOS F0)
12a.	I-110 at Vernon Avenue (Mainline) (SB)	(1.284)	(LOS F1)
6.	SR-110 North of Alpine Street (SB)	(1.294)	(LOS F1)
14.	US-101 South of Vermont Avenue (SB)	(1.349)	(LOS F1)
4N.	SR-110 Btw James Wood Blvd and Olympic Blvd (NB)	(1.337)	(LOS F1)
8.	US-101 at Glendale Boulevard (NB)	(1.371)	(LOS F2)
5.	SR-110 South of US-101 (SB)	(1.412)	(LOS F2)

Three freeway mainline locations would change to LOS E, one freeway mainline location would change to LOS F(0), four freeway mainline locations would change to LOS F(1), and two freeway mainline locations would change to LOS F(2).

Freeway Off-Ramps, With Concurrent Events

The freeway off-ramp analysis for the Future With Project Conditions and Future With Project With Concurrent Coliseum and Dodger Stadium Event Conditions is summarized below and in Table 8.6.5.3 of the Transportation Study. Table 8.6.5.3 also provides the ramp volumes and resultant queue lengths during the Pre-Event Hour for those locations where queue lengths would change with concurrent events. The detailed analysis for all freeway off-ramps is shown in Table A.8.6.5.3 in Appendix 8 of the Transportation Study.

Saturday Day Pre-Event Hour (12:00–1:00 P.M.)

The addition of concurrent event traffic would increase the ramp volume at nine offramp locations. However, at seven locations, there would be no change in status regarding storage lengths being exceeded. At two locations the status would change, with a lane capacity being exceeded at one off-ramp (I-110 Martin Luther King Jr. Boulevard NB Off-Ramp) due to Coliseum traffic, and the ramp storage capacity being exceeded at one ramp (US-101 Alvarado Street SB Off-Ramp) due to Dodger Stadium traffic. Traffic conditions at the other off-ramps studied in the Event Center analysis would remain unchanged with concurrent events.

Freeway On-Ramps, With Concurrent Events

The freeway on-ramp analysis for the Future With Project Conditions and Future With Project With Concurrent Coliseum and Dodger Stadium Event Conditions is summarized in Table 8.6.5.4 of the Transportation Study. Table 8.6.5.4 also provides the ramp capacities and ramp volumes during the Saturday Day Post-Event Hour. The detailed analysis for all freeway on-ramps is shown in Table A.8.6.5.4 in Appendix 8 of the Transportation Study.

Saturday Day Post-Event Hour (4:30–5:30 P.M.)

The addition of concurrent event traffic would increase the expected ramp volumes at nine on-ramp locations in the Saturday Day Post-Event Hour. However, there would be no change in the status of ramp capacity being exceeded from the Future With Project Conditions. Traffic conditions at the other on-ramps studied in the Future With Project Conditions would remain unchanged with concurrent events.

(iii) Weekday Evening Event, With Concurrent Events

Roadway Intersections, With Concurrent Events

The analysis is summarized below and in Table 8.7.1.1 of the Transportation Study. Table 8.7.1.1 focuses on those intersections where the level of service would worsen between the Future With Project Conditions and the Future With Project With Concurrent Events Conditions. The detailed analysis of all study intersections is presented in Table A.8.7.1.1 in Appendix 8 of the Transportation Study.

Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The addition of concurrent event traffic to Future With Project conditions would result in worse levels of service at the following 27 intersections in the Weekday Evening Pre-Event Hour.

61.	Los Angeles Street & Washington Boulevard	(LOS B)
70.	Flower Street & Jefferson Boulevard	(LOS B)
54.	Alvarado Street & Hoover Street	(LOS B)

171.	Central Avenue & 16th Street	(LOS C)
76.	Figueroa Street & 39th Street	(LOS D)
77.	I-110 HOV Ramps & 39th Street	(LOS D)
124.	Main Street & Cesar Chavez Avenue	(LOS D)
142.	Vermont Avenue & 8th Street	(LOS D)
145.	Normandie Avenue & Olympic Boulevard	(LOS D)
159.	Western Avenue & Washington Boulevard	(LOS D)
160.	Normandie Avenue & Washington Boulevard	(LOS D)
166.	Hill Street & 16th Street	(LOS D)
180.	Crenshaw Boulevard & Pico Boulevard	(LOS D)
41.	Grand Avenue & 17th Street	(LOS E)
56.	Grand Avenue & Washington Boulevard	(LOS E)
66.	Grand Avenue & Adams Boulevard	(LOS E)
78.	Figueroa Street & Martin Luther King Jr. Boulevard	(LOS E)
80.	I-110 NB Ramps & Martin Luther King Jr. Boulevard	(LOS E)
129.	Hill Street & College Street	(LOS E)
134.	Alvarado Street & US-101 EB Ramps	(LOS E)
172.	Central Avenue & Washington Boulevard	(LOS E)
184.	La Brea Avenue & Olympic Boulevard	(LOS E)
42.	Olive Street & 17th Street	(LOS F)
64.	Flower Street & Adams Boulevard	(LOS F)
130.	Sunset Boulevard & Elysian Park Avenue	(LOS F)
158.	Hoover Street & Venice Boulevard	(LOS F)
164.	Vermont Avenue & I-10 EB Ramps	(LOS F)

Thirteen of the 27 intersections would continue to operate at LOS D or better. The level of service would change to LOS E at nine intersections and to LOS F at five intersections. Eleven of these changes to LOS E and LOS F would result from the addition of traffic traveling to a Coliseum event and three would result from traffic traveling to a Dodger Stadium event.

Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

The addition of concurrent event traffic to Future With Project conditions would result in worse levels of service at the following 23 intersections in the Weekday Evening Post-Event Hour.

60.	Main Street & Washington Boulevard	(LOS B)
62.	San Pedro Street & Washington Boulevard	(LOS B)
69.	Main Street & Adams Boulevard	(LOS B)
80.	I-110 NB Ramps & Martin Luther King Jr. Boulevard	(LOS B)
130.	Sunset Boulevard & Elysian Park Avenue	(LOS B)
158.	Hoover Street & Venice Boulevard	(LOS B)
162.	Hoover Street & Washington Boulevard	(LOS B)

54.	Figueroa Street & Washington Boulevard	(LOS C)
77.	I-110 HOV Ramps at 39th Street	(LOS C)
144.	Western Avenue & Olympic Boulevard	(LOS C)
152.	Alvarado Street & Pico Boulevard	(LOS C)
163.	I-10 WB Ramps & Hoover Street	(LOS C)
165.	Hoover Street & I-10 EB Ramps	(LOS C)
76.	Figueroa Street & 37th Street	(LOS E)
78.	Figueroa Street & Martin Luther King Jr. Boulevard	(LOS E)
52.	Main Street & 18th Street	(LOS F)
63.	Figueroa Street & Adams Boulevard	(LOS F)
71.	Figueroa Street & Exposition Boulevard	(LOS F)
73.	Hope Street & 37th Street	(LOS F)
72.	Flower Street & 37th Street	(LOS F)
79.	I-110 SB Ramps & Martin Luther King Jr. Boulevard	(LOS F)
119.	Grand Avenue & US-101 NB Ramps	(LOS F)
164.	Vermont Avenue & I-10 EB Ramps	(LOS F)

Of the 23 intersections analyzed, 13 would continue to operate at LOS D or better. The level of service would change to LOS E at two intersections and to LOS F at eight intersections. Eight of these changes to LOS E and LOS F would result from the addition of traffic traveling to a Coliseum event and one would result from traffic traveling to a Dodger Stadium event

Transit, With Concurrent Events

Weekday Pre-Event Hour (4:30–5:30 P.M.)

The concurrent events would generate an additional 2,380 transit trips in the Event Center Pre-Event Hour. The majority (2,263 trips) would be trips to the Coliseum, with the remainder (117 trips) being trips to Dodger Stadium.

The transit system analysis for the Weekday Pre-Event Hour is summarized below and in Table A.8.7.2.1 of the Transportation Study. The transit system operates the most intensive schedules on weekday peak periods, so system capacity is at its highest during the Weekday Pre-Event Hour. Overall, the transit system serving the Proposed Project site would have a projected passenger-carrying capacity of 37,248 riders in the Weekday Pre-Event Hour. The total ridership in the Weekday Pre-Event Hour, including 7,200 trips from the Proposed Project and 2,380 concurrent event trips, would be 27,443 riders. Therefore, there would be sufficient capacity to accommodate the Proposed Project with concurrent events. This is largely because trips to the Proposed Project would be inbound to the downtown area, which is the non-peak load direction for transit service, carrying the highest loads outbound from downtown in the evening commuter peak period. Transit vehicles inbound to downtown are thus carrying far fewer passengers and have more surplus capacity. The policy load factors (capacities) would not be exceeded on any component of the transit system.

Weekday Post-Event Hour (9:00–10:00 P.M.)

The concurrent events would generate an additional 6,989 transit trips in the Event Center Post-Event Hour. The vast majority would be from the Coliseum (6,788 trips) with the remainder from Dodger Stadium (201 trips).

The transit system analysis for the Weekday Post-Event Hour is summarized below and in Table A.8.7.2.2 of the Transportation Study (see Appendix I to the Draft EIR). The transit system operates reduced schedules on weekday nights, so system capacity is lower than for the Weekday Pre-Event Hour. Overall, the transit system serving the Proposed Project site would have a projected passenger-carrying capacity of 9,225 riders in the Weekday Post-Event Hour (much lower than for the Weekday Pre-Event Hour). The total ridership in the Weekday Post-Event Hour, including 11,160 trips from the Proposed Project and 6,989 concurrent event trips, would be 21,981 riders. Therefore, ridership would exceed available capacity. The policy load factors (capacities) would be exceeded on eight rail transit lines; the Silver Line (both directions) and the Rapid; Express and Local Buses, as shown below. These impacts are incrementally greater as compared to the Proposed Project for all of the lines listed below, particularly the Metro Red Line, Metro Red/Purple Line, Metro Blue Line, Metro Expo Line, Metro Green Line (both directions), Metro Gold Line, Metro Silver (North), Metro Silver (South), and Rapid buses. In addition, an additional need for buses with regard to Local Bus lines occurs under this scenario that does not occur under the Proposed Project.

Line	Additional Rail Cars/Buses Needed to Meet Load Factor
Metro Red Line	22
Metro Red/Purple Line	18
Metro Blue Line	31
Expo Line	15
Green Line (East)	7
Green Line (West)	5
Gold Line (Pasadena)	5
Gold Line (East L.A.)	14
Metro Silver Line (South)	8
Metro Silver Line (North)	9
Rapid Bus	7
Express Bus	9
Local Bus	7

Freeway Segments, With Concurrent Events

The freeway segment analysis is summarized below and in Tables 8.7.5.1 and 8.7.5.2 of the Transportation Study for the Weekday Evening Pre-Event Hour and Post-Event Hours, respectively. The Tables only include those locations where the LOS designation would change with concurrent events. Detailed analysis of all freeway study locations is shown in Table A.8.7.5.1 and Table A.8.7.5.2 in Appendix 8 of the Transportation Study.

Weekday Pre-Event Hour (4:30–5:30 P.M.)

With concurrent events, five freeway analysis locations would operate at LOS D or better, one would operate at LOS E, five would operate at LOS F(0), four at LOS F(1), three at LOS F(2), and two at LOS F(3). The addition of concurrent event traffic would result in worse levels of service at the following ten freeway mainline locations in the Weekday Evening Pre-Event Hour.

11.	SR-60 East of Indiana Street (WB)	(0.814)	(LOS D)
16.	SR-110 South of Avenue 43 (SB)	(0.824)	(LOS D)
9b.	I-10 Between I-5 and US-101 (HOV) (WB)	(0.886)	(LOS D)
3b.	I-110 North of Martin Luther King Blvd (Mainline) (NB)	(0.974)	(LOS E)
4S.	SR-110 Btw James Wood Blvd and Olympic Blvd (SB)	(1.258)	(LOS F1)
12a.	I-110 at Vernon Avenue (Mainline) (NB)	(1.321)	(LOS F1)
6.	SR-110 North of Alpine Street (SB)	(1.342)	(LOS F1)
2.	I-10 East of San Pedro Street (WB)	(1.365)	(LOS F2)
14.	US-101 South of Vermont Avenue (SB)	(1.365)	(LOS F2)
5.	SR-110 South of US-101 (SB)	(1.503)	(LOS F3)

One analysis location would change to LOS E, three locations would change to LOS F(1), two to LOS F(2), and one to LOS F(3).

Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

With concurrent events, nine freeway analysis locations would operate at LOS D or better, two would operate at LOS E, five would operate at LOS F(0), two at LOS F(1), one at LOS F(2), and one at LOS F(3). The addition of concurrent event traffic would result in worse levels of service at the following 15 freeway mainline locations during the Weekday Evening Post-Event Hour.

11.	SR-60 East of Indiana Street (EB)	(0.663)	(LOS C)
3b.	I-110 North of Martin Luther King Blvd (Mainline) (SB)	(0.807)	(LOS D)

15. I-5 South of Stadium Way (NB)

(0.859)

(LOS D)

12b.	I-110 at Slauson Avenue (HOV) (SB)	(0.862)	(LOS D)
16.	SR-110 South of Avenue 43 (SB)	(0.878)	(LOS D)
1.	I-10 West of Vermont Avenue (WB)	(0.934)	(LOS E)
9a.	I-10 Between I-5 and US-101 (Mainline) (EB)	(0.991)	(LOS E)
13.	I-10 East of Crenshaw Boulevard (WB)	(1.016)	(LOS F0)
2.	I-10 East of San Pedro Street (EB)	(1.179)	(LOS F0)
4N.	SR-110 Btw James Wood Blvd and Olympic Blvd (NB)	(1.232)	(LOS F0)
14.	US-101 South of Vermont Avenue (NB)	(1.243)	(LOS F0)
6.	SR-110 North of Alpine Street (SB)	(1.281)	(LOS F1)
12a.	I-110 at Vernon Avenue (Mainline) (SB)	(1.283)	(LOS F1)
8.	US-101 at Glendale Boulevard (NB)	(1.380)	(LOS F2)
5.	SR-110 South of US-101 (NB)	(1.486)	(LOS F3)

Two of the study locations would change to LOS E, four would change to LOS F(0), two to LOS F(1), one to LOS F(2) and one to LOS F(3).

Freeway Off-Ramps, With Concurrent Events

The freeway off-ramp analysis for the Future With Project Conditions and Future With Project With Concurrent Coliseum and Dodger Stadium Event Conditions is summarized below and in Table 8.7.5.3 of the Transportation Study. Table 8.7.5.3 also provides the ramp volumes and resultant queue lengths during the Pre-Event Hour for those locations where queue lengths would change with concurrent events. The detailed analysis of all freeway off-ramps is shown in Table A.8.7.5.3 in Appendix 8 of the Transportation Study.

Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The addition of concurrent event traffic would increase the ramp volume at nine offramp locations. However, at seven locations, there would be no change in status regarding storage lengths being exceeded. At two locations the status would change, with lane capacity being exceeded at one off-ramp (I-10 Vermont Avenue EB Off-Ramp), and the ramp storage capacity being exceeded at one ramp (I-110 Martin Luther King Jr. Boulevard NB Off-Ramp). Both of these impacts would be due to Coliseum traffic. Traffic conditions at the other off-ramps studied in the Event Center analysis would remain unchanged with concurrent events.

Freeway On-Ramps, With Concurrent Events

The freeway on-ramp analysis for the Future With Project Conditions and Future With Project With Coliseum and Dodger Stadium Event Conditions is summarized below and in Table 8.7.5.4 of the Transportation Study. Table 8.7.5.4 shows the ramp capacities and ramp volumes during the Weekday Evening Post-Event Hour where traffic volumes

would change with concurrent events. The detailed analysis of all freeway on-ramps is shown in Table A.8.7.5.4 in Appendix 8 in the Transportation Study.

Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

The addition of concurrent event traffic would increase the expected ramp volumes at nine on-ramp locations in the Weekday Evening Post-Event Hour. There would be a change in the status of ramp capacity being exceeded from the Future With Project Conditions at two locations. With concurrent event traffic, the storage capacity would be exceeded on the I-110 Martin Luther King Jr. Boulevard SB On-Ramp and the I-10 Vermont Avenue WB On-Ramp, both due to Coliseum traffic. Traffic conditions at the other on-ramps studied in the Event Center analysis would remain unchanged with concurrent events.

b. Evaluation of Proposed Project With Concurrent Convention Center Auto Show Event

This section addresses the Future With Project conditions of a concurrent Auto Show Event at the Convention Center. It evaluates the likelihood of an event occurring at the Event Center at the same time as the Los Angeles Auto Show, estimates the transportation characteristics of the Auto Show, and evaluates the potential cumulative transportation conditions.

(1) Auto Show Characteristics and Concurrent Event Schedule

The Los Angeles Auto Show is the largest exhibition event with the highest attendance held at the Los Angeles Convention Center. The Auto Show runs for ten days in late November and starts on a Friday. It is scheduled around Thanksgiving, which falls on the Thursday of the middle week of the show.

Attendance at the Auto Show is somewhat higher on weekends and on Thanksgiving Day, than on regular weekdays.³³ However, at those times of highest Auto Show attendance, background traffic levels are lower and parking occupancies in downtown are much lower as people are not working. While Auto Show attendance is lower on a regular weekday, the potential cumulative condition would be higher with commuter traffic and commuter parking occurring in the downtown area on a regular work day.

³³ Los Angeles Convention Center staff, and Convention Center on-site parking data. Refer to Appendix I.1, Section 9.1, pages 9-1 to 9-12.

To provide the most conservative evaluation, this analysis looked at the worst case of an Event Center Weekday Evening Event, when background traffic levels and parking occupancies in the downtown are at their highest. However, it should be noted that the typical Weekday Evening Event would be an NFL football game, which occur only on Mondays and Thursdays. There is only one Thursday when the Auto Show is open to the general public and that is on Thanksgiving, when as discussed above, background traffic levels and downtown parking occupancies are well below typical weekday levels because of the holiday. Therefore, an event occurring on a Monday evening has the greatest potential on a weekday to impact roadways in the vicinity due to an NFL football game at the Event Center, the Auto Show, and ambient conditions. The Monday of the Auto Show week is typically a below average attendance day.³⁴ Nevertheless, to provide a more conservative assessment, the analysis focused on a Weekday Evening Event at the Event Center, assumed an average weekday level attendance at the Auto Show, and addressed both the Weekday Evening Event Pre-Event Hour (4:30-5:30 P.M.) and the Weekday Evening Event Post-Event Hour (9:00–10:00 P.M.). It should be noted that these concurrent events would occur infrequently, as there would be only one NFL game in the league played on any given Monday. As there are 32 teams in the league, there would be only a 3 percent chance of it occurring at the Event Center in any given year. Further, if games were scheduled randomly, it could be expected to occur on average only once every 32 years.

(a) Auto Show Characteristics

Data on Auto Show attendance is proprietary, but for the purposes of this analysis, the best available estimate (from the Convention Center) of auto show attendance is approximately 600,000 people over the entire ten days, which averages to about 60,000 people per day. As noted above, attendance is higher at weekends, and the available parking data indicate that the average weekday attendance is about 10 percent less than the average daily attendance. Parking demands for the Auto Show often exceed the capacity of the on-site parking garages, and visitors park off-site in parking lots and garages near the Convention Center. It was not possible to collect direct data observations during an Auto Show event in the timeframe of this study, and there is little information available on off-site parking for the Auto Show. Therefore, estimates were made of the transportation characteristics of the Auto Show during the Event Center Pre-Event and Post-Event Hours based on available parking data, on the experience of Convention Center and L.A. LIVE staff, and on professional judgment.

³⁴ Ibid

(b) Traffic Characteristics

The average weekday daily attendance was estimated at about 54,000 people (10 percent below the overall daily average, based on on-site parking data, as discussed above). On weekdays, the Auto Show is typically open from 11 A.M. to 10 P.M., although access is not allowed after 9 P.M. The Auto Show is a very large show with many exhibits to see. An average visit length of three hours was assumed for this analysis, which means few people would arrive after 7 P.M. in the evening.

If people arrived uniformly throughout the day, then on average about 11 percent of daily attendees would arrive each hour between 11 A.M. and 7 P.M., and about 11 percent would depart each hour between 2 P.M. and 10 P.M.³⁵ However, arrivals and departures are typically not spread evenly between hours. On weekdays, arrivals tend to be higher around lunchtime and in the early evening (after work), and the afternoon period tends to have below average activity for arrivals and departures.³⁶ For departures, many people tend to stay until the show closes at 10 P.M.³⁷

For the Weekday Evening Pre-Event Hour (4:30–5:30 P.M.), it was assumed that arrivals and departures are approximately 25 percent less than an average hour (i.e., 8.5 percent of daily total attendees arrive and 8.5 percent depart during this hour). This translates to about 1,530 vehicles arriving and 1,530 vehicles departing during the Weekday Evening Pre-Event Hour (4:30–5:30 P.M.).

For the Weekday Evening Post-Event Hour (9:00–10:00 P.M.), there would be no Auto Show arrivals as the event doors are closed at 9 P.M. It was assumed that departures are 30 percent greater than the average hour for departure between 9-10 P.M. (i.e., 14.30 percent of daily total attendees depart during the weekday evening Post-Event Hour (9:00–10:00 P.M.). This translates to no vehicles arriving and 2,574 vehicles departing during the Weekday Evening Post-Event Hour (9:00–10:00 P.M.).³⁸

³⁵ Accounts for some attendees actually arriving in half hour before 11 A.M. and some leaving in half hour after 10 P.M.

³⁶ Ibid

³⁷ Ibid

³⁸ Assumed an average vehicle occupancy of 3 attendees per vehicle.

(2) Weekday Evening Event, With Concurrent Auto Show

(a) Roadway Intersections, With Concurrent Auto Show

A summary is provided below of those intersections where the LOS would worsen between the Future With Project Conditions and the Future With Project With Concurrent Auto Show Event Conditions. Table 9.2.1.1 in the Transportation Study provides an analysis of these intersections. Those intersection LOS that would remain the same with the concurrent event, are not shown in Table 9.2.1.1. A detailed analysis of all study intersections for this scenario is presented in Table A.9.2.1.1 in Appendix 9 of the Transportation Study.

On a weekday, the concurrent parking demand for an Event Center Weekday Evening Event and the Auto Show would exceed the available parking supply in the Primary Parking Area identified for analysis. Therefore, some parking would need to occur beyond the boundaries of that area. There is a considerable parking supply in areas adjacent to the Primary Parking Area, particularly with the use of shuttle bus connections.

For the purposes of this traffic analysis it was assumed that parking would occur in the following five peripheral areas: on Bunker Hill; at Union Station; in parts of Central City West between Olympic Boulevard and Sixth Street; east of Broadway between Broadway and Main/Los Angeles Street; and south of Adams Boulevard in the USC/Coliseum area (including potentially the Shrine Auditorium Garage) to the extent available.

During the Weekday Evening Pre-Event Hour (4:30–5:30 P.M.) and Post-Event Hour (9:00–10:00 P.M.), there would be a mix of Event Center traffic and Auto Show traffic on City Streets in the downtown area. For the purposes of this analysis, it was assumed that a portion of the inbound traffic levels due to a concurrent Event Center Event and the Auto Show during the Pre-Event Hour (which could be either Event Center or Auto Show traffic) would park in the peripheral parking areas in order to evaluate cumulative traffic effects in accessing those areas. This assumption is also based on the fact that parking closer to the Project Site would already be occupied or dedicated for other attendees at that time. It was further assumed that the Auto Show outbound traffic during the Pre-Event Hour would be leaving parking areas nearer the Convention Center, as these persons would have arrived earlier in the day when more parking was available. This approach allowed a balanced evaluation of concurrent traffic.

In order to evaluate the cumulative effect of concurrent traffic, it was further assumed that during the Post-Event Hour, a portion of outbound traffic from the concurrent events would depart from the five peripheral parking areas. It should also be noted that additional traffic circulation may occur in the Pre-Event Hour as Auto Show arrivals search for available parking. This would be addressed through a comprehensive parking management program and parking information systems for Auto Show traffic as well as for the Event Center.

(i) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The addition of concurrent Auto Show traffic to Future With Project conditions would worsen the LOS at the following 26 intersections in the Weekday Evening Pre-Event Hour.

29.	Olive Street & Pico Boulevard	(LOS B)
51.	Broadway & 18th Street	(LOS B)
73.	Hope Street & 37th Street	(LOS B)
92.	Bixel Street & Wilshire Boulevard	(LOS B)
38.	Flower Street & Venice Boulevard	(LOS C)
39.	Grand Avenue & Venice Boulevard	(LOS C)
50.	Hill Street & 18th Street	(LOS C)
55.	Flower Street & Washington Boulevard	(LOS C)
77.	I-110 HOV Ramps & 39th Street	(LOS C)
143.	Alvarado Street & 8th Street	(LOS C)
53.	Los Angeles Street & 18th Street	(LOS D)
71.	Figueroa Street & Exposition Boulevard	(LOS D)
113.	Hill Street & 1st Street	(LOS D)
115.	Main Street & 1st Street	(LOS D)
145.	Normandie Avenue & Olympic Boulevard	(LOS D)
160.	Normandie Avenue & Washington Boulevard	(LOS D)
166.	Hill Street & 16th Street	(LOS D)
54.	Figueroa Street & Washington Boulevard	(LOS E)
110.	Hope Street & 1st Street	(LOS E)
170.	San Pedro Street & 16th Street	(LOS E)
184.	La Brea Avenue & Olympic Boulevard	(LOS E)
37.	Figueroa Street & Venice Boulevard	(LOS F)
147.	Alvarado Street & Olympic Boulevard	(LOS F)
152.	Alvarado Street & Pico Boulevard	(LOS F)
158.	Hoover Street & Venice Boulevard	(LOS F)
162.	Hoover Street & Washington Boulevard	(LOS F)

Of the 26 intersections listed above, 17 would continue to operate at LOS D or better. The LOS would change to LOS E at four intersections and to LOS F at five intersections. Five of these changes to LOS F would operate at LOS E without a concurrent Auto Show event.

(ii) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

The addition of concurrent Auto Show traffic to Future With Project conditions would result in worse levels of service at the following six intersections in the Weekday Evening Post-Event Hour.

72.	Flower Street & 37th Street	(LOS B)
110.	Hope Street & 1st Street	(LOS B)
70.	Flower Street & Jefferson Boulevard	(LOS C)
111.	Grand Avenue & 1st Street	(LOS C)
166.	Hill Street & 16th Street	(LOS E)
119.	Grand Avenue & US-101 NB Ramps	(LOS F)

Four of the six intersections would continue to operate at LOS D or better. The level of service would change to LOS E at one intersection (Hill Street & 16th Street) and to LOS F at one intersection (Grand Avenue & US-101 NB Ramps). This change to LOS F would operate at LOS E without a concurrent Auto Show event.

(b) Transit, With Concurrent Auto Show

The Convention Center has no specific data on the use of public transit to the Auto Show, although it is considered to be very minimal, particularly given the auto-oriented nature of the event. This would not be expected to change with the Proposed Project, so any transit usage to the Auto Show would remain constant. Therefore, the analysis of future transit conditions with the Proposed Project would be as discussed in subsection IV.B.1.9 above.

(c) Freeway Segments, With Concurrent Auto Show

The freeway segment analysis is summarized below and in Tables 9.2.5.1 and 9.2.5.2 of the Transportation Study for the Sunday Post-Event Hour. These Tables show the volumes, D/C ratios, and LOS for the Future With Project and Future With Project With Concurrent Auto Show Event Conditions for those locations where the LOS designation would change with the concurrent event. Detailed analysis of all freeway study locations is shown in Table A.9.2.5.1 and A.9.2.5.2 in Appendix 9 of the Transportation Study.

(i) Weekday Pre-Event Hour (4:30–5:30 P.M.)

With the concurrent event, six freeway analysis locations would operate at LOS D or better, nine would operate at LOS F(0), two at LOS F(1), two at LOS F(2), and one at LOS F(3). There would thus be no change in the total number of freeway analysis locations operating at LOS F in the Weekday Evening Pre-Event Hour with a concurrent Auto Show event. However, the addition of concurrent event traffic would result in a worse LOS at one

freeway mainline location in the Weekday Evening Pre-Event Hour. However, this location, listed below, would still operate at LOS D.

11. SR-60 East of Indiana Street (WB) (0.780) (LOS D)

(ii) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

With the concurrent event, 14 freeway analysis locations would operate at LOS D or better, three would operate at LOS E, and three would operate at LOS F(0). The addition of concurrent event traffic would result in a worse LOS at the following five freeway mainline locations in the Weekday Evening Post-Event Hour.

11.	SR-60 East of Indiana Street (EB)	(0.554)	(LOS C)
За.	I-110 South of Martin Luther King Blvd (Mainline) (SB)	(0.771)	(LOS D)
2.	I-10 East of San Pedro Street (EB)	(0.953)	(LOS E)
6.	SR-110 North of Alpine Street (NB)	(0.931)	(LOS E)
12a.	I-110 at Vernon Avenue (Mainline) (SB)	(0.940)	(LOS E)

Two locations would operate at LOS D or better, and three of the study locations would change to LOS E.

(d) Freeway Off-Ramps, With Concurrent Auto Show

The freeway off-ramp analysis for the Future With Project Conditions and Future With Project With Concurrent Auto Show Event Conditions is summarized below and in Table 9.2.5.3 in the Transportation Study. Table 9.2.5.3 also provides the ramp volumes and resultant queue lengths during the Pre-Event Hour for those locations where queue lengths would change with concurrent events. The detailed analysis for all freeway off-ramps is shown in Table A.9.2.5.3 in Appendix 9 of the Transportation Study.

(i) Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)

The addition of concurrent event traffic would increase the ramp volumes at seven off-ramp locations. However, at six locations, there would be no change in status regarding storage lengths being exceeded. At one location the status would change, with the ramp storage capacity being slightly exceeded at one ramp (I-10 San Pedro Street WB Off-Ramp), with concurrent Auto Show traffic (due to access to peripheral parking areas). Traffic conditions at the other off-ramps studied in the Event Center analysis would remain unchanged with the concurrent event.

(e) Freeway On-Ramps, With Concurrent Auto Show

The freeway on-ramp analysis for the Future With Project Conditions and Future With Project With Concurrent Auto Show Event Conditions is summarized below and in Table 9.2.5.4 of the Transportation Study. Table 9.2.5.4 also shows the ramp capacities and the ramp volumes during the Weekday Evening Post-Event Hour where traffic volumes would change with a concurrent Auto Show event. The detailed analysis for all freeway off-ramps is shown in Table A.9.2.5.4 in Appendix 9 of the Transportation Study.

(i) Weekday Evening Post-Event Hour (9:00–10:00 P.M.)

The addition of concurrent event traffic would increase the expected ramp volumes at ten on-ramp locations in the Weekday Evening Post-Event Hour.

There would be a change in the status of ramp capacity being exceeded from the Future With Project Conditions at one location. With concurrent event traffic, the storage capacity would be slightly exceeded on the I-110 37th Street SB On-Ramp with concurrent Auto Show traffic (due to egress from peripheral parking areas). Traffic conditions at the other on-ramps studied in the Event Center analysis would remain unchanged with the concurrent event.

13. Neighborhood Intrusion Impacts

a. Introduction

This section addresses potential traffic and parking impacts on local residential streets in the Pico-Union area, which is located to the west of the Project Site and west of the SR-110 Harbor Freeway, as shown in Figure IV.B.1-26 on page IV.B.1-321. This area comprises commercial, institutional, and residential land uses.

LADOT guidelines indicate that a local residential street can potentially be impacted through increased vehicle trips if traffic uses local residential streets as cut-through routes to bypass a congested arterial roadway. LOS E and F are considered to represent congested arterial conditions. Under these conditions, the concern is that motorists traveling on the arterial may opt to divert to a residential street. The guidelines further state that when selecting street segments for analysis, several conditions must be present. Please refer to Section IV.B.1.6.b.4 above for a discussion of these guidelines and thresholds of significance criteria for determining neighborhood intrusion impacts. After application of these guidelines, a local residential street is considered significantly impacted based on an increase in projected average daily traffic (ADT) volumes on the street exceeds the thresholds shown in Table IV.B.1-19 on page IV.B.1-286.

b. Neighborhood Street System

(1) East-West Streets

The following four principal east-west streets in Pico-Union are arterial highways and connect downtown Los Angeles to the Pico-Union, Koreatown, and Mid-City areas, and to Culver City and west Los Angeles. Commercial and institutional land uses are located along these arterials. These are not local streets and their street designation in the Westlake Community Plan is as follows:

- Olympic Boulevard: a six-lane Major Arterial;
- Washington Boulevard: a six-lane Major Arterial;
- Pico Boulevard: a four-lane Secondary Arterial; and
- Venice Boulevard: a four-lane Secondary Arterial.

There are only two other east-west streets that extend continuously throughout the Pico-Union Area and that could provide alternate routes to these arterials: 11th Street, which is designated a Collector Street in the Community Plan with adjacent commercial, institutional, and residential uses; and 12th Street, which is designated a Local Street with primarily residential land uses. All other east-west streets (11th Place, 12th Place, 14th Street, 17th Street, and 18th Street) are not considered viable alternate or cut-through routes as they are discontinuous at one or more locations (i.e., they serve only other local streets and do not provide continuous routes through Pico-Union), and they do not connect east of the Harbor Freeway to the Project Site or to downtown.

(2) North-South Streets

The following three principal north-south streets in Pico-Union are arterial highways, and connect Pico-Union to the Westlake area to the north, and to the North University Park and Exposition Park areas to the south. These are not local streets and their street designation in the Westlake Community Plan is as follows:

- Hoover Street: a four-lane Major Arterial;
- Alvarado Street: a four-lane Major Arterial; and
- Union Avenue: a two-lane Secondary Arterial.

Land uses adjacent to Hoover and Alvarado Streets are predominantly commercial, and land uses adjacent to Union Street are primarily residential with some commercial and institutional uses.

There are no other north-south streets that connect continuously through Pico-Union. One street, Albany Street, connects between Venice Boulevard and Olympic Boulevard. Albany Street is a two-lane street and is a designated Secondary Arterial between Venice Boulevard and Pico Boulevard, and a designated Major Arterial between Pico Boulevard and Olympic Boulevard. Valencia Street is a two lane Collector Street that also runs between Venice Boulevard and Olympic Boulevard, but is discontinuous with a jog at Pico Boulevard. Adjacent land uses on Valencia Street are primarily residential, with some commercial uses, while land uses on Albany Street include residential, commercial and institutional uses.

All other north-south streets (Toberman Street, Constance Street, Burlington Avenue, and Westlake Avenue) are Local Streets, with mostly residential land uses. As shown in Figure IV.B.1-26 on page IV.B.1-321, these are mostly short streets that are discontinuous (i.e., they often do not extend more than two or three blocks) in the area and only provide access to other local streets and to the local neighborhoods. Therefore, these streets generally do not provide for cut-through routes.

However, some of these Local Streets do connect between Pico Boulevard and Venice Boulevard (e.g., Bonnie Brae Street, Burlington Avenue, Constance Street, and Toberman Street), and between Venice Boulevard and Washington Boulevard (e.g., Bonnie Brae Street and Burlington Avenue). Therefore, these Local Streets do potentially provide cut-through routes between these particular arterials.

c. Project Access and Egress in Pico-Union

Some traffic that would access and egress the Project Site would use the east-west arterial roadways passing through Pico-Union to access Project parking areas. The parking supply immediately adjacent to the Proposed Project (i.e., L.A. Live Way Garage, Bond Street Garage, and part of the L.A. LIVE Olympic West garage), would be allocated for premier parking (for suites and premier seats). Public parking would occur in the off-site locations in the downtown area as discussed in Section IV.B.2, Parking, of this Draft EIR. Access to parking for the Proposed Project would be managed and would include the presale of parking with event tickets in designated parking zones based on the origin location of travel. Information would be provided to the ticket holder on specific access routes to parking areas in order to disperse traffic. This approach would also be used to keep traffic on the arterial roadways in the Pico-Union area and minimize/prevent the use of residential streets. It would also specify which arterials to use to access the different parking areas,

so that traffic would be on the preferred access route/street before passing through the Pico-Union area, which would further minimize traffic using cut-through connections between arterials.

d. Impacts on Neighborhood Street System

(1) Introduction

Because the majority of intersections along the arterial roadways in Pico-Union would operate at LOS D or better during the Pre-Event and Post-Event hours, these intersections would generally not be congested and there would be minimal incentive for traffic to divert onto local residential streets under these circumstances. However, as discussed below, some area intersections will operate at LOS E or F, which could lead to some diversion of traffic onto local streets.

The analysis of potential neighborhood traffic intrusion impacts was conducted in two general steps. The first step was to provide an evaluation of the potential for traffic intrusion onto local residential streets in the Pico-Union area from those arterial corridors passing through Pico-Union discussed above. This analysis is summarized below under Subsection (2), Corridor Evaluation, and provided in Section 5.7 of the Transportation Study. The second step was to provide a detailed quantitative analysis of the potential traffic diversion volumes onto local streets and then compare those volumes against LADOT significance thresholds to determine whether impacts would be significant. This analysis is provided below. This analysis addressed the potential diversions and cutthrough routes for all street types. However, potential significant impacts were only identified for Local Streets, as the City has no threshold criteria for non-local streets, since Collector and Arterial Streets are intended to carry higher traffic volumes than Local Streets.

(2) Corridor Evaluation

(a) Olympic Boulevard Corridor

This arterial street would be used primarily to access off-site parking in the downtown area. As it does not provide direct access to the on-site parking areas (except for the L.A. LIVE Garage), this street would not be identified in the parking information system as a principle route to on-site parking and would not be expected to be used as such.

Because the traffic analysis showed that no intersections along this corridor would operate at LOS E or LOS F during the Sunday Day Pre-Event Hour or Post-Event Hour, the Saturday Day Post Event Hour, and the Weekday Evening Post-Event Hour, this corridor would not be congested during those times. However, during the Saturday Day Pre-Event Hour, one intersection (Olympic Boulevard & Blaine Street) along this corridor would operate at LOS E. Also, during the Weekday Evening Pre-Event Hour, one intersection (Olympic Boulevard & Alvarado Street) would operate at LOS E, and one intersection would operate at LOS F (Olympic Boulevard & Figueroa Street). Therefore, the potential could exist for some traffic to divert from these areas to other routes.

Potential diversion routes could include 11th Street and 12th Street, which are the only continuous streets that connect east of the Harbor Freeway. Both these streets could provide access routes to on-site parking. Neither street would provide access to general parking east of L.A. Live Way, as 11th Street (Chick Hearn Court) would be closed before, during, and after events between L.A. Live Way and Figueroa Street, and 12th Street does not extend east of L.A. Live Way.

Of these two streets, only 12th Street is designated a Local Street. A Proposed Project Design Feature includes a temporary event barricade closure of 12th Street immediately west of Blaine Street to prevent traffic from accessing on-site parking from the neighborhood. Therefore, 12th Street would not be an alternative route.

It is unlikely that traffic would divert from Olympic Boulevard via north-south streets to Pico Boulevard, as there would be no advantage over the routes discussed above, and traffic that needed to use Pico Boulevard to access either on-site or off-site parking would already be on Pico Boulevard before reaching the Pico-Union area. During the Pre-Event Hours, some traffic eastbound on Olympic Boulevard could divert to 11th Street to access on-site parking. Such traffic would be most likely to use Union Avenue, Valencia Street, or Albany Street to access 11th Street, as these streets are closest to the Project Site. None of these potential diversion routes are Local Streets, as they are either Collector Streets (11th Street and Valencia Street), or Arterial Roadways (Union Avenue and Albany Street).

During the Post-Event Hours, some traffic exiting the on-site parking garages could potentially use 11th Street westbound to access Olympic Boulevard (most likely via Albany Street, Valencia Street, or Union Avenue), although none of these routes are designated Local Streets.

With the Project Design Feature discussed above that provides for a temporary event barricade that closes 12th Street west of Blaine Street, neighborhood intrusion impacts of the Proposed Project along the Olympic Boulevard Corridor would be considered less than significant.

(b) Pico Boulevard Corridor

This arterial street would be used to access on-site parking and off-site parking in the downtown area. As it does provide direct access to the on-site parking areas (except for the L.A. LIVE Garage), this street would be identified in the parking information system as an access route to on-site parking, and would be expected to be used as such.

Because no intersections would operate at LOS E or LOS F during the Sunday Day Pre-Event Hour or Post-Event Hour, and the Weekday Evening Post-Event Hour, this street would not be congested during those times. During the Saturday Day Pre-Event Hour and the Saturday Day Post Event Hour, one intersection (Pico Boulevard and Alvarado Street) along this corridor would operate at LOS E. During the Weekday Evening Pre-Event Hour, two intersections (Pico Boulevard & Alvarado Street and Pico Boulevard & Figueroa Street) along this corridor would operate at LOS E. This could result in the potential for some traffic to divert to other routes.

Potential diversion routes could include 11th Street and 12th Street, as the only continuous streets that connect east of the Harbor Freeway. 11th Street could provide access to on-site parking, but it is unlikely traffic would divert up to 11th Street, as there would be no advantage in doing so. This is because 11th Street would be a more circuitous access route to parking, and therefore would not save time. 12th Street would not be a viable alternative route because the proposed temporary or permanent barricade on 12th Street just west of Blaine Street would prevent traffic being able to access on-site parking from the neighborhood. Neither street would provide access to general parking east of L.A. Live Way, as 11th Street (Chick Hearn Court) would be closed before, during, and after events between L.A. Live Way and Figueroa Street, and as 12th Street does not extend east of L.A. Live Way.

It is unlikely that traffic would divert from Pico Boulevard via north-south streets to Olympic Boulevard, or south to Venice Boulevard, as there would be no advantage over Pico Boulevard, and traffic that needed to use either Olympic Boulevard or Pico Boulevard to access either on-site or off-site parking would already be on those streets before reaching the Pico-Union area.

In conclusion, potential impacts related to diversion of traffic from Pico Boulevard onto local streets are considered less than significant. During the Post-Event Hours, traffic exiting the on-site parking garages and heading west on Pico Boulevard might divert north to Olympic Boulevard via Albany Street, Valencia Street, or Union Avenue. However, none of these three streets are designated as Local Streets and there are no other direct street connections between Pico Boulevard and Olympic Boulevard in the local area. It is also possible that traffic exiting the on-site parking garages and heading west on Pico Boulevard might divert south to Venice Boulevard. Please refer to the discussion below under the subheading, "Venice Boulevard".

(c) Venice Boulevard Corridor

This arterial street would be used primarily to access off-site parking in the downtown area. As it does not provide direct access to the on-site parking areas (except perhaps for the Bond Street Garage), this street would not be identified in the parking information system as a primary route to on-site parking, and would not be expected to be used as such.

Because no intersections would operate at LOS E or LOS F during the Sunday Day Pre-Event Hour or Post-Event Hour, the Saturday Day Pre Event Hour, and the Weekday Evening Post-event Hour, the Venice Boulevard corridor would not be congested during those times. During the Saturday Day Post-Event Hour, one intersection (Venice Boulevard & Figueroa Street) along this corridor would operate at LOS E. However, due to its location east of Pico-Union, this intersection would not cause exiting westbound traffic to make any diversions to local Pico-Union Streets, and the other intersections would operate at LOS D or better. During the Weekday Evening Pre-Event Hour, two intersections would operate at LOS E (Venice Boulevard & Hoover Street, and Venice Boulevard & Figueroa Street). However, due to its location to the west of Pico-Union, the intersection of Venice Boulevard & Hoover Street would not cause diversions of traffic to the east in the Pico-Union area. Furthermore, there are no viable alternate routes on Local Streets as there are no Local Streets that are continuous and that connect to parking areas east of the Harbor Freeway between Pico Boulevard and Washington Boulevard.

It is possible that traffic could divert from Venice Boulevard via north-south streets to Pico Boulevard, in order to access on-site parking via Pico Boulevard. This is considered unlikely, as the parking information systems will direct on-site parking access via Pico Boulevard so traffic should already be on Pico Boulevard before reaching the Pico-Union area. Nevertheless, some traffic could divert from Venice Boulevard to Pico Boulevard using streets such as Union Avenue, Toberman Street, Valencia Street, and Albany Street. Only one of these streets, Toberman Street, is designated as a Local Street. The other three streets are either Collector or Arterial Streets. It is unlikely that traffic would divert using streets west of Union Avenue, as those streets are further from the Proposed Project. However, potential traffic diversions could occur during both Pre-Event Hours and Post-Event Hours. However, as shown in Table IV.B.1-19 on page IV.B.1-286 and discussed further below under Subsection (3), traffic diversion volumes onto Toberman would be below the threshold of significance.

(d) Washington Boulevard Corridor

This arterial street would be used to access off-site parking in the downtown area. As it does not provide direct access to the on-site parking areas, this street would not be identified in the parking information system as a route to on-site parking, and would not be expected to be used as such.

Because no intersections would operate at LOS E or LOS F during the Sunday Day Pre-Event Hour or Post-Event Hour, the Saturday Day Pre-Event Hour or Post Event Hour, and the Weekday Evening Post-Event Hour, the Washington Boulevard Corridor would not be congested at those times. However, during the Weekday Evening Pre-Event Hour, one of the analyzed intersections (Washington Boulevard & Hoover Street) along this corridor would operate at LOS E. The other intersections would operate at LOS D or better. However, due to its location to the west of Pico-Union, the LOS E at the intersection of Washington Boulevard & Hoover Street would not cause diversions of traffic to the east in the Pico-Union area.

Therefore, there would be limited potential for diversion from this arterial roadway. There are no viable alternate routes on Local Streets as there are no designated Local Streets between Pico Boulevard and Washington Boulevard that are continuous and that connect to parking areas east of the Harbor Freeway.

It is possible, however, that traffic could divert from Washington Boulevard via northsouth streets to Venice Boulevard in order to access on-site parking via Venice Boulevard and Convention Center Way. This is considered unlikely as the parking information systems will direct on-site parking access via Pico Boulevard, so traffic should already be on Pico Boulevard before reaching the Pico-Union area.

Nevertheless, it is possible that some traffic could divert from Washington Boulevard to Venice Boulevard using streets such as Burlington Avenue and Union Avenue. Only one of these streets, Burlington Avenue, is designated a Local Street. Union Avenue is designated as a Collector Street. It is unlikely that traffic would use Bonnie Brae Street as its intersection with Washington Boulevard is too close to Hoover Street. There are no other north-south streets that run between Washington Boulevard and Venice Boulevard between Hoover Street and the Harbor Freeway. These potential diversions could occur during both Pre-Event Hours and Post-Event Hours. However, as shown in Table IV.B.1-19 on page IV.B.1-286 and discussed further below, traffic diversion volumes onto Burlington Avenue would be below the threshold of significance.

(e) Hoover Street to Pico Boulevard

During the Pre-Event Hours, some Proposed Project traffic would travel north on Hoover Street to Alvarado Street, and then turn right at the intersection of Alvarado Street and Pico Boulevard to head eastbound on Pico Boulevard. During the Post-Event Hours, this traffic would return westbound on Pico Boulevard, turn left at Alvarado Street, and continue south on Hoover Street.

Potential cut-through routes would exist on Alvarado Terrace and Westlake Avenue, between Alvarado Street and Pico Boulevard, whereby traffic could avoid the intersection of Alvarado Street and Pico Boulevard. Both Alvarado Terrace and Westlake Avenue are designated Local Streets. For inbound Proposed Project traffic during Pre-Event Hours, both streets could be potential cut-through routes as they would involve only right turns. For outbound Proposed Project traffic during Post-Event Hours, Alvarado Terrace would not be a viable cut-through route as left turns are prohibited from westbound Alvarado Terrace to southbound Alvarado Street. Also, for outbound Post-Event traffic, Westlake Avenue would not be a very convenient cut-through route as it would involve making two left turns at uncontrolled intersections (at Pico Boulevard & Westlake Avenue, and at Westlake Avenue & Alvarado Street) which could be less convenient that making the one signalized left turn at Pico Boulevard & Alvarado Street.

The intersection of Pico Boulevard and Alvarado Street would operate at LOS E during the Saturday Pre-Event and Post-Event Hours, and during the Weekday Evening Pre-Event Hour. Therefore, there could be the potential for Proposed Project traffic to use Alvarado Terrace and Westlake Avenue as cut-through routes during these three time periods. As discussed further below, traffic diversion volumes would exceed LADOT thresholds of significance. Therefore, traffic diversion impacts on these two Local Streets are considered potentially significant.

(3) Traffic Diversion Volumes and Levels of Significance

For purpose of preparing a conservative analysis, a detailed analysis of potential traffic diversion volumes was conducted. This analysis is provided in Section 5.7 of the Transportation Study (see Appendix I to the Draft EIR) and addressed the potential diversions and cut-through routes discussed above, not just for Local Streets but for all street types. However, potential significant impacts were only identified for Local Streets, as the City has no threshold criteria for non-local streets, and because Collector and Arterial Streets are intended to carry higher traffic loads than Local Streets. For these non-local streets, the analysis identified the percent increase in traffic that could be expected due to the Proposed Project.

In general, traffic tends to stay on arterial roadways even under congested conditions, with only a small portion likely to seek alternate routes, usually because travel on local streets is often not much more convenient or faster. The analysis assumed conservatively that up to 25 percent of Project traffic on Olympic and Pico Boulevards and up to 10 percent of Project traffic on Venice and Washington Boulevards might potentially divert to other routes, as described above. The percentage was estimated to be higher on Olympic and Pico Boulevards because they are closer to on-site parking areas. It was also assumed that up to 50 percent of inbound Project traffic that uses Hoover/Alvarado Street and Pico Boulevard could divert to Alvarado Terrace and Westlake Avenue, with two-thirds using Alvarado Terrace and the remaining one-third using Westlake Avenue. It was also estimated that approximately 10 percent of outbound Project traffic could divert to Westlake Avenue, as described above.

The analysis is summarized in Table IV.B.1-19 on page IV.B.1-286 for Sunday, Saturday, and Weekday events. The table shows street type, existing volumes, Future Without Project volumes, estimated increases in traffic volumes due to the Proposed Project, and projected Future With Project volumes. For Local Streets, the increase in traffic volumes is compared to the LADOT thresholds for significant impacts. For other streets, the percent increase in total traffic is shown for informational purposes.

Conclusion. The analysis shows that the daily increase in traffic from the Proposed Project on most local streets, including Toberman Street and Burlington Avenue, would generally be less than 120 trips and thus would be below the City's threshold of significance. The two exceptions would be Alvarado Terrace and Westlake Avenue, between Alvarado Street and Pico Boulevard. Traffic increases on Alvarado Terrace during the Sunday event would be 158 trips, which is greater than the threshold of 120 trips. Traffic increases on Alvarado Terrace during the Saturday and Weekday events would be 14 percent and 16 percent, respectively, which is greater than the 12 percent or more threshold of significance. For Westlake Avenue, traffic increases due to the Proposed Project during the Sunday event would be 119 trips, which is just under the threshold of 120 trips. Traffic increases on Westlake Avenue for the Saturday and Weekday events would be 122 trips and 120 trips, respectively, which are at or over the significance threshold.

The analysis also showed that for other non-local streets in Pico-Union, the increase in traffic due to the Proposed Project would be less than 8 percent and in most cases would be less than 5 percent.

However, it is recognized that traffic could operate somewhat differently than the projections made in the analysis and that unforeseen significant traffic impacts could occur

on some of the other streets in the area. Measures to reduce these impacts are addressed in Section IV.B.1.16 (Project Design Features and Mitigation Measures) of this Draft EIR.

(4) Proposed Project Street Closures

The planned street closures adjacent to the Event Center during major events could also potentially affect traffic in the Pico-Union area. Two streets (L.A. Live Way and Chick Hearn Court) would be closed before, during, and after events and would result in some traffic being redirected to alternate routes. L.A. Live Way would be closed to all traffic, except local access to parking garages, between Pico Boulevard and Chick Hearn Court. Also, Chick Hearn Court would be closed between Figueroa Street and L.A. Live Way. Note that Chick Hearn is currently often closed between Figueroa Street and Georgia Street for L.A. LIVE and STAPLES Center events. Key traffic diversions that could affect the Pico-Union area due to these street closures would include the following:

- Local traffic using 11th Street from east of the Harbor Freeway to access/egress the neighborhood would have to use alternate routes. These routes would likely be Olympic Boulevard and Pico Boulevard. This would decrease traffic on 11th Street and increase traffic on these arterials. This could also increase traffic on Union Avenue, as traffic returns to 11th Street; however, this would be locally destined neighborhood traffic that would be shifting from 11th Street.
- Traffic currently using Pico Boulevard eastbound that turns north on L.A. Live Way to access the 11th Street northbound on-ramp to the Harbor Freeway would have to use alternate routes. Such routes would likely be the arterial roadways of Hoover and Alvarado Streets to Olympic Boulevard, then eastbound to Georgia Street, and then northbound to the 9th Street on-ramp to the Harbor Freeway northbound. The other possible diversions could be via Union Avenue, Valencia Street, and Albany Street, although this is less likely because these streets are generally only two-lane rather than four lane streets.

Event street closures would prevent any westbound traffic on 11th Street entering Pico-Union from east of the Harbor Freeway, which would reduce volumes on 11th Street.

<u>Conclusion</u>. While the planned street closures adjacent to the Event Center may cause some minor inconvenience to residents accessing/egressing the neighborhoods, impacts related to traffic diversions on the residential streets in Pico-Union are considered less than significant.

14. Project Access

a. Vehicular Access

Vehicular access provisions for the Proposed Project are discussed above in Section IV.B.1.7(b) of this Draft EIR and in detail in Chapter 4 of the Transportation Study (see Appendix I to the Draft EIR). Vehicular access for the Proposed Project would be very similar to that under existing conditions. Access to the South Hall and Venice parking garages at the Convention Center would remain as is. Access to the new L.A. Live Way Garage would be very similar to the current access to the Cherry Street Garage which it would replace. The two driveways on L.A. Live Way would be in approximately the same locations as currently provided, although additional driveways would be provided on 12th Street and Pico Boulevard. Access to the new Bond Street Garage would be in the same locations as currently provided for at the surface lot in that location and as detailed in Section IV.B.7(b). Some of these driveways are off-street (e.g., existing driveways to the South Hall and Venice Garages at the Convention Center). Driveways to the new L.A. Live Way and Bond Street Garages would be on-street. All new driveways would be designed according to LAMC and LADOT standards, and thus would not increase hazards due to design features. They would not conflict with adopted City policies or plans for alternative transportation as they would not conflict with any bus turnouts or bicycle facilities.

According to the *City of Los Angeles CEQA Thresholds Guide*, a project would have a significant access impact if the intersection(s) nearest the primary site access are projected to operate at LOS E or LOS F during the morning or afternoon peak hour under cumulative plus project conditions. The analysis of the Future With Project Conditions shows that intersections adjacent to these driveways would operate at better than LOS E conditions. Therefore, no significant impacts related to access would be expected.

As primarily event facilities, the garages would be designed to facilitate access and egress under event conditions. For Event Center events, they would be expected to provide for premier parking with pre-sold passes, thereby facilitating entry. The multiple access points to on-site parking for the Proposed Project would provide for an efficient dispersal of traffic and for flexibility of operations in controlling access and egress during events. Traffic operations at these driveways may vary considerably by event type and attendance, but would be facilitated by the closure of L.A. Live Way to through traffic (i.e., allowing local access only) during major events, and by the expected use of traffic control officers at key locations. Both of these measures would minimize vehicular–pedestrian conflicts and will be included in the Transportation Management Plan.

With the Proposed Project design features and measures identified above that will be included in the Transportation Management Plan, impacts related to driveway access would be less than significant.

Emergency Vehicle Access: Emergency vehicle access would be available at all times. While certain streets may be closed at certain times before, during, or after an event, these closures would not close the street to all vehicles, as local access and emergency vehicles would continue to be allowed to use those streets. The access of such vehicles would actually be facilitated by the proposed street closures and by the use of traffic control officers at key intersections. The Transportation Management Plan will address emergency vehicle provisions. Impacts of the Proposed Project on emergency vehicle access, is therefore, considered less than significant.

b. Transit Access

(1) Bus Transit Access

The Proposed Project would not be expected to relocate any bus stops permanently and therefore, would not have any potentially significant impacts on bus stop locations. However, there are a number of bus routes that run along streets in the immediate vicinity of the Proposed Project that could be affected by temporary street closures at certain times.

There are no bus routes that run on the streets that would be closed before, during, and after events (i.e., L.A. Live Way between Pico Boulevard and Chick Hearn Court, Chick Hearn Court between Figueroa Street and L.A. Live Way, and 12th Street between Figueroa Street and Flower Street). Therefore, the closure of these streets during events would not affect bus transit service.

Mitigation Measures discussed in Section IV.B.1.16 of this Draft EIR provide for temporary closures during the Post-Event Hour at major events at the Event Center on the following streets: Figueroa Street and Flower Street between Olympic Boulevard and Pico Boulevard; 11th and 12th Street between Figueroa Street and Hope Street; and Pico Boulevard westbound only between Flower Street and L.A. Live Way. The potential impacts on bus transit for each of these streets are discussed below.

(a) Figueroa Street and Flower Street

Figueroa Street and Flower Street tend to operate as a couplet, with buses generally traveling north on Figueroa Street and south on Flower Street. During post-event hours,

the following four bus routes operate along these streets: Metro Local 81; Metro Express 445; Metro Express 460; and Metro Silver Line.³⁹ There are typically a total of sixteen buses using these streets during the Post-Event Hour on weekends and ten buses during the Post-Event Hour on a Weekday Evening. The DASH F route also uses these sections of Figueroa Street and Flower Street, and typically a total of six DASH buses operate along the streets in the Sunday and Saturday Post-Event Hour, although no buses operate during the Weekday Evening Post-Event Hour. Two options exist to operate these routes during the Post-Event Hour with temporary street closures. Either transit vehicles could be allowed to access these streets, with potential delays to buses due to pedestrian volumes leaving the event and crossing the streets, or bus routes could be temporarily diverted to other streets with lower potential conflicts with pedestrian volumes. Metro has indicated a preference for diversion of these routes to Hope Street during the Post-Event Hour.⁴⁰ Hope Street is only one to two blocks east of the routes for these bus lines, and thus would remain conveniently close for bus patrons, as well as being close to the Pico Station for convenient bus-rail transfers. Also, pedestrian volumes would be lower in the Hope Street corridor compared to Figueroa and Flower Streets, as people disperse to many different routes as they walk further from the Event Center, thus minimizing conflicts with buses. Hope Street could therefore be an attractive and effective bus transit corridor during the Post-Event Hour.

(b) Pico Boulevard

During post-event hours one bus route, Metro Local 30, operates along Pico Boulevard. There are typically a total of six to eight buses using Pico westbound during the Post-Event Hour at weekends and two buses during the Post-Event Hour on a Weekday Evening. The same two options as discussed above for Figueroa and Flower Streets would exist in operation of this route during the Post-Event Hour with temporary street closures. Alternate streets for temporary route diversion would be Olympic Boulevard or Venice Boulevard, which would be three blocks north and one block south of Pico Boulevard, respectively.

The final decisions on bus operations would be made by Metro and incorporated into the Transportation Management Plan. This would include provisions for notifying passengers of possible diversions and temporary bus stops for diverted routes. Alternate routes exist within close proximity to streets that could be closed during Post-Event Hours, and they would be necessary only for approximately up to one hour after major events.

³⁹ While other regional bus operators also run some routes along these streets, they do not operate service during Post-Event hours so would not be affected by temporary street closures.

⁴⁰ Conversations with Metro staff, November 2011.

Such alternate routes would offer the potential to minimize bus-pedestrian conflicts during those hours. Measures to accommodate temporary route diversions would be included in the Transportation Management Plan. Therefore, with these provisions, impacts related to bus operations during temporary street closures is considered less than significant.

(2) Rail Transit Access

The existing Pico Station, between 12th Street and Pico Boulevard, has one platform, which is accessed only from the sidewalk on the east side of Flower Street. The side platform access/egress points have limited capacities because of the narrow sidewalk (only 10-feet wide) and narrow entrances to the station platform. Access to the east sidewalk is from 12th Street and from Pico Boulevard. Please refer to Section IV.B.3 for additional analysis of pedestrian travel related to Proposed Project activities.

The light rail tracks, which would serve both the existing Blue Line and the future Exposition Line, run at-grade at 12th Street and to the south. Event attendees using the rail transit system at the Pico Station would need to cross the light rail tracks at the Pico Station to access/egress the station platform. Because of the design of the station, they would need to cross both tracks, once to get to the east sidewalk of Flower Street, and then to cross the northbound track again to access the platform. Some of the pedestrians that park east of Flower Street would also need to cross the tracks to walk to/from the parking areas to the Project Site. This would occur at 12th Street and at Pico Boulevard.

The implementation of a pedestrian bridge(s) across Flower Street and the rail tracks was investigated and found to be infeasible as there is very limited room in the public right-of-way for the placement of a pedestrian bridge as well as the up/down stairs without severely reducing the sidewalk width and significantly impacting sidewalk pedestrian flows. Sidewalk widenings are not feasible as right-of-way is not available. Because of these physical constraints, any pedestrian bridge would have a much lower pedestrian capacity than the surface street routes, and thus would have limited benefit. Also, there would be no guarantee that pedestrians would use pedestrian bridges, as it is often more convenient for pedestrians to stay at-grade than use a pedestrian bridge and many pedestrians may simply continue to walk at-grade. It was therefore concluded that pedestrian bridge solutions were infeasible at this location.

Consequently, there could be conflicts between pedestrians, vehicles, and light rail trains at the Flower Street & 12th Street intersection, and at the Flower Street & Pico Boulevard intersection that could potentially cause significant pedestrian impacts. However, at-grade access/egress is not uncommon on the at-grade light rail system in Los Angeles County, where pedestrian access to the at-grade stations usually occurs at street intersections safely and without problems. With the Proposed Project however, the
pedestrian volumes would be much higher for short periods of time before and after events. However, there are examples across the country where at-grade light rail lines operate successfully either immediately adjacent to or in close proximity to major sports facilities. For example, the Third Street Line in San Francisco runs immediately adjacent to the AT&T Park baseball field for the San Francisco Giants, and in Baltimore the light rail line runs one block east of the Camden Yards baseball field for the Baltimore Orioles.

The temporary closure of Flower Street to vehicles after events would eliminate auto-pedestrian conflicts. A mitigation measure would add a second platform to the Pico Station that would significantly increase and enhance both the person capacity of the station and pedestrian safety for access/egress to/from the station platforms. As the second platform would be designed with "end-loading" from 12th Street and Pico Boulevard (which is the standard design at other light rail stations on the system in Los Angeles County), it would significantly reduce and minimize the number of transit passengers crossing the tracks.

Pedestrian circulation issues are addressed in the mitigation program and would be further detailed in the Transportation Management Plan. The Transportation Management Plan would also include measures (developed in close cooperation with Metro) for controlling trains at the Pico Station and for controlling and directing pedestrians crossing the tracks, to enhance pedestrian safety and improve pedestrian access to the station. These would include use of Metro and law enforcement personnel to control/direct pedestrian traffic, and to control train movements at the station and at the intersections immediately adjacent to the station (Flower Street & 12th Street, and Flower Street & Pico Boulevard). In addition, these measures would also include, at the discretion of Metro and LADOT, the temporary prohibition of pedestrians and/or vehicles crossing tracks at certain times as necessary (in which case they could for example, be redirected to 11th Street, where the light rail tracks are below grade). These measures would be detailed in the Transportation Management Plan that would be developed in coordination with Metro and LADOT.

With the proposed improvements at Pico Station to add a second platform, the proposed post-event street closures to vehicle traffic, and the provisions for pedestrian and vehicle control to be included in the Transportation Management Plan, rail transit pedestrian access impacts would be less than significant.

15. In-Street Construction Impacts

This section evaluates construction activities for the Proposed Project and the potential to cause temporary impacts to the transportation system during the Proposed Project's construction process.

a. Types of Construction Impacts and Methodology

Construction impacts were evaluated using the guidelines provided in the *City of Los Angeles CEQA Thresholds Guide,* which identify four types of in-street construction impacts and 16 factors by which to determine the potential significance of the impacts.

The four types of impacts are:

- 1. Temporary traffic impacts
- 2. Temporary loss of access
- 3. Temporary loss of bus stops or rerouting of bus routes
- 4. Temporary loss of on-street parking

In the evaluation of these factors, a significant impact would occur if the thresholds identified in Subsection 6 above, Thresholds of Significance, are exceeded for In-Street Construction Impacts.

Construction activities that could generally cause transportation impacts typically fall into one of the following categories:

- Haul truck trips—associated with export of demolition or excavation materials.
- Concrete and delivery trucks associated with delivery of construction materials.
- Construction worker trips traveling to/from the site.
- Temporary roadway lane closures that may be necessary for certain aspects of construction.
- Temporary modification or restriction of access to adjacent Lane uses.
- Temporary loss of on-street parking.
- Temporary loss of bus stops or rerouting of buses.

b. Construction Schedule

Construction activity associated with the Proposed Project is expected to occur over a period of approximately four years or 48 months, beginning in Fall 2012 and ending in August 2016. During this time, the following four structures will be built in the order listed (with the approximate duration of associated construction activities in parentheses):

- Bond Street Parking Garage (10 months)
 New Hall (18 months)
 L.A. Live Way Parking Garage (15 months)
- Event Center (33 months)

Some overlap in activities is expected to occur between these phases. Construction of the Bond Street Garage and New Hall is expected to begin and run concurrently. Construction of the L.A. Live Way Garage would begin after the completion of the Bond Street Garage and also run concurrently with construction of the New Hall. The construction of the Event Center is scheduled to begin about three months before completion of the New Hall, with completion of the L.A. Live Way Garage running concurrently for a period of time. Construction activities are expected to occur Mondays to Saturdays, between 7:00 A.M. and 12:00 A.M., and Sunday and holidays between 8:00 A.M. and midnight.

c. Truck Trips

Two primary types of truck trips are expected to travel to and from the Project Site: haul trips and concrete/delivery trips. Haul trips consist of removing debris created as part of the demolition activities and removing earth excavated to accommodate construction of the Proposed Project. Concrete/Delivery trips include trucks carrying concrete and trucks carrying other building materials.

(1) Haul Trips

Haul activities are expected to occur Mondays to Saturdays between 7:00 A.M. and 9:00 P.M. As shown in Figure 5.8.3.1 of the Transportation Study (see Appendix I of this Draft EIR),, four haul routes have been identified for use by trucks traveling to/from the Project Site as follows:

• <u>Truck Route Option 1</u>: Empty haul trucks are anticipated to travel from the Harbor Freeway (I-110) south of the Project Site and exit northbound onto L.A. Live Way to access the Project Site. Upon departure from the Project Site, the loaded haul trucks would travel via L.A. Live Way (heading north), west on 11th Street, and onto the I-110 southbound.

- <u>Truck Route Option 2</u>: Empty haul trucks are anticipated to travel from the Harbor Freeway (I-110) south of the Project Site and exit northbound onto L.A. Live Way to access the Project Site. Upon departure from the Project Site, the loaded haul trucks would travel east on Pico Boulevard, south on Grand Avenue, west on 17th Street, onto the Santa Monica Freeway (I-10) westbound, and then onto the I-110 southbound.
- <u>Truck Route Option 3</u>: Empty haul trucks are anticipated to travel from the Santa Monica Freeway (I-10) east of the Project Site, exit northbound onto L.A. Live Way from the I-110 Northbound/Pico Boulevard ramp, and head north on L.A. Live Way to access the Project Site. Upon departure from the Project Site, the loaded haul trucks would exit north on L.A. Live Way, and travel east on Chick Hearn Court, south on Flower Street, and then onto the I-10 eastbound.
- <u>Truck Route Option 4</u>: Empty haul trucks are anticipated to travel from the Santa Monica Freeway (I-10) east of the Project Site, exit northbound onto L.A. Live Way from the I-110 Northbound/Pico Boulevard ramp, and head north on L.A. Live Way to access the Project Site. Upon departure from the Project Site, the loaded haul trucks would exit east on Pico Boulevard, and travel south on Flower Street, and then onto the I-10 eastbound.

These haul routes cover relatively short distances on surface streets to access the freeway system. With the exception of 11th Street/Chick Hearn Court and L.A. Live Way adjacent to the Project Site, the haul routes use arterial streets that are designed to accommodate truck traffic.

Hauling activities would occur during approximately 22 months of the overall construction period, and the number of truck trips would vary during those months from a low of typically 70 truck trips a day to a high of 400 truck trips a day. In order to assess potential impacts, daily truck trips were converted into estimated average passenger-car equivalent (PCE) trips per hour. A passenger car equivalency of 2.0 was used for each truck, as a truck is considered equivalent to two passenger cars due to its greater size.⁴¹ It was also assumed the haul trips would be evenly distributed across the 14-hour daily construction period.

The lower levels of haul activity would occur for about 9 months, in three phases of 1-4 months each, and the number of haul trucks would typically be about 70 to 110 trips

⁴¹ 2000 Highway Capacity Manual (Transportation Research Board, 2000). Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, page 5-198.

per day (one-way trips). Using the conversion rates defined above, this would be equivalent to about 10 to 16 PCE trips per hour.

The higher levels of haul activity would occur for about 13 months in two phases of 2 months (L.A. Live Way Garage) and 11 months (Event Center), and the number of haul truck trips would range from 300 to 400 truck trips a day (with the higher number occurring during the 11-month phase). This would be equivalent to about 43 to 57 PCE trips per hour. The above numbers are average volumes. It is estimated that on any given day, peak volumes could be about 10 percent higher than the average volumes stated.

(2) Concrete/Delivery Trips

Concrete/Delivery truck trips are expected to occur throughout the 48 month construction period. These trips would also occur throughout the scheduled construction times of 7:00 A.M. to 12:00 A.M., Mondays to Saturdays, and are also expected to largely use the haul routes shown in Figure 5.8.3.1 in the Transportation Study.

Concrete/Delivery truck trips are expected to typically range from about 70 truck trips per day to about 220 truck trips per day, with an overall average of 135 trips per day during the 48-month construction period. For about two months, the typical number of trips could increase to about 280 truck trips per day. Using the same conversion factors discussed above, this would be the equivalent of 8 to 26 average PCE trips per hour, and an overall average of 16 PCE trips per hour. The above numbers are average volumes. It is estimated that on any given day, peak volumes for concrete trucks could be about 50 percent higher than the average volumes stated. For all other trucks, the peak volumes are expected to be about 10 percent higher than the average volumes stated.

(3) Total Truck Trips

The total number of truck trips, including both haul trucks and concrete/delivery trucks, would typically range from about 160 truck trips a day (for about 37 months of the 48 month construction period) to about 575 truck trips a day (for about 11 months). These would be equivalent to about 23 PCE trips per hour and 83 PCE trips per hour, respectively.

The majority of these truck trips would occur outside the peak periods during times of lower background traffic volumes. Even during peak traffic periods, these overall volumes of trips would not be expected to cause significant traffic impacts. It is possible however, that during times of events at the Convention Center, STAPLES Center, and NOKIA Theater, haul truck trips could cause some inconvenience to traffic operations in the area of the Project Site. The Construction Traffic Management and Control Plan that would be prepared for the Proposed Project would address such times and reduce any such impacts to a less than significant level.

d. Construction Worker Trips and Parking

(1) Number of Construction Workers

Construction activities are expected to occur Mondays to Saturdays between 7:00 A.M. and 12:00 A.M. Two construction shifts are anticipated; the first construction shift would be from 7:00 A.M. to 3:30 P.M., and the second would be from 3:30 P.M. to 12:00 A.M. The number of construction workers on-site will vary considerably over the construction period. During the first 22 months of the construction period, the average number of workers on-site is estimated to range from 150 to 700 workers per day, with the higher end of the range occurring for about 11 months. During the latter 26 months of construction the average number of workers is estimated to range from about 1,200 to 2,270 per day, with the higher end of the range also occurring for about 4 to 5 months. At any given time, the peak number of workers could be approximately 18 percent higher than these totals, so the daily on-site total could reach about 2,660 workers on occasions during the 4 to 5 months of highest construction activity. It is anticipated that there would be an equal number of construction workers on both shifts.

(2) Construction Worker Trips

Construction workers would travel outside of the peak hours, arriving before both the A.M. peak period and P.M. peak period, and leaving the site before P.M. peak period and around midnight. Although it would be expected that construction worker trips would not cause significant traffic impacts, an analysis was conducted of the likely number of construction worker trips, as discussed below.

In estimating the number of construction worker trips, it is expected that workers would take advantage of transit service to the downtown location as well as carpooling. It is estimated that the first shift workers would travel to the Project Site as follows: 20 percent would use public transit, 40 percent would drive alone and 40 percent (two workers per vehicle) would carpool. For second shift workers, it was estimated that 5 percent would use public transit, 55 percent would drive alone, and 40 percent would carpool (two workers per vehicle), due to far lower levels of transit service being available at 12:00 A.M. at the end of the shift.

During the first 22 months of construction, the expected number of construction workers identified above would generate between on average approximately 45 and 210 vehicle trips at the start and end of the first shift and between approximately 55 and

265 vehicle trips at the start and end of the second shift. The highest number of trips would be generated during the hour encompassing the shift changeover (3:00–4:00 P.M.), when a total of 100 to 475 vehicle trips would be generated.

During the last 26 months of construction, the expected number of construction workers identified above would generate on average between approximately 360 and 680 vehicle trips at the start and end of the first shift and between approximately 450 and 850 vehicle trips at the start and end of the second shift. The highest number of trips would be generated during the hour encompassing the shift changeover (3:00–4:00 P.M.), when a total of 810 to 1,530 vehicle trips would be generated.

During the last 26 months of construction, there would be a 4- to 5-month period when the peak number of construction workers could generate between approximately 800 vehicle trips at the start and end of the first shift and approximately 1,000 vehicle trips at the start and end of the second shift. The highest number of trips would be generated during the hour encompassing the shift changeover (3:00–4:00 P.M.), when a total of about 1,800 vehicle trips would be generated.

As identified earlier, because these worker trips would occur outside the peak periods, they would not be expected to cause significant traffic impacts. However, during the final 26 months of the construction period, there may be times when the number of trips during the shift changeover hour could potentially cause temporary significant localized traffic impacts at intersections adjacent to parking locations. This potential could be minimized through a program to encourage higher use of transit and ridesharing, and a program of effective construction worker parking management to avoid an overconcentration of worker parking in one location. Mitigation Measure B.1-30 includes a requirement for a Plan to provide these programs.

(3) Construction Worker Parking

Parking for construction workers would be provided either on-site or at off-site locations (with shuttle buses, where necessary). It is unlikely that all construction worker parking could be accommodated on-site, and it is likely that a substantial portion of parking could be located off-site. Actual locations of off-site construction worker parking cannot be identified at this time, however depending on location, workers could either walk to the construction site or be transported by shuttle bus. Due to this uncertainty, impacts related to construction worker parking would be potentially significant. The Proposed Project would provide sufficient parking for construction workers throughout the construction period, either on-site, in the vicinity of the Project, or in off-site locations with shuttle bus connections to the Project Site. Mitigation Measure B.1-30 includes the requirement for a Construction Worker Parking Management Plan, which includes a requirement to provide

shuttle services from off-site parking lots to the construction site. Therefore, with implementation of Mitigation Measure B.1-30, construction of the Proposed Project would result in a less than significant impact with regard to construction worker parking.

(4) Construction Worker Transit Trips

During the first 22 months of construction, the expected number of construction workers would generate between on average approximately 15 to 70 transit trips per hour at the start and end of work shifts, and up to approximately 90 transit trips per hour during the shift changeover.

During the last 26 months of construction, the construction workers would generate on average between approximately 120 and 225 transit trips per hour at the start and end of work shifts, and up to approximately 285 transit trips during the shift changeover.

During the last 26 months of construction, there would be a 4 to 5 month period when the peak number of construction workers could generate between approximately 70 and 270 transit trips at the start and end of work shifts, and up to approximately 335 transit trips during the shift changeover.

As there is a substantial capacity of transit service (rail and bus) serving the Project Area, and as the worker trips would occur outside the peak periods, these totals would represent less than significant impacts on the transit system,

e. Roadway Lane Closures

(1) Description of Roadway Lane Closures

Construction at the Project Site will require some roadway lane closures at certain times for construction activity and equipment. These will be limited to roadways immediately adjacent to the Project Site and are described below. Some lane closures will be necessary for extended periods of time and will be implemented with K-rail (temporary concrete traffic barrier) protection and appropriate traffic control equipment. Other closures will be temporary on an hourly basis. Those lane closures that are expected to be needed for extended periods of time are as follows:

(a) L.A. Live Way South of Pico Boulevard

It is anticipated it will be necessary to close the east curb lane on L.A. Live Way (one-way northbound street) between Bond Street and Pico Boulevard for approximately 12 months. This is a one-way northbound street and the lane closure would temporarily reduce the existing 5 lanes to 4 lanes with the temporary loss of one through lane at the intersection with Pico Boulevard. The east sidewalk would also be closed along this stretch of L.A. Live Way for the same 11 months. There is currently no driveway access along this stretch of L.A. Live Way, so no driveway access would be affected.

(b) Bond Street

It is expected that Bond Street (two-way street) and its sidewalks will need to be completely closed (both directions) from L.A. Live Way to Pico Boulevard for approximately 12 months. This closure would effectively eliminate the current access to the Bond Street parking lot, which would no longer be necessary during construction of the Bond Street Garage, which would involve the demolition of the Bond Street Parking Lot.

(c) L.A. Live Way North of Pico Boulevard

It is anticipated that the eastern lane (northbound) of L.A. Live Way from Pico Boulevard to approximately 250 feet north of Pico Boulevard will need to be closed for a period of 12 months. To accommodate this closure, the striped median/island along L.A. Live Way immediately north of Pico Boulevard could be removed and L.A. Live Way could be restriped to retain the existing 2 northbound lanes, 2 southbound left-turn lanes, and 2 southbound right-turn lanes. This would also require the closure of the existing inbound access to the truck loading deck of the West Hall.

It is anticipated that a construction area will also need to be placed on the east side of L.A. Live Way between Pico Boulevard and Chick Hearn Court for an additional 36 months during the construction of Event Center. Also, a similar construction area will be needed on the west side of L.A. Live Way between Pico Boulevard and Chick Hearn Court for approximately 14 months during the construction of the L.A. Live Way Garage. Construction of the L.A. Live Way Garage will involve the vacation of a 13-foot strip of land on the west side of L.A. Live Way and therefore, an equal narrowing of the current street width. It is estimated that these construction areas could each be approximately 17 to 18 feet in width. However, as L.A. Live Way is currently a wide street with wide curb lanes, it is anticipated that the roadway could be restriped with narrower lanes from the current configuration of 3 northbound lanes, 2 southbound lanes, and a two-way left-turn lane to a configuration consisting of 2 northbound lanes, 2 southbound lanes, and a two-way left-turn lane, thereby only losing one northbound lane of roadway capacity. It is also anticipated that the sidewalks on both sides of L.A. Live Way from Pico Boulevard to Chick Hearn Court would be closed for this period. The current access driveways along this stretch of L.A. Live Way to the West Hall Garage and to the Cherry Street Garage will no longer be necessary as they will both be demolished and replaced with new buildings. The existing outbound egress to L.A. Live Way from the truck loading deck of the West Hall would remain open during construction and would need to be reconfigured to allow use by both incoming and outgoing trucks.

(d) 12th Street

It is anticipated that the full closure of 12th Street (two-way street) in both directions from L.A. Live Way to Blaine Street will be necessary for approximately 14 months for construction of the L.A. Live Way garage. The sidewalks along both sides of 12th Street from L.A. Live Way to Blaine Street will also be closed for the same duration. There is currently no driveway access along this stretch of L.A Live Way, and therefore, no driveway access would be affected.

(e) Chick Hearn Court

It is anticipated that a 20-foot construction area will be needed on the south side of Chick Hearn Court (two-way roadway) between L.A. Live Way and Georgia Street for approximately 36 months (this would narrow to approximately 10-feet approaching the intersection with Georgia Street). However, as Chick Hearn Court is currently a wide street with wide curb lanes, it is anticipated that the roadway could be restriped with narrower lanes to retain the existing lane configuration. The creation of the construction zone along the southern edge of Chick Hearn Court will also require the closure of the existing sidewalk between L.A. Live Way and Georgia Street.

(f) Pico Boulevard

Construction of the New Hall will require a phased approach toward street lane closures along Pico Boulevard (two-way six-lane street).

The first phase will require the closure of the center lanes located on either side of the median along Pico Boulevard between L.A. Live Way and the western edge of Concourse Hall for a period of approximately 3 months. Pico Boulevard would be reduced from 3 lanes to 2 lanes in each direction. From the west side of Concourse Hall to Figueroa Street, the existing lane configuration would be retained. The sidewalks on both sides of Pico Boulevard are expected to remain open for pedestrian use during this phase of construction. Current access/egress to the passenger loading zone on Pico Drive adjacent to eastbound Pico Boulevard would remain open during this time. Access/egress to the current loading docks for the West Hall on the north side of Pico Boulevard would remain open but only to right-in/right-out movements (westbound) only, as the median lane closures would prevent left-in/left-out movements.

The second phase of construction along Pico Boulevard will require that the southern 3 lanes (eastbound direction) be closed for approximately 6 months between

L.A. Live Way and the western edge of Concourse Hall. The passenger loading zone on Pico Drive adjacent to eastbound Pico Boulevard would also be closed during this time, as would the sidewalk on the south side of Pico Boulevard.

It is anticipated that the westbound 3 lanes on the north side of Pico Boulevard could be reconfigured with K-rail to either maintain one lane in each direction if the existing north side sidewalk is maintained, or 2 lanes in one direction and one lane in the other direction if a temporary sidewalk can be provided along the north (or south) side of Pico Boulevard. Vehicular transitions from the temporary north side of Pico Boulevard back to the south side would have to be made at the east end of the closure between the west edge of Concourse Hall and the intersection of Figueroa Street & Pico Boulevard. They would also have to be made at the west end of the closure, probably west of the intersection of Pico Boulevard & L.A. Live Way. Temporary intersection layouts and traffic control would need to be implemented at these two intersections.

The third phase of construction along Pico Boulevard would be the mirror image of the second phase and would require the northern 3 lanes (westbound direction) to be closed for approximately 6 months. The eastbound lanes would be reopened and the passenger loading zone on Pico Drive on the south side of Pico Boulevard would be reopened. It is anticipated that the westbound 3 lanes on the north side of Pico Boulevard could be reconfigured with K-rail to either maintain one lane in each direction if the existing south curb line is maintained, or 2 lanes in one direction and one lane in the other direction if the south curb were temporarily relocated to the south. The sidewalk on the north side of Pico Boulevard would be closed, but the sidewalk on the south side would be reopened during this period. Temporary intersection layouts and traffic control would need to be implemented at the intersections of Figueroa Street & Pico Boulevard and L.A. Live Way & Pico Boulevard as described for the second phase above.

(2) Traffic Impacts of Roadway Lane Closures

Traffic impacts associated with the above defined temporary lane closures are generally expected to be less than significant. Bond Street is not a public street and is used only for access to the Bond Street Lot for the Convention Center. As the lot is being replaced, access would no longer be necessary during construction so there would be no significant impacts. Traffic volumes on L.A. Live Way and Chick Hearn Court are normally relatively low as they are Collector Streets, and the principal volumes are often generated by the adjacent parking structures. Because the parking structures on L.A. Live Way will be demolished, there will be no need for access during construction. Once the new garages are completed on L.A. Live Way, there will be sufficient roadway capacity maintained that is very similar to existing roadway capacity, to handle the traffic volumes during the remainder of construction on the Project Site. Also, similar levels of roadway capacity would be maintained on both these streets to provide access/egress to/from the freeway ramps at 11th Street & L.A. Live Way, and at Blaine Street & L.A. Live Way. Twelfth Street is a Collector Street that only provides local access from the Pico-Union neighborhood to L.A. Live Way. Closure of the block of 12th Street between L.A. Live Way and Blaine Street would not create significant traffic impacts as it is a lightly traveled street and convenient alternate routes are available within a one block distance via 11th Street and Pico Boulevard. The traffic impacts during construction are therefore expected to be less than significant on all these streets discussed above.

The temporary lane closures on Pico Boulevard would reduce the overall capacity of the street, which is a Modified Secondary Highway, potentially resulting in increased travel time and delays or decreased levels of service. These impacts are not expected to be significant for the construction phase where the two center lanes are closed. However, for the construction phases when either the three northerly lanes or the three southerly lanes are closed, increased travel time and delays or decreased levels of service could be significant. This could possibly result in some traffic shifting to other adjacent east-west roadways, such as Olympic Boulevard, Venice Boulevard, Washington Boulevard, 9th Street, or 8th Street, which could temporarily increase delays or decrease levels of service on those streets and lead to significant impacts. While Pico Boulevard currently generally operates at a good level of service in the Project Area, significant traffic impacts could occur as the result of temporary lane closures and transitions to/from the construction zones at the intersection of Pico Boulevard & L.A. Live Way, particularly during major events occurring at the Convention Center.

The temporary closure of the passenger loading zone on Pico Drive adjacent to the south side of Pico Boulevard would require the bus and taxi loading activities that sometimes occur there to be relocated to similar zones currently used on Gilbert Lindsay Plaza and Figueroa Drive. Impacts of this temporary relocation are expected to be less than significant.

(3) Transit Impacts of Roadway Lane Closures

Most of the lane closures would not require the temporary relocation of transit bus stops or the temporary rerouting of bus lines. This would be the case for the temporary closures of L.A. Live Way, Bond Street, 12th Street, and Chick Hearn Court. When either the northerly or southerly lanes of Pico Boulevard are temporarily closed, the Metro Rapid Bus Line #730 and Metro Local Bus Line #30 may need to be temporarily relocated to Venice Boulevard or Olympic Boulevard to facilitate more efficient traffic flow along Pico Boulevard and to maintain convenient bus service. Venice Boulevard is less than a quarter mile from Pico Boulevard and Olympic Boulevard is a third of a mile from Pico Boulevard. Therefore, some minor inconvenience may result from relocation of these lines. However, because alternate routes would be within about a three block walk, these impacts are considered less than significant.

If the two Metro bus lines are not relocated, two bus stops along Pico Boulevard would need to be relocated. While the relocations would be determined by Metro, the bus stop at the southeast corner of the Pico Boulevard & L.A. Live Way intersection would probably be relocated to the southwest corner of the Pico Boulevard & Bond Street intersection. The bus stop at the northwest corner of the Pico Boulevard & Figueroa Street intersection would probably be relocated to the northwest corner of the Pico Boulevard & Figueroa Street intersection would probably be relocated to the northwest corner of the Pico Boulevard & Figueroa Street intersection. The relocation of these bus stops would be a less than significant impact, as the relocation distance is approximately one block at both locations.

(4) Pedestrian-Related Impacts of Roadway Lane Closures

The temporary closures of sidewalks on the streets described above would not cause significant impacts to pedestrians in the area. In many cases, existing pedestrians volumes are low and convenient alternate routes would be available. Pedestrian volumes are negligible on L.A. Live Way south of Bond Street and on Bond Street. Pedestrian volumes are low on 12th Street, and convenient alternate routes exist on Pico Boulevard and on 11th Street. Pedestrian volumes on L.A. Live Way between Pico Boulevard and Chick Hearn Court are primarily generated by the parking facilities that are used during events. During much of the construction period, both sidewalks would be closed, but the parking facilities would not be open so no pedestrian traffic would be generated. When the new Bond Street Garage opens, and construction is still occurring on L.A. Live Way, an alternate route to STAPLES Center and L.A. LIVE would be available via Pico Boulevard and Gilbert Lindsay Plaza. When the sidewalk on the south side of Chick Hearn Court is closed during construction, the sidewalk on the north side of the street would provide an alternate route. During construction along Pico Boulevard, a temporary sidewalk/protected walkway (on either the north or south side) would be maintained at all times. Construction impacts on pedestrians are therefore expected to be less than significant.

(5) On-Street Parking Impacts of Roadway Lane Closures

There is no on-street parking allowed on any of the streets that would be subject to the temporary lane closures described above. Impacts to on-street parking would therefore be less than significant.

(6) Other Potential Temporary Roadway Lane Closures

During construction, there may be additional temporary lane closures that may occur for only certain hours or certain intermittent days. These would occur for specific construction needs and would be accomplished with traffic cones and/or traffic barricades. As these would occur for only short periods of time, would often occur outside of the peak periods, and as they would be subject to a Construction Traffic Control Plan that would be prepared for the Project, these impacts would be less than significant.

f. Convention Center Access

Access/egress would be maintained to the South Hall and Venice garages at all times during construction. The Bond Street Garage (928 spaces) would be constructed before the West Hall Garage (1,625 spaces), and Cherry Street Garage (868 spaces) would be closed for demolition. During construction of the L.A. Live Way Garage, the Convention Center would operate with a minimum of 3,670 spaces. While this would be less than the existing 5,588 spaces, it would be sufficient for most needs at the Convention Center, except for some high event days (e.g., E3 and the Auto Show). During such times, the Convention Center would need to arrange for off-site parking. As there is a substantial amount of off-street parking in the adjacent area as described in Section IV.B.2, Parking, of this Draft EIR, parking impacts during construction would be less than significant. However, during the closure of some of the traffic lanes on Pico Boulevard, additional traffic delays may occur on Pico Boulevard accessing or exiting the parking facilities. At certain times these impacts could be significant.

All existing pedestrian entry/exit points at the Convention Center would remain open during construction, and pedestrian sidewalk routes (including between the Convention Center Halls and remaining on-site parking garages) would be maintained (sometimes with temporary sidewalks). Therefore, pedestrian impacts during construction would be less than significant.

While the Pico Drive passenger loading area would be closed for a period of time during construction, the existing passenger loading areas at Figueroa Drive and Gilbert Lindsay Plaza would still be available. Therefore, shuttle bus and taxi service could be rearranged to temporarily use those areas during the temporary closure of the Pico Drive passenger loading area. Therefore, impacts to passenger loading and unloading would be less than significant.

In order to minimize impacts to all modes of Convention Center access and circulation during the construction period, construction activities would be coordinated with the event schedule of the Convention Center with implementation of the event construction traffic management plans.

g. STAPLES Center and L.A. LIVE Access

Access/egress would be maintained to the L.A. LIVE Garages at all times during construction. During construction, the spaces currently used for STAPLES Center parking in the West Hall and Cherry Street Garages (up to about 1,275 spaces) would no longer be available. However, those spaces would not be demolished until the Bond Street Garage (928 spaces) is completed, and therefore, the shortfall during construction of the L.A. Live Garage would be only 347 spaces. During that time, STAPLES Center would arrange for temporary replacement parking in adjacent off-site locations. As there is a substantial amount of off-street parking in the adjacent areas, as discussed in Section IV.B.2, Parking, of this Draft EIR, parking impacts during construction would be less than significant. L.A. LIVE parking would continue to occur in the L.A. LIVE Garages and at off-site parking locations in the adjacent areas of downtown, and therefore, parking impacts at L.A. LIVE would be less than significant.

All existing pedestrian entry/exit points at STAPLES Center and L.A. LIVE would remain open during construction, and pedestrian sidewalk routes (including between the Bond Street Garage and STAPLES Center) would be maintained (sometimes with temporary sidewalks). Therefore, pedestrian impacts during construction would be less than significant.

In order to minimize access and circulation impacts to patrons of STAPLES Center and L.A. LIVE during the construction period, construction activities would be coordinated with the event schedule of STAPLES Center, NOKIA Theater and L.A. LIVE, and construction traffic management plans would be developed and put in place.

h. Pico-Union Neighborhood Impacts

During the periods of construction when temporary lane closures occur on Pico Boulevard between L.A. Live Way and the Concourse Hall Bridge, the reduced roadway capacity could lead to some traffic diverting to other east-west arterial roadways. There would be the potential for some of this diverted traffic to use streets in Pico-Union to reach these parallel arterials. As discussed above, substantial diversions through Pico-Union are considered unlikely as travel times would be slow due to the lower capacity and local nature of the streets. Nevertheless, the potential would exist for such diversions to cause significant impacts. Therefore, a Pico-Union Neighborhood Construction Traffic Management Plan will be developed to minimize that potential. With the implementation of such a plan, it is expected that traffic impacts due to construction would be less than significant.

i. Overview of Construction Impacts

(1) Inconvenience Threshold

Overall, impacts from construction on the transportation system would be temporary and short-term, and would cause some temporary and intermittent reductions in street and intersection capacity on roadways adjacent to the Project Site. As increases in delays and travel times would be noticeable to drivers, traffic impacts would be considered potentially short-term and temporary significant impacts. While development and implementation of a detailed and comprehensive Construction Traffic Control Plan would reduce such impacts, it is conservatively concluded that impacts due to truck traffic, construction worker traffic, and some roadway lane closures would at times be significant and unavoidable.

(2) Transportation Hazards

Construction of the Proposed Project is not expected to create hazards for transportation system users, as long as commonly practiced safety procedures for construction are followed. Therefore, transportation-related hazards are expected to be less than significant. However, to further ensure such procedures would be implemented during construction, safety procedures would also be incorporated into the Construction Traffic Control Plans in the Mitigation Program. Impacts from transportation hazards would therefore remain less than significant.

16. Cumulative Impacts

a. Intersections, Freeways and Los Angeles County Congestion Management Plan Locations

Implementation of the Project in conjunction with the 133 related projects described in Section III, Overview of Environmental Setting, of this Draft EIR, and projected regional growth would increase the amount of traffic in the Study Area. As discussed previously, the analysis of Future-with-Project conditions reflects both Project-specific and future cumulative traffic impacts related to intersection Level of Service, because the Future-with-Project condition considers a combination of existing traffic conditions, plus traffic from regional growth and related projects, and Project traffic. The cumulative impacts associated with the individual analyses presented above are as follows:

• Intersection Level of Service Analysis: Cumulative conditions would result in significant intersection impacts and the Project would contribute to these impacts. Thus, the Project's contribution to impacts that would occur in the future cumulative conditions would be considerable, and cumulative impacts

would be significant at these intersections. As discussed in subsection 17, Level of Significance After Mitigation, although mitigation would reduce some of the significant impacts to less than significant, impacts would remain significant and unavoidable at certain intersections.

- Freeway Segment Analysis: Cumulative conditions would result in significant freeway segment impacts at certain locations and the Project would contribute to these impacts. Thus, the Project's contribution to impacts that would occur in the future cumulative conditions would be considerable, and cumulative impacts would be significant at these locations. As discussed in subsection 17, Level of Significance After Mitigation, it is conservatively concluded that these impacts would remain significant and unavoidable.
- Freeway Ramp Analysis: The analysis of cumulative impacts with regard to the analyzed on- and off-ramps concluded that the Project would result in significant impacts at on-ramps and off-ramps near the Project Site. Therefore, the Project's contribution to significant cumulative impacts at these on-ramps and off-ramps would be considerable. Therefore, the Project's cumulative impacts at certain on- and off-ramps would be significant.
- Congestion Management Plan Arterial Monitoring Station Analysis: This analysis concluded that the Project's contribution to the cumulative traffic would result in less than significant Level of Service impacts at the nine Los Angeles County Congestion Management Plan arterial monitoring stations analyzed. Therefore, the Project's contribution to cumulative impacts at Los Angeles County Congestion Management Plan arterial monitoring stations would not be considerable, and cumulative impacts would be less than significant.
- Congestion Management Plan Freeway Segments Analysis: This analysis concluded that the Project's contribution to cumulative traffic would result in significant Level of Service impacts at Los Angeles County Congestion Management Plan freeway segments during the weekday evening pre-event hour. As discussed below in subsection 17, Level of Significance After Mitigation, with implementation of the proposed mitigation, the Project's significant impacts to these Los Angeles County Congestion Management Plan freeway segments would be reduced but remain significant and unavoidable. Therefore, the Project's contribution to significant cumulative impacts on Los Angeles County Congestion Management Plan freeway segments would be considerable and unavoidable at certain segments.

b. Transit System Capacity Analysis

Implementation of the Project in conjunction with cumulative conditions would increase the demand for transit in the Study Area, which would result in significant transit impacts. As discussed below in subsection 17, Level of Significance After Mitigation, the

Project's transit impact would be less than significant with the proposed mitigation measures. Therefore, cumulative transit impacts would be less than significant.

17. Project Design Features and Mitigation Measures

a. Introduction and Overview

This section identifies strategies to reduce potentially significant transportation impacts identified in the impact analyses for the Proposed Project (provided in Section IV.B.10, 2017 Future with Project Condition, above), and describes a proposed transportation mitigation program. These strategies are discussed in detail in the Transportation Improvement and Mitigation Program (Chapter 10) of the EIR Transportation Study prepared by The Mobility Group, and included as Appendix I of this Draft EIR.

(1) Overall Transportation Strategy

The overall transportation strategy for the Proposed Project is based on the Project's unique location in Downtown Los Angeles adjacent to significant existing transit, freeway, and roadway infrastructure, and the successful operating experience to date of STAPLES Center and L.A. LIVE. The transportation strategy includes the following key components:

(a) Encourage and Facilitate the Use of Transit

The location of the Proposed Project provides an opportunity for the significant use of transit—particularly high-capacity rail transit—to access the Event Center. The Proposed Project is located within convenient access to two rail transit stations: the Pico Metro Station located one block from the Project Site; and the 7th Street/Metro Center located within four blocks of the Project Site. These two stations together provide access to the entire Metro and Metrolink rail transit system in Los Angeles County and Southern California. The use of transit will be heavily promoted as the central focus of the transportation strategy for the Proposed Project.

(b) Minimize Auto Trips

The Proposed Project includes policies and programs to reduce auto trips through promoting and encouraging increased auto vehicle occupancies and encouraging walking and bicycling. The Proposed Project will develop a Streetscape and Open Space Plan that will enhance the pedestrian environment in the area of the Proposed Project and build on the existing LASED Streetscape Plan to develop guidelines for streetscape improvements on streets leading to the Project Site. The intent of this plan is to promote pedestrian access to and from the Proposed Project. The Proposed Project will also encourage the use of bicycling through the provision of bicycle parking and bicycle valets, which will be coordinated and consistent with the current plans for a Bike Station at or adjacent to the Project Site, as well as the concept proposal in the current Figueroa Corridor Study for adding bike lanes on Figueroa Street.

(c) Use the Existing Distributed Parking Supply in Downtown

The existing and proposed supply of parking on-site, and the existing extensive supply of parking off-site in the downtown area, will provide a significant parking resource for the Proposed Project. As discussed in Section IV.B.2, Parking, of this Draft EIR, this will provide sufficient parking for the Proposed Project, including spectator events at the Event Center. This parking is distributed over a large portion of Downtown and will facilitate a strategy of distributing traffic over many routes, thereby reducing traffic congestion on individual routes.

(d) Continue Existing Strategies of Distributed Access and Egress Routes to Parking

Access and egress routes from freeways to parking areas will be able to use over forty off-ramps and on-ramps, thereby allowing traffic to be dispersed across many access/egress routes rather than being focused on only a few corridors. This distributed parking and access has worked successfully for STAPLES Center and L.A. LIVE, and will be accomplished through the use of directional signage, extensive information identifying parking zones and access routes, and bundling parking with ticket sales for the efficient management of distributed parking. Information will be distributed via many sources including web sites, media advertising, and smartphone applications.

(e) Use Effective Traffic Management to Maximize the Capacity of Existing Facilities

Building on the traffic management strategies for STAPLES Center and the Convention Center, the Event Center will use traffic management techniques, including directional signage, event traffic signal timing programs, and use of traffic control officers to gain the maximum efficiencies from the existing circulation system and to handle the relatively infrequent peak event loads.

(f) Extensive Use of Information Systems to Inform Patrons of Transportation Options and Preferred Transportation Methods and Operations

The extensive use of information systems will be employed by the Proposed Project, again continuing and expanding upon the experience and success of STAPLES Center and L.A. LIVE, to inform patrons of all transportation options. This will include the use of traditional methods such as print and broadcast media, as well as the latest digital

distribution technology, including methods in real time to mobile personal devices (e.g., smart phones and in-car navigation systems where feasible).

(g) Develop and Implement a Comprehensive Transportation Management Plan

A comprehensive Transportation Management Plan will be developed and implemented for the Proposed Project in coordination with LADOT, Metro, LAPD, Caltrans, and other transportation agencies. This Plan will include an Event Coordination Plan, which will provide the framework and details for managing all aspects of transportation for events at the Proposed Project as well as at STAPLES Center and L.A. LIVE. This Plan will build on the successful implementation of existing similar plans for STAPLES Center, L.A. LIVE, and the Convention Center. The transportation strategy will be further defined and detailed in the Transportation Management Plan that will be prepared for the Project.

(2) SB 292 Requirements and Relation to Mitigation Program

(a) Overview

On September 27, 2011, Governor Brown signed Senate Bill 292 which provides for expedited judicial review if litigation is filed in connection with the City's approval of the Proposed Project. As part of SB292, the Project Applicant must implement measures to provide for carbon neutrality from vehicle miles traveled and to reduce automobile trips of persons attending spectator events at the Event Center. In particular, the Proposed Project must achieve a trip ratio that is no more than 90 percent of the trip ratio at any other NFL stadium. As a result, the most important component of transportation strategy is to focus on measures that increase non-auto modes and to increase average vehicle ridership.

SB 292 requires reports to be filed for a period of years beginning after the second NFL season at the Proposed Event Center to provide data regarding the effectiveness of trip reduction measures. At the time the EIR is certified, SB 292 requires the City to adopt the protocol including criteria and guidelines that will be used to determine the effectiveness of trip ratio measures. The reports must also include a summary of publicly available data and other data gathered by the applicant regarding average vehicle ridership, non-passenger automobile modes of arrival, and trip reduction measures undertaken at other NFL stadiums.

The requirements under SB 292 are in addition to mitigation measures that are otherwise required under CEQA.

(b) SB 292 Reporting

In connection with the requirements of SB 292, the Transportation Management Plan will set forth the criteria and guidelines for monitoring and reporting on the trip ratio of total number of private passenger automobiles arriving at the Event Center for spectator events divided by the total annual number of spectators at the events. It is anticipated that the annual reporting required by SB 292 following the second NFL season will be submitted as part of the annual reports required by the proposed Development Agreement. The report will include the measures undertaken to reduce trips and the results of those measures. The report will also include data from other NFL stadiums including average vehicle ridership, non-passenger vehicle modes of arrival and trip reduction measures.

b. Project Design Features

The following improvements and programs would be incorporated directly into the Project Description for the Proposed Project and would therefore constitute Project Design Features:

(1) Project Area Street Modifications

The Proposed Project will make improvements and modifications to the streets listed below in order to achieve wider sidewalks.

(a) L.A. Live Way (Collector Street)

- **Project Design Feature B.1-1:** L.A. Live Way between Pico Boulevard and Chick Hearn Court/11th Street shall be modified to comprise an 89 foot right-of-way, and a 64-foot curb-curb width, with a 10-foot sidewalk on the west side of the street and a 15-foot sidewalk on the east side of the street. The existing lane configuration shall remain, except for the elimination of one midblock northbound lane, (as shown on Figure A.10.4.1.1 of Appendix A of the Transportation Study, contained in Appendix I of this Draft EIR). This shall be completed by the Event Center Applicant prior to issuance of a certificate of occupancy for the Event Center.
 - (b) Chick Hearn Court (Collector Street)
- **Project Design Feature B.1-2:** Chick Hearn Court between L.A. Live Way and Georgia Street shall be modified to comprise a 72-foot curb-to-curb width with a 15-foot sidewalk on the north side of the street and a 20-foot sidewalk on the south side of the street, between L.A. Live Way and the east-most driveway to the L.A LIVE West Garage; and

a 60.5-foot curb-curb width with a 26.5 foot sidewalk on the north side and a 20-foot sidewalk on the south side of the street between the east-most driveway of the L.A. LIVE West Garage and Georgia Street; and the existing 107-foot right-of-way for the entire block shall be maintained (as shown on Figure A.10.4.1.2 of Appendix A of the Transportation Study, contained in Appendix I of this Draft EIR). The existing lane configuration shall be maintained. This shall be completed by the Event Center Applicant prior to issuance of a certificate of occupancy for the Event Center.

- (c) Pico Boulevard (Modified Secondary Highway)
- Project Design Feature B.1-3: Pico Boulevard between Figueroa Street and a point approximately 600 feet west of Figueroa Street shall be modified to comprise a 70-foot curb-curb width, with three eastbound lanes and two westbound lanes, and with a minimum 20-foot sidewalk on the north side of the street and a minimum 20-foot sidewalk on the south side of the street, (of which 10 feet may be on Convention Center property). From the point approximately 600 feet west of Figueroa Street to L.A. Live Way, the existing roadway width of 80 feet curb-to-curb and lane configuration shall be maintained, and a minimum 20-foot sidewalk provided on both the north and south side of the street (all of which in each case may be provided on Convention Center property). The existing street right-of-way of 100 feet shall be maintained between Figueroa Street and L.A. Live Way. (See Figure A.10.4.1.3 of Appendix A of the Transportation Study contained in Appendix I of this Draft EIR.) This shall be completed by the New Hall Applicant prior to issuance of a certificate of occupancy for the New Hall.
 - (2) Trip Reduction Measures
- **Project Design Feature B.1-4:** The Proposed Project shall coordinate its planning with the City on the City's current plans to provide a Bike Station on or in the vicinity of the Project Site.
- Project Design Feature B.1-5: The Proposed Project shall coordinate its planning with the concept plans currently being evaluated in the Figueroa Corridor Study for providing a bike lane in each direction on Figueroa Street between USC and downtown, provided such plans do not include a raised curb delineating the bike lanes in the vicinity of the Project Site as they would create pedestrian safety impacts.

(3) Green Transportation Measures

The following two measures will be implemented to improve air quality and reduce carbon emissions. Because these measures would improve air quality but would not reduce vehicle trips, no trip credits were taken in the traffic analysis.

- Project Design Feature B.1-6: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall provide up to 12 electric vehicle charging stations in one or more of the on-site parking garages to facilitate and encourage the use of electric vehicles.
- **Project Design Feature B.1-7:** Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall provide priority parking locations for hybrid and electric vehicles, to facilitate and encourage the use of these vehicles.
 - (4) Transportation Management Center
- **Project Design Feature B.1-8:** Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall provide an appropriately sized building (approximately 2,000 square feet) on the Project Site to accommodate a Field Operations Center (FOC). This facility shall provide space for the on-site coordination of security staff, the LAPD, LADOT, Metro, and Caltrans, and communications capabilities to each agency's main control center. In addition to functioning as the security and safety management center, the FOC shall also provide for the centralized coordination of all transportation and parking management activities during events.

c. Mitigation Measures

(1) Mitigation Program Overview

The mitigation program is a comprehensive multi-modal program that includes a wide range of measures, and that focuses on encouraging transit use, reducing auto trips, implementing traffic management and operational measures, and implementing physical improvements in certain locations where feasible and beneficial to all transportation modes.

Unlike many land use development projects which function on a regular daily basis, the Proposed Project includes an Event Center where events would not occur every day or on a regular schedule, but rather would occur irregularly and only on those days and at those times when events are scheduled. Transportation mitigations are thus more appropriately focused on operational measures that would address the short-term and temporary nature of impacts by managing and maximizing the capacity of the existing roadway infrastructure on a temporary basis during events, rather than on physical infrastructure improvements that would not be necessary for mitigation for most of the time, and which might through roadway capacity increases encourage further auto use contrary to policies to increase transit use, or otherwise interfere with transportation-related goals on non-event days. Given the Proposed Project's stated policies and goals of increasing transit use and decreasing auto use, physical improvements to transportation infrastructure are focused on transit rather than highways. However, the mitigation plan does include certain "spot" or localized highway improvements to reduce traffic impacts and to facilitate efficient traffic operations where feasible.

(2) Transit Measures

The mitigation program includes the following measure and the Trip Reduction Measures set forth in subparagraph (3) below that are aimed at increasing ridership on transit. As it is difficult to accurately quantify the trip reduction benefits of these measures at this time, the traffic analysis has conservatively taken no trip credits for the measures listed below. Instead, the trip reductions will be monitored as part of the SB 292 process.

(a) Improve Pico Metro Station

Mitigation Measure B.1-1: Prior to issuance of a building permit for the Event Center, the Event Center Applicant shall enter into an agreement with Metro requiring the Event Center Applicant to make a one-time, fixed contribution of \$10,000,000 to Metro to improve the Pico Metro Station prior to the operation of the Event Center. The Pico Metro Station, located on Flower Street between 12th Street and Pico Boulevard one block from the Project Site, is currently a single platform station with limited capacity access to the platform from the east sidewalk of Flower Street. Metro will use the Event Center Applicant's contribution to (a) add a second platform parallel to the existing Pico Metro Station platform, and (b) refurbish the existing station platform to improve the passenger handling capacity.

(3) Trip Reduction Measures

- (a) Encourage Use of Alternative Modes
 - (i) Bicycle Use
- Mitigation Measure B.1-2: During operation of the Proposed Project, the Event Center Applicant shall provide for an on-site Bicycle Valet Program that shall be operated during major events.

- Mitigation Measure B.1-3: Prior to issuance of a building permit for the Event Center, the Event Center Applicant shall make a one-time, fixed financial contribution of \$250,000 to the City's recently established Bicycle Trust Fund, for the purposes of improving bicycle facilities in the vicinity of the Proposed Project.
 - (ii) Mobility Hub⁴²
- Mitigation Measure B.1-4: To support a local Mobility Hub, prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall provide space on or in the vicinity of the Project Site for a car-share program (i.e., approximately 300 sq. ft. for a rental office and parking for up to 20 car-share vehicles).
- Mitigation Measure B.1-5: Prior to issuance of a building permit for the Event Center, the Event Center Applicant shall make a one-time, fixed financial contribution of \$750,000 to LADOT's Mobility Hub Program.
 - (4) Traffic Management Measures

Due to the irregular nature of activities at event centers, and the fact that many events occur outside of the typical peak traffic hours on the highway system, traffic management and operations measures are typically considered the most effective strategies to mitigate or minimize the temporary impacts from event traffic. Rather than build unnecessary transportation infrastructure improvements that would only be used by the peak event traffic sporadically (generally before and after events), the traffic management measures seek to maximize the operational efficiency of the existing infrastructure to better accommodate the temporary nature of the event traffic impacts. These measures will not reduce vehicle trips, but will instead improve traffic flows in and around the Event Center and may therefore partially mitigate traffic impacts. As their precise effect cannot be accurately quantified, the traffic analysis conservatively took no trip credits or reductions in intersection volume to capacity ratios for these measures. The proposed traffic management measures include the following:

⁴² LADOT has received funding to implement the Integrated Mobility Hubs project within Downtown Los Angeles. This program would provide secure bicycle parking and a fleet of shared bikes and cars in an attempt to enhance urban mobility and serve as an extension of the current transportation network. Integrated mobility hubs provide an opportunity to customize the first and last mile experience by providing the end-user with vehicle options that would meet their particular needs for the day.

- (a) Portable Surface Street Changeable Message Signs (CMS)
- Mitigation Measure B.1-6: The Event Center Applicant shall obtain and use up to 25 portable CMS trailers for use in traffic operations management during events. Their specific use shall be determined in the Transportation Management Plan.
 - (b) Permanent Surface Street Changeable Message Signs (CMS)
- Mitigation Measure B.1-7: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall obtain and install new permanent surface street Changeable Message Signs (CMS) signs (up to a total cost of \$1,200,000) to be used in conjunction with the existing CMS signs on streets in the area around the Project Site to provide specific traffic and parking messages as needed. Their specific use shall be determined in the Transportation Management Plan. These shall be smaller and less visually intrusive than the existing CMS signs in the area, and shall be used to expand and augment the existing system.
 - (c) Fixed Signage
- Mitigation Measure B.1-8: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall implement a fixed signage program (up to a total cost of \$500,000) that provides directional information to parking zones, parking facilities and preferred access/egress routes, as defined in the TMP.
 - (5) Pico-Union Neighborhood Traffic and Parking Management Plan

To mitigate potential impacts to certain local residential streets in the Pico-Union area due to possible cut-through traffic, and the potential for significant parking impacts in the area, the following Mitigation Measure is included:

Mitigation Measure B.1-9: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall develop and implement a Neighborhood Traffic and Parking Management Plan to minimize potential impacts to local residential streets in the Pico-Union area due to possible cut-through traffic and parking impacts. The Plan, which shall include up to \$75,000 for traffic and parking signage, and up to \$250,000 for potential traffic and parking control measures shall be developed in coordination with LADOT and the community.

(6) Street Intersection Improvements

The Proposed Project is located in the central Los Angeles area, where the street system is essentially fully built out and is already often striped for the maximum capacity and operational effectiveness within the available right-of-way. In most cases, street widenings are not feasible due to the following: sufficient right-of-way is not available and right-of-way acquisition is not possible; the street widening might cause secondary impacts by displacing on-street parking; or because it is not practical or desirable to reduce sidewalk widths due to secondary impacts that could occur to pedestrian flows through a degraded pedestrian environment.

In addition, for the downtown area to function effectively from an access and circulation standpoint, it is critical for the transportation system to achieve a balance in serving vehicular traffic, transit, and pedestrians. Roadway widenings, while benefiting vehicular traffic, often have adverse impacts on pedestrians by reducing sidewalk widths and may have adverse impacts on bus transit service by relocating or impacting bus stops. Therefore, even where roadway mitigations may physically be possible, they may be considered detrimental in the overall context of multi-modal transportation and circulation and are thus considered infeasible in many locations.

(a) Reversible Lanes

The potential benefits and effectiveness of temporary reversible lanes on key arterial roadways during pre-event and/or post-event hours was evaluated as a traffic management measure. This evaluation indicated that reversible lanes were either not needed, were not an effective solution, or were not feasible. For example, on east-west arterials west of the Project Site, reversible lanes could theoretically be beneficial during the pre-event hour for a weekday evening event. However, as eastbound and westbound traffic volumes are very similar at that time, the roadway capacity in the "reverse" direction is not available. Reversible lanes were therefore not included in the mitigation program.

(b) Specific Intersection Improvements

The feasibility of specific intersection improvements was investigated for the intersection locations where the Project would cause significant traffic impacts. This evaluation, which was conducted in conjunction with LADOT staff, looked at the feasibility of re-striping traffic lanes and/or adding traffic lanes to modify intersection lane configurations, roadway widenings, and potential changes to signal timing and phasing. In

conjunction with LADOT, it was determined that in general the following types of intersection improvements were <u>not</u> feasible:

- Roadway widenings were not a feasible measure due to the lack of available right-of-way because of existing buildings or improvements or lack of control over adjacent right-of-way;
- Roadway lane re-striping was not a feasible measure at a majority of the impacted intersections as it would result in inadequate lane widths, reduce sidewalk widths (which would degrade the pedestrian environment and could cause secondary impacts), or require the removal of on-street parking (which would also cause secondary impacts to the adjacent land uses); and,
- Signal timing/phasing changes were not feasible as they would worsen rather than improve intersection operations or potentially cause other problems and/or impacts elsewhere.

Specific physical mitigation improvements were deemed to be feasible at the following intersection locations.

(i) Blaine Street at SR-110 Southbound Off-Ramp

- Mitigation Measure B.1-10: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach to Blaine Street on the SR-110 SB Off-Ramp to change one of the exclusive right-turn lanes into a shared left and right lane. This will modify the approach from the existing configuration of one left-turn lane and two exclusive right-turn lanes to a configuration of one left-turn lane, one shared left and right lane, and an exclusive right turn lane. It will not require any widening or additional right-of-way but would require the approval of Caltrans. (The concept improvement plan for this location is shown in Figure A.10.5.7.1 in Appendix A of the Transportation Study, provided as Appendix I of this Draft EIR).
 - (ii) Blaine Street at 11th Street
- Mitigation Measure B.1-11: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach to Blaine Street on 11th Street to include one exclusive left-turn lane and one shared left-through lane. This will modify the existing approach from the configuration of one shared left-through lane and one through lane, to a configuration of one exclusive left-turn lane and one shared left-through lane. This measure will provide two left-turn lanes to the SR-110 Southbound

On-Ramp at this intersection rather than the existing one left turn lane, thereby increasing access capacity to the ramp for outbound traffic from the Proposed Project. This measure will require widening on the south-east corner of the intersection. This measure would require the approval of Caltrans. (The concept improvement plan for this location is shown in Figure A.10.5.7.2 in Appendix A of the Transportation Study, provided as Appendix I of this Draft EIR).

(iii) The 17th Street and 18th Street Corridor Between Los Angeles Street and Grand Avenue

This is a key access and egress corridor from the I-10 freeway from the east (and thereby from I-5 and SR-60) to the Project Site. The mitigation program for this corridor includes freeway ramp improvements and street restriping and improvements to enhance traffic flow in this corridor. As provided for below under the specific mitigation measures, the I-10 Westbound Off-Ramp at Los Angeles Street (the westbound approach at the Los Angeles Street & 17th Street intersection), shall be widened from two lanes to three lanes to provide additional capacity for traffic exiting the freeway. An additional traffic lane shall be provided westbound on 17th Street and eastbound on 18th Street between Olive Street and Los Angeles Street. Access shall be improved to the I-10 Eastbound On-Ramp at Specific intersection improvements to be Los Angeles Street. implemented under this overall mitigation measure are identified Except where identified, these measures can be below. implemented within the existing curb-to-curb roadway widths and within existing rights-of-way. (The concept improvement plans for this location are shown in Figures A.10.5.7.3 and A.10.5.7.4 in Appendix A of the Transportation Study, provided as Appendix I of this Draft EIR).

- (iv) Los Angeles Street at 17th Street
- Mitigation Measure B.1-12: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall widen the westbound approach on the I-10 Westbound Off-Ramp to add a through lane. This will modify the existing configuration of one shared left-through lane and one shared through-right lane to a configuration of one shared left-through lane, one through lane, and one shared throughright lane. This measure will require widening on the south side in the Caltrans right-of-way, and would require the approval of Caltrans.
 - (v) Main Street at 17th Street

Mitigation Measure B.1-13: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach on 17th Street to add an additional through lane. This will modify the existing configuration of one shared leftthrough lane and one shared through-right lane to a configuration of one shared left-through lane, one through lane and one shared through-right lane.

- (vi) Broadway at 17th Street
- Mitigation Measure B.1-14: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach on 17th Street to add an additional through lane. This will modify the existing configuration of one shared leftthrough lane and one shared through-right lane to a configuration of one shared left-through lane, one through lane and one shared through-right lane.
 - (vii) Hill Street at 17th Street
- Mitigation Measure B.1-15: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach on 17th Street to add an additional through lane. This will modify the existing configuration of one shared left-through lane and one shared through-right lane to a configuration of one shared left-through lane, one through lane and one shared through lane and one shared through lane.
 - (viii) Olive Street at 17th Street
- Mitigation Measure B.1-16: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach on 17th Street to add an additional through lane. This will modify the existing configuration of one through lane and one shared through-right lane to a configuration of two through lanes and one shared through-right lane.
 - (ix) Grand Avenue at 17th Street
- Mitigation Measure B.1-17: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach on 17th Street to add an additional through lane. This will modify the existing configuration of one shared leftthrough lane and one through lane to a configuration of one shared left-through lane and two through lanes.
 - (x) Hill Street at 18th Street

Mitigation Measure B.1-18: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the eastbound approach on 18th Street to add an additional through lane. This will modify the existing configuration of one shared leftthrough lane and one shared through-right lane to a configuration of one shared left-through lane, one through lane, and one shared through-right lane.

- (xi) Broadway at 18th Street
- Mitigation Measure B.1-19: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the eastbound approach on 18th Street to add an additional through lane. This would modify the existing configuration of one left turn lane, one through lane and one shared through-right lane to a configuration of one shared left-through lane, one through lane, and one shared through-right lane.
 - (xii) Los Angeles Street at 18th Street
- Mitigation Measure B.1-20: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall widen the eastbound approach on 18th Street to add an additional left-turn lane. This will modify the existing configuration of one left-turn lane, one through lane, and one shared through-right lane to a configuration of two leftturn lanes, one through lane, and one shared through-right lane. This measure will require widening into the Caltrans right-of-way on the northwest corner of the 18th Street and Los Angeles Street intersection, and would require the approval of Caltrans.
 - (7) ATSAC System Upgrades
- Mitigation Measure B.1-21: Prior to issuance of a certificate of occupancy for the Event center, the Event Center Applicant shall install, or shall pay LADOT to install a fixed amount of \$1,200,000 to provide for the design and installation of, traffic signal controller upgrades and additional CCTV cameras as defined in Mitigation Measures B.1-21A and B.1-21B below. These improvements shall be implemented either by the Applicant through the City's B-Permit process, or through payment of the \$1,200,000 fixed fee to LADOT who shall then design and install the improvements (if the latter then payment shall be made prior to the issuance of a building permit for the Event Center).
 - (a) Intersection Traffic Signal Controller Upgrades

The traffic signal controllers at some study intersections are currently older model Type 170 Controllers. Where possible, the City is implementing upgrades to newer Type 2070 Controllers, which provides for enhanced real time operation of traffic signal timing. The newer controllers, which are required in the following Mitigation Measure, allow LADOT to respond to real time traffic situations by making immediate adjustments to an intersection's signal timing and providing for more efficient traffic flows.

- Mitigation Measure B.1-21A: The Applicant shall install or fund (as defined above) the upgrade of the signal controllers from the older model Type 170 Controllers to the newer Type 2070 Controllers at the following 73 intersection locations:.
 - 1. Griffith Avenue & 16th Street
 - 2. San Pedro Street & 16th Street
 - 3. Maple Avenue & 16th Street
 - 4. Maple Avenue & 18th Street
 - 5. Maple Avenue & 23rd Street
 - 6. Maple Avenue & Adams Boulevard
 - 7. Los Angeles Street & 16th Street
 - 8. Los Angeles Street & 17th Street
 - 9. Los Angeles Street & 18th Street
 - 10. Main Street & 16th Street
 - 11. Main Street & 17th Street
 - 12. Main Street & 18th Street
 - 13. Main Street & 23rd Street
 - 14. Broadway & Alpine Street
 - 15. Broadway & Ord Street
 - 16. Broadway & 16th Street
 - 17. Hill Street & 1st Street
 - 18. Hill Street & 2nd Street
 - 19. Hill Street & 3rd Street
 - 20. Hill Street & 4th Street

 - 21. Hill Street & 16th Street
 - 22. Hill Street & 17th Street
 - 23. Hill Street & 18th Street
 - 24. Hill Street & Adams Boulevard
 - 25. Olive Street & 16th Street
 - 26. Grand Avenue & 16th Street
 - 27. Grand Avenue & Adams Boulevard
 - 28. Hope Street & 2nd Street
 - 29. Hope Street & 4th Street
 - 30. Hope Street & Wilshire Boulevard
 - 31. Hope Street & 8th Street
 - 32. Hope Street & 9th Street
 - 33. Hope Street & 11th Street
 - 34. Hope Street & 12th Street
 - 35. Hope Street & Pico Boulevard
 - 36. Flower Street & 9th Street

- 37. Flower Street & 11th Street
- 38. Figueroa Street & Olympic Boulevard
- 39. Figueroa Street & Convention Center Bus Exit
- 40. Figueroa Street & Venice Boulevard
- 41. Figueroa Street & 18th Street
- 42. Figueroa Street & 23rd Street
- 43. Francisco Street & 8th Street
- 44. Georgia Street & 9th Street
- 45. Convention Center Drive & Venice Boulevard
- 46. Lucas Street & Wilshire Boulevard
- 47. L.A. Live Way & 11th Street
- 48. Blaine Street & SR-110 SB Off-Ramp
- 49. Blaine Street & 11th Street
- 50. Albany Street & Pico Boulevard
- 51. Valencia Street & 11th Street
- 52. Valencia Street & Pico Boulevard
- 53. Oak Street & Washington Boulevard
- 54. Union Avenue & 11th Street
- 55. Union Avenue & 12th Street
- 56. Union Avenue & Venice Boulevard
- 57. Union Avenue & Washington Boulevard
- 58. Union Avenue & 23rd Street
- 59. Bonnie Brae Street & Pico Boulevard
- 60. Burlington Avenue & Venice Boulevard
- 61. Alvarado Street & 11th Street
- 62. Alvarado Street & 12th Street
- 63. Alvarado Street & Pico Boulevard
- 64. Hoover Street & Pico Boulevard
- 65. Hoover Street & Washington Boulevard
- 66. Hoover Street & 20th Street
- 67. Hoover Street & I-10 EB Ramps
- 68. Magnolia Avenue & Pico Boulevard
- 69. Magnolia Avenue & Venice Boulevard
- 70. Magnolia Avenue & Washington Boulevard
- 71. Westmoreland Avenue & Venice Boulevard
- 72. Catalina Street & Pico Boulevard
- 73. Loyola High School Driveway & Venice Boulevard

(b) Closed Circuit Television (CCTV) Cameras

An integral part of the City's ATSAC/ATCS traffic signal control system is CCTV cameras at key intersection locations. These provide visual information to the City's ATSAC Traffic Control Center, and allow LADOT to monitor traffic operations and respond in real time to traffic conditions that delay vehicles and transit service.

- Mitigation Measure B.1-21B: CCTV Camera Installation Locations. The Applicant shall install or fund (as defined above) new CCTV cameras (including necessary mounting poles, fiber optic and electrical connections) at the following nine intersection locations:.
 - 1. Broadway & 3rd Street
 - 2. Broadway & 17th Street
 - 3. Broadway & 18th Street
 - 4. Grand Avenue & 1st Street
 - 5. Flower Street & 3rd Street
 - 6. Flower Street & 9th Street
 - 7. Figueroa Street & 2nd Street
 - 8. Figueroa Street & 5th Street
 - 9. Figueroa Street & Adams Boulevard
 - (8) Freeway Measures

The freeway system is part of the regional transportation infrastructure, and in the heavily developed and built-up area of Central Los Angeles, there is very little if any rightof-way available for freeway widenings. Freeway improvement projects are therefore generally not very common and usually only carried out as part of major regional infrastructure improvement plans. In addition, unlike many land use development projects which function on a regular daily basis, the Proposed Project includes an Event Center where events would not occur every day or on a regular schedule, but rather would occur irregularly and only on those days and at those times when events were scheduled. Transportation mitigations are thus more appropriately focused on operational measures that would address the short-term and temporary nature of impacts by managing and maximizing the capacity of the existing roadway infrastructure on a temporary basis during events, rather than on physical infrastructure improvements that would not be necessary for mitigation for most of the time, and which might through roadway capacity increases encourage further auto use contrary to policies of increased transit use.

The Event Center Applicant has agreed with Caltrans to a program of freeway improvements and traffic management measures for a total of \$11,000,000, with Caltrans having the flexibility to re-allocate monies between the specific measures as may be necessary or appropriate in their implementation. The specific measures are described below under Mitigation Measures B.1-22 through B.1-27. To provide a conservative analysis, no mitigation credit has been taken for these measures, except for the ramp improvements.

(a) Freeway Ramps

A review of the Proposed Project's impacts on the freeway system revealed no feasible off-ramp or on-ramp mitigation measures that the Proposed Project could implement at most locations. The freeway system in downtown Los Angeles is complex, with many ramps in close proximity and often tied into collector-distributor lanes, which make the improvement of one ramp or freeway segment infeasible without major changes to larger segments. In other cases, freeway segments are on structures or where right-of-way for improvements is not available, thus making improvements infeasible. Major changes to freeway infrastructure are only made at a regional level as part of long-term plans and are beyond the capacity of individual development projects to implement. However, the following ramp improvements appear to be feasible and are thus proposed in the Mitigation Program for the Proposed Project as follows.

(i) SR-110 Southbound Off-Ramp to Blaine Street (Olympic Boulevard)

- Mitigation Measure B.1-22: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall restripe the westbound approach to Blaine Street on the SR-110 SB Off-Ramp to change one of the exclusive right-turn lanes to a shared left and right lane. This would modify the approach from the existing configuration of one left-turn lane and two exclusive right-turn lanes to a configuration of one left-turn lane, one shared left and right lane, and an exclusive right turn lane. This measure would enhance the capacity of the off-ramps for Event Center traffic inbound to the parking garages at the Proposed Project. This measure would not require any widening or additional right-of-way but would require the approval of Caltrans. (See also Mitigation Measure B.1-10)
 - (ii) I-10 Westbound Off-Ramp at Los Angeles Street
- Mitigation Measure B.1-23: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall widen the westbound approach on the I-10 Westbound Off-Ramp to add a lane. This would modify the existing configuration of one shared left-through lane and one shared through-right lane to a configuration of one shared left-through lane, one through lane, and one shared throughright lane. This measure would require widening on the south side in the Caltrans right-of-way but would require the approval of Caltrans. (See also Mitigation Measure B.1-12).
 - (iii) Ramp Metering Upgrades

Mitigation Measure B.1-24: Prior to issuance of a building permit for the Event Center, the Event Center, Applicant shall make a one time, fixed contribution of \$1,600,000 to Caltrans for the purpose of implementing upgrades to ramp meters on on-ramps in the downtown area. These would also facilitate event traffic management. Installation locations would be determined in conjunction with Caltrans and LADOT and incorporated along with all other ramp metering locations in the downtown area into the Transportation Management Plan. This measure would require the approval of Caltrans.

(b) Freeway Mainline Segments

A review of the Proposed Project's impacts on the freeway system revealed no feasible mainline segment mitigation measures that the Proposed Project could implement. However, the following measures are proposed that would facilitate traffic flows and operations and that could reduce impacts:

(i) Contribution to Regional-Level Improvement

- Mitigation Measure B.1-25: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall make a one-time, fixed contribution of \$2,400,000 to Caltrans towards the mainline freeway improvement project in Downtown Los Angeles that would add an auxiliary lane to the northbound US-101 Hollywood Freeway between the Four-Level Interchange (with SR-110) and Alvarado Street. This improvement would correct merge-weave related traffic congestion that causes significant backups on both the westbound US-101 and the northbound SR-110 freeways. This contribution would fund initial engineering studies and a Project Study Report (PSR) or other appropriate report that would represent a necessary initial step toward implementing the freeway improvement project and make it available for state and federal funding. This measure would require the approval of Caltrans.
 - (ii) CMS Signs
- Mitigation Measure B.1-26: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall install, in conjunction with Caltrans, five additional mainline freeway changeable message signs (CMS) on the freeway systems surrounding and/or approaching downtown (up to a total cost of \$2,500,000) to facilitate event traffic management. Installation locations will be determined in conjunction with Caltrans and LADOT and incorporated into the Transportation Management Plan. This measure would require the approval of Caltrans. If Caltrans elects to install these signs, then prior to issuance of a building permit for the Event Center, the Event
Center Applicant shall make a payment of \$2,500,000 to Caltrans for installation of the signs.

- (iii) Fixed Directional Signage
- Mitigation Measure B.1-27: Prior to issuance of a certificate of occupancy for the Event Center, the Event Center Applicant shall install fixed directional signage on the freeway system approaching and surrounding the downtown (up to a total of \$2,000,000) to provide information on access routes to the parking areas for the Proposed Project to help manage traffic flows in a distributed manner as specified in the parking management strategy. This measure would require the approval of Caltrans.
 - (iv) Additional Freeway Service Patrols
- Mitigation Measure B.1-28: During operation of the Event Center, the Event Center Applicant shall fund additional Freeway Service Patrols (up to four additional tow trucks with driver) through Metro's program to increase patrols on the freeway system around downtown before and after events.
 - (9) Develop and Implement a Transportation Management Plan
- **Mitigation Measure B.1-29:** Prior to issuance of a certificate of occupancy for the Proposed Project, the Event Center Applicant shall develop and implement a comprehensive Transportation Management Plan (TMP) for the Proposed Project, for approval by LADOT. The TMP shall be developed in coordination with LADOT, Metro, LAPD, Caltrans, and other transportation agencies as appropriate. The TMP will provide the framework and details for managing all aspects of transportation for events at the Proposed Project. This plan will build on the successful implementation of existing similar plans for STAPLES Center, L.A. LIVE, and the Convention Center. The Plan will provide an initial blueprint for transportation management, but will also be dynamic, flexible, and capable of responsiveness to the actual transportation conditions that may occur once the Proposed Project is in operation. The Plan will be a multi-modal plan that addresses transit, autos, parking, pedestrians, and bicycles. The Transportation Management Plan will include the following subjects:
 - Event Center Site Description and Operations
 - Event Center Scheduling
 - Event Coordination Plan

- Trip-Generation Levels
- Overall Parking Strategy
- Parking Management and Access/Egress Plans
- Transit Service
- Pedestrian Circulation
- Transportation Demand Management and Trip Reduction (visitors and employees)
- Traffic Management
- Pico-Union Neighborhood Traffic and Parking Management Plan

The Transportation Management Plan will include, but not necessarily be limited to, the following types of measures:

- Parking Locations by Type of Parking, and Parking Management Measures
- Access and Egress Routes to Parking
- Access and Egress Routes to Transit
- Event Ticket Bundling with Parking and Transit Passes
- Transit Service Provisions
- Integrated Transit Fare Measures
- Private Bus, Taxi, and Limousine Provisions
- Pedestrian Signage and Wayfinding
- Pedestrian Circulation Management
- Use of Traffic Control Officers
- Potential Temporary Street Closures
- Potential Temporary Turn Restrictions
- Potential Temporary Traffic Lane Closures and/or Reassignments
- Use of Changeable Message Signs
- Emergency Vehicle Provisions

(a) Potential Measures to Reduce Vehicle Trips

The TMP may include, but not be limited to, the following types of programs to increase transit ridership and increase vehicle occupancies beyond the levels identified in the Draft EIR impact analysis in order to reduce the number of vehicle trips.

• Additional Metro and Metrolink Service

Additional passengers could be carried by the Metro lines serving the Project Site and on the Metrolink six-county commuter rail lines serving Union Station. During certain time periods such increases might be accommodated by existing service levels. For other event scenarios, additional transit service would need to be provided by adding rail cars to trains, or by additional trains, to increase the frequency and capacity of the service.

• Special Metrolink Trains

Metrolink could run special event trains, similar to those currently operated to Major League Baseball games at Angel Stadium of Anaheim and those that have been operated to Fontana Speedway and to concerts at Angel Stadium of Anaheim.

• Express Bus Park-and-Ride

The Event Center could run an Express Park-and-Ride service where patrons could park in remote parking locations and ride Express Bus Service directly to the Event Center. This could operate in a similar fashion to the existing Hollywood Bowl Parkand-Ride service. While this service would be coordinated and managed by the Event Center, it would most likely be operated by private transit operators.

Charter Bus Service

The Event Center could encourage a resident football team to promote the use of charter buses for team fans to use to attend games rather than driving. These would be an efficient method of bringing fans who would travel longer distances to games (for example outside of Los Angeles County), and could also be organized by fan supporter and/or booster clubs.

• Encourage and Incentivize Transit Use

The use of transit would be encouraged and heavily promoted by the Proposed Project. This would include bundling of transit passes with event ticket sales, where patrons could purchase a transit ticket at the same time as the event ticket so patrons would not need to buy a transit ticket on the day of the event. The Proposed Project will work with transit operators to achieve a process where a single transit ticket/pass could be used on all connecting transit links to facilitate transfers. This would also include extensive use of marketing and promotional materials to ensure patrons would be aware of the availability, convenience, and benefits of all transit options, including use of electronic distribution methods such as web-site and cell phone applications. This measure could also include special offers and/or programs to encourage the use of transit, such as potentially offering discounts on merchandise or at restaurants, or running a "Transit Club" or "Transit Fan Appreciation Program" where continued use of transit provides patrons with certain benefits.

• Increase Auto Occupancy

Measures to increase auto occupancy could be aimed at increasing auto occupancy for events over the 3.00 persons per car assumed for weekend events and the 2.75 persons per car assumed for weekday events in the traffic analysis. Measures could include reduced parking rates for cars with 4+ people, and providing preferred parking locations for cars with 4+ people. The Proposed Project could also encourage the use of vanpools by facilitating the organization of vanpool programs for Event Center events, and by providing priority parking for vanpool vehicles

- (10) Construction Impacts
- Mitigation Measure B.1-30: Prior to issuance of a building permit for the Proposed Project, the Event Center Applicant shall prepare Construction Traffic and Parking Management Plans for all phases of construction activity at the Project Site for review and approval by LADOT. These Plans shall include, but not be limited to the following: specific provisions for truck routes and staging; roadway lane closures; maintenance of transit service; and maintenance of access/egress for all travel modes to the Project Site. Specifically, these plans shall include, but not be limited to the following elements, as appropriate:
 - Coordination of construction activities with event schedules at Convention Center, STAPLES Center, and L.A. LIVE. Identification of truck staging areas, and management of truck access/egress to minimize truck impacts on the street system.
 - Worksite Traffic Control Plans, including temporary traffic controls, lane reconfigurations, temporary traffic signal operation, signage, detour plans as appropriate, and provisions for flag personnel, etc.
 - Construction Worker Transportation Demand Management Plan to encourage use of transit and ridesharing to minimize parking needs, and shuttles from remote parking sites used by construction workers.
 - Construction Worker Parking Management Plan to provide sufficient parking, including multiple dispersed off-site parking

locations to minimize potential associated off-site traffic impacts, and to prevent construction workers from using on-street parking in the Pico-Union area.

- Alternate routing, protection barriers, covered walkways where necessary and feasible, and other safety precautions for pedestrians and bicyclists through the Project Area.
- Event Construction Parking Plan to develop and implement temporary parking strategies for events for the Convention Center, STAPLES Center, and L.A. LIVE during construction.
- Pico-Union Construction Traffic and Parking Management Plan to minimize impacts in the Pico-Union area.
- Schedule construction-related deliveries, other than concrete and earthwork-related deliveries, to reduce travel during peak commute periods.
- Freeway Truck Management Plan to be submitted to Caltrans.
- Coordinate with Metro regarding possible bus stop relocations and/or bus line/re-routings to minimize inconvenience to transit riders.

18. Level of Significance After Mitigation

An analysis of traffic patterns in the Study Area with implementation of the proposed Project Design Features and Mitigation Measures was conducted. This analysis included the quantitative effects of physical mitigation measures (such as roadway improvements, ATSAC system upgrades at intersections, freeway ramp improvements, and event street closures) and is provided in the Transportation Improvement and Mitigation Program (Chapter 10) of the Transportation Study prepared by The Mobility Group, included as Appendix I of this Draft EIR. This analysis did not quantify the benefits of trip reduction or increased transit use measures, because it is difficult to accurately quantify such benefits. Therefore, the traffic analysis conservatively took no trip credits for these types of measures. The mitigation analysis is thus considered a conservative analysis because these latter measures will nonetheless be implemented with the Proposed Project, particularly in conjunction with SB 292, and will reduce the residual significant impacts identified below. If implementation of any of the identified Mitigation Measures is delayed, temporary significant impacts would occur. If any of the identified Mitigation Measures prove to be infeasible or are rejected by an agency with jurisdiction (such as Caltrans), long term significant and unavoidable impacts would occur.

a. Intersection Level of Service

The mitigation analysis for intersections is summarized in Table IV.B.1-21 on page IV.B.1-291, which shows for each time period the number of significantly impacted intersections before and after mitigation. The mitigation program would reduce significantly impacted intersections, some to a level below significant, while others would partially mitigate the impacts. An analysis of the proposed temporary event street closures indicated that while post-event street closures would reduce vehicle-pedestrian conflicts in the immediate area of the Proposed Project, they would in certain cases cause secondary significant traffic impacts along routes to which traffic was diverted (i.e., increasing the number of significantly impacted intersections) as shown in the following paragraphs.

LADOT determined that the traffic system management improvements included in the Mitigation Measures for traffic signal upgrades (ATSAC) and CCTV cameras would increase intersection capacity in the system. Per LADOT procedures, a 1 percent increase in intersection capacity (0.01 improvement in the V/C ratio) was included in the mitigation analysis for the intersections shown in Table IV.B.1-20 on page IV.B.1-288.⁴³ The intersection levels of service at all analysis locations for the 2017 Future With Project With Mitigation scenario are shown in Appendix A of the Transportation Study in Tables A.10.5.7.1 through A.10.5.7.3. The Mitigation Program would reduce the number of significantly impacted intersections as follows and as shown in Table IV.B.1-291.

<u>Sunday Day Pre-Event Hour</u>: The Mitigation Program would reduce the number of significantly impacted intersections from 11 to 4, and would partially mitigate a further 3 intersections.

Sunday Day Post-Event Hour: The Mitigation Program would increase the number of significantly impacted intersections from 18 to 20 during the Sunday Day Post-Event Hour (increase due to temporary street closures), and would partially mitigate a further 9 intersections.

<u>Saturday Day Pre-Event Hour</u>: The Mitigation Program would reduce the number of significantly impacted intersections from 31 to 28 during the Saturday Day Pre-Event Hour, and would partially mitigate a further 24 intersections.

⁴³ Because the improvements benefit the signal system and not just individual intersections, their benefit is applied also to intersections in the vicinity of the intersection where they are implemented. The list in Table 21 was approved by LADOT.

<u>Saturday Day Post-Event Hour</u>: The Mitigation Program would increase the number of significantly impacted intersections from 36 to 42 during the Saturday Day Post-Event Hour (increase due to temporary street closures), and would partially mitigate a further 12 intersections.

<u>Weekday Evening Pre-Event Hour</u>: The Mitigation Program would reduce the number of significantly impacted intersections from 77 to 72 during the Weekday Evening Pre-Event Hour, and would partially mitigate a further 41 intersections.

<u>Weekday Evening Post-Event Hour</u>: The Mitigation Program would decrease the number of significantly impacted intersections from 9 to 6 during the Weekday Evening Post-Event Hour, and would partially mitigate a further 4 intersections.

Summary. In summary, significant unavoidable impacts would remain at 4 intersections in the Sunday Day Pre-Event Hour, at 20 intersections in the Sunday Day Post-Event Hour, at 28 intersections in the Saturday Day Pre-Event Hour, at 42 intersections in the Saturday Day Post-Event Hour, at 72 intersections in the Weekday Evening Pre-Event Hour, and at 6 intersections in the Weekday Evening Post-Event Hour. The intersection mitigations would be effective in eliminating or substantially reducing the number of intersections operating at LOS F before and after events, as shown in Table IV.B.1-22 for Sunday Day Events, in Table IV.B.1-23 for Saturday Day Events, and Table IV.B.1-24 for Weekday Evening Events on pages IV.B.1-292, IV.B.1-293, and IV.B.1-294, respectively.

These impacts would not however, occur on a daily or regular basis, and would occur irregularly associated only with events at the Event Center. The number of impacts would also reduce with the implementation of additional trip reduction and greater use of transit measures. Impacts would also be reduced further by implementation of the Transportation Management Plan and measures associated with SB 292. (For purposes of preparing a conservative analysis, neither of these factors were included into the mitigation calculations).

b. Transit

The impact analysis for the 2017 Future with Project Condition identified certain transit service increases that would be necessary in order to not exceed transit policy load factors. The analysis concluded that these increases in service would be necessary due largely to the fact that transit service operates at reduced schedules during weekends and the late evenings. It was also concluded that only relatively modest increases in transit service would be necessary. With the implementation of these increases identified in Table IV.B.1-25 on page IV.B.1-295, impacts on the transit system would be reduced to a less

than significant level and there would be no remaining unavoidable significant transit impacts. The transit analysis for the Future With Project With Mitigation scenario is shown in Appendix 10 in Tables A.10.5.1.1 through A.10.5.1.6 of the Transportation Study, which is included as Appendix I of this Draft EIR. However, if for some reason Metro does not add the requisite number of additional rail cars, a significant and unavoidable impact would remain.

c. Project Access

The impact analysis identified that there would be no significant access impacts for the Proposed Project. No mitigation measures would be necessary, and there would be no remaining unavoidable significant impacts.

d. Neighborhood Intrusion

The impact analysis identified the potential for significant traffic and parking impacts to occur on local streets in the Pico-Union area. With the proposed mitigation of a Neighborhood Traffic and Parking Management Program, neighborhood intersection impacts would be less than significant, and there would be no remaining unavoidable significant impacts. However, if the neighborhood is unable to agree on specific measures, a significant and unavoidable impact would remain.

e. Freeways

The impact analysis for the 2017 Future with Project Condition identified a number of significant freeway impacts on freeway mainline segments, as well as at freeway offramps and on-ramps during pre-event and post-event hours. Because these impacts would not occur on a regular daily basis, but would occur irregularly during events, the Mitigation Measures focus more appropriately on trip reduction and traffic management measures than infrastructure improvements. Residual impacts for freeway segments and on-ramps and off-ramps are listed below.

(1) Freeway Segments

Following implementation of the Mitigation Measures, there would be the following significant and unavoidable impacts at freeway segments:

There would be four significant impact locations during the Sunday Day Pre-Event Hour, nine significant impact locations during the Sunday Day Post-Event Hour, six significant impact locations during the Saturday Day Pre-Event Hour, 13 significant impact locations during the Saturday Day Post-Event Hour, 13 significant impact locations during the Weekday Evening Pre-Event Hour, and three significant impact locations during the Weekday Evening Post-Event Hour. These impacts also occur prior to the implementation of the mitigation measures. However, it would be expected that these impacts would be reduced through the implementation of the Transportation Management Plan (TMP), and would be further reduced (and in some cases perhaps eliminated) by the trip reduction and greater use of transit measures to be implemented as part of the TMP and SB 292. Nevertheless it is conservatively concluded for the purposes of this EIR that these would all remain unavoidable significant impacts.

(2) Freeway Off-Ramps

The impact analysis for the 2017 Future with Project Condition identified significant freeway off-ramp impacts at 4 locations in the Sunday Day Pre-Event Hour, at 5 locations in the Saturday Pre-Event Hour, and at 8 locations in the Weekday Evening Pre-Event Hour. With implementation of the mitigation measures, there would be 3 remaining significant impacts in the Sunday Day Pre-Event Hour, 5 remaining significant impacts in the Saturday Day Pre-Event Hour, and 7 remaining significant impacts in the Weekday Evening Pre-Event Hour, and 7 remaining significant impacts in the Weekday Evening Pre-Event Hour.

While it is expected that these impacts would be reduced through the implementation of the Transportation Management Plan (TMP), and would be further reduced (and in some cases perhaps eliminated) by the trip reduction and greater use of transit measures to be implemented as part of the TMP and SB 292, it is conservatively concluded for the purposes of this EIR that these would all remain unavoidable significant impacts. The freeway off-ramp analysis for the Future With Project With Mitigation Scenario is shown in Appendix 10 in Tables A.10.5.8.1 through A.10.5.8.3 of the Transportation Study, provided in Appendix I of this Draft EIR. The Freeway Ramp proposed improvements included for SR-110 Southbound Off-Ramp to Blaine Street (Olympic Boulevard) and the I-10 Westbound Off-Ramp at Los Angeles Street were included in the mitigation analysis.

(3) Freeway On-Ramps

The impact analysis identified significant freeway on-ramp impacts at 7 locations in the Sunday Day Post-Event Hour, at 11 locations in the Saturday Post-Event Hour, and at 6 locations in the Weekday Evening Post-Event Hour. No feasible physical improvement mitigation measures were identified for these impacts.

While it is expected that these impacts would be reduced through the implementation of the Transportation Management Plan (TMP) and further reduced (and in some cases perhaps eliminated) by the Trip Reduction and Greater Use of Transit

Measures to be implemented as part of the TMP and SB 292, it is conservatively concluded for the purposes of this EIR that these impacts would all remain significant and unavoidable. The freeway on-ramp analysis for the Future With Project With Mitigation is shown in Appendix 10 in Tables A.10.5.8.4 through A.10.5.8.6 of the Transportation Study, provided in Appendix I of this Draft EIR.

f. Congestion Management Program

The impact analysis identified that the Proposed Project would cause no significant traffic impacts at CMP monitoring intersections, but would cause nineteen significant impacts at freeway monitoring locations. These impacts would not occur on a regular daily basis but would occur only infrequently, as there would be few weekday evening events starting at 5:30pm (and coincides with the PM peak hour requirement by the CMP analysis). No feasible mitigation measures were identified for these infrequent mainline freeway impacts. However, it would be expected that these impacts would be reduced through the implementation of the Transportation Management Plan (TMP), and would be further reduced (and in some cases perhaps eliminated) by the trip reduction and greater use of transit measures to be implemented as part of the TMP and SB 292. Nevertheless it is conservatively concluded for the purposes of this EIR that these impacts would all remain significant and unavoidable.

g. Construction

Overall, impacts from construction on the transportation system would be temporary and short-term, and would cause some temporary and intermittent reductions in street and intersection capacity on roadways adjacent to the Project Site. As increases in delays and travel times would be noticeable to drivers, traffic impacts are considered potentially shortterm and temporary significant impacts.

The Proposed Project will prepare Construction Traffic and Parking Management Plans for all phases of construction activity at the Project Site. These Plans will include specific provisions for truck routes and staging, roadway lane closures, maintenance of transit service, and maintenance of access/egress for all travel modes to the Project Site.

While development and implementation of a detailed and comprehensive Construction Traffic Control Plan would reduce such impacts, it is conservatively concluded that impacts due to truck traffic, construction worker traffic, and some roadway lane closures would at times be significant and unavoidable.

In addition, implementation of the off-site mitigation measures could result in environmental impacts as well. Primarily through regulatory compliance, including but not

limited to, implementation of standard LADOT and Metro construction procedures and mitigation measures, impacts would be reduced to less than significant levels. In the event that multiple off-site roadway Improvements are under construction at the same time or their construction occurs concurrently with on-site construction, then the air quality and noise impacts attributable to the implementation of these off-site roadway improvements could represent an incremental increase to the Proposed Project's significant air quality and noise impacts.

			Train Service			MTA and LADOT DASH Service					Other Bus Operators			
Time of the Week	Time of Day	Red Line	Purple Line	Blue Line	Metro Rapid	Silver Line	Metro Express	Metro Bus Lines	DASH	Montebello Transit	Foothill Transit	Santa Monica Transit		
Weekday	Afternoon (4:30 P.M.–5:30 P.M.) Headway (minutes)	10	10 a	5–6	10–15	6	30	11 ^h	5–10	30	10-20	25-30		
	Evening (9 p.m.–10 p.m.) Headway (minutes)	20	20 0 ^a	20	No Service ^f	30–60	30–60 ⁹	31 ^h	No Service	60	30	N/A		
	Last Service 0043 (Primary Direction)	12:22 А.М. ^ь	11:32 Р.М. ^ь	12:47 A.M. ^d	8:00 р.м.— 9:00 р.м. ^f	1:24 а.м.	8:09 р.м.– 12:12 а.м. ^g	24-Hr Owl ⁱ	6:55 р.м.	10:20 р.м.	11:00 р.м.	8:43 р.м.		
	Last Service (Secondary Direction)	1:18 A.M. ^c	11:49 р.м. ^с	12:14 А.М. ^е	8:00 p.m 9:00 p.m. ^f	1:27 A.M.	10:22 р.м.— 1:10 а.м. ⁹	24-Hr Owl ⁱ	6:55 p.m.	10:07 р.м.	12:27 р.м.	8:11 р.м.		
Saturday	Midday (12 P.M.–1 P.M.) Headway (minutes)	12	12 -8 ^a	12–15	11–20	20	30–60	18 ⁿ	6–20 ^j	60	30	30		
	Afternoon (4:30 P.M.–5:30 P.M.) Headway (minutes)	12	12 -8 ^a	20	20–30	20	40–60	18 ^h	6–20 ⁱ	30	30	30		
	Last Service (Primary Direction)	12:22 A.M. ^b	11:32 Р.М. ^ь	12:47 A.M. ^d	7:30 p.m.– 8:00 p.m. ^f	1:24 А.М.	8:00 р.м.– 12:12 а.м. ⁹	24-Hr Owl ⁱ	4:40 p.m.– 4:45 p.m. ^j	10:50 р.м.	11:00 р.м.	8:43 p.m.		
	Last Service (Secondary Direction)	1:18 A.M. ^c	11:49 р.м. ^с	12:14 А.М. ^е	7:30 p.m.– 9:00 p.m. ^f	1:27 A.M.	10:19 р.м.— 1:07 а.м. ⁹	24-Hr Owl ⁱ	4:40 р.м.– 4:45 р.м. ^ј	10:33 р.м.	12:30 р.м.	7:54 р.м.		
Sunday	Midday (12 P.M.–1 P.M.) Headway (minutes)	12	12 -8 ^a	12–15	20–26	30	40–60	21 ^h	10–20 ⁱ	N/A	30	30		
	Afternoon (4:30 P.M.–5:30 P.M.) Headway (minutes)	12	12 -8 ^a	20	20–30	30	40–60	25 ^h	10–20 ⁱ	N/A	30	30		
	Last Service (Primary Direction)	12:22 A.M. ^b	11:32 Р.М. ^ь	12:47 A.M. ^d	7:28 p.m.– 7:45 p.m. ^f	1:24 А.М.	8:00 р.м.– 12:12 а.м. ⁹	24-Hr Owl ⁱ	4:40 р.м.–4:45 р.м. ^ј	N/A	11:00 р.м.	8:43 p.m.		
	Last Service (Secondary Direction)	1:18 А.М. ^с	11:49 р.м. ^с	12:14 А.М. ^е	7:27 p.m.– 8:38 p.m. ^f	1:27 A.M.	10:26 р.м.— 1:07 а.м. ⁹	24-Hr Owl ⁱ	4:40 p.m.– 4:45 p.m. ^j	N/A	12:30 р.м.	7:54 р.м.		

 Table IV.B.1-1

 Summary of Public Transit Service Operations in Vicinity of Project Area

Table IV.B.1-1 (Continued) Summary of Public Transit Service Operations in Vicinity of Project Area

		Train Service			MTA and LADOT DASH Service					
Time of the Week	Time of Day	Red Line	Purple Line	Blue Line	Metro Rapid	Silver Line	Metro Express	Metro Bus Lines	DASH	Mon Tr

^a Combined Headway of Red Line and Purple Line.

^b Primary Direction for last service leaving 7th St./Metro Station is westbound direction.

^c Secondary Direction for last service leaving 7th St./Metro Station is eastbound direction.

^{*d*} *Primary Direction for last service leaving Pico Station is southbound direction.*

^e Secondary Direction for last service leaving Pico Station is northbound direction.

^f Only Rapid Transit Route 733 operates later than 9 P.M. in this area.

^g Only Express Routes 439, 460 and 485 (3 Routes of the total 5 Routes) operate later than 9 P.M. in this area.

^{*h*} Based on an average of 36 routes.

Twenty-one of the 35 lines operate 24-hour Owl service. Only 4 of the 35 lines end service prior to 9 P.M.

^j Only DASH E & F (2 Routes) operate during the weekends.

Source: The Mobility Group, 2011.

Other Bus Operators									
tebello ansit	Foothill Transit	Santa Monica Transit							

Table IV.B.1-2
Level of Service Definitions for Signalized Intersections

Level of Service	Description	Volume-to- Capacity (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.	< 0.600							
В	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							
С	Good operation. Occasionally drivers may have to wait for more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701–0.800							
D	Fair operation. Cars are sometimes required to wait for more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801–0.900							
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.901–1.000							
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	> 1.001							
Source: H	Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, D.C.,								

1985 and Interim Materials on Highway Capacity, MCHRP Circular 212, 1982. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, Table 2.6.1, page 2-20.

Freeway Corridor	Growth Factor 2011–2017
SR-110 North	3.3%
I-10 East	6.6%
SR-60 East	6.0%
I-5 South	8.1%
I-110 South	3.1%
I-10 West	1.2%
US-101 Northwest	2.1%
I-5 North	10.2%
Downtown Area	5.7%
Source: Draft 2010 Congestion Man Angeles County, LACMTA, 20 Convention Center Moderniza Project EIR Transportation Stu 5-42.	agement Plan for Los 10. Refer to Appendix I.1, ation and Farmers Field udy, Table 5.1.5.1, page

Table IV.B.1-3Freeway Growth Factors 2011–2017

 Table IV.B.1-4

 Level of Service Definitions for Freeway Segments

Level of Service	Volume-to- Capacity (V/C) Ratio	Flow Conditions
A	0.00–0.35	Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed.
В	0.36–0.54	Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability.
С	0.55–0.77	Stable traffic flow, but less freedom to select speed, change lanes, or pass. Density increasing.
D	0.78–0.93	Approaching unstable flow. Speeds tolerable but subject to sudden and considerable variation. Less maneuverability and driver comfort.
E	0.94–1.00	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort.
F (0)	1.01–1.25	Forced traffic flow. Speed and flow may be greatly reduced with high densities.
F (1)	1.26–1.35	Forced traffic flow. Severe congested conditions prevail for more than one hour. Speed and flow may drop to zero with high densities.
F (2)	1.36–1.45	Forced traffic flow. Severe congested conditions prevail for more than one hour. Speed and flow may drop to zero with high densities.
F (3)	> 1.45	Forced traffic flow. Severe congested conditions prevail for more than one hour. Speed and flow may drop to zero with high densities.
Source: Los	Angeles County Metro	politan Transportation Authority, 2010 Congestion Management Program

Farmers Field Project EIR Transportation Study, Table 5.1.5.2, page 5-44.

Line	Vehicle Type	Seats Rail/Car/Bus	Total Capacity Rail/Car/Bus	Policy Load Factor				
Metro Rail				·				
Red Line	Train	54	124	2.30				
Purple Line	Train	54	124	2.30				
Blue Line	Train	75	131	1.75				
Green Line	Train	75	131	1.75				
Gold Line	Train	75	131	1.75				
Metro Bus	·							
40' Bus	Bus	40	52	1.30				
45' Bus	Bus	46	60	1.30				
60' Bus	Bus	57	74	1.30				
Metrolink				<u>.</u>				
San Bernardino Line	Train	140	140	1.00				
Source: Metro Metrolink 2011 Refer to Appendix L1 Convention Center Modernization and Farmers Field								

Table IV.B.1-5 Transit Vehicle Capacities

Source: Metro, Metrolink, 2011. Refer to Appendix I.1, Convention Center Modernization and Farmers Field Project EIR Transportation Study, Table 5.1.2.1, page 5-15.

		Pre-Eve	Sunda ent Hour	ay Day (12:00–1:	00 р.м.)	Sunday Day Post-Event Hour (4:30–5:30 P.M.)				
		Exis Cond	Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project conditions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
1	Georgia Street & Olympic Boulevard	0.205	А	0.314	Α	0.191	Α	0.356	А	
2	Francisco Street & Olympic Boulevard	0.214	A	0.293	A	0.131	A	0.211	A	
3	Figueroa Street & Olympic Boulevard	0.255	А	0.392	A	0.253	A	0.380	A	
4	Flower Street & Olympic Boulevard	0.306	А	0.405	Α	0.242	А	0.340	А	
5	Grand Avenue & Olympic Boulevard	0.156	А	0.272	A	0.123	Α	0.237	А	
6	Olive Street & Olympic Boulevard	0.145	А	0.303	A	0.138	Α	0.318	А	
7	Hill Street & Olympic Boulevard	0.132	А	0.276	Α	0.125	Α	0.273	Α	
8	Broadway & Olympic Boulevard	0.207	А	0.475	Α	0.163	Α	0.463	Α	
9	Main Street & Olympic Boulevard	0.177	А	0.442	Α	0.158	Α	0.426	Α	
10	Los Angeles Street & Olympic Boulevard	0.215	A	0.263	A	0.099	A	0.146	A	
11	Santee Street & Olympic Boulevard	0.228	А	0.272	Α	0.119	Α	0.164	Α	
12	Maple Avenue & Olympic Boulevard	0.292	А	0.375	Α	0.172	Α	0.262	А	
13	Maple Avenue & 9th Street	0.308	А	0.371	А	0.157	Α	0.212	Α	
14	San Pedro Street & 9th Street	0.256	А	0.285	А	0.142	Α	0.197	Α	
15	L.A. Live Way & 11th Street	0.147	А	0.185	А	0.103	Α	0.125	А	
16	Figueroa Street & 11th Street	0.105	А	0.243	А	0.099	Α	0.242	А	
17	Flower Street & 11th Street	0.095	А	0.246	Α	0.057	Α	0.249	А	
18	Grand Avenue & 11th Street	0.054	А	0.161	Α	0.051	Α	0.162	Α	
19	Olive Street & 11th Street	0.048	А	0.207	Α	0.041	Α	0.163	А	
20	Figueroa Street & 12th Street	0.067	А	0.132	Α	0.071	Α	0.135	Α	
21	Flower Street & 12th Street	0.028	А	0.088	Α	0.035	Α	0.092	Α	
22	Grand Avenue & 12th Street	0.040	А	0.116	A	0.041	Α	0.125	Α	
23	Olive Avenue & 12th Street	0.046	А	0.167	Α	0.036	А	0.139	А	
24	L.A. Live Way & Pico Boulevard	0.354	А	0.412	Α	0.306	А	0.341	А	
25	L.A. Live Way & Bond Street/I-10 & I-110 Off-Ramps	0.230	A	0.254	A	0.205	A	0.226	A	
26	Figueroa Street & Pico Boulevard	0.187	А	0.321	Α	0.248	А	0.383	А	
27	Flower Street & Pico Boulevard	0.102	А	0.255	Α	0.144	А	0.279	А	
28	Grand Avenue & Pico Boulevard	0.080	А	0.188	Α	0.078	Α	0.178	А	
29	Olive Street & Pico Boulevard	0.069	A	0.162	Α	0.066	A	0.149	A	
30	Hill Street & Pico Boulevard	0.081	A	0.166	A	0.068	Α	0.119	A	
31	Broadway & Pico Boulevard	0.159	А	0.258	А	0.126	Α	0.205	А	
32	Main Street & Pico Boulevard	0.193	А	0.399	A	0.163	Α	0.378	A	
33	Blaine Street & Olympic Boulevard	0.304	А	0.413	A	0.275	Α	0.383	A	

City of Los Angeles SCH. No. 2011031049

		Pre-Eve	Sunda ent Hour	ay Day (12:00–1:	00 р.м.)	Sunday Day Post-Event Hour (4:30–5:30 P.M.)				
		Exis Cond	Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project conditions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
34	Blaine Street & SR-110 SB Off-Ramp	0.209	Α	0.252	Α	0.129	Α	0.189	Α	
35	Blaine Street & 11th Street	0.315	Α	0.405	Α	0.359	Α	0.469	Α	
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.066	А	0.077	A	0.131	А	0.148	A	
37	Figueroa Street & Venice Boulevard	0.162	Α	0.237	А	0.181	Α	0.236	А	
38	Flower Street & Venice Boulevard	0.087	Α	0.185	А	0.096	Α	0.181	А	
39	Grand Avenue & Venice Boulevard	0.065	Α	0.111	А	0.066	Α	0.118	А	
40	Olive Street & Venice Boulevard	0.064	Α	0.125	А	0.058	А	0.119	А	
41	Grand Avenue & 17th Street	0.147	Α	0.277	A	0.137	Α	0.265	Α	
42	Olive Street & 17th Street	0.179	А	0.293	А	0.118	Α	0.245	А	
43	Hill Street & 17th Street	0.159	Α	0.297	Α	0.127	Α	0.256	Α	
44	Broadway & 17th Street	0.195	А	0.309	А	0.139	Α	0.248	Α	
45	Main Street & 17th Street	0.158	А	0.309	А	0.110	Α	0.253	А	
46	Los Angeles Street & 17th Street	0.221	А	0.341	А	0.119	Α	0.236	Α	
47	Flower Street & 18th Street	0.020	А	0.073	А	0.023	Α	0.068	А	
48	Grand Avenue & 18th Street	0.093	А	0.177	А	0.088	Α	0.173	Α	
49	Olive Street & 18th Street	0.115	А	0.275	А	0.076	Α	0.195	Α	
50	Hill Street & 18th Street	0.089	Α	0.151	А	0.076	Α	0.130	Α	
51	Broadway & 18th Street	0.124	А	0.200	А	0.087	Α	0.152	А	
52	Main Street & 18th Street	0.115	А	0.225	А	0.099	А	0.214	А	
53	Los Angeles Street & 18th Street	0.135	А	0.280	А	0.158	А	0.315	Α	
54	Figueroa Street & Washington Boulevard	0.299	A	0.398	A	0.290	A	0.339	A	
55	Flower Street & Washington Boulevard	0.126	A	0.243	A	0.093	A	0.189	A	
56	Grand Avenue & Washington Boulevard	0.150	A	0.192	A	0.108	A	0.161	A	
57	Olive Street & Washington Boulevard	0.098	Α	0.165	А	0.091	Α	0.146	Α	
58	Hill Street & Washington Boulevard	0.095	Α	0.151	А	0.081	Α	0.127	Α	
59	Broadway & Washington Boulevard	0.155	A	0.228	А	0.104	A	0.186	A	
60	Main Street & Washington Boulevard	0.210	Α	0.310	А	0.150	Α	0.268	А	
61	Los Angeles Street & Washington Boulevard	0.109	A	0.138	A	0.087	A	0.103	A	
62	San Pedro Street & Washington Boulevard	0.336	A	0.364	A	0.267	A	0.302	A	
63	Figueroa Street & Adams Boulevard	0.498	Α	0.621	В	0.468	Α	0.563	Α	
64	Flower Street & Adams Boulevard	0.102	Α	0.240	A	0.125	Α	0.249	A	

City of Los Angeles SCH. No. 2011031049

		Pre-Eve	Sunda ent Hour	ay Day (12:00–1:	00 р.м.)	Sunday Day Post-Event Hour (4:30–5:30 р.м.)				
		Exis Cond	Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project conditions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
65	I-110 NB Off-Ramps & Adams Boulevard	0.278	A	0.294	A	0.289	A	0.308	A	
66	Grand Avenue & Adams Boulevard	0.127	A	0.185	A	0.112	A	0.182	A	
67	Hill Street & Adams Boulevard	0.123	А	0.187	А	0.092	Α	0.146	А	
68	Broadway & Adams Boulevard	0.167	А	0.223	А	0.134	Α	0.185	А	
69	Main Street & Adams Boulevard	0.234	А	0.307	А	0.181	Α	0.275	А	
70	Flower Street & Jefferson Boulevard	0.097	А	0.237	А	0.100	Α	0.228	А	
71	Figueroa Street & Exposition Boulevard	0.464	A	0.597	A	0.309	A	0.451	A	
72	Flower Street & 37th Street	0.093	А	0.124	А	0.140	Α	0.181	Α	
73	Hope Street & 37th Street	0.163	А	0.202	Α	0.186	Α	0.231	А	
74	Hill Street & 37th Street	0.034	А	0.049	Α	0.033	Α	0.050	Α	
75	Broadway & 37th Street	0.068	А	0.087	Α	0.049	Α	0.064	Α	
76	Figueroa Street & 39th Street	0.131	А	0.200	А	0.188	Α	0.292	Α	
77	I-110 HOV Ramps & 39th Street	0.068	А	0.083	А	0.088	Α	0.108	Α	
78	Figueroa Street & Martin Luther King Jr Boulevard	0.481	A	0.549	A	0.515	A	0.627	В	
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.593	A	0.604	В	0.587	A	0.597	A	
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.453	A	0.533	A	0.377	A	0.429	A	
81	Georgia Street &9th Street	0.229	А	0.375	Α	0.168	Α	0.344	А	
82	Francisco Street & 9th Street	0.115	А	0.161	А	0.092	Α	0.141	Α	
83	Figueroa Street & 9th Street	0.168	А	0.361	Α	0.139	Α	0.333	А	
84	Flower Street & 9th Street	0.185	А	0.324	А	0.111	Α	0.263	А	
85	Broadway & 9th Street	0.180	А	0.339	А	0.096	Α	0.217	Α	
86	Bixel Street & 8th Street	0.256	А	0.373	А	0.289	Α	0.403	Α	
87	Francisco Street & 8th Street	0.099	А	0.181	Α	0.117	Α	0.191	Α	
88	Figueroa Street & 8th Street	0.125	А	0.311	Α	0.124	Α	0.293	Α	
89	Flower Street & 8th Street	0.109	Α	0.232	A	0.119	Α	0.225	A	
90	Hill Street & 8th Street	0.111	Α	0.230	A	0.098	Α	0.219	A	
91	Broadway & 8th Street	0.195	A	0.524	A	0.138	A	0.407	A	
92	Bixel Street & Wilshire Boulevard	0.222	А	0.290	A	0.241	Α	0.268	A	
93	Figueroa Street & Wilshire Boulevard	0.185	А	0.256	Α	0.221	Α	0.301	Α	
94	Lucas Avenue & 6th Street	0.210	А	0.325	А	0.201	Α	0.333	А	
95	Bixel Street & 6th Street	0.169	A	0.251	Α	0.183	A	0.278	А	

		Sunday Day Pre-Event Hour (12:00–1:00 р.м.)				Sunday Day Post-Event Hour (4:30–5:30 р.м.)				
		Exis Cond	Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project conditions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
96	Figueroa Street & 6th Street	0.141	Α	0.219	А	0.147	А	0.225	А	
97	Flower Street & 6th Street	0.117	А	0.189	А	0.120	Α	0.201	А	
98	Grand Avenue & 6th Street	0.117	А	0.159	А	0.075	Α	0.095	А	
99	Hill Street & 6th Street	0.171	А	0.247	А	0.117	Α	0.176	А	
100	Spring Street & 6th Street	0.147	Α	0.303	А	0.136	Α	0.268	А	
101	Main Street & 6th Street	0.129	Α	0.216	А	0.145	Α	0.221	А	
102	Figueroa Street & 5th Street	0.112	Α	0.170	Α	0.122	Α	0.171	А	
103	Grand Avenue & 5th Street	0.097	Α	0.140	Α	0.139	Α	0.153	Α	
104	Olive Street & 5th Street	0.133	А	0.203	А	0.142	Α	0.214	А	
105	Hill Street & 5th Street	0.106	А	0.221	А	0.090	Α	0.168	А	
106	Spring Street & 5th Street	0.113	А	0.204	А	0.120	Α	0.223	А	
107	Main Street & 5th Street	0.112	Α	0.126	А	0.097	Α	0.129	А	
108	Figueroa Street & 2nd Street	0.145	Α	0.162	А	0.174	Α	0.172	А	
109	Beaudry Street & 1st Street	0.106	А	0.130	А	0.120	Α	0.162	А	
110	Hope Street & 1st Street	0.190	А	0.289	А	0.182	Α	0.274	А	
111	Grand Avenue & 1st Street	0.208	А	0.384	А	0.199	Α	0.363	А	
112	Olive Street & 1st Street	0.099	А	0.243	А	0.090	Α	0.252	А	
113	Hill Street & 1st Street	0.141	А	0.289	А	0.123	Α	0.268	А	
114	Spring Street & 1st Street	0.086	А	0.213	А	0.083	Α	0.226	А	
115	Main Street & 1st Street	0.106	А	0.268	А	0.103	Α	0.263	А	
116	Hope Street & Temple Street	0.302	Α	0.386	А	0.248	Α	0.308	А	
117	Main Street & Aliso Street	0.114	Α	0.295	А	0.125	Α	0.267	А	
118	Los Angeles Street & Aliso Street/ US-101 SB On-Ramps	0.124	A	0.181	A	0.146	A	0.191	A	
119	Grand Avenue & US-101 NB Ramps	0.279	Α	0.449	А	0.266	Α	0.461	А	
120	Beaudry Avenue & Sunset Boulevard	0.341	А	0.440	А	0.518	Α	0.607	В	
121	Figueroa Street & Cesar Chavez Avenue	0.387	A	0.456	A	0.435	A	0.509	A	
122	Grand Avenue & Cesar Chavez Avenue	0.454	A	0.596	A	0.217	A	0.389	A	
123	Spring Street & Cesar Chavez Avenue	0.339	A	0.506	A	0.378	A	0.590	A	
124	Main Street & Cesar Chavez Avenue	0.386	Α	0.471	A	0.465	А	0.518	А	
125	Alameda Street & Cesar Chavez Avenue	0.534	A	0.578	A	0.609	В	0.651	В	
126	Main Street & Alpine Street	0.159	Α	0.238	A	0.126	Α	0.196	А	

		Pre-Eve	Sunda ent Hour	ay Day (12:00–1:	00 р.м.)	Sunday Day Post-Event Hour (4:30–5:30 P.M.)				
		Exis Cond	sting itions	Future Pro Cond	Without ject itions	Exis Cond	ting itions	Future Pro condi	Without ject itions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
127	Alameda Street & Alpine Street	0.12	Α	0.165	А	0.103	A	0.128	Α	
128	Hill Street & Alpine Street	0.268	А	0.319	А	0.197	A	0.263	А	
129	Hill Street & College Street	0.371	Α	0.475	А	0.312	Α	0.421	Α	
130	Sunset Boulevard & Elysian Park Avenue	0.839	D	0.820	D	0.632	В	0.645	В	
131	Glendale Boulevard & Bellevue Avenue	0.308	А	0.314	A	0.292	A	0.307	A	
132	Glendale Boulevard & Temple Street	0.477	Α	0.518	А	0.461	Α	0.515	Α	
133	Alvarado Street & US-101 WB Ramps	0.444	A	0.479	A	0.470	A	0.494	A	
134	Alvarado Street & US-101 EB Ramps	0.375	Α	0.433	A	0.388	Α	0.452	A	
135	Alvarado Street & Beverly Boulevard	0.357	А	0.399	A	0.402	Α	0.455	Α	
136	Vermont Avenue & 6th Street	0.473	Α	0.553	A	0.438	Α	0.529	Α	
137	Alvarado Street & 6th Street	0.376	Α	0.456	А	0.373	Α	0.454	А	
138	Western Avenue & Wilshire Boulevard	0.574	A	0.610	В	0.614	В	0.664	В	
139	Normandie Avenue & Wilshire Boulevard	0.301	A	0.379	A	0.382	A	0.496	A	
140	Vermont Avenue & Wilshire Boulevard	0.662	В	0.796	С	0.642	В	0.770	С	
141	Alvarado Street & Wilshire Boulevard	0.403	Α	0.413	Α	0.452	Α	0.469	Α	
142	Vermont Avenue & 8th Street	0.585	А	0.715	С	0.515	A	0.635	В	
143	Alvarado Street & 8th Street	0.351	Α	0.477	A	0.338	Α	0.418	Α	
144	Western Avenue & Olympic Boulevard	0.560	A	0.652	В	0.732	С	0.824	D	
145	Normandie Avenue & Olympic Boulevard	0.421	A	0.479	A	0.414	A	0.500	A	
146	Vermont Avenue & Olympic Boulevard	0.689	В	0.828	D	0.691	В	0.819	D	
147	Alvarado Street & Olympic Boulevard	0.437	Α	0.528	А	0.505	A	0.604	В	
148	Union Avenue & Olympic Boulevard	0.432	Α	0.481	А	0.503	A	0.560	Α	
149	Western Avenue & Pico Boulevard	0.501	Α	0.566	A	0.475	A	0.553	Α	
150	Normandie Avenue & Pico Boulevard	0.471	Α	0.524	A	0.393	A	0.445	Α	
151	Vermont Avenue & Pico Boulevard	0.593	Α	0.684	В	0.557	Α	0.649	В	
152	Alvarado Street & Pico Boulevard	0.537	Α	0.619	В	0.552	A	0.644	В	
153	Union Avenue & Pico Boulevard	0.540	Α	0.579	А	0.581	А	0.615	В	
154	Alvarado Street & Hoover Street	0.265	Α	0.332	A	0.336	Α	0.406	Α	

		Sunday Day Pre-Event Hour (12:00–1:00 р.м.)					Sunda ent Hour	y Day (4:30–5:	30 р.м.)
		Exis Cond	sting litions	Future Pro Cond	Without ject itions	Exis Cond	ting itions	Future Pro condi	Without ject itions
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
155	Western Avenue & Venice Boulevard	0.445	А	0.499	Α	0.499	А	0.551	А
156	Normandie Avenue & Venice Boulevard	0.395	A	0.425	A	0.350	A	0.389	A
157	Vermont Avenue & Venice Boulevard	0.485	А	0.556	А	0.487	Α	0.567	А
158	Hoover Street & Venice Boulevard	0.444	А	0.529	А	0.519	Α	0.586	А
159	Western Avenue & Washington Boulevard	0.529	A	0.596	A	0.457	A	0.522	A
160	Normandie Avenue & Washington Boulevard	0.472	A	0.513	A	0.386	A	0.432	A
161	Vermont Avenue & Washington Boulevard	0.494	A	0.599	A	0.502	A	0.604	В
162	Hoover Street & Washington Boulevard	0.464	A	0.561	A	0.449	A	0.555	A
163	I-10 WB Ramps & 20th Street	0.458	А	0.564	Α	0.459	Α	0.563	А
164	Vermont Avenue & I-10 EB Ramps	0.573	А	0.684	В	0.607	В	0.726	С
165	Hoover Street & I-10 EB Ramps	0.521	А	0.574	Α	0.490	Α	0.552	Α
166	Hill Street & 16th Street	0.073	А	0.115	A	0.077	Α	0.111	А
167	Broadway & 16th Street	0.087	А	0.125	А	0.083	А	0.110	Α
168	Main Street & 16th Street	0.080	А	0.221	А	0.067	А	0.187	А
169	Los Angeles Street & 16th Street	0.082	А	0.088	А	0.070	А	0.076	А
170	San Pedro Street & 16th Street	0.326	А	0.331	А	0.275	А	0.281	А
171	Central Avenue & 16th Street	0.349	А	0.371	А	0.278	Α	0.298	А
172	Central Avenue & Washington Boulevard	0.323	A	0.416	A	0.226	A	0.301	A
173	Wilton Place & Wilshire Boulevard	0.456	А	0.447	А	0.428	А	0.419	А
174	Arlington Avenue & Olympic Boulevard	0.329	A	0.365	A	0.346	A	0.385	A
175	Arlington Avenue & Pico Boulevard	0.357	А	0.391	Α	0.313	Α	0.348	Α
176	Arlington Avenue & Venice Boulevard	0.480	A	0.510	A	0.458	A	0.485	A
177	Arlington Avenue & Washington Boulevard	0.431	A	0.463	A	0.390	A	0.422	A
Sourc	e: The Mobility Group, 2011.								

		Pre-Eve	Sature ent Hour	day Day (12:00–1	:00 р.м.)	Saturday Day Post-Event Hour (4:30–5:30 P.M.)			
		Exis Condi	ting itions	Future Pro Cond	Without ject itions	Exis Cond	ting itions	Future Pro cond	Without ject itions
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
1	Georgia Street & Olympic Boulevard	0.389	Α	0.567	А	0.350	А	0.577	А
2	Francisco Street & Olympic Boulevard	0.328	Α	0.441	А	0.272	А	0.373	А
3	Figueroa Street & Olympic Boulevard	0.442	Α	0.610	В	0.451	А	0.623	В
4	Flower Street & Olympic Boulevard	0.466	Α	0.600	А	0.409	А	0.530	А
5	Grand Avenue & Olympic Boulevard	0.281	Α	0.404	А	0.225	А	0.358	А
6	Olive Street & Olympic Boulevard	0.299	Α	0.509	А	0.253	А	0.446	А
7	Hill Street & Olympic Boulevard	0.301	Α	0.538	А	0.229	А	0.438	А
8	Broadway & Olympic Boulevard	0.359	Α	0.727	С	0.297	А	0.627	В
9	Main Street & Olympic Boulevard	0.343	Α	0.591	А	0.310	А	0.582	А
10	Los Angeles Street & Olympic Boulevard	0.337	Α	0.399	А	0.210	А	0.274	А
11	Santee Street & Olympic Boulevard	0.312	Α	0.363	А	0.205	А	0.260	А
12	Maple Avenue & Olympic Boulevard	0.367	Α	0.463	А	0.245	А	0.356	А
13	Maple Avenue & 9th Street	0.422	Α	0.486	А	0.281	А	0.344	А
14	San Pedro Street & 9th Street	0.467	Α	0.502	А	0.270	А	0.333	А
15	L.A. Live Way & 11th Street	0.192	Α	0.248	А	0.222	А	0.261	А
16	Figueroa Street & 11th Street	0.264	Α	0.437	А	0.288	А	0.470	А
17	Flower Street & 11th Street	0.139	Α	0.458	А	0.127	А	0.406	А
18	Grand Avenue & 11th Street	0.056	Α	0.215	А	0.079	А	0.251	А
19	Olive Street & 11th Street	0.059	Α	0.325	А	0.082	А	0.287	А
20	Figueroa Street & 12th Street	0.162	Α	0.284	А	0.233	А	0.348	А
21	Flower Street & 12th Street	0.055	Α	0.153	А	0.058	А	0.161	А
22	Grand Avenue & 12th Street	0.066	Α	0.199	А	0.055	А	0.187	А
23	Olive Avenue & 12th Street	0.074	Α	0.279	А	0.071	А	0.257	А
24	L.A. Live Way & Pico Boulevard	0.464	Α	0.517	А	0.452	А	0.511	А
25	L.A. Live Way & Bond Street/I-10 & I-110 Off-Ramps	0.270	A	0.303	A	0.304	A	0.329	A
26	Figueroa Street & Pico Boulevard	0.314	Α	0.520	А	0.437	А	0.627	В
27	Flower Street & Pico Boulevard	0.159	Α	0.323	А	0.166	А	0.329	А
28	Grand Avenue & Pico Boulevard	0.135	Α	0.289	А	0.109	А	0.255	А
29	Olive Street & Pico Boulevard	0.111	Α	0.286	А	0.127	А	0.279	А
30	Hill Street & Pico Boulevard	0.200	Α	0.315	А	0.129	А	0.238	А
31	Broadway & Pico Boulevard	0.289	Α	0.405	А	0.199	А	0.310	А
32	Main Street & Pico Boulevard	0.348	А	0.639	В	0.260	A	0.531	А
33	Blaine Street & Olympic Boulevard	0.472	А	0.605	В	0.440	A	0.582	А
34	Blaine Street & SR-110 SB Off-Ramp	0.205	А	0.268	A	0.196	A	0.264	A

City of Los Angeles SCH. No. 2011031049

		Pre-Eve	Sature ent Hour	day Day (12:00–1	:00 p.m.)	Saturday Day Post-Event Hour (4:30–5:30 р.м.)				
		Exis Condi	ting itions	Future Pro Cond	Without ject itions	Exis Cond	sting itions	Future Pro cond	Without ject itions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
35	Blaine Street & 11th Street	0.375	А	0.479	A	0.571	A	0.699	В	
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.095	A	0.109	A	0.129	A	0.149	A	
37	Figueroa Street & Venice Boulevard	0.372	Α	0.462	А	0.413	Α	0.544	А	
38	Flower Street & Venice Boulevard	0.155	Α	0.277	А	0.183	А	0.297	А	
39	Grand Avenue & Venice Boulevard	0.092	Α	0.178	А	0.086	А	0.168	А	
40	Olive Street & Venice Boulevard	0.078	Α	0.197	A	0.078	А	0.181	А	
41	Grand Avenue & 17th Street	0.223	Α	0.377	A	0.228	А	0.385	А	
42	Olive Street & 17th Street	0.263	Α	0.454	А	0.239	А	0.412	А	
43	Hill Street & 17th Street	0.317	Α	0.493	А	0.203	А	0.372	А	
44	Broadway & 17th Street	0.318	Α	0.473	A	0.201	А	0.346	А	
45	Main Street & 17th Street	0.295	Α	0.491	A	0.243	Α	0.431	А	
46	Los Angeles Street & 17th Street	0.367	Α	0.531	А	0.291	Α	0.446	А	
47	Flower Street & 18th Street	0.036	Α	0.093	А	0.046	Α	0.106	А	
48	Grand Avenue & 18th Street	0.139	Α	0.258	Α	0.181	Α	0.294	А	
49	Olive Street & 18th Street	0.175	Α	0.376	А	0.165	Α	0.338	А	
50	Hill Street & 18th Street	0.189	Α	0.287	Α	0.193	Α	0.289	А	
51	Broadway & 18th Street	0.289	Α	0.391	Α	0.251	Α	0.350	А	
52	Main Street & 18th Street	0.332	Α	0.470	А	0.309	Α	0.446	А	
53	Los Angeles Street & 18th Street	0.367	Α	0.541	A	0.405	Α	0.585	А	
54	Figueroa Street & Washington Boulevard	0.412	Α	0.534	Α	0.391	Α	0.488	А	
55	Flower Street & Washington Boulevard	0.214	Α	0.348	A	0.167	Α	0.302	А	
56	Grand Avenue & Washington Boulevard	0.306	Α	0.385	A	0.250	А	0.329	А	
57	Olive Street & Washington Boulevard	0.208	Α	0.325	A	0.144	А	0.257	А	
58	Hill Street & Washington Boulevard	0.214	А	0.308	А	0.146	Α	0.237	А	
59	Broadway & Washington Boulevard	0.294	Α	0.409	A	0.209	А	0.329	А	
60	Main Street & Washington Boulevard	0.429	Α	0.572	A	0.345	A	0.487	А	
61	Los Angeles Street & Washington Boulevard	0.211	A	0.252	A	0.189	A	0.231	A	
62	San Pedro Street & Washington Boulevard	0.478	A	0.526	A	0.397	A	0.444	A	
63	Figueroa Street & Adams Boulevard	0.742	С	0.957	E	0.713	С	0.925	E	
64	Flower Street & Adams Boulevard	0.222	Α	0.393	Α	0.221	A	0.390	А	
65	I-110 NB Off-Ramps & Adams Boulevard	0.478	Α	0.503	Α	0.468	A	0.460	А	
66	Grand Avenue & Adams Boulevard	0.303	Α	0.334	Α	0.240	Α	0.291	A	

		Pre-Eve	Sature ent Hour	day Day (12:00–1	:00 р.м.)	Saturday Day Post-Event Hour (4:30–5:30 р.м.)			
		Exis Condi	ting tions	Future Pro Cond	Without ject itions	Exis Cond	ting itions	Future Pro cond	Without ject itions
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
67	Hill Street & Adams Boulevard	0.299	А	0.387	А	0.223	А	0.326	А
68	Broadway & Adams Boulevard	0.293	А	0.359	А	0.231	А	0.303	А
69	Main Street & Adams Boulevard	0.424	А	0.521	А	0.333	А	0.438	А
70	Flower Street & Jefferson Boulevard	0.259	А	0.409	А	0.256	А	0.411	А
71	Figueroa Street & Exposition Boulevard	0.517	А	0.697	В	0.464	А	0.640	В
72	Flower Street & 37th Street	0.234	А	0.278	А	0.271	А	0.318	А
73	Hope Street & 37th Street	0.256	А	0.304	А	0.268	А	0.321	А
74	Hill Street & 37th Street	0.084	А	0.122	А	0.092	А	0.138	А
75	Broadway & 37th Street	0.109	А	0.153	А	0.083	Α	0.105	А
76	Figueroa Street & 39th Street	0.222	А	0.358	А	0.227	Α	0.359	А
77	I-110 HOV Ramps & 39th Street	0.132	А	0.168	А	0.150	Α	0.187	А
78	Figueroa Street & Martin Luther King Jr Boulevard	0.561	A	0.703	С	0.497	A	0.631	В
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.667	В	0.681	В	0.602	В	0.613	В
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.545	A	0.627	В	0.483	А	0.579	A
81	Georgia Street &9th Street	0.227	А	0.437	А	0.263	А	0.502	А
82	Francisco Street & 9th Street	0.159	А	0.253	А	0.145	А	0.231	А
83	Figueroa Street & 9th Street	0.295	А	0.540	А	0.301	A	0.537	A
84	Flower Street & 9th Street	0.367	А	0.539	А	0.226	Α	0.422	А
85	Broadway & 9th Street	0.325	А	0.451	А	0.239	А	0.338	А
86	Bixel Street & 8th Street	0.377	А	0.527	А	0.323	А	0.475	А
87	Francisco Street & 8th Street	0.164	А	0.260	А	0.159	А	0.254	А
88	Figueroa Street & 8th Street	0.203	А	0.418	А	0.238	А	0.471	А
89	Flower Street & 8th Street	0.239	А	0.393	А	0.212	А	0.359	А
90	Hill Street & 8th Street	0.320	А	0.475	А	0.238	Α	0.391	А
91	Broadway & 8th Street	0.310	А	0.713	С	0.236	Α	0.546	А
92	Bixel Street & Wilshire Boulevard	0.289	А	0.387	А	0.297	А	0.352	А
93	Figueroa Street & Wilshire Boulevard	0.260	А	0.376	А	0.364	А	0.482	А
94	Lucas Avenue & 6th Street	0.266	А	0.478	А	0.264	А	0.453	А
95	Bixel Street & 6th Street	0.273	А	0.407	А	0.233	А	0.389	А
96	Figueroa Street & 6th Street	0.197	А	0.317	А	0.249	А	0.369	А
97	Flower Street & 6th Street	0.149	А	0.259	А	0.156	A	0.265	А
98	Grand Avenue & 6th Street	0.173	А	0.245	А	0.138	А	0.203	Α

		Pre-Eve	Sature ent Hour	day Day (12:00–1	:00 р.м.)	Saturday Day Post-Event Hour (4:30–5:30 р.м.)			
		Exis Condi	ting itions	Future Pro Cond	Without ject itions	Exis Cond	sting itions	Future Pro cond	Without ject itions
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
99	Hill Street & 6th Street	0.293	Α	0.386	A	0.261	А	0.351	А
100	Spring Street & 6th Street	0.139	Α	0.325	А	0.137	Α	0.327	А
101	Main Street & 6th Street	0.173	Α	0.288	А	0.183	Α	0.301	А
102	Figueroa Street & 5th Street	0.163	Α	0.242	А	0.201	Α	0.269	А
103	Grand Avenue & 5th Street	0.153	Α	0.219	Α	0.176	Α	0.223	А
104	Olive Street & 5th Street	0.284	Α	0.373	Α	0.302	Α	0.395	А
105	Hill Street & 5th Street	0.222	Α	0.349	А	0.221	Α	0.348	А
106	Spring Street & 5th Street	0.124	Α	0.274	A	0.128	Α	0.268	А
107	Main Street & 5th Street	0.156	Α	0.199	А	0.149	Α	0.212	А
108	Figueroa Street & 2nd Street	0.315	Α	0.306	Α	0.286	Α	0.278	А
109	Beaudry Street & 1st Street	0.124	Α	0.184	Α	0.163	Α	0.231	А
110	Hope Street & 1st Street	0.156	Α	0.293	Α	0.203	Α	0.324	А
111	Grand Avenue & 1st Street	0.185	Α	0.402	Α	0.308	Α	0.466	А
112	Olive Street & 1st Street	0.109	Α	0.313	Α	0.102	Α	0.291	А
113	Hill Street & 1st Street	0.184	Α	0.393	A	0.336	А	0.490	А
114	Spring Street & 1st Street	0.106	Α	0.327	A	0.130	Α	0.360	А
115	Main Street & 1st Street	0.130	Α	0.348	Α	0.142	Α	0.360	А
116	Hope Street & Temple Street	0.232	Α	0.299	Α	0.291	Α	0.358	А
117	Main Street & Aliso Street	0.129	Α	0.363	A	0.172	Α	0.393	А
118	Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.211	A	0.306	A	0.217	A	0.315	A
119	Grand Avenue & US-101 NB Ramps	0.281	Α	0.497	Α	0.345	Α	0.560	А
120	Beaudry Avenue & Sunset Boulevard	0.725	С	0.806	D	0.523	Α	0.633	В
121	Figueroa Street & Cesar Chavez Avenue	0.497	Α	0.567	A	0.479	Α	0.572	А
122	Grand Avenue & Cesar Chavez Avenue	0.420	Α	0.578	A	0.480	Α	0.642	В
123	Spring Street & Cesar Chavez Avenue	0.383	Α	0.671	В	0.371	А	0.664	В
124	Main Street & Cesar Chavez Avenue	0.444	Α	0.549	A	0.505	Α	0.599	А
125	Alameda Street & Cesar Chavez Avenue	0.574	Α	0.653	В	0.582	Α	0.660	В
126	Main Street & Alpine Street	0.171	Α	0.312	Α	0.137	Α	0.254	А
127	Alameda Street & Alpine Street	0.120	Α	0.199	Α	0.092	Α	0.170	А
128	Hill Street & Alpine Street	0.384	Α	0.429	Α	0.311	Α	0.415	А
129	Hill Street & College Street	0.433	Α	0.543	А	0.400	Α	0.573	А
130	Sunset Boulevard & Elysian Park Avenue	0.677	В	0.656	В	0.597	Α	0.609	В
131	Glendale Boulevard & Bellevue Avenue	0.388	Α	0.415	А	0.356	Α	0.381	А
132	Glendale Boulevard & Temple Street	0.570	Α	0.650	В	0.583	Α	0.661	В

City of Los Angeles SCH. No. 2011031049

		Pre-Eve	Sature ent Hour	day Day (12:00–1	:00 р.м.)	Saturday Day Post-Event Hour (4:30–5:30 р.м.)			
		Exis Condi	ting itions	Future Pro Cond	Without ject itions	Exis Cond	ting itions	Future Pro cond	Without ject itions
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
133	Alvarado Street & US-101 WB Ramps	0.517	А	0.565	А	0.505	А	0.550	A
134	Alvarado Street & US-101 EB Ramps	0.462	Α	0.561	А	0.474	А	0.564	А
135	Alvarado Street & Beverly Boulevard	0.426	Α	0.521	А	0.437	А	0.509	А
136	Vermont Avenue & 6th Street	0.533	Α	0.660	В	0.629	В	0.748	С
137	Alvarado Street & 6th Street	0.436	Α	0.574	А	0.438	А	0.554	А
138	Western Avenue & Wilshire Boulevard	0.603	В	0.660	В	0.696	В	0.761	С
139	Normandie Avenue & Wilshire Boulevard	0.555	Α	0.687	В	0.462	А	0.639	В
140	Vermont Avenue & Wilshire Boulevard	0.603	В	0.789	С	0.613	В	0.782	С
141	Alvarado Street & Wilshire Boulevard	0.411	Α	0.449	А	0.419	А	0.459	А
142	Vermont Avenue & 8th Street	0.519	Α	0.727	С	0.511	А	0.703	С
143	Alvarado Street & 8th Street	0.372	Α	0.544	А	0.342	А	0.471	А
144	Western Avenue & Olympic Boulevard	0.507	Α	0.625	В	0.519	А	0.633	В
145	Normandie Avenue & Olympic Boulevard	0.511	Α	0.621	В	0.505	А	0.603	В
146	Vermont Avenue & Olympic Boulevard	0.874	D	1.067	F	0.640	В	0.846	D
147	Alvarado Street & Olympic Boulevard	0.617	В	0.749	С	0.581	А	0.710	С
148	Union Avenue & Olympic Boulevard	0.553	Α	0.620	В	0.507	А	0.577	А
149	Western Avenue & Pico Boulevard	0.595	Α	0.681	В	0.621	В	0.709	С
150	Normandie Avenue & Pico Boulevard	0.532	Α	0.613	В	0.549	А	0.626	В
151	Vermont Avenue & Pico Boulevard	0.599	Α	0.726	С	0.540	А	0.669	В
152	Alvarado Street & Pico Boulevard	0.612	В	0.728	С	0.640	В	0.753	С
153	Union Avenue & Pico Boulevard	0.597	Α	0.638	В	0.563	А	0.603	В
154	Alvarado Street & Hoover Street	0.319	Α	0.413	А	0.328	А	0.427	А
155	Western Avenue & Venice Boulevard	0.487	Α	0.553	А	0.529	А	0.592	А
156	Normandie Avenue & Venice Boulevard	0.457	Α	0.504	А	0.469	А	0.528	А
157	Vermont Avenue & Venice Boulevard	0.543	Α	0.645	В	0.593	А	0.697	В
158	Hoover Street & Venice Boulevard	0.579	Α	0.682	В	0.591	А	0.699	В
159	Western Avenue & Washington Boulevard	0.598	Α	0.673	В	0.651	В	0.731	С
160	Normandie Avenue & Washington Boulevard	0.557	A	0.622	В	0.556	A	0.631	В
161	Vermont Avenue & Washington Boulevard	0.663	В	0.802	D	0.679	В	0.817	D
162	Hoover Street & Washington Boulevard	0.539	А	0.640	В	0.605	В	0.747	С
163	I-10 WB Ramps & 20th Street	0.565	А	0.701	В	0.531	А	0.666	В
164	Vermont Avenue & I-10 EB Ramps	0.745	С	0.904	Е	0.688	В	0.844	D
165	Hoover Street & I-10 EB Ramps	0.636	В	0.722	С	0.570	А	0.654	В

		Pre-Eve	Saturo ent Hour	day Day (12:00–1	:00 р.м.)	Saturday Day Post-Event Hour (4:30–5:30 р.м.)				
		Exis Condi	Existing Conditions		Without ject itions	Existing Conditions		Future Without Project conditions		
No.	Intersection	V/C LOS		V/C	LOS	V/C	LOS	V/C	LOS	
166	Hill Street & 16th Street	0.221	А	0.297	А	0.152	А	0.229	А	
167	Broadway & 16th Street	0.240	А	0.294	А	0.151	А	0.203	А	
168	Main Street & 16th Street	0.265	А	0.470	А	0.137	А	0.352	А	
169	Los Angeles Street & 16th Street	0.252	А	0.266	А	0.137	А	0.151	А	
170	San Pedro Street & 16th Street	0.705	С	0.714	С	0.417	А	0.423	А	
171	Central Avenue & 16th Street	0.555	А	0.586	А	0.386	А	0.411	А	
172	Central Avenue & Washington Boulevard	0.527	А	0.637	В	0.341	А	0.443	А	
173	Wilton Place & Wilshire Boulevard	0.515	А	0.511	А	0.600	А	0.600	А	
174	Arlington Avenue & Olympic Boulevard	0.401	А	0.454	А	0.471	А	0.519	А	
175	Arlington Avenue & Pico Boulevard	0.390	А	0.430	А	0.452	А	0.496	А	
176	Arlington Avenue & Venice Boulevard	0.454	А	0.474	А	0.700	В	0.735	С	
177	Arlington Avenue & Washington Boulevard	0.519	A	0.561	A	0.561	A	0.605	В	
Sourc	e: The Mobility Group, 2011.									

Table IV.B.1-8 Future Without Project Intersection Level of Service Weekday Evening Pre-Event Hour (4:30–5:30 р.м.) and Post-Event Hour (9:00–10:00 р.м.)

		Pre-Ev	Weekda ent Hou	y Evenin r (4:30–5	іg :30 р.м.)	Weekday Evening Post-Event Hour (9:00–10:00 р.м.)				
		Exis Condi	ting itions	Future Pro Conc	Without oject ditions	Exist Condi	ing tions	Future V Project co	Vithout Inditions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
1	Georgia Street & Olympic Boulevard	0.349	А	0.662	В	0.155	А	0.322	А	
2	Francisco Street & Olympic Boulevard	0.281	А	0.499	А	0.098	А	0.189	А	
3	Figueroa Street & Olympic Boulevard	0.731	С	0.989	E	0.129	А	0.285	А	
4	Flower Street & Olympic Boulevard	0.445	А	0.639	В	0.117	А	0.249	А	
5	Grand Avenue & Olympic Boulevard	0.447	А	0.674	В	0.087	А	0.192	А	
6	Olive Street & Olympic Boulevard	0.474	А	0.682	В	0.070	А	0.208	А	
7	Hill Street & Olympic Boulevard	0.462	А	0.745	С	0.051	А	0.159	А	
8	Broadway & Olympic Boulevard	0.406	А	0.869	D	0.064	А	0.253	А	
9	Main Street & Olympic Boulevard	0.630	В	1.082	F	0.050	А	0.198	А	
10	Los Angeles Street & Olympic Boulevard	0.367	А	0.444	А	0.042	А	0.062	А	
11	Santee Street & Olympic Boulevard	0.289	А	0.351	А	0.013	А	0.030	А	
12	Maple Avenue & Olympic Boulevard	0.334	А	0.472	А	0.025	А	0.058	А	
13	Maple Avenue & 9th Street	0.407	А	0.493	А	0.041	А	0.065	А	
14	San Pedro Street & 9th Street	0.530	А	0.617	В	0.053	А	0.077	А	
15	L.A. Live Way & 11th Street	0.233	А	0.272	А	0.049	А	0.064	А	
16	Figueroa Street & 11th Street	0.329	А	0.476	А	0.064	А	0.157	А	
17	Flower Street & 11th Street	0.292	А	0.576	А	0.038	А	0.152	А	
18	Grand Avenue & 11th Street	0.252	А	0.465	А	0.035	А	0.099	А	
19	Olive Street & 11th Street	0.233	А	0.443	А	0.029	А	0.127	А	
20	Figueroa Street & 12th Street	0.252	А	0.362	А	0.034	А	0.070	А	
21	Flower Street & 12th Street	0.187	А	0.350	А	0.022	А	0.069	А	
22	Grand Avenue & 12th Street	0.222	А	0.401	А	0.039	А	0.100	А	
23	Olive Avenue & 12th Street	0.175	А	0.382	А	0.025	А	0.096	А	
24	L.A. Live Way & Pico Boulevard	0.487	А	0.539	А	0.129	А	0.160	А	
25	L.A. Live Way & Bond Street/I-10 & I-110 Off-Ramps	0.322	A	0.349	А	0.065	A	0.072	A	
26	Figueroa Street & Pico Boulevard	0.607	В	0.765	С	0.073	А	0.149	А	
27	Flower Street & Pico Boulevard	0.507	А	0.668	В	0.054	А	0.117	А	
28	Grand Avenue & Pico Boulevard	0.422	А	0.649	В	0.051	А	0.099	А	
29	Olive Street & Pico Boulevard	0.256	А	0.471	А	0.027	А	0.073	А	
30	Hill Street & Pico Boulevard	0.425	А	0.575	А	0.027	А	0.064	А	
31	Broadway & Pico Boulevard	0.453	А	0.578	А	0.128	А	0.201	А	
32	Main Street & Pico Boulevard	0.554	А	1.049	F	0.040	А	0.138	A	
33	Blaine Street & Olympic Boulevard	0.546	А	0.718	С	0.236	А	0.352	A	
34	Blaine Street & SR-110 SB Off-Ramp	0.153	А	0.237	А	0.078	А	0.107	А	

City of Los Angeles SCH. No. 2011031049

Table IV.B.1-8 (Continued) Future Without Project Intersection Level of Service Weekday Evening Pre-Event Hour (4:30–5:30 р.м.) and Post-Event Hour (9:00–10:00 р.м.)

		Pre-Ev	Weekda vent Hou	ıy Evenir ır (4:30–5	ng 5:30 р.м.)	Weekday Evening Post-Event Hour (9:00–10:00 р.м.)				
		Exis Cond	ting itions	Future Pro Cono	Without oject ditions	Exist Condi	ting	Future V Project co	Vithout	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
35	Blaine Street & 11th Street	0.736	С	0.880	D	0.301	Α	0.418	A	
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.150	A	0.174	A	0.030	A	0.036	A	
37	Figueroa Street & Venice Boulevard	0.717	С	0.796	С	0.070	А	0.121	А	
38	Flower Street & Venice Boulevard	0.407	Α	0.525	А	0.052	А	0.097	А	
39	Grand Avenue & Venice Boulevard	0.377	Α	0.513	А	0.043	А	0.078	А	
40	Olive Street & Venice Boulevard	0.223	Α	0.363	А	0.029	А	0.070	А	
41	Grand Avenue & 17th Street	0.567	Α	0.772	С	0.070	А	0.161	А	
42	Olive Street & 17th Street	0.359	Α	0.568	А	0.073	А	0.179	А	
43	Hill Street & 17th Street	0.517	Α	0.724	С	0.048	А	0.100	А	
44	Broadway & 17th Street	0.486	A	0.657	В	0.058	Α	0.108	А	
45	Main Street & 17th Street	0.471	A	0.680	В	0.052	Α	0.123	А	
46	Los Angeles Street & 17th Street	0.415	А	0.589	А	0.048	Α	0.095	А	
47	Flower Street & 18th Street	0.106	А	0.239	А	0.026	Α	0.063	А	
48	Grand Avenue & 18th Street	0.273	Α	0.428	Α	0.048	Α	0.080	А	
49	Olive Street & 18th Street	0.280	Α	0.385	Α	0.051	Α	0.119	А	
50	Hill Street & 18th Street	0.365	Α	0.534	Α	0.033	Α	0.064	А	
51	Broadway & 18th Street	0.393	A	0.517	А	0.049	Α	0.086	А	
52	Main Street & 18th Street	0.476	A	0.625	В	0.058	Α	0.145	А	
53	Los Angeles Street & 18th Street	0.545	A	0.732	С	0.085	Α	0.247	А	
54	Figueroa Street & Washington Boulevard	0.661	В	0.736	С	0.131	Α	0.269	А	
55	Flower Street & Washington Boulevard	0.470	Α	0.643	В	0.063	Α	0.179	А	
56	Grand Avenue & Washington Boulevard	0.543	Α	0.716	С	0.075	Α	0.183	А	
57	Olive Street & Washington Boulevard	0.367	А	0.529	А	0.068	А	0.165	А	
58	Hill Street & Washington Boulevard	0.522	Α	0.629	В	0.054	А	0.099	А	
59	Broadway & Washington Boulevard	0.656	В	0.740	С	0.065	Α	0.112	А	
60	Main Street & Washington Boulevard	0.652	В	0.774	С	0.069	Α	0.148	А	
61	Los Angeles Street & Washington Boulevard	0.508	A	0.558	A	0.046	A	0.062	A	
62	San Pedro Street & Washington Boulevard	0.649	В	0.696	В	0.119	A	0.160	A	
63	Figueroa Street & Adams Boulevard	0.869	D	1.015	F	0.248	А	0.333	A	
64	Flower Street & Adams Boulevard	0.671	В	0.899	D	0.209	Α	0.315	A	
65	I-110 NB Off-Ramps & Adams Boulevard	0.449	А	0.525	A	0.122	Α	0162	A	
66	Grand Avenue & Adams Boulevard	0.497	А	0.647	В	0.070	А	0.113	A	

Table IV.B.1-8 (Continued) Future Without Project Intersection Level of Service Weekday Evening Pre-Event Hour (4:30–5:30 р.м.) and Post-Event Hour (9:00–10:00 р.м.)

		Pre-Ev	Weekda vent Hou	ıy Evenir ır (4:30–5	іg :30 р.м.)	Weekday Evening Post-Event Hour (9:00–10:00 р.м.)				
		Exis Cond	ting itions	Future Pro Cono	Without oject ditions	Exist Condi	ing tions	Future V Project co	Vithout Inditions	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
67	Hill Street & Adams Boulevard	0.433	А	0.585	А	0.060	Α	0.080	А	
68	Broadway & Adams Boulevard	0.546	А	0.620	В	0.068	Α	0.088	А	
69	Main Street & Adams Boulevard	0.637	В	0.731	С	0.086	Α	0.147	A	
70	Flower Street & Jefferson Boulevard	0.362	A	0.542	А	0.120	Α	0.255	А	
71	Figueroa Street & Exposition Boulevard	0.625	В	0.715	С	0.277	Α	0.393	А	
72	Flower Street & 37th Street	0.398	A	0.434	А	0.175	Α	0.229	А	
73	Hope Street & 37th Street	0.471	A	0.511	А	0.158	Α	0.202	A	
74	Hill Street & 37th Street	0.251	A	0.295	А	0.019	Α	0.030	A	
75	Broadway & 37th Street	0.376	A	0.418	А	0.035	Α	0.048	А	
76	Figueroa Street & 39th Street	0.467	A	0.528	А	0.063	Α	0.089	А	
77	I-110 HOV Ramps & 39th Street	0.466	A	0.496	А	0.040	Α	0.041	А	
78	Figueroa Street & Martin Luther King Jr Boulevard	0.840	D	0.788	С	0.285	A	0.349	A	
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.725	С	0.738	С	0.415	A	0.421	A	
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.629	В	0.784	С	0.245	A	0.319	A	
81	Georgia Street &9th Street	0.342	А	0.612	В	0.200	Α	0.311	А	
82	Francisco Street & 9th Street	0.278	А	0.475	А	0.070	Α	0.105	А	
83	Figueroa Street & 9th Street	0.394	Α	0.665	В	0.090	Α	0.234	А	
84	Flower Street & 9th Street	0.305	Α	0.583	А	0.103	Α	0.199	А	
85	Broadway & 9th Street	0.320	А	0.625	В	0.052	Α	0.101	А	
86	Bixel Street & 8th Street	0.672	В	1.057	F	0.219	Α	0.301	А	
87	Francisco Street & 8th Street	0.375	А	0.498	А	0.094	Α	0.181	А	
88	Figueroa Street & 8th Street	0.686	В	1.014	F	0.111	Α	0.293	А	
89	Flower Street & 8th Street	0.394	Α	0.551	А	0.105	Α	0.193	А	
90	Hill Street & 8th Street	0.380	А	0.559	А	0.046	Α	0.101	A	
91	Broadway & 8th Street	0.308	A	0.729	С	0.052	Α	0.173	A	
92	Bixel Street & Wilshire Boulevard	0.465	Α	0.551	А	0.223	Α	0.234	А	
93	Figueroa Street & Wilshire Boulevard	0.986	E	1.321	F	0.265	Α	0.339	А	
94	Lucas Avenue & 6th Street	0.631	В	0.893	D	0.134	А	0.216	A	
95	Bixel Street & 6th Street	0.585	А	0.748	С	0.147	А	0.207	A	
96	Figueroa Street & 6th Street	0.720	С	0.944	Е	0.126	А	0.189	A	
97	Flower Street & 6th Street	0.315	А	0.449	A	0.099	Α	0.139	A	
98	Grand Avenue & 6th Street	0.326	А	0.414	А	0.084	А	0.094	A	

Table IV.B.1-8 (Continued)Future Without Project Intersection Level of ServiceWeekday Evening Pre-Event Hour (4:30–5:30 P.M.) and Post-Event Hour (9:00–10:00 P.M.)

		Pre-Ev	Weekda vent Hou	ıy Evenin ır (4:30–5	іg 5:30 р.м.)	Weekday Evening Post-Event Hour (9:00–10:00 р.м.)				
		Exis Cond	ting itions	Future Pro Cono	Without oject ditions	Exist Condi	ing tions	Future V Project co	Vithout	
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
99	Hill Street & 6th Street	0.381	Α	0.483	Α	0.083	Α	0.115	А	
100	Spring Street & 6th Street	0.238	Α	0.484	А	0.089	Α	0.182	А	
101	Main Street & 6th Street	0.320	Α	0.460	А	0.090	Α	0.141	А	
102	Figueroa Street & 5th Street	0.852	D	1.016	F	0.125	Α	0.178	А	
103	Grand Avenue & 5th Street	0.302	Α	0.400	А	0.116	Α	0.114	А	
104	Olive Street & 5th Street	0.572	Α	0.727	С	0.131	Α	0.193	А	
105	Hill Street & 5th Street	0.324	Α	0.473	А	0.059	Α	0.117	А	
106	Spring Street & 5th Street	0.163	А	0.349	А	0.060	Α	0.121	А	
107	Main Street & 5th Street	0.223	Α	0.325	А	0.064	Α	0.083	А	
108	Figueroa Street & 2nd Street	0.618	В	0.677	В	0.121	Α	0.133	А	
109	Beaudry Street & 1st Street	0.450	Α	0.525	А	0.079	Α	0.079	А	
110	Hope Street & 1st Street	0.601	Α	0.764	С	0.094	Α	0.125	А	
111	Grand Avenue & 1st Street	0.707	С	0.913	E	0.115	Α	0.190	А	
112	Olive Street & 1st Street	0.557	Α	0.760	С	0.049	Α	0.108	А	
113	Hill Street & 1st Street	0.625	В	0.771	С	0.096	Α	0.153	А	
114	Spring Street & 1st Street	0.251	Α	0.536	А	0.058	Α	0.159	А	
115	Main Street & 1st Street	0.502	Α	0.798	С	0.059	Α	0.162	А	
116	Hope Street & Temple Street	0.705	С	0.799	С	0.127	Α	0.165	А	
117	Main Street & Aliso Street	0.334	Α	0.601	В	0.068	Α	0.182	А	
118	Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.288	A	0.463	A	0.062	A	0.090	A	
119	Grand Avenue & US-101 NB Ramps	0.642	В	0.917	E	0.328	Α	0.484	А	
120	Beaudry Avenue & Sunset Boulevard	0.961	E	1.058	F	0.436	Α	0.471	А	
121	Figueroa Street & Cesar Chavez Avenue	0.741	С	0.845	D	0.364	Α	0.424	А	
122	Grand Avenue & Cesar Chavez Avenue	0.705	С	0.886	D	0.332	Α	0.456	А	
123	Spring Street & Cesar Chavez Avenue	0.467	Α	0.843	D	0.315	Α	0.514	А	
124	Main Street & Cesar Chavez Avenue	0.641	В	0.789	С	0.177	Α	0.237	А	
125	Alameda Street & Cesar Chavez Avenue	0.736	С	0.822	D	0.294	Α	0.341	А	
126	Main Street & Alpine Street	0.486	Α	0.638	В	0.071	Α	0.108	А	
127	Alameda Street & Alpine Street	0.138	Α	0.294	А	0.039	Α	0.078	А	
128	Hill Street & Alpine Street	0.566	Α	0.736	С	0.086	Α	0.165	А	
129	Hill Street & College Street	0.663	В	0.862	D	0.114	Α	0.207	А	
130	Sunset Boulevard & Elysian Park Avenue	0.753	С	0.733	С	0.497	Α	0.501	А	
131	Glendale Boulevard & Bellevue Avenue	0.725	С	0.766	С	0.225	Α	0.224	А	
132	Glendale Boulevard & Temple Street	0.983	E	1.074	F	0.322	Α	0.345	А	

City of Los Angeles SCH. No. 2011031049

Table IV.B.1-8 (Continued)Future Without Project Intersection Level of ServiceWeekday Evening Pre-Event Hour (4:30–5:30 P.M.) and Post-Event Hour (9:00–10:00 P.M.)

		Pre-Ev	Weekda ent Hou	ıy Evenir ır (4:30–5	іg :30 р.м.)	Weekday Evening Post-Event Hour (9:00–10:00 р.м.)				
		Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project conditions		
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
133	Alvarado Street & US-101 WB Ramps	0.577	А	0.619	В	0.365	Α	0.412	А	
134	Alvarado Street & US-101 EB Ramps	0.544	А	0.642	В	0.459	Α	0.537	А	
135	Alvarado Street & Beverly Boulevard	0.560	А	0.658	В	0.257	Α	0.299	А	
136	Vermont Avenue & 6th Street	0.735	С	0.855	D	0.509	А	0.554	А	
137	Alvarado Street & 6th Street	0.561	А	0.691	В	0.270	А	0.344	А	
138	Western Avenue & Wilshire Boulevard	0.706	С	0.869	D	0.534	Α	0.559	А	
139	Normandie Avenue & Wilshire Boulevard	0.882	D	0.969	E	0.472	А	0.502	А	
140	Vermont Avenue & Wilshire Boulevard	0.754	С	1.040	F	0.512	А	0.576	А	
141	Alvarado Street & Wilshire Boulevard	0.565	А	0.897	D	0.261	А	0.307	А	
142	Vermont Avenue & 8th Street	0.615	В	0.786	С	0.443	А	0.562	А	
143	Alvarado Street & 8th Street	0.486	А	0.662	В	0.146	А	0.245	А	
144	Western Avenue & Olympic Boulevard	0.887	D	0.989	Ш	0.498	А	0.585	А	
145	Normandie Avenue & Olympic Boulevard	0.627	В	0.745	С	0.301	А	0.371	А	
146	Vermont Avenue & Olympic Boulevard	0.805	D	0.970	Ш	0.525	А	0.646	В	
147	Alvarado Street & Olympic Boulevard	0.728	С	0.872	D	0.260	Α	0.358	А	
148	Union Avenue & Olympic Boulevard	0.655	В	0.729	С	0.217	Α	0.270	А	
149	Western Avenue & Pico Boulevard	0.634	В	0.720	С	0.348	А	0.412	А	
150	Normandie Avenue & Pico Boulevard	0.511	А	0.602	В	0.246	А	0.284	А	
151	Vermont Avenue & Pico Boulevard	0.659	В	0.781	С	0.361	А	0.438	А	
152	Alvarado Street & Pico Boulevard	0.650	В	0.767	С	0.214	А	0.283	А	
153	Union Avenue & Pico Boulevard	0.669	В	0.707	С	0.189	А	0.215	А	
154	Alvarado Street & Hoover Street	0.465	А	0.577	А	0.165	Α	0.225	А	
155	Western Avenue & Venice Boulevard	0.641	В	0.714	С	0.314	Α	0.359	А	
156	Normandie Avenue & Venice Boulevard	0.643	В	0.713	С	0.247	А	0.281	А	
157	Vermont Avenue & Venice Boulevard	0.663	В	0.763	С	0.320	А	0.383	А	
158	Hoover Street & Venice Boulevard	0.793	С	0.914	Е	0.271	А	0.344	А	
159	Western Avenue & Washington Boulevard	0.677	В	0.757	С	0.389	Α	0.443	А	
160	Normandie Avenue & Washington Boulevard	0.678	В	0.756	С	0.285	A	0.326	A	
161	Vermont Avenue & Washington Boulevard	0.774	С	0.910	Ш	0.377	А	0.458	А	
162	Hoover Street & Washington Boulevard	0.732	С	0.855	D	0.265	А	0.343	A	
163	I-10 WB Ramps & 20th Street	0.584	А	0.735	С	0.258	А	0.332	A	
164	Vermont Avenue & I-10 EB Ramps	0.654	В	0.783	С	0.454	А	0.546	A	
165	Hoover Street & I-10 EB Ramps	0.664	В	0.748	С	0.395	А	0.480	A	
166	Hill Street & 16th Street	0.420	А	0.512	A	0.037	А	0.061	A	

City of Los Angeles SCH. No. 2011031049

Table IV.B.1-8 (Continued)Future Without Project Intersection Level of ServiceWeekday Evening Pre-Event Hour (4:30–5:30 P.M.) and Post-Event Hour (9:00–10:00 P.M.)

		Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)				Weekday Evening Post-Event Hour (9:00–10:00 р.м.)				
		Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project conditions		
No.	Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
167	Broadway & 16th Street	0.372	А	0.432	А	0.043	Α	0.064	А	
168	Main Street & 16th Street	0.399	А	0.780	С	0.037	Α	0.095	А	
169	Los Angeles Street & 16th Street	0.347	А	0.364	А	0.029	Α	0.033	А	
170	San Pedro Street & 16th Street	0.701	С	0.711	С	0.095	Α	0.096	А	
171	Central Avenue & 16th Street	0.595	А	0.638	В	0.158	Α	0.176	А	
172	Central Avenue & Washington Boulevard	0.717	С	0.837	D	0.103	Α	0.181	А	
173	Wilton Place & Wilshire Boulevard	0.746	С	0.749	С	0.385	Α	0.369	А	
174	Arlington Avenue & Olympic Boulevard	0.631	В	0.683	В	0.261	Α	0.395	А	
175	Arlington Avenue & Pico Boulevard	0.600	А	0.651	В	0.205	Α	0.235	А	
176	Arlington Avenue & Venice Boulevard	0.849	D	0.895	D	0.274	Α	0.298	А	
177	Arlington Avenue & Washington Boulevard	0.667	В	0.725	С	0.320	A	0.346	A	
Source: The Mobility Group, 2011.										

Table IV.B.1-9 Event Center Project Trip Generation

	We	Weekday Evening NFL Game		Saturday Day Time Other Event			Sunday Day Time NFL Game							
Parameter	%	Trips	Net Trips	%	Trips	Net Trips	%	Net Trips	Trips					
Seats			72,000			72,000			72,000					
Walk-In: % & Trips	7.0%	5,040		3.5%	2,520		3.5%	2,520						
Transit: % & Trips	20.0%	14,400		15.0%	10,800		15.0%	10,800						
Charter Bus: % & Trips	0.0%	0		0.0%	0		0.0%	0						
Remaining By Auto: % & Trips	73.0%		52,560	81.5%		58,680	81.5%		58,680					
Auto Occupancy: & Auto Vehicle Trips	2.70		19,467	3.0		19,560	3.0		19,560					
Parked Cars			19,467			19,560			19,560					
Inbound Auto Vehicle Trips			19,467			19,560			19,560					
Inbound Auto Veh. Trips in Pre-Event Hour	50.0%		9,733	50.0%		9,780	50.0%		9,780					
Outbound Auto Vehicle Trips			19,467			19,560			19,560					
Outbound Auto Trips Veh. In Post-Event Hour	75.0%		14,600	75.0%		14,670	75.0%		14,670					
Outbound Auto Trips Veh. In Post-Event Hour Source: The Mobility Group, 2011.	75.0%		14,600	75.0%		14,670	75.0%		14,6					
		Event Center Patrons			E\ E	vent Cen Employee	ter es	Conver I	ntion Cer	nter Trip s	Total			
--------------------	------------------------------------	----------------------	--------	--------	---------	----------------------	-----------	-------------	-----------	----------------	-------	--------	--------	--
Day	Time	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Weekday Evening	Pre-Event Hour 4:30–5:30 р.м.	9,733	0	9,733	0	0	0	44	225	269	9,777	225	10,002	
	Post-Event Hour 9:00–10:00 р.м.	0	14,600	14,600	0	634	634	0	0	0	0	15,234	15,234	
Saturday Day	Pre-Event Hour 12:00–1:00 р.м.	9,780	0	9,780	0	0	0	42	22	64	9,822	22	9,844	
	Post-Event Hour 4:30–5:30 р.м.	0	14,670	14,670	0	634	634	21	62	83	21	15,366	15,387	
Sunday Day	Pre-Event Hour 12:00–1:00 р.м.	9,780	0	9,780	0	0	0	42	19	61	9,822	19	9,841	
	Post-Event Hour 4:30–5:30 р.м.	0	14,670	14,670	0	634	634	20	60	80	20	15,364	15,384	
Source: The Mobili	Source: The Mobility Group, 2011.													

Table IV.B.1-10 Proposed Project—Total Trip Generation

	Sunday Day Event						Saturday Day Event							Weekday Evening Event							
Parameter	F (*	Pre-Event H 2:00–1:00 F	our P.M.)	P (ost-Event H 4:30–5:30 P.	our .m.)		Pre-Event Hour (12:00–1:00 р.м.)			P (*	ost-Event H 4:30–5:30 P.	lour .m.)	Pre-Event Hour (4:30–5:30 р.м.)				Post-Event Hour (9:00–10:00 р.м.)			
INTERSECTIONS																					
Number of Intersections by Level of Service	LOS	Future Without Project	Future With Project	LOS	Future Without Project	Future With Project	LO	Future Without S Project	Future With Project		LOS	Future Without Project	Future With Project	LC	Fu Wi S Pr	iture thout oject	Future With Project		os	Future Without Project	Future With Project
	А	166	145	Α	162	142	A	136	111		А	138	98	A		66	44		Ą	176	162
	В	7	18	В	11	15	В	26	26		В	25	33	E		30	31	I	В	1	6
	С	2	5	С	2	9	С	10	20		С	10	21	C		49	41	(C	0	2
	D	2	7	D	2	6	D	2	8		D	3	13			22	30	[D	0	2
	E	0	2	E	0	2	E	2	6		E	1	4	E		10	19		E	0	2
	F	0	0	F	0	3	F	F 1 6			F	0	8	F		10	22		F	0	3
		1//	1//		177	1//		177	1//			1//	177		187 187		187			1//	1//
Impacts by Level		DS # Im C	4 5 1 1 1 1		OS # In C D E F Stal	7 6 2 3 18		LOS # Impacts C 14 D 6 E 5 F 6 Total 31				OS # Im C D E F otal	appacts 14 11 3 8 36	-	LOS C D E F Total	# In	npacts 17 22 18 20 77		LO C D E F Tot	S # Im	pacts 2 2 2 3 9
Key Impact Issues/Location	 Nine of the 11 impacted intersections will continue to operate at LOS D or better with the Proposed Project. The remaining two impacted intersections would operate at LOS E. Half of the impacted intersections would be located along 17th Street leading from the I-10 westbound off-ramp at Los Angeles Street. Angeles Street. Thirteen of the 18 intersections would D or better with the Project. Two of th intersections would E with the Proposed intersections, Blain Street, Hill Street a Los Angeles Street. Cos E and LOS F would be located of the I-10 freeway a Street leading to the on-ramp at Los Ar 			the 18 impa s would oper with the Pro wo of the imp s would oper Proposed Pr ns, Blaine St Street & 18 street & 18 street & 18 rate at LOS F Project. One ns, including LOS F inter pocated on Hi seway and al ling to the I-1 t Los Angele	acted erate at LOS posed pacted erate at LOS oject. Three reet & 11th h Street, and 8th Street, actions with the e-third of the most of the sections, II Street near ong 18th 0 eastbound s Street.	Twenty interse D or be Project interse E, one LOS E Project Ramps interse operat Propos & Olyn the imp virtuall would corrido westbo	of the 31 impactions would op etter with the Pr the Five of the im- ctions would op of which would without the Pro- c (Vermont Aven b). Six of the im- ctions are expe- e at LOS F with the Project, one operate at LOS feed Project (Ven opic Boulevard) opacted intersect y all of the LOS ope along the 17 r leading from the opic for the top of the top of the opic for the top of the top of the top of the top of the opic for the top of the top	acted perate at LOS oposed pacted operate at LOS operate at LOS operate at posed nue & I-10 EE pacted to the e of which F without the mont Avenue . Seven of tions, and F locations, th Street he I-10 t Los Angeles	Two inte D c Pro inte E w of t Pro imp virt inte alo Pro virt inte alo prir acc free inte	enty-five rsection r better ject. The rsection with the he impa- erate at posed I hacted in ually all rsection ng the I of dow est and narily w essing eway. E rsection wntown	e of the 36 in ns would oper with the Pro hree of the in ns would oper Proposed Pr acted interse LOS F with t Project. Ten ntersections, of the LOS I ns, would be -10 corridor of vith outbound the I-10 east Eleven of the ns would be area, and the	npacted erate at LOS posed npacted erate at LOS oject. Eight ctions would the of the including F located on the south een Figueroa Street, I traffic tbound impacted in the e remaining	Thirty interse opera Propo impace opera would Propo Avenu Hoove and C Boule impace opera Propo Would Propo Olymp Pico E Adam	nine of th actions wo e at LOS sed Proje- ted intersa e at LOS operate a sed Proje e & Wilsh or Street & renshaw f vard). Tw ted intersa e at LOS sed Proje operate a sed Proje operate a sed Proje operate a sed Proje sed Proje operate a sed Proje operate a sed Proje operate a sed Proje	e 75 im buld cor D or be ct. Eigl ections E, thre tt LOS I ct (Norn ire Bou Venice Bouleva enty of ections F with ct, eigh tt LOS I ct (Main ard, Main Figuer rd, Bixe	apacted httinue to better with the hteen of the would e of which E without the mandie ilevard, e Boulevard, ard & Venice the would the t of which F without the n Street & ain Street & base on Street & e	Five c inters D or I the P impac opera Propo inters Stree Los A would Propo impac locate freew leadir ramp of the be at freew	of the n sections better, I ropose cted int ate at L bsed Pr sections t, Hill S Angeles d opera bsed Pr cted int ed on H ray and ng to th at Los e impac on-ram ray syst	ine impacts would operations ooth with a d Project. ersections OS E with oroject. Threes the at LOS I oroject. Six ersections along 18th e I-10 east Angeles S ted interse p locations tem (Blaine	ed erate at LOS nd without One of the would the ee reet & 11th h Street, and 8th Street F with the of the nine would be ear the I-10 n Street bound on- treet. Two ctions would s to the e Street	

	Sunday I	Day Event	Saturday	Day Event	Weekday Evening Event			
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)		
			Street. Four intersections would be at the end of off-ramps (San Pedro Street, Adams Boulevard, Vermont Avenue, and Hoover Street). Seven of the impacted intersections would be in the downtown area. The remaining 13 impacted intersections would be located on arterial roadways approaching downtown, of which twelve would operate at LOS D or better.	fifteen intersections would be on arterials serving the downtown area, with the majority of these intersections operating at LOS D or better.	8th Street, Figueroa Street & 8th Street, Figueroa Street & Wilshire Boulevard, Figueroa Street & 5th Street, and Vermont Avenue & Wilshire Boulevard) and six of which would operate at LOS E without the Proposed Project (Figueroa Street & Olympic Boulevard, Figueroa Street & 6th Street, Grand Avenue & 1st Street, Western Avenue & Olympic Boulevard, Vermont Avenue & Olympic Boulevard, and Vermont Avenue & Washington Boulevard). Nine of the impacted intersections, including four LOS F intersections, would be located along the 17th Street (and 16th Street) corridor leading from the I-10 westbound ramps at Los Angeles Street and San Pedro Street. Twenty-seven of the impacted intersections, would be located in the downtown area. Four intersections would be located at the ends of freeway off- ramps (at Vermont Avenue, at Hoover Street, at Adams Boulevard, and at Martin Luther King Jr. Boulevard), with three operating at LOS D or better and one operating at LOS E). The remaining 37 impacted intersections would be located on arterial roadways near or leading to downtown, with 19 intersections operating at LOS D or better, 12 operating at LOS F. Because of the higher background traffic volumes without the project for this scenario, many intersection impacts represent increases in V/C ratio but no change in LOS	southbound to the Harbor Freeway and Grand Avenue northbound to the Hollywood Freeway).		

	Sunday I	Day Event	Saturday	Day Event	Weekday Evening Event			
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)		
					designation, or worsening by only one level of service. For example, of the 38 impacted intersections that would operate at LOS E or LOS F with the Proposed Project, at eight locations the LOS would change from LOS D to LOS E, at four locations it would remain at LOS E (without and with the Proposed Project), at five locations it would worsen from LOS E to LOS F, and at five locations it would remain at LOS F.			
TRANSIT	·				·			
Impacts	Minor Impacts to:Impacts to:• Blue Line• Red Line• Metrolink• Blue Line• Silver Line• Express Bus• Express Bus• Metrolink• Silver Line• Rapid Bus• Express Bus• Express Bus		Minor Impacts to: • Red Line • Blue Line • Silver Line • Express Bus • Local Bus	Impacts to: • Red Line • Blue Line • Expo Line • Metrolink • Silver Line • Express Bus	No Impacts	Impacts to: • Red Line (WB) • Red/Purple Line (EB) • Blue Line • Expo Line • Green Line (East) • Green Line (West) • Gold Line (Pas) • Gold Line (ELA) • Silver Line • Rapid Bus • Express Bus		
Additional Rail Car/Buses Needed to Meet Load Factor	Blue Line3Metrolink1Silver Line2 + 2Express Bus2	Red Line6Blue Line8Expo Line1Metrolink2Silver Line3 + 3Rapid Bus1Express Bus3	Red Line1Blue Line4Silver Line1 + 1Express Bus1Local Bus1	Red Line5Blue Line9Expo Line1Metrolink1Silver Line2 + 2Express Bus2	None Necessary	Red Line13Red/Purple3Blue18Expo10Green (East)5Green (West)4Gold (Pas)2Gold (ELA)4Silver Line3 + 3Rapid Bus7Express Bus5		
Key Issues	These would occur because of the reduced transit schedules at weekends, when additional capacity could be provided, and these impacts could therefore be eliminated by relatively small	These would occur because of the reduced transit schedules at weekends, when additional capacity could be provided, and these impacts could therefore be eliminated by relatively small	These would occur because of the reduced transit schedules at weekends, when additional capacity could be provided, and these impacts could therefore be eliminated by relatively small	These would occur because of the reduced transit schedules at weekends, when additional capacity could be provided, and these impacts could therefore be eliminated by relatively small	Surplus capacity available as Event Center trips are inbound to downtown during P.M. peak period.	These impacts would occur because of the significantly scaled back service schedules that are operated on the transit system in the late evening. Because of the reduced transit schedules at these		

	Sunday	Day Event	Saturda	y Day Event	Weekday Evening Event							
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)						
	increases in transit service.		times, additional capacity would need to be provided during the Weekday Post-Event Hour. Such capacity would be available, and additional service could be provided. The total service necessary to accommodate the Weekday Evening Post-Event Hour passenger loads would still be well below the service levels typically operated during the weekday peak periods.									
FREEWAYS	REEWAYS											

Freeway Segments

Number of Segments by Level of Service	LOS	Future Without Project	Future With Project															
	А	2	0	А	1	1	А	1	0	А	1	1	А	2	0	A	3	1
	В	1	1	В	2	0	В	2	1	В	1	0	В	1	0	В	4	1
	С	6	4	С	6	3	С	5	3	С	6	2	С	2	3	С	13	9
	D	8	7	D	9	4	D	10	4	D	8	4	D	1	3	D	0	6
	E	3	4	E	2	3	Е	2	6	Е	3	0	E	3	0	E	0	0
	F0	0	4	F0	0	9	F0	0	5	F0	1	13	F0	8	9	F0	0	3
	F1	0	0	F1	0	0	F1	0	1	F1	0	0	F1	2	2	F1	0	0
	F2	0	0	F2	0	2	F2	0	0									
	F3	0	0	F3	1	1	F3	0	0									
		20	20		20	20		20	20		20	20		20	20		20	20

	Sunday I	Day Event	Saturday	Day Event	Weekday Evening Event			
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)		
Number of Segments	4 segments SR-110 North of Alpine Street (SB) (1.005) F(0) I-5 South of Stadium Way (SB) (1.040) F(0) US-101 at Glendale Blvd (SB) (1.094) F(0) US-101 South of Vermont Ave (SB) (1.180) F(0)	9 segments I-110 at Vernon Ave (Mainline) (SB) (1.010) $F(0)$ SR-110 South of Ave 43 (NB) (1.013) $F(0)$ SR-110 Between James Wood Blvd and Olympic Blvd (NB) (1.059) $F(0)$ I-10 West of Vermont Ave (WB) (1.060) $F(0)$ US-101 South of Vermont (NB) (1.072) $F(0)$ US-101 North of Vignes St (SB) (1.081) $F(0)$ I-5 West of Indiana Street (SB) (1.121) $F(0)$ US-101 at Glendale Blvd (NB) (1.138) $F(0)$ SR-110 South of US-101 (NB) (1,243) $F(0)$	6 segments 4 mainline 2 HOV I-5 South of Stadium Way (SB) (1.011) F(0) I-110 North of Martin Luther King Jr. Blvd (HOV) (NB) (1.015) F(0) US-101 at Glendale Blvd (SB) (1.064) F(0) US-101 North of Vignes St (NB) (1.067) F(0) US-101 South of Vermont Ave (SB) (1.150) F(0) I-110 at Slauson Ave (HOV) (NB) (1.252) F(1)	13 segments11 mainline2 HOVI-10 West of Vermont Ave (WB) (1.044) F(0)I-5 South of Stadium Way (NB) (1.055) F(0)US-101 South of Vermont Ave (SB) (1.084) F(0)I-10 East of San Pedro Street (EB) (1.088) F(0)I-110 at Vernon Ave (Mainline) (SB) (1.089) F(0)I-110 North of Martin Luther KingJr. Blvd (HOV) (SB) (1.093) F(0)I-5 West of Indiana Street (SB) (1.112) F(0)I-110 at Slauson Ave (HOV) (SB) (1.119) F(0)SR-110 North of Alpine St (NB) (1.129) F(0)US-101 at Glendale Blvd (NB) (1.140) F(0)SR-110 Between James Wood Blvdand Olympic Blvd (NB) (1.162) F(0)US-101 North of Vignes St (SB) (1.174) F(0)SR-110 South of US-101 (NB) (1.237) F(0)	13 segmentsI-110 South of Martin Luther King Jr. Blvd (Mainline) (NB) (1.025) F(0)I-5 South of Stadium Way (SB) (1.082) F(0)SR-110 Between James Wood Blvd and Olympic Blvd (SB) (1.102) F(0)US-101 at Glendale Blvd (SB) (1.136) F(0)I-5 West of Indiana Street (NB) (1.142) F(0)I-10 at Vernon (Mainline) (NB) (1.179) F(0)US-101 North of Vignes St (NB) (1.187) F(0)US-101 South of Vermont (SB) (1.216) F(0)SR-110 North of Alpine St (SB) (1.227) F(0)I-10 East of San Pedro St (WB) (1.276) F(1)I-10 West of Vermont Ave (EB) (1.361) F(2)SR-110 South of US-101 (SB) (1.374) F(2)I-10 East of Crenshaw Blvd (EB) (1.571) F(3)	3 segments US-101 at Glendale Blvd (1.014) F(0) SR-110 South of US-101 (1.016) F(0) I-5 West of Indiana Street (1.017) F(0)		

	Sunday	Day Event	Saturday		
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Рге-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Eve (4:30–5
Key Issues	The D/C ratio would be less than 1.10 at three of the four impacted freeway locations, and would be between 1.10 and 1.20 at the one remaining location.	At six of the nine impacted freeway locations, the D/C ratio would be less than 1.10. At two of the remaining impacted freeway locations, the D/C ratio would be between 1.10 and 1.20, and at one location the D/C ratio would be greater than 1.20.	The majority of D/C ratios at LOS F locations would be less than a D/C ratio of 1.10. At one location the D/C ratio would be between 1.10 and 1.20, and at one location it would be greater than 1.20.	The D/C ratio would be less than 1.10 at six of the impacted locations, and would be between 1.10 and 1.20 at a further six locations. At the remaining impacted locations the D/C ratio would be greater than 1.20.	At two of the 13 in locations, the D/C less than 1.10. F locations would h between 1.10 and impacted location D/C ratio between The remaining the locations would b the project. The le 10 of the 13 impa would be LOS F Proposed Project impacted location D/C ratio would b percent at six loca 15 percent to 25 p the other four loca
FREEWAYS	DAMPS				
FREEWAT OFF					
Number of Impacts	4 off-ramps 1 ramp 3 lane	N/A	5 off-ramps 2 ramp 3 lane	N/A	8 off-ramps 6 ramp 2 lane
	Los Angeles Street WB Off-Ramp (Mainline)		Los Angeles Street WB Off-Ramp (Mainline)		Grand Avenue N (Mainline)
	Grand Avenue NB Off-Ramp (Lane)		Hoover Street EB Off-Ramp (Mainline)		Los Angeles Stre (Mainline)
	9th Street NB Off-Ramp (Lane)		Grand Avenue NB Off-Ramp (Lane)		9th Street NB Off (Mainline)
	Hoover Street EB Off-Ramp (Lane)		Adams Boulevard NB Off-Ramp (Lane)		Hoover Street EB (Mainline)
			9th Street NB Off-Ramp (Lane)		6th Street SB Off (Mainline)
					Olympic Bouleva (Mainline)
					Martin Luther Kin NB Off-Ramp (Lane)
					Adams Boulevard

Weekday Evening Event										
ent Hour 5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)									
mpacted freeway cratio would be rive impacted ave a D/C ratio d 1.20. Three is would have a in 1.20 and 1.30. ree impacted ree LOS F without evel of service at acted locations without the c. Of these 10 is, the increase in re less than 10 ations, and in the percent range at ations.	All three of impacted freeway locations would have a D/C ratio less than 1.02.									
	N/A									
B Off-Ramp										
et WB Off-Ramp										
-Ramp										
8 Off-Ramp										
-Ramp										
rd SB Off-Ramp										
g Jr. Boulevard										
d NB Off-Ramp										

	Sund	day Day Event	Satur	day Day Event	
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Ev (4:30–5
					Lane)
Number of Impacts	N/A	7 on-ramps Los Angeles Street EB On-Ramp Washington Boulevard SB On- Ramp Blaine Street SB On-Ramp 8th Street SB On-Ramp 5th Street NB On-Ramp 11th Street NB On-Ramp	N/A	11 on-rampsLos Angeles St EB On-Ramp(US-101)Los Angeles St EB On-Ramp (I-10)Washington Boulevard SB On-RampBlaine Street SB On-Ramp8th Street SB On-RampGrand Ave WB On-Ramp (I-10/I-Glendale Boulevard On-Ramp5th Street NB On-Ramp8th Street NB On-Ramp9th Street NB On-Ramp9th Street NB On-Ramp11th Street NB On-Ramp	N/A
Key Issues		At three of these locations, volumes would exceed ramp capacities by less than 10 percent.		At three of these locations, volumes would exceed ramp capacities by less than 10 percent.	
CONGESTION I	MANAGEMENT PLAN			· · · ·	
Intersections					
Number of Impacts	N/A	N/A	N/A	N/A	No impacts
<u>Freeways</u>					
Number of Impa	cts	N/A	N/A	N/A	19
<u>Transit</u>					
	See Transit Analysia	Ν/Δ	Ν/Δ	N/A	NI/A

Weekday Evening Event									
ent Hour 5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)								
	6 on-ramps Los Angeles Street EB On-Ramp Blaine Street SB On-Ramp 5th Street NB On-Ramp 8th Street NB On-Ramp 9th Street NB On-Ramp 11th Street NB On-Ramp								
	N/A								
	N/A								
	N/A								

)	Sunday Day Post-Event Hour (4:30–5:30 р.м.)										
		Future W Proje Condit	Future Without Project Conditions		Future With Project Conditions		Significant	Future \ Proj Condi	Nithout ject itions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
1	Georgia Street & Olympic Boulevard	0.314	A	0.438	A	0.124	No	0.356	A	0.581	A	0.225	No
2	Francisco Street & Olympic Boulevard	0.293	A	0.492	A	0.199	No	0.211	A	0.499	A	0.288	No
3	Figueroa Street & Olympic Boulevard	0.392	A	0.622	В	0.230	No	0.380	A	0.567	A	0.187	No
4	Flower Street & Olympic Boulevard	0.405	A	0.667	В	0.262	No	0.340	A	0.690	В	0.350	No
5	Grand Avenue & Olympic Boulevard	0.272	A	0.361	A	0.089	No	0.237	A	0.304	A	0.067	No
6	Olive Street & Olympic Boulevard	0.303	A	0.474	A	0.171	No	0.318	A	0.385	A	0.067	No
7	Hill Street & Olympic Boulevard	0.276	А	0.299	A	0.023	No	0.273	A	0.294	A	0.021	No
8	Broadway & Olympic Boulevard	0.475	A	0.498	A	0.023	No	0.463	A	0.463	A	0.000	No
9	Main Street & Olympic Boulevard	0.442	A	0.467	A	0.025	No	0.426	A	0.424	A	-0.002	No
10	Los Angeles Street & Olympic Boulevard	0.263	A	0.263	A	0.000	No	0.146	A	0.149	A	0.003	No
11	Santee Street & Olympic Boulevard	0.272	А	0.272	А	0.000	No	0.164	А	0.179	A	0.015	No

			Pre-l	Տսո Event Hoւ	day Da ur (12:0	у 0—1:00 р.м.))		Pos	Sur t-Event He	nday Day our (4:30	/)—5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proje Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ject tions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
12	Maple Avenue & Olympic Boulevard	0.375	А	0.375	A	0.000	No	0.262	A	0.291	A	0.029	No
13	Maple Avenue & 9th Street	0.371	А	0.372	А	0.001	No	0.212	Α	0.234	Α	0.022	No
14	San Pedro Street & 9th Street	0.285	A	0.309	A	0.024	No	0.197	A	0.233	A	0.036	No
15	L.A. Live Way & 11th Street	0.185	Α	0.105	Α	-0.080	No	0.125	Α	0.625	В	0.500	No
16	Figueroa Street & 11th Street	0.243	A	0.254	A	0.011	No	0.242	A	0.238	A	-0.004	No
17	Flower Street & 11th Street	0.246	Α	0.224	Α	-0.022	No	0.249	Α	0.306	Α	0.057	No
18	Grand Avenue & 11th Street	0.161	Α	0.343	Α	0.182	No	0.162	Α	0.221	Α	0.059	No
19	Olive Street & 11th Street	0.207	Α	0.392	Α	0.185	No	0.163	Α	0.261	Α	0.098	No
20	Figueroa Street & 12th Street	0.132	A	0.138	A	0.006	No	0.135	A	0.122	A	-0.013	No
21	Flower Street & 12th Street	0.088	Α	0.088	Α	0.000	No	0.092	Α	0.141	Α	0.049	No
22	Grand Avenue & 12th Street	0.116	Α	0.123	А	0.007	No	0.125	Α	0.294	А	0.169	No
23	Olive Avenue & 12th Street	0.167	Α	0.347	Α	0.180	No	0.139	Α	0.185	Α	0.046	No
24	L.A. Live Way & Pico Boulevard	0.412	A	0.514	A	0.102	No	0.341	A	0.394	A	0.053	No
25	L.A. Live Way & Bond Street/ I-10 & I-110 Off- Ramps	0.254	A	0.390	A	0.136	No	0.226	A	0.320	A	0.094	No

			Pre-	Sun Event Hou	iday Daj ur (12:0	у 0—1:00 р.м.))		Pos	Sur t-Event He	nday Day our (4:30	/)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condi	With ect tions	Change	Significant	Future \ Proj Condi	Without ject itions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
26	Figueroa Street & Pico Boulevard	0.321	A	0.491	A	0.170	No	0.383	A	0.492	A	0.109	No
27	Flower Street & Pico Boulevard	0.255	A	0.387	A	0.132	No	0.279	A	0.469	A	0.190	No
28	Grand Avenue & Pico Boulevard	0.188	A	0.257	A	0.069	No	0.178	A	0.454	A	0.276	No
29	Olive Street & Pico Boulevard	0.162	A	0.442	A	0.280	No	0.149	A	0.197	A	0.048	No
30	Hill Street & Pico Boulevard	0.166	Α	0.389	Α	0.223	No	0.119	Α	0.591	Α	0.472	No
31	Broadway & Pico Boulevard	0.258	Α	0.325	Α	0.067	No	0.205	Α	0.249	А	0.044	No
32	Main Street & Pico Boulevard	0.399	A	0.453	A	0.054	No	0.378	A	0.396	A	0.018	No
33	Blaine Street & Olympic Boulevard	0.413	A	0.677	В	0.264	No	0.383	A	0.568	A	0.185	No
34	Blaine Street & SR-110 SB Off-Ramp	0.252	A	0.697	В	0.445	No	0.189	A	0.225	A	0.036	No
35	Blaine Street & 11th Street	0.405	А	0.760	С	0.355	Yes	0.469	Α	1.323	F	0.854	Yes
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.077	A	0.255	A	0.178	No	0.148	A	0.289	A	0.141	No
37	Figueroa Street & Venice Boulevard	0.237	A	0.365	A	0.128	No	0.236	A	0.539	A	0.303	No

			Pre-l	Sun Event Hou	iday Daj ur (12:0	у 0—1:00 р.м.))		Pos	Sur t-Event H	nday Day our (4:30	/)—5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condi	With ect tions	Change	Significant	Future \ Proj Condi	Vithout ject tions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
38	Flower Street & Venice Boulevard	0.185	A	0.243	A	0.058	No	0.181	A	0.511	A	0.330	No
39	Grand Avenue & Venice Boulevard	0.111	A	0.162	A	0.051	No	0.118	A	0.536	A	0.418	No
40	Olive Street & Venice Boulevard	0.125	A	0.379	A	0.254	No	0.119	A	0.596	A	0.477	No
41	Grand Avenue & 17th Street	0.277	Α	0.319	Α	0.042	No	0.265	Α	0.507	Α	0.242	No
42	Olive Street & 17th Street	0.293	Α	0.969	E	0.676	Yes	0.245	Α	0.388	Α	0.143	No
43	Hill Street & 17th Street	0.297	Α	0.839	D	0.542	Yes	0.256	Α	0.917	E	0.661	Yes
44	Broadway & 17th Street	0.309	Α	0.835	D	0.526	Yes	0.248	Α	0.339	Α	0.091	No
45	Main Street & 17th Street	0.309	А	0.813	D	0.504	Yes	0.253	Α	0.289	А	0.036	No
46	Los Angeles Street & 17th Street	0.341	A	0.858	D	0.517	Yes	0.236	A	0.271	A	0.035	No
47	Flower Street & 18th Street	0.073	Α	0.080	Α	0.007	No	0.068	Α	0.194	Α	0.126	No
48	Grand Avenue & 18th Street	0.177	Α	0.255	Α	0.078	No	0.173	Α	0.502	Α	0.329	No
49	Olive Street & 18th Street	0.275	Α	0.494	Α	0.219	No	0.195	Α	0.322	Α	0.127	No
50	Hill Street & 18th Street	0.151	Α	0.241	Α	0.090	No	0.130	Α	1.021	F	0.891	Yes
51	Broadway & 18th Street	0.200	Α	0.232	Α	0.032	No	0.152	Α	0.791	С	0.639	Yes
52	Main Street & 18th Street	0.225	А	0.225	Α	0.000	No	0.214	Α	0.808	D	0.594	Yes
53	Los Angeles Street & 18th Street	0.280	A	0.280	A	0.000	No	0.315	A	1.503	F	1.188	Yes

			Pre-l	Տսո Event Hoւ	day Da ur (12:0	у 0—1:00 р.м.)		Pos	Sur t-Event He	nday Day our (4:30	/)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future \ Proj Condi	Without ject itions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
54	Figueroa Street & Washington Boulevard	0.398	A	0.438	A	0.040	No	0.339	A	0.566	A	0.227	No
55	Flower Street & Washington Boulevard	0.243	A	0.247	A	0.004	No	0.189	A	0.460	A	0.271	No
56	Grand Avenue & Washington Boulevard	0.192	A	0.248	A	0.056	No	0.161	A	0.489	A	0.328	No
57	Olive Street & Washington Boulevard	0.165	A	0.334	A	0.169	No	0.146	A	0.330	A	0.184	No
58	Hill Street & Washington Boulevard	0.151	A	0.306	A	0.155	No	0.127	A	0.275	A	0.148	No
59	Broadway & Washington Boulevard	0.228	A	0.289	A	0.061	No	0.186	A	0.268	A	0.082	No
60	Main Street & Washington Boulevard	0.310	A	0.333	A	0.023	No	0.268	A	0.412	A	0.144	No
61	Los Angeles Street & Washington Boulevard	0.138	A	0.165	A	0.027	No	0.103	A	0.202	A	0.099	No
62	San Pedro Street & Washington Boulevard	0.364	A	0.391	A	0.027	No	0.302	A	0.435	A	0.133	No
63	Figueroa Street & Adams Boulevard	0.621	В	0.621	В	0.000	No	0.563	A	0.606	В	0.043	No
64	Flower Street & Adams Boulevard	0.240	A	0.249	A	0.009	No	0.249	A	0.420	A	0.171	No

			Pre-l	Տսո Event Hoւ	day Da ur (12:0	у)—1:00 р.м.))		Pos	Sur t-Event He	nday Day our (4:30	/)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proje Condit	With ect tions	Change	Significant	Future V Proj Condi	Nithout ject itions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
65	I-110 NB Off-Ramps & Adams Boulevard	0.294	A	0.697	В	0.403	No	0.308	A	0.348	A	0.040	No
66	Grand Avenue & Adams Boulevard	0.185	A	0.372	A	0.187	No	0.182	A	0.249	A	0.067	No
67	Hill Street & Adams Boulevard	0.187	A	0.595	A	0.408	No	0.146	A	0.181	A	0.035	No
68	Broadway & Adams Boulevard	0.223	A	0.263	A	0.040	No	0.185	A	0.195	A	0.010	No
69	Main Street & Adams Boulevard	0.307	A	0.307	A	0.000	No	0.275	A	0.275	A	0.000	No
70	Flower Street & Jefferson Boulevard	0.237	A	0.238	A	0.001	No	0.228	A	0.376	A	0.148	No
71	Figueroa Street & Exposition Boulevard	0.597	A	0.608	В	0.011	No	0.451	A	0.451	A	0.000	No
72	Flower Street & 37th Street	0.124	Α	0.125	Α	0.001	No	0.181	Α	0.337	Α	0.156	No
73	Hope Street & 37th Street	0.202	Α	0.216	Α	0.014	No	0.231	Α	0.231	Α	0.000	No
74	Hill Street & 37th Street	0.049	Α	0.108	А	0.059	No	0.050	A	0.061	А	0.011	No
75	Broadway & 37th Street	0.087	Α	0.087	А	0.000	No	0.064	Α	0.064	А	0.000	No
76	Figueroa Street & 39th Street	0.200	A	0.219	A	0.019	No	0.292	A	0.293	A	0.001	No
77	I-110 HOV Ramps & 39th Street	0.083	A	0.178	A	0.095	No	0.108	A	0.279	A	0.171	No

			Pre-l	Տսո Event Hoւ	iday Da ur (12:0	у 0—1:00 р.м.)		Pos	Sur t-Event He	nday Day our (4:30	/)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Without ject itions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
78	Figueroa Street & Martin Luther King Jr Boulevard	0.549	A	0.550	A	0.001	No	0.627	В	0.757	С	0.130	Yes
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.604	В	0.605	В	0.001	No	0.597	A	0.747	С	0.150	Yes
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.533	A	0.573	A	0.040	No	0.429	A	0.443	A	0.014	No
81	Georgia Street &9th Street	0.375	Α	0.537	Α	0.162	No	0.344	Α	0.556	Α	0.212	No
82	Francisco Street & 9th Street	0.161	A	0.279	A	0.118	No	0.141	A	0.481	A	0.340	No
83	Figueroa Street & 9th Street	0.361	Α	0.485	Α	0.124	No	0.333	Α	0.460	Α	0.127	No
84	Flower Street & 9th Street	0.324	Α	0.395	Α	0.071	No	0.263	Α	0.387	Α	0.124	No
85	Broadway & 9th Street	0.339	Α	0.339	Α	0.000	No	0.217	Α	0.277	Α	0.060	No
86	Bixel Street & 8th Street	0.373	А	0.373	Α	0.000	No	0.403	A	0.549	А	0.146	No
87	Francisco Street & 8th Street	0.181	A	0.307	A	0.126	No	0.191	A	0.417	A	0.226	No
88	Figueroa Street & 8th Street	0.311	Α	0.701	С	0.390	Yes	0.293	Α	0.561	Α	0.268	No
89	Flower Street & 8th Street	0.232	Α	0.553	Α	0.321	No	0.225	Α	0.423	Α	0.198	No
90	Hill Street & 8th Street	0.230	А	0.323	Α	0.093	No	0.219	Α	0.260	А	0.041	No
91	Broadway & 8th Street	0.524	А	0.551	Α	0.027	No	0.407	А	0.407	А	0.000	No
92	Bixel Street & Wilshire Boulevard	0.290	A	0.325	A	0.035	No	0.268	A	0.289	A	0.021	No

			Pre-l	Տսո Event Hoւ	iday Da ur (12:0	у 0—1:00 р.м.))		Pos	Sur E-Event H	nday Day our (4:30	/)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proje Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	e With ject itions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
93	Figueroa Street & Wilshire Boulevard	0.256	A	0.291	A	0.035	No	0.301	A	0.608	В	0.307	No
94	Lucas Avenue & 6th Street	0.325	Α	0.532	Α	0.207	No	0.333	Α	0.366	Α	0.033	No
95	Bixel Street & 6th Street	0.251	А	0.306	Α	0.055	No	0.278	Α	0.278	Α	0.000	No
96	Figueroa Street & 6th Street	0.219	А	0.346	Α	0.127	No	0.225	Α	0.385	Α	0.160	No
97	Flower Street & 6th Street	0.189	А	0.386	Α	0.197	No	0.201	A	0.203	Α	0.002	No
98	Grand Avenue & 6th Street	0.159	А	0.261	Α	0.102	No	0.095	A	0.157	Α	0.062	No
99	Hill Street & 6th Street	0.247	А	0.271	Α	0.024	No	0.176	А	0.369	Α	0.193	No
100	Spring Street & 6th Street	0.303	Α	0.346	Α	0.043	No	0.268	Α	0.316	Α	0.048	No
101	Main Street & 6th Street	0.216	А	0.216	Α	0.000	No	0.221	A	0.444	Α	0.223	No
102	Figueroa Street & 5th Street	0.170	А	0.182	Α	0.012	No	0.171	A	0.420	Α	0.249	No
103	Grand Avenue & 5th Street	0.140	А	0.235	Α	0.095	No	0.153	А	0.203	Α	0.050	No
104	Olive Street & 5th Street	0.203	Α	0.244	Α	0.041	No	0.214	Α	0.334	Α	0.120	No
105	Hill Street & 5th Street	0.221	Α	0.311	Α	0.090	No	0.168	Α	0.311	Α	0.143	No
106	Spring Street & 5th Street	0.204	Α	0.247	Α	0.043	No	0.223	Α	0.223	Α	0.000	No
107	Main Street & 5th Street	0.126	А	0.126	Α	0.000	No	0.129	A	0.215	Α	0.086	No
108	Figueroa Street & 2nd Street	0.162	А	0.162	Α	0.000	No	0.172	A	0.338	Α	0.166	No
109	Beaudry Street & 1st Street	0.130	А	0.137	Α	0.007	No	0.162	А	0.164	Α	0.002	No
110	Hope Street & 1st Street	0.289	Α	0.339	Α	0.050	No	0.274	А	0.597	Α	0.323	No
111	Grand Avenue & 1st Street	0.384	Α	0.424	Α	0.040	No	0.363	А	0.754	С	0.391	Yes
112	Olive Street & 1st Street	0.243	Α	0.248	Α	0.005	No	0.252	А	0.395	Α	0.143	No

City of Los Angeles SCH. No. 2011031049 Convention and Event Center Project Draft EIR April 5, 2012

			Pre-l	Sun Event Hou	iday Da ur (12:0	у 0—1:00 р.м.))		Pos	Sur t-Event H	nday Day our (4:30	/)—5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condi	With ect tions	Change	Significant	Future \ Proj Condi	Vithout ject tions	Future Proj Condi	e With ject itions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
113	Hill Street & 1st Street	0.289	А	0.353	А	0.064	No	0.268	Α	0.437	Α	0.169	No
114	Spring Street & 1st Street	0.213	Α	0.294	А	0.081	No	0.226	Α	0.228	Α	0.002	No
115	Main Street & 1st Street	0.268	Α	0.268	А	0.000	No	0.263	Α	0.365	A	0.102	No
116	Hope Street & Temple Street	0.386	A	0.399	A	0.013	No	0.308	A	0.473	A	0.165	No
117	Main Street & Aliso Street	0.295	Α	0.295	Α	0.000	No	0.267	Α	0.552	Α	0.285	No
118	Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.181	A	0.181	A	0.000	No	0.191	A	0.263	A	0.072	No
119	Grand Avenue & US-101 NB Ramps	0.449	A	0.449	A	0.000	No	0.461	A	0.894	D	0.433	Yes
120	Beaudry Avenue & Sunset Boulevard	0.440	A	0.451	A	0.011	No	0.607	В	0.607	В	0.000	No
121	Figueroa Street & Cesar Chavez Avenue	0.456	A	0.456	A	0.000	No	0.509	A	0.509	A	0.000	No
122	Grand Avenue & Cesar Chavez Avenue	0.596	A	0.596	A	0.000	No	0.389	A	0.392	A	0.003	No
123	Spring Street & Cesar Chavez Avenue	0.506	A	0.561	A	0.055	No	0.590	A	0.590	A	0.000	No
124	Main Street & Cesar Chavez Avenue	0.471	A	0.471	A	0.000	No	0.518	A	0.547	A	0.029	No
125	Alameda Street & Cesar Chavez Avenue	0.578	A	0.578	A	0.000	No	0.651	В	0.651	В	0.000	No
126	Main Street & Alpine Street	0.238	Α	0.251	Α	0.013	No	0.196	Α	0.219	Α	0.023	No

City of Los Angeles SCH. No. 2011031049 Convention and Event Center Project Draft EIR April 5, 2012

			Pre-l	Sun Event Hou	iday Da ur (12:0	у 0—1:00 р.м.)		Pos	Sur t-Event H	nday Day our (4:30	/)—5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condi	With ect tions	Change	Significant	Future \ Proj Condi	Vithout ject tions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
127	Alameda Street & Alpine Street	0.165	A	0.167	A	0.002	No	0.128	A	0.129	A	0.001	No
128	Hill Street & Alpine Street	0.319	А	0.389	Α	0.070	No	0.263	Α	0.433	Α	0.170	No
129	Hill Street & College Street	0.475	Α	0.491	Α	0.016	No	0.421	Α	0.591	Α	0.170	No
130	Sunset Boulevard & Elysian Park Avenue	0.820	D	0.820	D	0.000	No	0.645	В	0.657	В	0.012	No
131	Glendale Boulevard & Bellevue Avenue	0.314	A	0.362	A	0.048	No	0.307	A	0.443	A	0.136	No
132	Glendale Boulevard & Temple Street	0.518	A	0.572	A	0.054	No	0.515	A	0.655	В	0.140	No
133	Alvarado Street & US-101 WB Ramps	0.479	A	0.480	A	0.001	No	0.494	A	0.556	A	0.062	No
134	Alvarado Street & US-101 EB Ramps	0.433	A	0.433	A	0.000	No	0.452	A	0.475	A	0.023	No
135	Alvarado Street & Beverly Boulevard	0.399	A	0.418	A	0.019	No	0.455	A	0.473	A	0.018	No
136	Vermont Avenue & 6th Street	0.553	A	0.563	A	0.010	No	0.529	A	0.543	A	0.014	No
137	Alvarado Street & 6th Street	0.456	Α	0.478	Α	0.022	No	0.454	Α	0.471	Α	0.017	No
138	Western Avenue & Wilshire Boulevard	0.610	В	0.632	В	0.022	No	0.664	В	0.679	В	0.015	No
139	Normandie Avenue & Wilshire Boulevard	0.379	A	0.396	A	0.017	No	0.496	A	0.515	A	0.019	No

			Pre-l	Տսո Event Hoւ	day Da ur (12:0	у 0—1:00 р.м.)		Pos	Sur t-Event Ho	nday Day our (4:30	/)—5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proje Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ject tions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
140	Vermont Avenue & Wilshire Boulevard	0.796	С	0.811	D	0.015	No	0.770	С	0.785	С	0.015	No
141	Alvarado Street & Wilshire Boulevard	0.413	A	0.423	A	0.010	No	0.469	A	0.521	A	0.052	No
142	Vermont Avenue & 8th Street	0.715	С	0.729	С	0.014	No	0.635	В	0.639	В	0.004	No
143	Alvarado Street & 8th Street	0.477	Α	0.505	Α	0.028	No	0.418	Α	0.509	Α	0.091	No
144	Western Avenue & Olympic Boulevard	0.652	В	0.699	В	0.047	No	0.824	D	0.899	D	0.075	Yes
145	Normandie Avenue & Olympic Boulevard	0.479	A	0.523	A	0.044	No	0.500	A	0.557	A	0.057	No
146	Vermont Avenue & Olympic Boulevard	0.828	D	0.905	E	0.077	Yes	0.819	D	0.896	D	0.077	Yes
147	Alvarado Street & Olympic Boulevard	0.528	A	0.672	В	0.144	No	0.604	В	0.691	В	0.087	No
148	Union Avenue & Olympic Boulevard	0.481	A	0.677	В	0.196	No	0.560	A	0.618	В	0.058	No
149	Western Avenue & Pico Boulevard	0.566	A	0.583	A	0.017	No	0.553	A	0.577	A	0.024	No
150	Normandie Avenue & Pico Boulevard	0.524	A	0.539	A	0.015	No	0.445	A	0.451	A	0.006	No
151	Vermont Avenue & Pico Boulevard	0.684	В	0.727	С	0.043	Yes	0.649	В	0.719	С	0.070	Yes

			Pre-l	Տսո Event Hoւ	day Da ur (12:0	у)—1:00 р.м.))		Pos	Sur t-Event He	nday Day our (4:30	/)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proje Condit	With ect tions	Change	Significant	Future \ Proj Condi	Nithout ject itions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
152	Alvarado Street & Pico Boulevard	0.619	В	0.867	D	0.248	Yes	0.644	В	0.834	D	0.190	Yes
153	Union Avenue & Pico Boulevard	0.579	A	0.677	В	0.098	No	0.615	В	0.829	D	0.214	Yes
154	Alvarado Street & Hoover Street	0.332	A	0.334	A	0.002	No	0.406	A	0.515	A	0.109	No
155	Western Avenue & Venice Boulevard	0.499	A	0.544	A	0.045	No	0.551	A	0.611	В	0.060	No
156	Normandie Avenue & Venice Boulevard	0.425	A	0.464	A	0.039	No	0.389	A	0.448	A	0.059	No
157	Vermont Avenue & Venice Boulevard	0.556	A	0.630	В	0.074	No	0.567	A	0.625	В	0.058	No
158	Hoover Street & Venice Boulevard	0.529	A	0.562	A	0.033	No	0.586	A	0.739	С	0.153	Yes
159	Western Avenue & Washington Boulevard	0.596	A	0.643	В	0.047	No	0.522	A	0.560	A	0.038	No
160	Normandie Avenue & Washington Boulevard	0.513	A	0.548	A	0.035	No	0.432	A	0.439	A	0.007	No
161	Vermont Avenue & Washington Boulevard	0.599	A	0.676	В	0.077	No	0.604	В	0.669	В	0.065	No
162	Hoover Street & Washington Boulevard	0.561	A	0.699	В	0.138	No	0.555	А	0.673	В	0.118	No

			Pre-l	Sun Event Hou	iday Da ur (12:0	у 0–1:00 р.м.))		Pos	Sur t-Event H	nday Day our (4:30	/)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ject tions	Future Proj Condi	e With ject tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
163	I-10 WB Ramps & 20th Street	0.564	A	0.561	A	-0.003	No	0.563	A	0.769	С	0.206	Yes
164	Vermont Avenue & I-10 EB Ramps	0.684	В	0.767	С	0.083	Yes	0.726	С	0.726	С	0.000	No
165	Hoover Street & I-10 EB Ramps	0.574	A	0.687	В	0.113	No	0.552	A	0.552	A	0.000	No
166	Hill Street & 16th Street	0.115	А	0.472	Α	0.357	No	0.111	Α	0.969	E	0.858	Yes
167	Broadway & 16th Street	0.125	Α	0.273	Α	0.148	No	0.110	Α	0.338	А	0.228	No
168	Main Street & 16th Street	0.221	А	0.353	Α	0.132	No	0.187	Α	0.349	Α	0.162	No
169	Los Angeles Street & 16th Street	0.088	A	0.265	A	0.177	No	0.076	A	0.203	A	0.127	No
170	San Pedro Street & 16th Street	0.331	A	0.479	A	0.148	No	0.281	A	0.588	A	0.307	No
171	Central Avenue & 16th Street	0.371	A	0.380	A	0.009	No	0.298	A	0.337	A	0.039	No
172	Central Avenue & Washington Boulevard	0.416	A	0.464	A	0.048	No	0.301	A	0.454	A	0.153	No
173	Wilton Place & Wilshire Boulevard	0.447	A	0.447	A	0.000	No	0.419	A	0.430	A	0.011	No
174	Arlington Avenue & Olympic Boulevard	0.365	A	0.400	A	0.035	No	0.385	A	0.436	A	0.051	No
175	Arlington Avenue & Pico Boulevard	0.391	A	0.401	A	0.010	No	0.348	A	0.364	A	0.016	No

			Pre-l	Sun Event Hou	iday Da ur (12:0	у 0–1:00 р.м.)		Pos	Sur t-Event H	nday Day our (4:30	/)—5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condi	With ect tions	Change	Significant	Future Pro Cond	Without ject itions	Future Proj Condi	e With ject itions	Change	Signi	ficant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Imp	pact
176	Arlington Avenue & Venice Boulevard	0.510	А	0.544	A	0.034	No	0.485	A	0.536	A	0.051	Ν	10
177	Arlington Avenue & Washington Boulevard	0.463	А	0.505	A	0.042	No	0.422	A	0.423	A	0.001	N	10
Total	# of Impacted Intersections								11					18
# of Ir	npacted Intersections with FW	P LOS C						36%	4			:	39%	7
# of Ir	npacted Intersections with FW	P LOS D						45%	5			:	33%	6
# of Ir	npacted Intersections with FW	P LOS E						9%	2				11%	2
# of Ir	npacted Intersections with FW	P LOS F						9%	0				17%	3
Sourc	e: The Mobility Group, 2011.			·										

			Pre-l	Satu Event Hou	rday Da ır (12:00	iy)—1:00 р.м.))		Post	Satu E-Event Ho	irday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proje Condit	With ect ions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
1	Georgia Street & Olympic Boulevard	0.567	A	0.640	В	0.073	No	0.577	A	0.834	D	0.257	Yes
2	Francisco Street & Olympic Boulevard	0.441	A	0.629	В	0.188	No	0.373	A	0.597	А	0.224	No
3	Figueroa Street & Olympic Boulevard	0.610	В	0.856	D	0.246	Yes	0.623	В	0.869	D	0.246	Yes
4	Flower Street & Olympic Boulevard	0.600	A	0.924	E	0.324	Yes	0.530	A	0.865	D	0.335	Yes
5	Grand Avenue & Olympic Boulevard	0.404	A	0.608	В	0.204	No	0.358	A	0.468	A	0.110	No
6	Olive Street & Olympic Boulevard	0.509	A	0.727	С	0.218	Yes	0.446	A	0.613	В	0.167	No
7	Hill Street & Olympic Boulevard	0.538	A	0.689	В	0.151	No	0.438	A	0.508	A	0.070	No
8	Broadway & Olympic Boulevard	0.727	С	0.753	С	0.026	No	0.627	В	0.632	В	0.005	No
9	Main Street & Olympic Boulevard	0.591	A	0.609	В	0.018	No	0.582	А	0.579	A	-0.003	No
10	Los Angeles Street & Olympic Boulevard	0.399	A	0.399	A	0.000	No	0.274	A	0.274	A	0.000	No
11	Santee Street & Olympic Boulevard	0.363	A	0.363	A	0.000	No	0.260	А	0.275	А	0.015	No

			Pre-l	Satu Event Hou	rday Da ur (12:00	іу)—1:00 р.м.))		Pos	Satu t-Event Ho	ırday Da our (4:30	у)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ject tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
12	Maple Avenue & Olympic Boulevard	0.463	A	0.480	A	0.017	No	0.356	A	0.368	A	0.012	No
13	Maple Avenue & 9th Street	0.486	Α	0.486	Α	0.000	No	0.344	Α	0.360	Α	0.016	No
14	San Pedro Street & 9th Street	0.502	A	0.523	A	0.021	No	0.333	A	0.363	A	0.030	No
15	L.A. Live Way & 11th Street	0.248	Α	0.109	Α	-0.139	No	0.261	Α	0.641	В	0.380	No
16	Figueroa Street & 11th Street	0.437	A	0.436	A	-0.001	No	0.470	A	0.464	A	-0.006	No
17	Flower Street & 11th Street	0.458	Α	0.462	Α	0.004	No	0.406	Α	0.469	Α	0.063	No
18	Grand Avenue & 11th Street	0.215	Α	0.393	Α	0.178	No	0.251	Α	0.332	Α	0.081	No
19	Olive Street & 11th Street	0.325	Α	0.551	Α	0.226	No	0.287	А	0.311	Α	0.024	No
20	Figueroa Street & 12th Street	0.284	A	0.289	A	0.005	No	0.348	A	0.336	A	-0.012	No
21	Flower Street & 12th Street	0.153	Α	0.176	Α	0.023	No	0.161	Α	0.211	Α	0.050	No
22	Grand Avenue & 12th Street	0.199	Α	0.206	Α	0.007	No	0.187	Α	0.379	Α	0.192	No
23	Olive Avenue & 12th Street	0.279	Α	0.481	Α	0.202	No	0.257	Α	0.342	Α	0.085	No
24	L.A. Live Way & Pico Boulevard	0.517	A	0.567	A	0.050	No	0.511	A	0.358	A	-0.153	No
25	L.A. Live Way & Bond Street/I-10 & I-110 Off- Ramps	0.303	A	0.145	A	0.112	No	0.329	A	0.326	A	-0.003	No

			Pre-l	Satu Event Hou	ırday Da ur (12:00	ау 0—1:00 р.м.))		Pos	Satu t-Event Ho	irday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
26	Figueroa Street & Pico Boulevard	0.520	A	0.616	В	0.096	No	0.627	В	0.657	В	0.030	No
27	Flower Street & Pico Boulevard	0.323	A	0.502	A	0.179	No	0.329	A	0.507	A	0.178	No
28	Grand Avenue & Pico Boulevard	0.289	A	0.381	A	0.092	No	0.255	A	0.605	В	0.350	No
29	Olive Street & Pico Boulevard	0.286	A	0.524	A	0.238	No	0.279	A	0.344	A	0.065	No
30	Hill Street & Pico Boulevard	0.315	Α	0.621	В	0.306	No	0.238	А	0.739	С	0.501	Yes
31	Broadway & Pico Boulevard	0.405	Α	0.537	Α	0.132	No	0.310	А	0.333	А	0.023	No
32	Main Street & Pico Boulevard	0.639	В	0.686	В	0.047	No	0.531	A	0.547	A	0.016	No
33	Blaine Street & Olympic Boulevard	0.605	В	0.943	E	0.338	Yes	0.582	A	0.857	D	0.275	Yes
34	Blaine Street & SR-110 SB Off-Ramp	0.268	A	0.635	В	0.367	No	0.264	A	0.389	A	0.125	No
35	Blaine Street & 11th Street	0.479	Α	0.711	С	0.232	Yes	0.699	В	1.188	F	0.489	Yes
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.109	A	0.222	A	0.113	No	0.149	A	0.239	A	0.090	No
37	Figueroa Street & Venice Boulevard	0.462	A	0.544	A	0.082	No	0.544	A	0.902	E	0.358	Yes

			Pre-l	Satu Event Hou	irday Da ur (12:00	іу)—1:00 р.м.)		Pos	Satu t-Event Ho	ırday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
38	Flower Street & Venice Boulevard	0.277	A	0.342	A	0.065	No	0.297	A	0.737	С	0.440	Yes
39	Grand Avenue & Venice Boulevard	0.178	A	0.251	A	0.073	No	0.168	A	0.626	В	0.458	No
40	Olive Street & Venice Boulevard	0.197	A	0.399	A	0.202	No	0.181	A	0.611	В	0.430	No
41	Grand Avenue & 17th Street	0.377	Α	0.441	Α	0.064	No	0.385	А	0.718	С	0.333	Yes
42	Olive Street & 17th Street	0.454	Α	1.003	F	0.549	Yes	0.412	A	0.605	В	0.193	No
43	Hill Street & 17th Street	0.493	Α	1.047	F	0.554	Yes	0.372	A	1.097	F	0.725	Yes
44	Broadway & 17th Street	0.473	А	1.065	F	0.592	Yes	0.346	A	0.487	А	0.141	No
45	Main Street & 17th Street	0.491	А	1.035	F	0.544	Yes	0.431	Α	0.511	А	0.080	No
46	Los Angeles Street & 17th Street	0.531	A	1.074	F	0.543	Yes	0.446	A	0.526	A	0.080	No
47	Flower Street & 18th Street	0.093	Α	0.095	Α	0.002	No	0.106	A	0.179	Α	0.073	No
48	Grand Avenue & 18th Street	0.258	Α	0.336	Α	0.078	No	0.294	А	0.544	А	0.250	No
49	Olive Street & 18th Street	0.376	Α	0.599	Α	0.223	No	0.338	Α	0.549	Α	0.211	No
50	Hill Street & 18th Street	0.287	Α	0.373	Α	0.086	No	0.289	A	1.242	F	0.953	Yes
51	Broadway & 18th Street	0.391	Α	0.429	Α	0.038	No	0.350	А	1.033	F	0.683	Yes
52	Main Street & 18th Street	0.470	А	0.470	Α	0.000	No	0.446	А	1.080	F	0.634	Yes
53	Los Angeles Street & 18th Street	0.541	A	0.541	A	0.000	No	0.585	A	1.853	F	1.268	Yes

			Pre-l	Satu Event Hou	rday Da ur (12:00	іу)—1:00 р.м.))		Pos	Satu t-Event Ho	ırday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ject tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
54	Figueroa Street & Washington Boulevard	0.534	A	0.592	A	0.058	No	0.488	A	0.709	С	0.221	Yes
55	Flower Street & Washington Boulevard	0.348	A	0.351	A	0.003	No	0.302	A	0.569	A	0.267	No
56	Grand Avenue & Washington Boulevard	0.385	A	0.454	А	0.069	No	0.329	A	0.558	A	0.229	No
57	Olive Street & Washington Boulevard	0.325	A	0.485	A	0.160	No	0.257	A	0.470	A	0.213	No
58	Hill Street & Washington Boulevard	0.308	A	0.496	A	0.188	No	0.237	A	0.388	A	0.151	No
59	Broadway & Washington Boulevard	0.409	A	0.476	A	0.067	No	0.329	A	0.421	A	0.092	No
60	Main Street & Washington Boulevard	0.572	A	0.598	A	0.026	No	0.487	A	0.651	В	0.164	No
61	Los Angeles Street & Washington Boulevard	0.252	A	0.278	A	0.026	No	0.231	A	0.340	A	0.109	No
62	San Pedro Street & Washington Boulevard	0.526	A	0.527	A	0.001	No	0.444	A	0.608	В	0.164	No
63	Figueroa Street & Adams Boulevard	0.957	E	0.966	E	0.009	No	0.925	E	0.930	E	0.005	No
64	Flower Street & Adams Boulevard	0.393	A	0.403	A	0.010	No	0.390	A	0.546	A	0.156	No

			Pre-l	Satu Event Hou	rday Da ur (12:00	іу)—1:00 р.м.))		Pos	Satu t-Event Ho	ırday Da our (4:30	у)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
65	I-110 NB Off-Ramps & Adams Boulevard	0.503	A	0.880	D	0.377	Yes	0.460	A	0.504	A	0.044	No
66	Grand Avenue & Adams Boulevard	0.334	A	0.524	A	0.190	No	0.291	A	0.359	A	0.068	No
67	Hill Street & Adams Boulevard	0.387	A	0.771	С	0.384	Yes	0.326	A	0.337	A	0.011	No
68	Broadway & Adams Boulevard	0.359	A	0.436	A	0.077	No	0.303	A	0.303	A	0.000	No
69	Main Street & Adams Boulevard	0.521	A	0.521	A	0.000	No	0.438	A	0.438	A	0.000	No
70	Flower Street & Jefferson Boulevard	0.409	A	0.411	A	0.002	No	0.411	A	0.540	A	0.129	No
71	Figueroa Street & Exposition Boulevard	0.697	В	0.703	С	0.006	No	0.640	В	0.643	В	0.003	No
72	Flower Street & 37th Street	0.278	Α	0.278	Α	0.000	No	0.318	А	0.455	Α	0.137	No
73	Hope Street & 37th Street	0.304	Α	0.318	Α	0.014	No	0.321	A	0.322	Α	0.001	No
74	Hill Street & 37th Street	0.122	Α	0.226	А	0.104	No	0.138	A	0.138	А	0.000	No
75	Broadway & 37th Street	0.153	А	0.153	А	0.000	No	0.105	A	0.105	А	0.000	No
76	Figueroa Street & 39th Street	0.358	A	0.376	A	0.018	No	0.359	A	0.365	A	0.006	No
77	I-110 HOV Ramps & 39th Street	0.168	A	0.269	A	0.101	No	0.187	A	0.344	A	0.157	No

			Pre-l	Satu Event Hou	rday Da ur (12:00	у)—1:00 р.м.)		Pos	Satu t-Event Ho	ırday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ject tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
78	Figueroa Street & Martin Luther King Jr Boulevard	0.703	С	0.708	С	0.005	No	0.631	В	0.768	С	0.137	Yes
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.681	В	0.685	В	0.004	No	0.613	В	0.769	С	0.156	Yes
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.627	В	0.696	В	0.069	No	0.579	A	0.609	В	0.030	No
81	Georgia Street & 9th Street	0.437	Α	0.553	Α	0.116	No	0.502	Α	0.722	С	0.220	Yes
82	Francisco Street & 9th Street	0.253	A	0.357	A	0.104	No	0.231	A	0.575	A	0.344	No
83	Figueroa Street & 9th Street	0.540	Α	0.647	В	0.107	No	0.537	Α	0.642	В	0.105	No
84	Flower Street & 9th Street	0.539	А	0.608	В	0.069	No	0.422	Α	0.492	А	0.070	No
85	Broadway & 9th Street	0.451	А	0.452	Α	0.001	No	0.338	А	0.395	А	0.057	No
86	Bixel Street & 8th Street	0.527	Α	0.527	Α	0.000	No	0.475	Α	0.609	В	0.134	No
87	Francisco Street & 8th Street	0.260	A	0.543	A	0.283	No	0.254	A	0.471	A	0.217	No
88	Figueroa Street & 8th Street	0.418	Α	0.986	Е	0.568	Yes	0.471	А	0.754	С	0.283	Yes
89	Flower Street & 8th Street	0.393	Α	0.755	С	0.362	Yes	0.359	А	0.559	А	0.200	No
90	Hill Street & 8th Street	0.475	А	0.541	А	0.066	No	0.391	Α	0.395	А	0.004	No
91	Broadway & 8th Street	0.713	С	0.743	С	0.030	No	0.546	А	0.546	А	0.000	No
92	Bixel Street & Wilshire Boulevard	0.387	A	0.403	A	0.016	No	0.352	A	0.377	A	0.025	No

			Pre-l	Satu Event Hou	irday Da ur (12:00	іу)—1:00 р.м.)		Pos	Satu E-Event Ho	ırday Da our (4:30	у)–5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
93	Figueroa Street & Wilshire Boulevard	0.376	A	0.393	A	0.017	No	0.482	А	0.820	D	0.338	Yes
94	Lucas Avenue & 6th Street	0.478	Α	0.706	С	0.228	Yes	0.453	А	0.491	Α	0.038	No
95	Bixel Street & 6th Street	0.407	А	0.485	Α	0.078	No	0.389	А	0.404	Α	0.015	No
96	Figueroa Street & 6th Street	0.317	Α	0.451	Α	0.134	No	0.369	А	0.533	А	0.164	No
97	Flower Street & 6th Street	0.259	Α	0.467	Α	0.208	No	0.265	А	0.305	Α	0.040	No
98	Grand Avenue & 6th Street	0.245	Α	0.338	Α	0.093	No	0.203	А	0.275	А	0.072	No
99	Hill Street & 6th Street	0.386	Α	0.397	Α	0.011	No	0.351	А	0.513	А	0.162	No
100	Spring Street & 6th Street	0.325	Α	0.369	Α	0.044	No	0.327	А	0.375	Α	0.048	No
101	Main Street & 6th Street	0.288	Α	0.288	Α	0.000	No	0.301	А	0.526	Α	0.225	No
102	Figueroa Street & 5th Street	0.242	Α	0.273	Α	0.031	No	0.269	А	0.523	Α	0.254	No
103	Grand Avenue & 5th Street	0.219	Α	0.307	Α	0.088	No	0.223	А	0.277	А	0.054	No
104	Olive Street & 5th Street	0.373	Α	0.414	Α	0.041	No	0.395	А	0.541	Α	0.146	No
105	Hill Street & 5th Street	0.349	Α	0.440	Α	0.091	No	0.348	А	0.403	Α	0.055	No
106	Spring Street & 5th Street	0.274	Α	0.329	Α	0.055	No	0.268	А	0.268	Α	0.000	No
107	Main Street & 5th Street	0.199	Α	0.199	Α	0.000	No	0.212	А	0.297	Α	0.085	No
108	Figueroa Street & 2nd Street	0.306	Α	0.311	Α	0.005	No	0.278	А	0.484	Α	0.206	No
109	Beaudry Street & 1st Street	0.184	Α	0.184	Α	0.000	No	0.231	Α	0.233	Α	0.002	No
110	Hope Street & 1st Street	0.293	Α	0.427	Α	0.134	No	0.324	А	0.650	В	0.326	No
111	Grand Avenue & 1st Street	0.402	Α	0.440	Α	0.038	No	0.466	А	0.841	D	0.375	Yes
112	Olive Street & 1st Street	0.313	А	0.313	А	0.000	No	0.291	А	0.426	А	0.135	No

City of Los Angeles

SCH. No. 2011031049

Convention and Event Center Project Draft EIR April 5, 2012

			Pre-l	Satu Event Hou	rday Da ur (12:00	іу)—1:00 р.м.)			Post	Satu E-Event Ho	ırday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
113	Hill Street & 1st Street	0.393	Α	0.469	Α	0.076	No	0.490	А	0.654	В	0.164	No
114	Spring Street & 1st Street	0.327	А	0.410	А	0.083	No	0.360	А	0.362	Α	0.002	No
115	Main Street & 1st Street	0.348	Α	0.348	А	0.000	No	0.360	А	0.464	А	0.104	No
116	Hope Street & Temple Street	0.299	А	0.347	А	0.048	No	0.358	A	0.523	A	0.165	No
117	Main Street & Aliso Street	0.363	Α	0.363	Α	0.000	No	0.393	А	0.681	В	0.288	No
118	Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.306	A	0.306	A	0.000	No	0.315	A	0.387	A	0.072	No
119	Grand Avenue & US-101 NB Ramps	0.497	A	0.497	A	0.000	No	0.560	А	1.008	F	0.448	Yes
120	Beaudry Avenue & Sunset Boulevard	0.806	D	0.806	D	0.000	No	0.633	В	0.633	В	0.000	No
121	Figueroa Street & Cesar Chavez Avenue	0.567	A	0.567	A	0.000	No	0.572	A	0.572	A	0.000	No
122	Grand Avenue & Cesar Chavez Avenue	0.578	A	0.578	A	0.000	No	0.642	В	0.645	В	0.003	No
123	Spring Street & Cesar Chavez Avenue	0.671	В	0.733	С	0.062	Yes	0.664	В	0.664	В	0.000	No
124	Main Street & Cesar Chavez Avenue	0.549	A	0.549	A	0.000	No	0.599	A	0.631	В	0.032	No
125	Alameda Street & Cesar Chavez Avenue	0.653	В	0.653	В	0.000	No	0.660	В	0.660	В	0.000	No
126	Main Street & Alpine Street	0.312	Α	0.328	Α	0.016	No	0.254	Α	0.271	Α	0.017	No

City of Los Angeles SCH. No. 2011031049 Convention and Event Center Project Draft EIR April 5, 2012

			Pre-l	Satu Event Hou	irday Da ur (12:00	у D—1:00 р.м.))		Pos	Satu t-Event Ho	ırday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condi	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
127	Alameda Street & Alpine Street	0.199	A	0.214	A	0.015	No	0.170	A	0.195	A	0.025	No
128	Hill Street & Alpine Street	0.429	Α	0.532	Α	0.103	No	0.415	А	0.577	А	0.162	No
129	Hill Street & College Street	0.543	Α	0.645	В	0.102	No	0.573	А	0.735	С	0.162	Yes
130	Sunset Boulevard & Elysian Park Avenue	0.656	В	0.656	В	0.000	No	0.609	В	0.624	В	0.015	No
131	Glendale Boulevard & Bellevue Avenue	0.415	A	0.468	A	0.053	No	0.381	A	0.591	A	0.210	No
132	Glendale Boulevard & Temple Street	0.650	В	0.706	С	0.056	Yes	0.661	В	0.854	D	0.193	Yes
133	Alvarado Street & US-101 WB Ramps	0.565	A	0.566	A	0.001	No	0.550	A	0.614	В	0.064	No
134	Alvarado Street & US-101 EB Ramps	0.561	A	0.561	A	0.000	No	0.564	A	0.589	A	0.025	No
135	Alvarado Street & Beverly Boulevard	0.521	A	0.540	A	0.019	No	0.509	A	0.509	A	0.000	No
136	Vermont Avenue & 6th Street	0.660	В	0.669	В	0.009	No	0.748	С	0.763	С	0.015	No
137	Alvarado Street & 6th Street	0.574	Α	0.594	Α	0.020	No	0.554	А	0.585	Α	0.031	No
138	Western Avenue & Wilshire Boulevard	0.660	В	0.712	С	0.052	Yes	0.761	С	0.776	С	0.015	No
139	Normandie Avenue & Wilshire Boulevard	0.687	В	0.706	С	0.019	No	0.639	В	0.639	В	0.000	No

			Pre-l	Satu Event Hou	rday Da ur (12:00	у)—1:00 р.м.))		Pos	Satu t-Event Ho	urday Da our (4:30	у —5:30 р.м.)	
		Future W Proje Condit	/ithout ect ions	Future Proj Condit	With ect tions	Change	Significant	Future V Proj Condi	Vithout ect tions	Future Proj Condi	With ect tions	Change	Significant
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact
140	Vermont Avenue & Wilshire Boulevard	0.789	С	0.803	D	0.014	No	0.782	С	0.798	С	0.016	No
141	Alvarado Street & Wilshire Boulevard	0.449	A	0.455	A	0.006	No	0.459	A	0.508	A	0.049	No
142	Vermont Avenue & 8th Street	0.727	С	0.740	С	0.013	No	0.703	С	0.704	С	0.001	No
143	Alvarado Street & 8th Street	0.544	А	0.575	А	0.031	No	0.471	А	0.563	А	0.092	No
144	Western Avenue & Olympic Boulevard	0.625	В	0.677	В	0.052	No	0.633	В	0.707	С	0.074	Yes
145	Normandie Avenue & Olympic Boulevard	0.621	В	0.665	В	0.044	No	0.603	В	0.668	В	0.065	No
146	Vermont Avenue & Olympic Boulevard	1.067	F	1.144	F	0.077	Yes	0.846	D	0.904	E	0.058	Yes
147	Alvarado Street & Olympic Boulevard	0.749	С	0.898	D	0.149	Yes	0.710	С	0.817	D	0.107	Yes
148	Union Avenue & Olympic Boulevard	0.620	В	0.775	С	0.155	Yes	0.577	A	0.663	В	0.086	No
149	Western Avenue & Pico Boulevard	0.681	В	0.698	В	0.017	No	0.709	С	0.717	С	0.008	No
150	Normandie Avenue & Pico Boulevard	0.613	В	0.627	В	0.014	No	0.626	В	0.629	В	0.003	No
151	Vermont Avenue & Pico Boulevard	0.726	С	0.769	С	0.043	Yes	0.669	В	0.715	С	0.046	Yes

			Pre-l	Satu Event Hou	rday Da ur (12:00	іу)—1:00 р.м.))	Saturday Day Post-Event Hour (4:30–5:30 р.м.)						
		Future Without Project Conditions		Future With Project Conditions		Change	Significant	Future Without Project Conditions		Future With Project Conditions		Change	Significant	
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact	
152	Alvarado Street & Pico Boulevard	0.728	С	0.993	E	0.265	Yes	0.753	С	0.980	E	0.227	Yes	
153	Union Avenue & Pico Boulevard	0.638	В	0.634	В	-0.004	No	0.603	В	0.765	С	0.162	Yes	
154	Alvarado Street & Hoover Street	0.413	A	0.412	A	-0.001	No	0.427	A	0.536	A	0.109	No	
155	Western Avenue & Venice Boulevard	0.553	A	0.581	A	0.028	No	0.592	A	0.607	В	0.015	No	
156	Normandie Avenue & Venice Boulevard	0.504	A	0.537	A	0.033	No	0.528	A	0.583	A	0.055	No	
157	Vermont Avenue & Venice Boulevard	0.645	В	0.728	С	0.083	Yes	0.697	В	0.731	С	0.034	No	
158	Hoover Street & Venice Boulevard	0.682	В	0.735	С	0.053	Yes	0.699	В	0.872	D	0.173	Yes	
159	Western Avenue & Washington Boulevard	0.673	В	0.700	В	0.027	No	0.731	С	0.748	С	0.017	No	
160	Normandie Avenue & Washington Boulevard	0.622	В	0.652	В	0.030	No	0.631	В	0.637	В	0.006	No	
161	Vermont Avenue & Washington Boulevard	0.802	D	0.899	D	0.097	Yes	0.817	D	0.825	D	0.008	No	
162	Hoover Street & Washington Boulevard	0.640	В	0.759	С	0.119	Yes	0.747	С	0.856	D	0.109	Yes	

		Saturday Day Pre-Event Hour (12:00–1:00 р.м.)							Saturday Day Post-Event Hour (4:30–5:30 р.м.)						
		Future Without Project Conditions		Future With Project Conditions		Change	Significant	Future Without Project Conditions		Future With Project Conditions		Change	Cimiliant		
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact		
163	I-10 WB Ramps & 20th Street	0.701	В	0.712	С	0.011	No	0.666	В	0.884	D	0.218	Yes		
164	Vermont Avenue & I-10 EB Ramps	0.904	E	0.987	E	0.083	Yes	0.844	D	0.844	D	0.000	No		
165	Hoover Street & I-10 EB Ramps	0.722	С	0.842	D	0.120	Yes	0.654	В	0.654	В	0.000	No		
166	Hill Street & 16th Street	0.297	А	0.714	С	0.417	Yes	0.229	Α	1.152	F	0.923	Yes		
167	Broadway & 16th Street	0.294	Α	0.484	Α	0.190	No	0.203	Α	0.427	Α	0.224	No		
168	Main Street & 16th Street	0.470	Α	0.598	Α	0.128	No	0.352	А	0.512	Α	0.160	No		
169	Los Angeles Street & 16th Street	0.266	A	0.448	A	0.182	No	0.151	A	0.277	A	0.126	No		
170	San Pedro Street & 16th Street	0.714	С	0.849	D	0.135	Yes	0.423	A	0.721	С	0.298	Yes		
171	Central Avenue & 16th Street	0.586	A	0.597	A	0.011	No	0.411	A	0.449	A	0.038	No		
172	Central Avenue & Washington Boulevard	0.637	В	0.663	В	0.026	No	0.443	A	0.598	A	0.155	No		
173	Wilton Place & Wilshire Boulevard	0.511	A	0.517	A	0.006	No	0.600	A	0.611	В	0.011	No		
174	Arlington Avenue & Olympic Boulevard	0.454	A	0.489	A	0.035	No	0.519	A	0.551	A	0.032	No		
175	Arlington Avenue & Pico Boulevard	0.430	Α	0.430	A	0.000	No	0.496	A	0.511	A	0.015	No		

		Saturday Day Pre-Event Hour (12:00–1:00 р.м.)							Saturday Day Post-Event Hour (4:30–5:30 р.м.)							
		Future Without Project Conditions		Future With Project Conditions		Change	Significant	Future Without Project Conditions		Future With Project Conditions		Change	Significant			
No.	Intersection	V/C	LOS	V/C	LOS	in V/C	Impact	V/C	LOS	V/C	LOS	in V/C	Impact			
176	Arlington Avenue & Venice Boulevard	0.474	A	0.507	A	0.033	No	0.735	С	0.790	С	0.055	Yes			
177	Arlington Avenue & Washington Boulevard	0.561	A	0.597	A	0.036	No	0.605	В	0.609	В	0.004	No			
Total # of Impacted Intersections									31					36		
# of Impacted Intersections with FWP LOS C							45%	14			3	89%	14			
# of Impacted Intersections with FWP LOS D 19								19%	6			3	81%	11		
# of Impacted Intersections with FWP LOS E								16%	5				8%	3		
# of Impacted Intersections with FWP LOS F 19%												2	2%	8		
Sourc	Source: The Mobility Group, 2011.															
		Weekday Evening Pre-Event Hour (4:30-5:30 р.м.)								Wee st-Event	ekday Ev Hour (9	vening :00-10:00 р.м	L-)			
-----	--	--	-------------------------------	-------------------------	----------------------	-----------	-------------	-------------------------------	----------------------------	-------------------------	--------------------------	-------------------------	-------------			
		Fut With Pro Cond	ure nout ject itions	Future Proj Condi	With ect tions	Change in	Significant	Fute With Proj Condi	ure out ect tions	Future Proj Condi	e With ject itions	Change in	Significant			
No.	Intersection	V/C	LOS	V/C	LOS	V/C	Impact	V/C	LOS	V/C	LOS	V/C	Impact			
1	Georgia Street & Olympic Boulevard	0.662	В	0.757	С	0.095	Yes	0.322	А	0.522	Α	0.200	No			
2	Francisco Street & Olympic Boulevard	0.499	A	0.628	В	0.129	No	0.189	А	0.338	A	0.149	No			
3	Figueroa Street & Olympic Boulevard	0.989	E	1.273	F	0.284	Yes	0.285	А	0.458	A	0.173	No			
4	Flower Street & Olympic Boulevard	0.639	В	0.873	D	0.234	Yes	0.249	A	0.410	A	0.161	No			
5	Grand Avenue & Olympic Boulevard	0.674	В	0.680	В	0.006	No	0.192	А	0.239	A	0.047	No			
6	Olive Street & Olympic Boulevard	0.682	В	0.733	С	0.051	Yes	0.208	А	0.224	Α	0.016	No			
7	Hill Street & Olympic Boulevard	0.745	С	0.749	С	0.004	No	0.159	А	0.287	Α	0.128	No			
8	Broadway & Olympic Boulevard	0.869	D	0.894	D	0.025	Yes	0.253	А	0.262	Α	0.009	No			
9	Main Street & Olympic Boulevard	1.082	F	1.100	F	0.018	Yes	0.198	А	0.202	Α	0.004	No			
10	Los Angeles Street & Olympic Boulevard	0.444	А	0.453	А	0.009	No	0.062	А	0.069	Α	0.007	No			
11	Santee Street & Olympic Boulevard	0.351	A	0.359	А	0.008	No	0.030	А	0.037	Α	0.007	No			
12	Maple Avenue & Olympic Boulevard	0.472	А	0.472	А	0.000	No	0.058	А	0.071	Α	0.013	No			
13	Maple Avenue & 9th Street	0.493	А	0.497	А	0.004	No	0.065	А	0.070	Α	0.005	No			
14	San Pedro Street & 9th Street	0.617	В	0.639	В	0.022	No	0.077	А	0.089	Α	0.012	No			
15	L.A. Live Way & 11th Street	0.272	А	0.113	А	-0.159	No	0.064	А	0.663	В	0.599	No			
16	Figueroa Street & 11th Street	0.476	А	0.489	А	0.013	No	0.157	А	0.184	Α	0.027	No			
17	Flower Street & 11th Street	0.576	А	0.577	А	0.001	No	0.152	А	0.167	Α	0.015	No			
18	Grand Avenue & 11th Street	0.465	А	0.762	С	0.297	Yes	0.099	А	0.239	Α	0.140	No			
19	Olive Street & 11th Street	0.443	А	0.637	В	0.194	No	0.127	А	0.215	Α	0.088	No			
20	Figueroa Street & 12th Street	0.362	А	0.341	А	-0.021	No	0.070	А	0.070	Α	0.000	No			
21	Flower Street & 12th Street	0.350	А	0.355	А	0.005	No	0.069	А	0.076	Α	0.007	No			
22	Grand Avenue & 12th Street	0.401	А	0.431	А	0.030	No	0.100	А	0.252	Α	0.152	No			
23	Olive Avenue & 12th Street	0.382	А	0.498	Α	0.116	No	0.096	А	0.117	Α	0.021	No			
24	L.A. Live Way & Pico Boulevard	0.539	А	0.585	Α	0.046	No	0.160	А	0.233	Α	0.073	No			
25	L.A. Live Way & Bond Street/I-10 & I-110 Off-Ramps	0.349	Α	0.364	Α	0.015	No	0.072	А	0.253	Α	0.191	No			
26	Figueroa Street & Pico Boulevard	0.765	С	0.909	Е	0.144	Yes	0.149	Α	0.304	Α	0.155	No			
27	Flower Street & Pico Boulevard	0.668	В	0.767	С	0.099	Yes	0.117	А	0.281	Α	0.164	No			
28	Grand Avenue & Pico Boulevard	0.649	В	0.689	В	0.040	No	0.099	А	0.378	Α	0.279	No			
29	Olive Street & Pico Boulevard	0.471	Α	0.600	Α	0.129	No	0.073	А	0.092	Α	0.019	No			
30	Hill Street & Pico Boulevard	0.575	А	0.758	С	0.183	Yes	0.064	А	0.585	Α	0.521	No			

			P	We Pre-Event	ekday E Hour (4	Evening 4:30-5:30 р.м.))		Pos	Wee st-Event	kday Ev Hour (9	vening :00-10:00 р.м	.)
		Fut With Pro Condi	ure nout ject itions	Future Proj Condi	With ect tions	Change in	Significant	Futi With Proj Condi	ure out ect tions	Future Proj Condi	With ect tions	Change in	Significant
No.	Intersection	V/C	LOS	V/C	LOS	V/C	Impact	V/C	LOS	V/C	LOS	V/C	Impact
31	Broadway & Pico Boulevard	0.578	A	0.681	В	0.103	No	0.201	А	0.275	А	0.074	No
32	Main Street & Pico Boulevard	1.049	F	1.116	F	0.067	Yes	0.138	A	0.197	A	0.059	No
33	Blaine Street & Olympic Boulevard	0.718	С	0.823	D	0.105	Yes	0.352	А	0.429	A	0.077	No
34	Blaine Street & SR-110 SB Off-Ramp	0.237	Α	0.847	D	0.610	Yes	0.107	Α	0.135	Α	0.028	No
35	Blaine Street & 11th Street	0.880	D	1.032	F	0.152	Yes	0.418	А	1.258	F	0.840	Yes
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.174	Α	0.360	А	0.186	No	0.036	А	0.117	Α	0.081	No
37	Figueroa Street & Venice Boulevard	0.796	С	0.971	Е	0.175	Yes	0.121	А	0.282	А	0.161	No
38	Flower Street & Venice Boulevard	0.525	А	0.614	В	0.089	No	0.097	А	0.379	А	0.282	No
39	Grand Avenue & Venice Boulevard	0.513	Α	0.625	В	0.112	No	0.078	А	0.474	А	0.396	No
40	Olive Street & Venice Boulevard	0.363	Α	0.622	В	0.259	No	0.070	А	0.565	А	0.495	No
41	Grand Avenue & 17th Street	0.772	С	0.836	D	0.064	Yes	0.161	А	0.358	А	0.197	No
42	Olive Street & 17th Street	0.568	Α	0.997	Е	0.429	Yes	0.179	Α	0.258	А	0.079	No
43	Hill Street & 17th Street	0.724	С	1.289	F	0.565	Yes	0.100	А	0.759	С	0.659	Yes
44	Broadway & 17th Street	0.657	В	1.199	F	0.542	Yes	0.108	А	0.174	А	0.066	No
45	Main Street & 17th Street	0.680	В	1.178	F	0.498	Yes	0.123	А	0.123	А	0.000	No
46	Los Angeles Street & 17th Street	0.589	А	1.087	F	0.498	Yes	0.095	А	0.095	А	0.000	No
47	Flower Street & 18th Street	0.239	Α	0.275	А	0.036	No	0.063	А	0.106	А	0.043	No
48	Grand Avenue & 18th Street	0.428	Α	0.490	А	0.062	No	0.080	А	0.275	А	0.195	No
49	Olive Street & 18th Street	0.385	Α	0.569	А	0.184	No	0.119	А	0.341	А	0.222	No
50	Hill Street & 18th Street	0.534	А	0.534	А	0.000	No	0.064	А	1.070	F	1.006	Yes
51	Broadway & 18th Street	0.517	А	0.553	А	0.036	No	0.086	А	0.813	D	0.727	Yes
52	Main Street & 18th Street	0.625	В	0.625	В	0.000	No	0.145	А	0.832	D	0.687	Yes
53	Los Angeles Street & 18th Street	0.732	С	0.732	С	0.000	No	0.247	А	1.621	F	1.374	Yes
54	Figueroa Street & Washington Boulevard	0.736	С	0.832	D	0.096	Yes	0.269	А	0.427	А	0.158	No
55	Flower Street & Washington Boulevard	0.643	В	0.645	В	0.002	No	0.179	А	0.389	А	0.210	No
56	Grand Avenue & Washington Boulevard	0.716	С	0.756	С	0.040	Yes	0.183	А	0.421	А	0.238	No
57	Olive Street & Washington Boulevard	0.529	Α	0.732	С	0.203	Yes	0.165	А	0.336	А	0.171	No
58	Hill Street & Washington Boulevard	0.629	В	0.776	С	0.147	Yes	0.099	А	0.339	А	0.240	No
59	Broadway & Washington Boulevard	0.740	С	0.809	D	0.069	Yes	0.112	А	0.279	А	0.167	No
60	Main Street & Washington Boulevard	0.774	С	0.779	С	0.005	No	0.148	А	0.318	А	0.170	No

		Weekday Evening Pre-Event Hour (4:30-5:30 р.м.)							Pos	Wee st-Event	kday Ev Hour (9	vening :00-10:00 P.N	1.)
		Fut With Pro Condi	ure nout ject itions	Future Proj Condi	With ect tions	Change in	Significant	Futi With Proj Condi	ure out ect tions	Future Proj Condi	With ect tions	Change in	Significant
No.	Intersection	V/C	LOS	V/C	LOS	V/Č	Impact	V/C	LOS	V/C	LOS	V/Č	Impact
61	Los Angeles Street & Washington Boulevard	0.558	A	0.582	A	0.024	No	0.062	A	0.195	A	0.133	No
62	San Pedro Street & Washington Boulevard	0.696	В	0.701	С	0.005	No	0.160	A	0.331	A	0.171	No
63	Figueroa Street & Adams Boulevard	1.015	F	1.025	F	0.010	Yes	0.333	A	0.379	A	0.046	No
64	Flower Street & Adams Boulevard	0.899	D	0.912	E	0.013	Yes	0.315	A	0.667	В	0.352	No
65	I-110 NB Off-Ramps & Adams Boulevard	0.525	A	0.941	E	0.416	Yes	0.162	А	0.214	A	0.052	No
66	Grand Avenue & Adams Boulevard	0.647	В	0.823	D	0.176	Yes	0.113	А	0.225	A	0.112	No
67	Hill Street & Adams Boulevard	0.585	A	0.966	Е	0.381	Yes	0.080	А	0.123	A	0.043	No
68	Broadway & Adams Boulevard	0.620	В	0.620	В	0.000	No	0.088	А	0.094	A	0.006	No
69	Main Street & Adams Boulevard	0.731	С	0.731	С	0.000	No	0.147	А	0.147	A	0.000	No
70	Flower Street & Jefferson Boulevard	0.542	Α	0.547	А	0.005	No	0.255	А	0.442	Α	0.187	No
71	Figueroa Street & Exposition Boulevard	0.715	С	0.722	С	0.007	No	0.393	А	0.413	Α	0.020	No
72	Flower Street & 37th Street	0.434	А	0.434	А	0.000	No	0.229	А	0.480	А	0.251	No
73	Hope Street & 37th Street	0.511	А	0.534	А	0.023	No	0.202	А	0.202	А	0.000	No
74	Hill Street & 37th Street	0.295	Α	0.353	А	0.058	No	0.030	А	0.048	А	0.018	No
75	Broadway & 37th Street	0.418	Α	0.418	А	0.000	No	0.048	А	0.048	А	0.000	No
76	Figueroa Street & 39th Street	0.528	Α	0.548	А	0.020	No	0.089	А	0.092	А	0.003	No
77	I-110 HOV Ramps & 39th Street	0.496	Α	0.636	В	0.140	No	0.041	А	0.173	А	0.132	No
78	Figueroa Street & Martin Luther King Jr Boulevard	0.788	С	0.788	С	0.000	No	0.349	А	0.455	А	0.106	No
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.738	С	0.743	С	0.005	No	0.421	А	0.548	А	0.127	No
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.784	С	0.846	D	0.062	Yes	0.319	А	0.323	А	0.004	No
81	Georgia Street &9th Street	0.612	В	0.730	С	0.118	Yes	0.311	А	0.552	А	0.241	No
82	Francisco Street & 9th Street	0.475	Α	0.543	А	0.068	No	0.105	А	0.273	А	0.168	No
83	Figueroa Street & 9th Street	0.665	В	0.773	С	0.108	Yes	0.234	А	0.336	А	0.102	No
84	Flower Street & 9th Street	0.583	Α	0.643	В	0.060	No	0.199	А	0.245	А	0.046	No
85	Broadway & 9th Street	0.625	В	0.628	В	0.003	No	0.101	А	0.139	А	0.038	No
86	Bixel Street & 8th Street	1.057	F	1.084	F	0.027	Yes	0.301	А	0.431	А	0.130	No
87	Francisco Street & 8th Street	0.498	Α	0.574	А	0.076	No	0.181	А	0.343	А	0.162	No
88	Figueroa Street & 8th Street	1.014	F	1.368	F	0.354	Yes	0.293	А	0.558	А	0.265	No
89	Flower Street & 8th Street	0.551	Α	0.691	В	0.140	No	0.193	А	0.372	А	0.179	No
90	Hill Street & 8th Street	0.559	Α	0.617	В	0.058	No	0.101	А	0.136	А	0.035	No

			P	We Pre-Event	ekday E Hour (Evening 4:30-5:30 р.м	.)		Pos	Wee st-Event	ekday Ev Hour (9	vening :00-10:00 р.м	.)
		Fut With Pro Condi	ure nout ject itions	Future Proj Condi	With ect tions	Change in	Significant	Fute With Proj Condi	ure out ect tions	Future Proj Condi	With ject tions	Change in	Significant
No.	Intersection	V/C	LOS	V/C	LOS	V/C	Impact	V/C	LOS	V/C	LOS	V/C	Impact
91	Broadway & 8th Street	0.729	С	0.752	С	0.023	No	0.173	А	0.173	A	0.000	No
92	Bixel Street & Wilshire Boulevard	0.551	A	0.575	A	0.024	No	0.234	A	0.247	A	0.013	No
93	Figueroa Street & Wilshire Boulevard	1.321	F	1.343	F	0.022	Yes	0.339	A	0.620	В	0.281	No
94	Lucas Avenue & 6th Street	0.893	D	1.031	F	0.138	Yes	0.216	A	0.223	A	0.007	No
95	Bixel Street & 6th Street	0.748	С	0.817	D	0.069	Yes	0.207	Α	0.207	A	0.000	No
96	Figueroa Street & 6th Street	0.944	E	1.177	F	0.233	Yes	0.189	А	0.304	A	0.115	No
97	Flower Street & 6th Street	0.449	Α	0.661	В	0.212	No	0.139	Α	0.171	A	0.032	No
98	Grand Avenue & 6th Street	0.414	A	0.513	А	0.099	No	0.094	A	0.156	A	0.062	No
99	Hill Street & 6th Street	0.483	Α	0.503	А	0.020	No	0.115	А	0.280	Α	0.165	No
100	Spring Street & 6th Street	0.484	Α	0.523	А	0.039	No	0.182	А	0.232	А	0.050	No
101	Main Street & 6th Street	0.460	Α	0.463	А	0.003	No	0.141	А	0.372	Α	0.231	No
102	Figueroa Street & 5th Street	1.016	F	1.101	F	0.085	Yes	0.178	А	0.421	А	0.243	No
103	Grand Avenue & 5th Street	0.400	Α	0.508	А	0.108	No	0.114	А	0.186	А	0.072	No
104	Olive Street & 5th Street	0.727	С	0.773	С	0.046	Yes	0.193	А	0.390	А	0.197	No
105	Hill Street & 5th Street	0.473	Α	0.576	А	0.103	No	0.117	А	0.251	Α	0.134	No
106	Spring Street & 5th Street	0.349	Α	0.387	А	0.038	No	0.121	А	0.121	Α	0.000	No
107	Main Street & 5th Street	0.325	Α	0.328	А	0.003	No	0.083	А	0.145	Α	0.062	No
108	Figueroa Street & 2nd Street	0.677	В	0.677	В	0.000	No	0.133	А	0.306	Α	0.173	No
109	Beaudry Street & 1st Street	0.525	Α	0.531	А	0.006	No	0.079	А	0.079	Α	0.000	No
110	Hope Street & 1st Street	0.764	С	0.897	D	0.133	Yes	0.125	Α	0.482	Α	0.357	No
111	Grand Avenue & 1st Street	0.913	E	1.052	F	0.139	Yes	0.190	Α	0.647	В	0.457	No
112	Olive Street & 1st Street	0.760	С	0.765	С	0.005	No	0.108	А	0.266	А	0.158	No
113	Hill Street & 1st Street	0.771	С	0.796	С	0.025	No	0.153	А	0.310	Α	0.157	No
114	Spring Street & 1st Street	0.536	Α	0.630	В	0.094	No	0.159	А	0.160	Α	0.001	No
115	Main Street & 1st Street	0.798	С	0.799	С	0.001	No	0.162	А	0.274	Α	0.112	No
116	Hope Street & Temple Street	0.799	С	0.849	D	0.050	Yes	0.165	А	0.336	Α	0.171	No
117	Main Street & Aliso Street	0.601	В	0.604	В	0.003	No	0.182	А	0.512	Α	0.330	No
118	Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.463	Α	0.464	Α	0.001	No	0.090	А	0.161	Α	0.071	No
119	Grand Avenue & US-101 NB Ramps	0.917	Е	0.917	Е	0.000	No	0.484	А	0.956	E	0.472	Yes
120	Beaudry Avenue & Sunset Boulevard	1.058	F	1.058	F	0.000	No	0.471	Α	0.471	Α	0.000	No

	Weekday Evening Pre-Event Hour (4:30-5:30 р.м.)								Wee st-Event	ekday Ev Hour (9	/ening :00-10:00 р.м	I.)
	Fut Wit Pro Cond	ure hout ject itions	Future Proj Condi	With ect tions	Change in	Significant	Fute With Proj Condi	ure iout ject tions	Future Proj Condi	With ject tions	Change in	Significant
No. Intersection	V/C	LOS	V/C	LOS	V/C	Impact	V/C	LOS	V/C	LOS	V/C	Impact
121 Figueroa Street & Cesar Chavez Avenue	0.845	D	0.845	D	0.000	No	0.424	А	0.424	А	0.000	No
122 Grand Avenue & Cesar Chavez Avenue	0.886	D	0.886	D	0.000	No	0.456	Α	0.461	A	0.005	No
123 Spring Street & Cesar Chavez Avenue	0.843	D	0.904	Е	0.061	Yes	0.514	A	0.514	A	0.000	No
124 Main Street & Cesar Chavez Avenue	0.789	С	0.789	С	0.000	No	0.237	Α	0.268	A	0.031	No
125 Alameda Street & Cesar Chavez Avenue	0.822	D	0.822	D	0.000	No	0.341	Α	0.341	Α	0.000	No
126 Main Street & Alpine Street	0.638	В	0.638	В	0.000	No	0.108	Α	0.132	А	0.024	No
127 Alameda Street & Alpine Street	0.294	Α	0.322	А	0.028	No	0.178	Α	0.080	А	0.002	No
128 Hill Street & Alpine Street	0.736	С	0.736	С	0.000	No	0.165	Α	0.321	А	0.156	No
129 Hill Street & College Street	0.862	D	0.862	D	0.000	No	0.207	Α	0.363	Α	0.156	No
130 Sunset Boulevard & Elysian Park Avenue	0.733	С	0.733	С	0.000	No	0.501	Α	0.515	Α	0.014	No
131 Glendale Boulevard & Bellevue Avenue	0.766	С	0.766	С	0.000	No	0.224	Α	0.401	Α	0.177	No
132 Glendale Boulevard & Temple Street	1.074	F	1.074	F	0.000	No	0.345	Α	0.557	А	0.212	No
133 Alvarado Street & US-101 WB Ramps	0.619	В	0.619	В	0.000	No	0.412	Α	0.412	А	0.000	No
134 Alvarado Street & US-101 EB Ramps	0.642	В	0.642	В	0.000	No	0.537	Α	0.542	А	0.005	No
135 Alvarado Street & Beverly Boulevard	0.658	В	0.658	В	0.000	No	0.299	Α	0.304	А	0.005	No
136 Vermont Avenue & 6th Street	0.855	D	0.867	D	0.012	No	0.554	Α	0.567	А	0.013	No
137 Alvarado Street & 6th Street	0.691	В	0.691	В	0.000	No	0.344	Α	0.349	А	0.005	No
138 Western Avenue & Wilshire Boulevard	0.869	D	0.893	D	0.024	Yes	0.559	Α	0.581	А	0.022	No
139 Normandie Avenue & Wilshire Boulevard	0.969	E	0.992	Е	0.023	Yes	0.502	Α	0.525	А	0.023	No
140 Vermont Avenue & Wilshire Boulevard	1.040	F	1.081	F	0.041	Yes	0.576	Α	0.602	В	0.026	No
141 Alvarado Street & Wilshire Boulevard	0.897	D	0.929	Е	0.032	Yes	0.307	Α	0.354	А	0.047	No
142 Vermont Avenue & 8th Street	0.786	С	0.800	С	0.014	No	0.562	Α	0.564	А	0.002	No
143 Alvarado Street & 8th Street	0.662	В	0.662	В	0.000	No	0.245	Α	0.343	А	0.098	No
144 Western Avenue & Olympic Boulevard	0.989	E	1.042	F	0.053	Yes	0.585	Α	0.673	В	0.088	No
145 Normandie Avenue & Olympic Boulevard	0.745	С	0.794	С	0.049	Yes	0.371	Α	0.447	А	0.076	No
146 Vermont Avenue & Olympic Boulevard	0.970	Е	1.032	F	0.062	Yes	0.646	В	0.735	С	0.089	Yes
147 Alvarado Street & Olympic Boulevard	0.872	D	0.980	Е	0.108	Yes	0.358	Α	0.446	Α	0.088	No
148 Union Avenue & Olympic Boulevard	0.729	С	0.857	D	0.128	Yes	0.270	Α	0.333	А	0.063	No
149 Western Avenue & Pico Boulevard	0.720	С	0.745	С	0.025	No	0.412	Α	0.449	Α	0.037	No
150 Normandie Avenue & Pico Boulevard	0.602	В	0.627	В	0.025	No	0.284	Α	0.294	Α	0.010	No

		Weekday Evening Pre-Event Hour (4:30-5:30 р.м.)							Po	Wee st-Event	ekday Ev Hour (9	vening :00-10:00 p.M	I.)
		Fut With Proj Condi	ure nout ject itions	Future Proj Condi	With ect tions	- Change in	Significant	Fut With Proj Condi	ure out ject tions	Future Proj Condi	e With ject itions	Change in	Significant
No.	Intersection	V/C	LOS	V/C	LOS	V/Č	Impact	V/C	LOS	V/C	LOS	v/č	Impact
151	Vermont Avenue & Pico Boulevard	0.781	С	0.829	D	0.048	Yes	0.438	Α	0.530	Α	0.092	No
152	Alvarado Street & Pico Boulevard	0.767	С	0.999	E	0.232	Yes	0.283	A	0.494	A	0.211	No
153	Union Avenue & Pico Boulevard	0.707	С	0.846	D	0.139	Yes	0.215	Α	0.425	A	0.210	No
154	Alvarado Street & Hoover Street	0.577	A	0.570	Α	-0.007	No	0.225	A	0.334	A	0.109	No
155	Western Avenue & Venice Boulevard	0.714	С	0.779	С	0.065	Yes	0.359	Α	0.419	A	0.060	No
156	Normandie Avenue & Venice Boulevard	0.713	С	0.769	С	0.056	Yes	0.281	Α	0.357	Α	0.076	No
157	Vermont Avenue & Venice Boulevard	0.763	С	0.858	D	0.095	Yes	0.383	Α	0.527	Α	0.144	No
158	Hoover Street & Venice Boulevard	0.914	E	0.991	Е	0.077	Yes	0.344	Α	0.501	Α	0.157	No
159	Western Avenue & Washington Boulevard	0.757	С	0.790	С	0.033	No	0.443	Α	0.509	Α	0.066	No
160	Normandie Avenue & Washington Boulevard	0.756	С	0.794	С	0.038	No	0.326	А	0.364	A	0.038	No
161	Vermont Avenue & Washington Boulevard	0.910	Е	1.010	F	0.100	Yes	0.458	Α	0.550	Α	0.092	No
162	Hoover Street & Washington Boulevard	0.855	D	0.951	Е	0.096	Yes	0.343	Α	0.434	Α	0.091	No
163	I-10 WB Ramps & 20th Street	0.735	С	0.753	С	0.018	No	0.332	Α	0.497	Α	0.165	No
164	Vermont Avenue & I-10 EB Ramps	0.783	С	0.850	D	0.067	Yes	0.546	Α	0.546	Α	0.000	No
165	Hoover Street & I-10 EB Ramps	0.748	С	0.840	D	0.092	Yes	0.480	Α	0.480	Α	0.000	No
166	Hill Street & 16th Street	0.512	Α	0.797	С	0.285	Yes	0.061	Α	0.966	Е	0.905	Yes
167	Broadway & 16th Street	0.432	Α	0.569	А	0.137	No	0.064	Α	0.449	Α	0.385	No
168	Main Street & 16th Street	0.780	С	0.927	E	0.147	Yes	0.095	Α	0.260	Α	0.165	No
169	Los Angeles Street & 16th Street	0.364	Α	0.615	В	0.251	No	0.033	Α	0.128	Α	0.095	No
170	San Pedro Street & 16th Street	0.711	С	0.855	D	0.144	Yes	0.096	А	0.415	Α	0.319	No
171	Central Avenue & 16th Street	0.638	В	0.659	В	0.021	No	0.176	Α	0.209	Α	0.033	No
172	Central Avenue & Washington Boulevard	0.837	D	0.858	D	0.021	Yes	0.181	А	0.315	Α	0.134	No
173	Wilton Place & Wilshire Boulevard	0.749	С	0.757	С	0.008	No	0.369	Α	0.374	Α	0.005	No
174	Arlington Avenue & Olympic Boulevard	0.683	В	0.723	С	0.040	Yes	0.395	Α	0.454	Α	0.059	No
175	Arlington Avenue & Pico Boulevard	0.651	В	0.669	В	0.018	No	0.235	Α	0.262	Α	0.027	No
176	Arlington Avenue & Venice Boulevard	0.895	D	0.945	E	0.050	Yes	0.298	Α	0.365	Α	0.067	No
177	Arlington Avenue & Washington Boulevard	0.725	С	0.771	С	0.046	Yes	0.346	Α	0.346	Α	0.000	No
178	Crenshaw Boulevard & Wilshire Boulevard	0.821	D	0.823	D	0.002	No						
179	Crenshaw Boulevard & Olympic Boulevard	0.885	D	0.935	Е	0.050	Yes						
180	Crenshaw Boulevard & Pico Boulevard	0.778	С	0.793	С	0.015	No						

			Р	We re-Event	ekday E Hour (4	Evening 4:30-5:30 р.м)		Pos	Wee st-Event	ekday E Hour (9	vening :00-10:00 P.M	ı.)
		Futu With Proj Condi	ure out ect tions	Future Proj Condi	With ect tions	Change in	Significant	Fut With Pro Cond	ure nout ject itions	Future Proj Condi	e With ject itions	Change in	Significant
No.	Intersection	V/C	LOS	V/C	LOS	V/C	Impact	V/C	LOS	V/C	LOS	V/C	Impact
181	Crenshaw Boulevard & Venice Boulevard	0.942	Е	0.973	Е	0.031	Yes						
182	Crenshaw Boulevard & Washington Boulevard	0.894	D	0.960	Е	0.066	Yes						
183	San Vicente Boulevard & Venice Boulevard	0.529	А	0.562	А	0.033	No						
184	La Brea Avenue & Olympic Boulevard	0.848	D	0.891	D	0.043	Yes						
185	La Brea Avenue & Venice Boulevard	0.825	D	0.828	D	0.003	No						
186	La Brea Avenue & Washington Boulevard	0.746	С	0.776	С	0.030	No						
187	Fairfax Avenue & Olympic Boulevard	0.840	D	0.858	D	0.018	No						
	Total # of Impacted Intersections					0.40/	17					00%	9
	# of Impacted Intersections with FWP LOS C					24%	17					22%	2
	# of Impacted Intersections with FWP LOS D					29%	22					33%	2
	# of Impacted Intersections with FWP LOS E					21% 25%	18					11%	2
	# of impacted intersections with FWP LOS F					23%	20					33%	3
Source	e: The Mobility Group, 2011.												

 Table IV.B.1-15

 Project Impact Summary—Future With Project Compared to LACC Dark Conditions

				Sunday I	Day Event						Saturday	Day Eve	ent						Weekday Ev	vening E	vent		
Parameter		Pre-Ev (12:00–	ent Ho 1:00 p.1	ur м.)	P (ost-Event Ho 4:30–5:30 p.i	our M.)		Pre (12:	-Event Ho :00–1:00 p.	ur M.)		Pos (4:	st-Event Hc 30–5:30 p.M	our 1.)		Pre-E (4:30-	vent Ho -5:30 p.r	ur 1.)		Po: (9:0	st-Event Ho 00–10:00 p.i	our M.)
INTERSECTION	NS																						
Number of Intersections by Level of Service	LOS	Fu Wi Pr	uture thout oject	Future With Project	LOS	Future Without Project	Future With Project	LO	s	Future Without Project	Future With Project	LO	s	Future Without Project	Future With Project	LOS	F W P	uture 'ithout roject	Future With Project	LO	S	Future Without Project	Future With Project
	A B C D E F	1	66 7 2 2 0 0 77	145 18 5 7 2 0 177	A B C D E F	164 9 2 2 0 0 177	142 15 9 6 2 3 177	A B C D E F		139 23 11 1 2 1 177	111 26 20 8 6 6 177	A B C D E F		138 25 10 3 1 0 177	98 33 21 13 4 8 177	A B C D E F		70 30 46 22 10 9 187	44 31 41 30 19 22 187	A B C D E F		176 1 0 0 0 0 177	162 6 2 2 2 3 177
Number of Impacts by Level Key Impact	Nine of the	LOS C D F Total e 11 im	# Imp	bacts 4 5 2 0 1	Thirteen of	OS # Im C D E F otal 1 the 18 impac	pacts 7 6 2 3 8 tted	Twenty	LOS C D E F Tota	S # Imp 14 al 3 32 impacte	pacts 4 6 6 6 2 ed	Twenty	LO C D F Tot	S # Imp 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3	bacts 4 1 3 8 6 bacted	Forty-on	LOS C D E F Total	# Imj 1 2 1 2 7 79 impa	pacts 9 2 8 0 9 (cted)	Four of	LO C E F Tot	S # Imp	pacts 2 2 2 3 9 d
Locations	Total 11 Key Impact ssues/ ocations Nine of the 11 impacted intersections will continue to oper at LOS D or better with the Proposed Project. The remaining two impacted intersections would operate at LOS E. Half of the impacted intersections would be located along 17th Street leading from the I-10 westbound off-ramp Los Angeles Street.				D or better Project. Tv intersection E with the I intersection Street, Hill Los Angele would open Proposed F intersection LOS E and would be lo the I-10 fre Street lead on-ramp at	s would oper with the Prop to of the impa s would oper Proposed Pro s, Blaine Stre Street & 18th s Street & 18 ate at LOS F Project. One- s, including r LOS F inters cated on Hill eway and alo ng to the I-10 Los Angeles	ate at LOS posed acted rate at LOS ject. Three set & 11th Street, and th Street, and th Street with the third of the nost of the sections, Street near ng 18th eastbound Street.	D or be Project. intersect LOS F I 17th Str I-10 we Angeles would b (San Pe Bouleva Hoover impacted the dow fifteen in be locat approad thirteen better.	tter wit Six o ctions, locatio reet co stbour s Street ed the edro S ard, Ve Street ed inter ntown mpacto ted on ching o	th the Property of the impact and virtuall ons, would borridor leading off-ramp et. Four inter- ne end of off- itreet, Adam ermont Ave t). Eight of resections wo narea. The ted intersect arterial road downtown, d operate ar	ate at LOS osed ted ly all of the pe along the ang from the at Los ersections ff-ramps nue, and the rould be in eremaining tions would adways of which t LOS D or	D or be Project intersed E with t of the in operate Project intersed the LOS located the sou Figuero Street, access freeway intersed downto thirteen arterials with ele operatio	ctions atter with the Pro- ctions the Pro- mpacta at LC at	would opera- ith the Prop- ee of the imp would opera- oposed Proj ed intersect DS F with th of the impa , including v tersections, g the I-10 co d of downtov- eet and San rily with outl e I-10 eastb n of the impa would be in ea, and the sections wor ing the dow of these inter LOS D or be	ate at LOS osed bacted ate at LOS ject. Eight ions would e Proposed cted irtually all of would be rridor on wn between Pedro bound traffic ound acted the remaining uld be on ntown area, rsections etter.	operate Propose impacted operate would op Propose Avenue Crensha Bouleva intersect F with th which w without th Street & Street & Street & Street & Avenue Street & Street & S	at LOS I d Project interse at LOS I erate at d Project w Boule d). Twe ons wor e Propo ould ope ne Propo Olympic Pico Bo Adams 8th Stre 5th Stre & Wilshi which v	D or bett D or bett ections w E, two of t LOS E t (Norm ire Boule evard & V enty of th uld oper sed Pro- erate at L osed Pro- c Boulevard Boulevard Boulevard evard, Figu evard, Figu	inde to ser with the een of the yould f which without the andie evard, and /enice ne impacted ate at LOS ject, five of LOS F oject (Main ard, Main Figueroa urd, Bixel eroa Street gueroa Vermont evard) and verate at	D or be the Pro impacte operate Project Street & 18th St & 18th F with t the nine would b the I-10 Street I on-ram of the in be at of freeway southbo and Gra the Hol	ctions atter, b posec ed integent at LC . Three at LC . Three . T	would opera- oth with and I Project. Twee Project. Twee Project. Twee Project. Twee Project intersection would opera- oposed Project acted intersect oposed Project acted intersect of the I-10 os Angeles ed intersect p locations t en (Blaine S o the Harbovenue north d Freeway).	ate at LOS d without wo ould e Proposed ons, Blaine Street & geles Street rate at LOS ect. Six of ections Street near ng 18th eastbound Street. Two ions would to the Street or Freeway bound to

	Sunday I	Day Event	Saturday	Day Event	Weekday Ev	vening Event
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)
					LOS E without the Proposed Project (Figueroa Street & Olympic Boulevard, Figueroa Street & 8th Street, Figueroa Street & 6th Street, Grand Avenue & 1st Street, Western Avenue & Olympic Boulevard, Vermont Avenue & Olympic Boulevard, and Vermont Avenue & Washington Boulevard). Nine of the impacted intersections,	
					including four LOS F intersections, would be located along the 17th Street (and 16th Street) corridor leading from the I-10 westbound ramps at Los Angeles Street and San Pedro Street. Twenty-eight of the impacted intersections, including ten LOS F intersections, would be	
					located in the downtown area. Four intersections would be located at the ends of freeway off-ramps (at Vermont Avenue, at Hoover Street, at Adams Boulevard, and at Martin Luther King Jr. Boulevard, with three	
					operating at LOS D or better and one operating at LOS E). The remaining 38 impacted intersections would be located on arterial roadways near or leading to downtown, with 18 intersections operating at LOS D or better, 10 operating at LOS E and six operating at LOS F.	
					Because of the higher background traffic volumes without the project for this scenario, many intersection impacts represent increases in V/C ratio but no change in LOS designation, or worsening by only one level of service. For example, of the 38 impacted intersections that would operate at LOS E or LOS F with the Proposed Project, at nine locations the LOS would change	

	S	Sunday Day Event	Saturday	Day Event	Weekday Ev	vening Event
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)
					from LOS D to LOS E, at two locations it would remain at LOS E (without and with the Proposed Project), at seven locations it would worsen from LOS E to LOS F, and at seven locations it would remain at LOS F.	
Impacts	Minor impacts to:	Impacts to:	Minor impacts to:	Impacts to:	No impacts	Impacts to:
	Blue Line	Red Line	Red Line	Red Line		Red Line (WB)
	Metrolink	Blue Line	Blue Line	Blue Line		Red/Purple Line (EB)
	Silver Line	• Expo Line	Silver Line	• Expo Line		Blue Line
	Express Bus	Metrolink	• Express Bus	Metrolink		• Expo Line
		Silver Line	• Local Bus	Silver Line		Green Line (East)
		Rapid Bus		• Express Bus		Green Line (West)
		• Express Bus				Gold Line (Pas)
						Gold Line (ELA)
						Silver Line
						Rapid Bus
						• Express Bus
Additional Rail	Blue Line 3	Red Line 6	Red Line 1	Red Line 5	None necessary	Red Line (WB) 13
Cars/Buses	Metrolink 1	Blue Line 8	Blue Line 4	Blue Line 9		Red/Purple Line (EB) 3
Needed to	Silver Line 2+2	Expo Line 1	Silver Line 1+1	Expo Line 1		Blue Line 18
Factor	Express Bus 2	Metrolink 2	Express Bus 1	Metrolink 1		Expo Line 10
		Silver Line 3+3	Local Bus 1	Silver Line 2+2		Green Line (East) 5
		Rapid Bus 1		Express Bus 2		Green Line (West) 4
		Express Bus 3				Gold Line (Pas) 2
						Gold Line (ELA) 4 Silver Line 212
						Silver Line 5+5
						Express Bus 5
Key Issues	These would occur because	of the These would occur because of the	These would occur because of the	These would occur because of the	Surplus capacity available as Event	These impacts would occur because
	reduced transit schedules at	reduced transit schedules at	reduced transit schedules at	reduced transit schedules at	Center trips are inbound to	of the significantly scaled back
	weekends, when additional of	capacity weekends, when additional capacity	weekends, when additional capacity	weekends, when additional capacity	downtown during P.M. peak period.	service schedules that are operated
	could be provided, and these	e could be provided, and these	could be provided, and these	could be provided, and these		on the transit system in the late
	eliminated by relatively small	Impacts could, therefore, be eliminated by relatively small	Impacts could, therefore, be eliminated by relatively small	Impacts could, therefore, be		transit schedules at these times
	increases in transit service.	increases in transit service.	increases in transit service.	increases in transit service.		additional capacity would need to be
						provided during the Weekday Post-
						Event Hour. Such capacity would

City of Los Angeles SCH. No. 2011031049

	Pre-Event Hour (12:00–1:00 P.M.)			Day Event					Saturday	Day Event					Weekday Ev	vening Event		
Parameter	Pre-Event Hour (12:00–1:00 р.м.)			Pc (4	ost-Event Ho :30–5:30 p.m	our л.)	P (1	Pre-Event Ho 2:00–1:00 P.	ur м.)	P0 (4	ost-Event He l:30–5:30 p.	our M.)	P (4	re-Event Ho ::30–5:30 p.r	ur 1.)	Po (9:	st-Event Ho 00–10:00 p.	pur M.)
																be available could be pro- necessary to Weekday Ex- passenger to below the se operated du periods.	, and addition vided. The to accommod vening Post-fo ads would s ervice levels ring the wee	nal service total service ate the Event Hour till be well typically kday peak
FREEWAYS																		
Freeway Seg	ments			T.			T 	-		ı ş			ı [p			<u></u>		
Intersections by Level of Service	LOS	Future Without Project	Future With Project	LOS	Future Without Project	Future With Project	LOS	Future Without Project	Future With Project	LOS	Future Without Project	Future With Project	LOS	Future Without Project	Future With Project	LOS	Future Without Project	Future With Project
	А	2	0	А	1	1	А	1	0	A	1	1	А	2	0	А	3	1
	В	2	1	B	2	0	В	2	1	B	1	0	B 1 0 C 2 3		B	4	1	
		6	4 7		8	3 4		10	3 4		6	2 4	C 2 3 D 1 3			13	9 6	
	E	3	4	E	2	3	E	2	6	E	3	0	D 1 3 E 3 0		E	0	0	
	F0	0	4	F0	0	9	F0	0	5	F0	1	13	F0	9	9	F0	0	3
	F1	0	0	F1	0	0	F1	0	1	F1	0	0	F1	1	2	F1	0	0
	F2 F3	0	0	F2 F3	0	0	F2 F3	0	0	F2 F3		0	F2 F3	0	2	F2 F3	0	0
	13	20	20	13	20	20	13	20	20	15	20	20		20	20	10	20	20
Number of	1.000monto	20	20		20	20	6 cogmonto		20	12 0000001		20	14 cogmont		20	2 cogmonto	20	20
Number of Segments	4 segments SR-110 Nor (1.006) F(th of Alpine {	Street (SB)	9 segments I-110 at Ver (1.010) F(non Ave (Ma ₀₎	inline) (SB)	6 segments 4 mainline 2 HOV	i		13 segment 11 mainline 2 HOV	S		14 segment I-110 South Blvd (Mainli	s of Martin Lu ne) (NB)	ther King Jr.	3 segments US-101 at G (1.014) F(ilendale Blvd	
	(1.006) F(0) I-5 South of Stadium Way (SB) (1.010) (1.040) F(0)				(NB)	I-5 South of (1.011) F(f Stadium Wa (0)	iy (SB)	I-10 West o (1.045) F(f Vermont Av 0)	ve (WB)	(1.025) F(I-5 South of	0)´` Stadium Wa	iy (SB)	SR-110 Sou (1.016) F(, th of US-101 0)		
	US-101 at Glendale Blvd (SB) (1.094) F(0) SR-110 Between James Wood Blvd and Olympic Blvd (NB) (1.059) F(0)				I-110 North Blvd (HOV) (1.015) F(of Martin Lut (NB) (0)	her King Jr.	I-5 South of (1.055) F(Stadium Wa (0)	ay (NB)	(1.082) F(SR-110 Bet	0) ween James	Wood Blvd	I-5 West of I (1.017) F(ndiana Stree 0)	t		
	US-101 South of Vermont Ave (SB) (1.180) F(0) I-10 West of Vermont Ave (1.060) F(0)			e (WB)	US-101 at 0 (1.064) F(Glendale Blvc (0)	d (SB)	(1.084) F(0) San Pedro S	Street (EB)	(1.102) F(0) Glendale Blvc	1 (SB)					
	(1.06 US-1 (1.07			US-101 Sou (1.072) F(, hth of Vermor	nt (NB)	US-101 Nor (1.067) F(rth of Vignes (0)	St (NB)	(1.088) F(0) mon Ave (Ma	inline) (SB)	(1.136) F(0) Indiana Stree	et (NB)			
		.100) 1 (0)			th of Vignes	St (SB)	US-101 Sou	uth of Vermor	nt Ave (SB)	(1.089) F((0)		(1.142) F(0)				

City of Los Angeles SCH. No. 2011031049

	Sunday I	Day Event	Saturday	Day Event	Weekday Ev	vening Event
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)
Key Issues	The D/C ratio would be less than 1.10 at three of the four impacted freeway locations and would be between 1.10 and 1.20 at the one remaining location.	 (1.081) F(0) I-5 West of Indiana Street (SB) (1.121) F(0) US-101 at Glendale Blvd (NB) (1.139) F(0) SR-110 South of US-101 (NB) (1.243) F(0) At six of the nine impacted freeway locations, the D/C ratio would be less than 1.10. At two of the remaining impacted freeway locations, the D/C ratio would be between 1.10 and 1.20, and at one location the D/C ratio would be greater than 1.20.	(1.150) F(0) I-110 at Slauson Ave (HOV) (NB) (1.252) F(1) Four of the LOS F locations would have a D/C ratio of less than 1.10. At one location the D/C ratio would be between 1.10 and 1.20, and at one location it would be greater than 1.20.	I-110 North of Martin Luther King Jr. Blvd (HOV) (SB) (1.093) F(0) I-5 West of Indiana Street (SB) (1.112) F(0) I-110 at Slauson Ave (HOV) (SB) (1.119) F(0) SR-110 North of Alpine St (NB) (1.129) F(0) US-101 at Glendale Blvd (NB) (1.140) F(0) SR-110 Between James Wood Blvd and Olympic Blvd (NB) (1.162) F(0) US-101 North of Vignes St (SB) (1.174) F(0) SR-110 South of US-101 (NB) (1.238) F(0) The D/C ratio would be less than 1.10 at six of the impacted locations and would be between 1.10 and 1.20 at a further six locations. At the remaining impacted locations the D/C ratio would be greater than 1.20.	I-110 at Vernon (Mainline) (NB) (1.179) $F(0)$ US-101 North of Vignes St (NB) (1.187) $F(0)$ US-101 South of Vermont (SB) (1.216) $F(0)$ SR-110 North of Alpine St (SB) (1.227) $F(0)$ SR-110 Between James Wood Blvd and Olympic Blvd (NB) (1.268) $F(1)$ I-10 East of San Pedro St (WB) (1.276) $F(1)$ I-10 West of Vermont Ave (EB) (1.361) $F(2)$ SR-110 South of US-101 (SB) (1.374) $F(2)$ I-10 East of Crenshaw Blvd (EB) (1.571) $F(3)$ At two of the 14 impacted freeway locations, the D/C ratio would be less than 1.10. Five impacted locations would have a D/C ratio between 1.10 and 1.20. Four impacted locations would have a D/C ratio between 1.20 and 1.30, and three impacted locations would	All three of impacted freeway locations would have a D/C ratio less than 1.02.
		greater than 1.20.			have a D/C ratio greater than 1.30. The level of service at 11 of the 14 impacted locations would be LOS F without the Proposed Project. Of these 11 impacted locations, the increase in D/C ratio would be less than 10 percent at six locations between 10 percent to 15 percent at one location, and in the 15 percent to 25 percent range at the other four locations.	

	Sunday I	Day Event	Saturday	v Day Event	Weekday Evening Event				
Parameter	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)	Pre-Event Hour (4:30–5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)			
Freeway Off-	Ramps	-	-			-			
Number of Impacts	4 off-ramps 2 ramp 2 Lane	N/A	5 Off-Ramps 2 Ramp 3 Lane	N/A	8 Off-Ramps 6 Ramp 2 Lane	N/A			
	(Mainline)		(Mainline)		(Mainline)				
	Hoover Street EB Off-Ramp (Mainline)		Hoover Street EB Off-Ramp (Mainline)		Los Angeles Street WB Off-Ramp (Mainline)				
	Grand Avenue NB Off-Ramp (Lane)		Grand Avenue NB Off-Ramp (Lane)		9th Street NB Off-Ramp (Mainline)				
	9th Street NB Off-Ramp (Lane)		Adams Boulevard NB Off-Ramp (Lane)		Hoover Street EB Off-Ramp (Mainline)				
			9th Street NB Off-Ramp (Lane)		6th Street SB Off-Ramp (Mainline)				
					Olympic Boulevard SB Off-Ramp (Mainline)				
					Martin Luther King Jr. Boulevard NB Off-Ramp (Lane)				
					Adams Boulevard NB Off-Ramp (Lane)				
Key Issues									
Freeway On-I	Ramps	1	1		1	[
Number of Impacts	N/A	7 On-Ramps	N/A	11 On-Ramps	N/A	6 On-Ramps			
		Los Angeles Street EB On-Ramp		Los Angeles St EB On-Ramp		Los Angeles Street EB On-Ramp			
		Washington Boulevard SB On-Ramp				Blaine Street SB On-Ramp			
		Blaine Street SB On-Ramp				5th Street NB On-Ramp			
		8th Street SB On-Ramp		Wasnington Boulevard SB On-Ramp		8th Street NB On-Ramp			
		5th Street NB On-Ramp		Blaine Street SB On-Ramp		9th Street NB On-Ramp			
		8th Street NB On-Ramp		8th Street SB On-Ramp		11th Street NB On-Ramp			
		11th Street NB On-Ramp		Grand Ave WB On-Ramp (I-10/ I-110)					

re-Event Hour 2:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.) At three of these locations, volumes would exceed ramp capacities by	Рге-Event Hour (12:00–1:00 р.м.)	Post-Event Hour (4:30–5:30 р.м.)Glendale Boulevard On-Ramp5th Street NB On-Ramp8th Street NB On-Ramp9th Street NB On-Ramp11th Street NB On-RampAt three of these locations, volumes would exceed ramp capacities by	Pre-Ev (4:30-
	At three of these locations, volumes would exceed ramp capacities by		Glendale Boulevard On-Ramp5th Street NB On-Ramp8th Street NB On-Ramp9th Street NB On-Ramp11th Street NB On-RampAt three of these locations, volumes would exceed ramp capacities by	
	At three of these locations, volumes would exceed ramp capacities by		5th Street NB On-Ramp8th Street NB On-Ramp9th Street NB On-Ramp11th Street NB On-RampAt three of these locations, volumes would exceed ramp capacities by	
	At three of these locations, volumes would exceed ramp capacities by		8th Street NB On-Ramp 9th Street NB On-Ramp 11th Street NB On-Ramp At three of these locations, volumes would exceed ramp capacities by	
	At three of these locations, volumes would exceed ramp capacities by		9th Street NB On-Ramp 11th Street NB On-Ramp At three of these locations, volumes would exceed ramp capacities by	
	At three of these locations, volumes would exceed ramp capacities by		11th Street NB On-RampAt three of these locations, volumes would exceed ramp capacities by	
	At three of these locations, volumes would exceed ramp capacities by		At three of these locations, volumes would exceed ramp capacities by	
	less than 10 percent.		less than 10 percent.	
NT PLAN				1
	N/A	N/A	N/A	No impacts
	L			4
	N/A	N/A	N/A	23 locations
			- ·	
Analysis	N/A	N/A	N/A	N/A
	Analysis	N/A N/A Analysis N/A	N/A N/A N/A N/A Analysis N/A	N/A N/A N/A N/A N/A N/A

Weekday Ev	ening Event
ent Hour 5:30 р.м.)	Post-Event Hour (9:00–10:00 р.м.)
	N/A
	N/A
	N/A

		Sunday Day Pre-Event Hour (12:00–1:00 р.м.)						Sunday Day Post-Event Hour (4:30–5:30 р.м.)					
		Future Pro Cond	Without ject itions	Future Pro Condi	e With ject itions		Significant	Future V Pro Condi	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
1	Georgia Street & Olympic Boulevard	0.311	А	0.438	А	0.127	No	0.348	А	0.581	А	0.233	No
2	Francisco Street & Olympic Boulevard	0.291	А	0.492	А	0.201	No	0.203	А	0.499	А	0.296	No
3	Figueroa Street & Olympic Boulevard	0.385	А	0.622	В	0.237	No	0.355	А	0.567	Α	0.212	No
4	Flower Street & Olympic Boulevard	0.405	А	0.667	В	0.262	No	0.340	А	0.690	В	0.350	No
5	Grand Avenue & Olympic Boulevard	0.271	А	0.361	А	0.090	No	0.237	А	0.304	А	0.067	No
6	Olive Street & Olympic Boulevard	0.302	А	0.474	А	0.172	No	0.317	А	0.385	А	0.068	No
7	Hill Street & Olympic Boulevard	0.276	А	0.299	А	0.023	No	0.273	А	0.294	А	0.021	No
8	Broadway & Olympic Boulevard	0.475	А	0.498	А	0.023	No	0.463	А	0.463	А	0.000	No
9	Main Street & Olympic Boulevard	0.428	А	0.467	А	0.039	No	0.412	А	0.424	А	0.012	No
10	Los Angeles Street & Olympic Boulevard	0.263	А	0.263	А	0.000	No	0.146	А	0.149	А	0.003	No
11	Santee Street & Olympic Boulevard	0.272	А	0.272	А	0.000	No	0.164	А	0.179	А	0.015	No
12	Maple Avenue & Olympic Boulevard	0.375	А	0.375	А	0.000	No	0.262	А	0.291	А	0.029	No
13	Maple Avenue & 9th Street	0.370	А	0.372	А	0.002	No	0.209	А	0.234	А	0.025	No
14	San Pedro Street & 9th Street	0.279	А	0.309	А	0.030	No	0.193	А	0.233	А	0.040	No
15	L.A. Live Way & 11th Street	0.128	А	0.105	А	-0.023	No	0.078	А	0.625	В	0.547	No
16	Figueroa Street & 11th Street	0.235	А	0.254	А	0.019	No	0.229	А	0.238	А	0.009	No
17	Flower Street & 11th Street	0.244	А	0.224	А	-0.020	No	0.248	А	0.306	А	0.058	No
18	Grand Avenue & 11th Street	0.155	А	0.343	А	0.188	No	0.157	А	0.221	А	0.064	No
19	Olive Street & 11th Street	0.201	А	0.392	А	0.191	No	0.159	А	0.261	А	0.102	No
20	Figueroa Street & 12th Street	0.129	А	0.138	А	0.009	No	0.123	А	0.122	А	-0.001	No
21	Flower Street & 12th Street	0.087	А	0.088	А	0.001	No	0.092	А	0.141	А	0.049	No
22	Grand Avenue & 12th Street	0.116	А	0.123	А	0.007	No	0.124	А	0.294	А	0.170	No
23	Olive Avenue & 12th Street	0.167	А	0.347	А	0.180	No	0.137	А	0.185	А	0.048	No
24	L.A. Live Way & Pico Boulevard	0.323	А	0.514	А	0.191	No	0.308	А	0.394	А	0.086	No
25	L.A. Live Way & Bond Street/I-10 & I-110 Off-Ramps	0.187	А	0.392	А	0.203	No	0.155	А	0.320	А	0.165	No
26	Figueroa Street & Pico Boulevard	0.297	А	0.491	А	0.194	No	0.297	А	0.492	А	0.195	No
27	Flower Street & Pico Boulevard	0.226	А	0.387	А	0.161	No	0.197	А	0.469	А	0.272	No
28	Grand Avenue & Pico Boulevard	0.181	А	0.257	А	0.076	No	0.157	А	0.454	А	0.297	No
29	Olive Street & Pico Boulevard	0.157	А	0.442	А	0.285	No	0.139	А	0.197	A	0.058	No
30	Hill Street & Pico Boulevard	0.162	А	0.389	А	0.227	No	0.114	А	0.591	A	0.477	No
31	Broadway & Pico Boulevard	0.249	А	0.325	А	0.076	No	0.196	А	0.249	A	0.053	No
32	Main Street & Pico Boulevard	0.380	А	0.453	А	0.073	No	0.361	А	0.396	A	0.035	No

City of Los Angeles SCH. No. 2011031049

				Pre-Ever	Sunday nt Hour (1	^у Day 2:00–1:00 р.м.)		Sunday Day Post-Event Hour (4:30–5:30 р.м.)					
		Future V Proj Condi	Vithout ject itions	Futuro Pro Cond	e With ject litions		Significant	Future V Pro Condi	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
33	Blaine Street & Olympic Boulevard	0.408	А	0.677	В	0.269	No	0.380	А	0.568	А	0.188	No
34	Blaine Street & SR-110 SB Off-Ramp	0.172	А	0.697	В	0.525	No	0.134	А	0.225	А	0.091	No
35	Blaine Street & 11th Street	0.387	А	0.760	С	0.373	Yes	0.410	А	1.323	F	0.913	Yes
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.061	А	0.255	Α	0.194	No	0.086	А	0.289	Α	0.203	No
37	Figueroa Street & Venice Boulevard	0.205	А	0.365	Α	0.160	No	0.212	А	0.539	А	0.327	No
38	Flower Street & Venice Boulevard	0.170	А	0.243	Α	0.073	No	0.146	А	0.511	А	0.365	No
39	Grand Avenue & Venice Boulevard	0.108	А	0.162	Α	0.054	No	0.110	А	0.536	А	0.426	No
40	Olive Street & Venice Boulevard	0.111	А	0.379	Α	0.268	No	0.115	А	0.596	А	0.481	No
41	Grand Avenue & 17th Street	0.275	А	0.319	Α	0.044	No	0.257	А	0.507	А	0.250	No
42	Olive Street & 17th Street	0.279	А	0.969	E	0.690	Yes	0.243	А	0.388	А	0.145	No
43	Hill Street & 17th Street	0.286	А	0.839	D	0.553	Yes	0.257	А	0.917	Е	0.660	Yes
44	Broadway & 17th Street	0.295	А	0.835	D	0.540	Yes	0.244	А	0.339	А	0.095	No
45	Main Street & 17th Street	0.296	А	0.813	D	0.517	Yes	0.252	А	0.289	А	0.037	No
46	Los Angeles Street & 17th Street	0.329	А	0.858	D	0.529	Yes	0.235	А	0.271	А	0.036	No
47	Flower Street & 18th Street	0.072	А	0.080	Α	0.008	No	0.066	А	0.194	А	0.128	No
48	Grand Avenue & 18th Street	0.174	А	0.255	Α	0.081	No	0.169	А	0.502	А	0.333	No
49	Olive Street & 18th Street	0.266	А	0.494	Α	0.228	No	0.191	А	0.322	А	0.131	No
50	Hill Street & 18th Street	0.151	А	0.241	Α	0.090	No	0.126	А	1.021	F	0.895	Yes
51	Broadway & 18th Street	0.197	А	0.232	Α	0.035	No	0.147	А	0.791	С	0.644	Yes
52	Main Street & 18th Street	0.225	А	0.225	Α	0.000	No	0.211	А	0.808	D	0.597	Yes
53	Los Angeles Street & 18th Street	0.279	А	0.280	Α	0.001	No	0.308	А	1.503	F	1.195	Yes
54	Figueroa Street & Washington Boulevard	0.388	А	0.438	А	0.050	No	0.330	А	0.566	А	0.236	No
55	Flower Street & Washington Boulevard	0.241	А	0.247	Α	0.006	No	0.188	А	0.460	А	0.272	No
56	Grand Avenue & Washington Boulevard	0.190	А	0.248	Α	0.058	No	0.160	А	0.489	А	0.329	No
57	Olive Street & Washington Boulevard	0.162	А	0.334	Α	0.172	No	0.146	А	0.330	А	0.184	No
58	Hill Street & Washington Boulevard	0.148	А	0.306	Α	0.158	No	0.127	А	0.275	А	0.148	No
59	Broadway & Washington Boulevard	0.224	А	0.289	Α	0.065	No	0.185	А	0.268	А	0.083	No
60	Main Street & Washington Boulevard	0.309	А	0.333	Α	0.024	No	0.268	А	0.412	А	0.144	No
61	Los Angeles Street & Washington Boulevard	0.136	А	0.165	Α	0.029	No	0.103	А	0.202	А	0.099	No
62	San Pedro Street & Washington Boulevard	0.362	А	0.391	Α	0.029	No	0.301	А	0.435	А	0.134	No
63	Figueroa Street & Adams Boulevard	0.613	В	0.621	В	0.008	No	0.562	А	0.606	В	0.044	No
64	Flower Street & Adams Boulevard	0.240	Α	0.249	A	0.009	No	0.249	Α	0.420	A	0.171	No

				Pre-Ever	Sunday t Hour (1	∕ Day 2:00–1:00 р.м.)	Sunday Day Post-Event Hour (4:30–5:30 р.м.)						
		Future Pro Cond	Without ject itions	Future Pro Condi	e With ject itions		Significant	Future V Pro Condi	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
65	I-110 NB Off-Ramps & Adams Boulevard	0.232	А	0.697	В	0.443	No	0.242	А	0.348	А	0.106	No
66	Grand Avenue & Adams Boulevard	0.185	А	0.372	А	0.187	No	0.182	А	0.249	А	0.067	No
67	Hill Street & Adams Boulevard	0.187	А	0.595	А	0.408	No	0.146	А	0.181	А	0.035	No
68	Broadway & Adams Boulevard	0.222	А	0.263	А	0.041	No	0.183	А	0.195	А	0.012	No
69	Main Street & Adams Boulevard	0.307	А	0.307	А	0.000	No	0.275	А	0.275	А	0.000	No
70	Flower Street & Jefferson Boulevard	0.237	А	0.238	А	0.001	No	0.228	А	0.376	А	0.148	No
71	Figueroa Street & Exposition Boulevard	0.589	А	0.608	В	0.019	No	0.408	А	0.451	А	0.043	No
72	Flower Street & 37th Street	0.122	А	0.125	А	0.003	No	0.174	А	0.337	А	0.163	No
73	Hope Street & 37th Street	0.202	А	0.216	А	0.014	No	0.231	А	0.231	А	0.000	No
74	Hill Street & 37th Street	0.049	А	0.108	А	0.059	No	0.050	А	0.061	А	0.011	No
75	Broadway & 37th Street	0.086	А	0.087	А	0.001	No	0.063	А	0.064	А	0.001	No
76	Figueroa Street & 39th Street	0.200	А	0.219	А	0.019	No	0.292	А	0.293	А	0.001	No
77	I-110 HOV Ramps & 39th Street	0.083	А	0.178	А	0.095	No	0.108	А	0.279	А	0.171	No
78	Figueroa Street & Martin Luther King Jr Boulevard	0.549	А	0.550	А	0.001	No	0.627	В	0.757	С	0.130	Yes
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.604	В	0.605	В	0.001	No	0.597	А	0.747	С	0.150	Yes
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.533	А	0.573	А	0.040	No	0.429	А	0.443	А	0.014	No
81	Georgia Street &9th Street	0.371	А	0.537	А	0.166	No	0.325	А	0.556	А	0.231	No
82	Francisco Street & 9th Street	0.161	А	0.279	А	0.118	No	0.141	А	0.481	А	0.340	No
83	Figueroa Street & 9th Street	0.359	А	0.485	А	0.126	No	0.327	А	0.460	А	0.133	No
84	Flower Street & 9th Street	0.322	А	0.395	А	0.073	No	0.261	А	0.387	А	0.126	No
85	Broadway & 9th Street	0.338	А	0.339	А	0.001	No	0.215	А	0.277	А	0.062	No
86	Bixel Street & 8th Street	0.373	А	0.373	А	0.000	No	0.403	А	0.549	А	0.146	No
87	Francisco Street & 8th Street	0.181	А	0.307	А	0.126	No	0.191	А	0.417	А	0.226	No
88	Figueroa Street & 8th Street	0.311	А	0.701	С	0.390	Yes	0.293	А	0.561	А	0.268	No
89	Flower Street & 8th Street	0.230	А	0.553	А	0.323	No	0.224	А	0.423	А	0.199	No
90	Hill Street & 8th Street	0.230	А	0.323	А	0.093	No	0.219	А	0.260	А	0.041	No
91	Broadway & 8th Street	0.524	А	0.551	А	0.027	No	0.407	А	0.407	А	0.000	No
92	Bixel Street & Wilshire Boulevard	0.289	А	0.325	А	0.036	No	0.267	А	0.289	А	0.022	No
93	Figueroa Street & Wilshire Boulevard	0.256	А	0.291	А	0.035	No	0.297	А	0.608	В	0.311	No
94	Lucas Avenue & 6th Street	0.321	А	0.532	А	0.211	No	0.331	А	0.366	А	0.035	No
95	Bixel Street & 6th Street	0.249	А	0.306	А	0.057	No	0.277	А	0.278	А	0.001	No
96	Figueroa Street & 6th Street	0.218	А	0.346	А	0.128	No	0.224	А	0.385	А	0.161	No

City of Los Angeles SCH. No. 2011031049

				Pre-Ever	Sunday nt Hour (1	и Day 2:00–1:00 р.м.)		Sunday Day Post-Event Hour (4:30–5:30 р.м.)					
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future Without Project Conditions		Future With Project Conditions			Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
97	Flower Street & 6th Street	0.188	A	0.386	Α	0.198	No	0.200	А	0.203	А	0.003	No
98	Grand Avenue & 6th Street	0.159	А	0.261	А	0.102	No	0.094	А	0.157	А	0.063	No
99	Hill Street & 6th Street	0.247	A	0.271	Α	0.024	No	0.175	А	0.369	А	0.194	No
100	Spring Street & 6th Street	0.299	Α	0.346	Α	0.047	No	0.264	А	0.316	А	0.052	No
101	Main Street & 6th Street	0.215	А	0.216	Α	0.001	No	0.217	А	0.444	А	0.227	No
102	Figueroa Street & 5th Street	0.170	А	0.182	Α	0.012	No	0.170	А	0.420	А	0.250	No
103	Grand Avenue & 5th Street	0.139	А	0.235	Α	0.096	No	0.153	А	0.203	А	0.050	No
104	Olive Street & 5th Street	0.203	Α	0.244	Α	0.041	No	0.214	А	0.334	А	0.120	No
105	Hill Street & 5th Street	0.221	Α	0.311	А	0.090	No	0.168	А	0.311	А	0.143	No
106	Spring Street & 5th Street	0.200	А	0.247	А	0.047	No	0.221	А	0.223	А	0.002	No
107	Main Street & 5th Street	0.125	Α	0.126	А	0.001	No	0.125	А	0.215	А	0.090	No
108	Figueroa Street & 2nd Street	0.162	A	0.162	А	0.000	No	0.172	А	0.338	А	0.166	No
109	Beaudry Street & 1st Street	0.130	A	0.137	А	0.007	No	0.162	А	0.164	А	0.002	No
110	Hope Street & 1st Street	0.289	A	0.339	А	0.050	No	0.274	А	0.597	А	0.323	No
111	Grand Avenue & 1st Street	0.384	A	0.424	А	0.040	No	0.363	А	0.754	С	0.391	Yes
112	Olive Street & 1st Street	0.243	Α	0.248	А	0.005	No	0.252	А	0.395	А	0.143	No
113	Hill Street & 1st Street	0.288	A	0.353	А	0.065	No	0.266	А	0.437	А	0.171	No
114	Spring Street & 1st Street	0.208	А	0.294	Α	0.086	No	0.221	А	0.228	А	0.007	No
115	Main Street & 1st Street	0.265	A	0.268	А	0.003	No	0.251	А	0.365	А	0.114	No
116	Hope Street & Temple Street	0.386	A	0.399	А	0.013	No	0.308	А	0.473	А	0.165	No
117	Main Street & Aliso Street	0.291	Α	0.295	А	0.004	No	0.255	А	0.552	А	0.297	No
118	Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.180	А	0.181	А	0.001	No	0.189	А	0.263	А	0.074	No
119	Grand Avenue & US-101 NB Ramps	0.449	А	0.449	А	0.000	No	0.461	А	0.894	D	0.433	Yes
120	Beaudry Avenue & Sunset Boulevard	0.440	A	0.451	А	0.011	No	0.607	В	0.607	В	0.000	No
121	Figueroa Street & Cesar Chavez Avenue	0.456	А	0.456	A	0.000	No	0.509	А	0.509	А	0.000	No
122	Grand Avenue & Cesar Chavez Avenue	0.596	A	0.596	А	0.000	No	0.389	А	0.392	А	0.003	No
123	Spring Street & Cesar Chavez Avenue	0.497	A	0.561	А	0.064	No	0.586	А	0.590	А	0.004	No
124	Main Street & Cesar Chavez Avenue	0.469	A	0.471	А	0.002	No	0.514	А	0.547	А	0.033	No
125	Alameda Street & Cesar Chavez Avenue	0.578	A	0.578	A	0.000	No	0.651	В	0.651	В	0.000	No
126	Main Street & Alpine Street	0.238	A	0.251	А	0.013	No	0.190	А	0.219	A	0.029	No
127	Alameda Street & Alpine Street	0.165	A	0.107	A	0.002	No	0.128	А	0.129	А	0.001	No
128	Hill Street & Alpine Street	0.319	Α	0.389	Α	0.070	No	0.263	А	0.433	А	0.170	No

City of Los Angeles SCH. No. 2011031049

				Pre-Ever	Sunday Day /ent Hour (12:00–1:00 р.м.)			Sunday Day Post-Event Hour (4:30–5:30 P.M.)					
		Future Pro Cond	Without ject itions	Future Pro Condi	e With ject itions		Significant	Future Pro Cond	Without ject itions	Futuro Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
129	Hill Street & College Street	0.475	А	0.491	А	0.016	No	0.421	А	0.591	А	0.170	No
130	Sunset Boulevard & Elysian Park Avenue	0.820	D	0.820	D	0.000	No	0.645	В	0.657	В	0.012	No
131	Glendale Boulevard & Bellevue Avenue	0.313	А	0.362	А	0.049	No	0.306	А	0.443	А	0.137	No
132	Glendale Boulevard & Temple Street	0.515	А	0.572	А	0.057	No	0.513	А	0.655	В	0.142	No
133	Alvarado Street & US-101 WB Ramps	0.479	А	0.480	А	0.001	No	0.494	А	0.556	А	0.062	No
134	Alvarado Street & US-101 EB Ramps	0.433	А	0.433	А	0.000	No	0.452	А	0.475	А	0.023	No
135	Alvarado Street & Beverly Boulevard	0.399	А	0.418	А	0.019	No	0.455	А	0.473	А	0.018	No
136	Vermont Avenue & 6th Street	0.553	А	0.563	А	0.010	No	0.529	А	0.543	А	0.014	No
137	Alvarado Street & 6th Street	0.456	А	0.478	А	0.022	No	0.454	А	0.471	А	0.017	No
138	Western Avenue & Wilshire Boulevard	0.608	В	0.632	В	0.024	No	0.664	В	0.679	В	0.015	No
139	Normandie Avenue & Wilshire Boulevard	0.376	А	0.396	А	0.020	No	0.492	А	0.515	А	0.023	No
140	Vermont Avenue & Wilshire Boulevard	0.795	С	0.811	D	0.016	No	0.768	С	0.785	С	0.017	No
141	Alvarado Street & Wilshire Boulevard	0.412	А	0.423	А	0.011	No	0.466	А	0.521	А	0.055	No
142	Vermont Avenue & 8th Street	0.715	С	0.729	С	0.014	No	0.635	В	0.639	В	0.004	No
143	Alvarado Street & 8th Street	0.477	А	0.505	А	0.028	No	0.418	А	0.509	А	0.091	No
144	Western Avenue & Olympic Boulevard	0.649	В	0.699	В	0.050	No	0.815	D	0.899	D	0.084	Yes
145	Normandie Avenue & Olympic Boulevard	0.473	А	0.523	А	0.050	No	0.497	А	0.557	А	0.060	No
146	Vermont Avenue & Olympic Boulevard	0.819	D	0.905	Е	0.086	Yes	0.811	D	0.896	D	0.085	Yes
147	Alvarado Street & Olympic Boulevard	0.524	А	0.672	В	0.148	No	0.595	А	0.691	В	0.096	No
148	Union Avenue & Olympic Boulevard	0.478	А	0.677	В	0.199	No	0.552	А	0.618	В	0.066	No
149	Western Avenue & Pico Boulevard	0.558	А	0.583	А	0.025	No	0.546	А	0.577	А	0.031	No
150	Normandie Avenue & Pico Boulevard	0.516	А	0.539	А	0.023	No	0.442	А	0.451	А	0.009	No
151	Vermont Avenue & Pico Boulevard	0.680	В	0.727	С	0.047	Yes	0.638	В	0.719	С	0.081	Yes
152	Alvarado Street & Pico Boulevard	0.607	В	0.867	D	0.260	Yes	0.628	В	0.834	D	0.206	Yes
153	Union Avenue & Pico Boulevard	0.573	А	0.677	В	0.104	No	0.597	А	0.829	D	0.232	Yes
154	Alvarado Street & Hoover Street	0.330	А	0.334	А	0.004	No	0.399	А	0.515	А	0.116	No
155	Western Avenue & Venice Boulevard	0.496	А	0.544	А	0.048	No	0.545	А	0.611	В	0.066	No
156	Normandie Avenue & Venice Boulevard	0.421	А	0.464	А	0.043	No	0.385	А	0.448	А	0.063	No
157	Vermont Avenue & Venice Boulevard	0.554	А	0.630	В	0.076	No	0.565	А	0.625	В	0.060	No
158	Hoover Street & Venice Boulevard	0.518	А	0.562	А	0.044	No	0.574	А	0.739	С	0.165	Yes
159	Western Avenue & Washington Boulevard	0.595	А	0.643	В	0.048	No	0.521	А	0.560	А	0.039	No
160	Normandie Avenue & Washington Boulevard	0.512	А	0.548	А	0.036	No	0.432	А	0.439	А	0.007	No

		Sunday DaySunday DayPre-Event Hour (12:00–1:00 P.M.)Post-Event Hour (4:30–5:30 P.M.)											
		Future Pro Cond	Without ject itions	Future With Project Conditions			Significant	Future Without Project Conditions		Future With Project Conditions			Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
161	Vermont Avenue & Washington Boulevard	0.597	А	0.676	В	0.079	No	0.603	В	0.669	В	0.066	No
162	Hoover Street & Washington Boulevard	0.549	А	0.699	В	0.150	No	0.549	А	0.673	В	0.124	No
163	I-10 WB Ramps & 20th Street	0.556	А	0.561	А	0.005	No	0.541	А	0.769	С	0.228	Yes
164	Vermont Avenue & I-10 EB Ramps	0.684	В	0.767	С	0.083	Yes	0.726	С	0.726	С	0.000	No
165	Hoover Street & I-10 EB Ramps	0.563	А	0.687	В	0.124	No	0.548	А	0.552	А	0.004	No
166	Hill Street & 16th Street	0.112	А	0.472	А	0.360	No	0.109	А	0.969	Е	0.860	Yes
167	Broadway & 16th Street	0.118	А	0.273	А	0.155	No	0.105	А	0.338	А	0.233	No
168	Main Street & 16th Street	0.213	А	0.353	А	0.140	No	0.183	А	0.349	А	0.166	No
169	Los Angeles Street & 16th Street	0.088	А	0.265	А	0.177	No	0.076	А	0.203	А	0.127	No
170	San Pedro Street & 16th Street	0.331	А	0.479	А	0.148	No	0.281	А	0.588	А	0.307	No
171	Central Avenue & 16th Street	0.369	А	0.380	А	0.011	No	0.294	А	0.337	А	0.043	No
172	Central Avenue & Washington Boulevard	0.414	А	0.464	А	0.050	No	0.300	А	0.454	А	0.154	No
173	Wilton Place & Wilshire Boulevard	0.446	А	0.447	А	0.001	No	0.417	А	0.430	А	0.013	No
174	Arlington Avenue & Olympic Boulevard	0.360	А	0.400	А	0.040	No	0.377	А	0.436	А	0.059	No
175	Arlington Avenue & Pico Boulevard	0.382	А	0.401	А	0.019	No	0.337	А	0.364	А	0.027	No
176	Arlington Avenue & Venice Boulevard	0.503	А	0.544	А	0.041	No	0.477	А	0.536	А	0.059	No
177	Arlington Avenue & Washington Boulevard	0.461	А	0.505	А	0.044	No	0.421	А	0.423	А	0.002	No
							44						10
	I otal # of Impacted Intersections					000/	11					222/	18
	# of Impacted Intersections with FWP LOS C					36%	4					39%	1
	# of Impacted Intersections with FWP LOS D					45%	5					33%	6
	# of Impacted Intersections with FWP LOS E					9%	2					11%	2
	# of Impacted Intersections with FWP LOS F					9%	0					17%	3
Source	: The Mobility Group, 2011.												

Table IV.B.1-17
Future With Project With LACC Dark
Saturday Day Pre-Event Hour (12:00–1:00 P.M.) and Post-Event Hour (4:30–5:30 P.M.)

				Pre-Even	Saturda t Hour (1	у Day 2:00–1:00 р.м.)		Saturday Day Post-Event Hour (4:30–5:30 р.м.)					
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future V Proj Condi	Vithout ect tions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
1	Georgia Street & Olympic Boulevard	0.565	А	0.640	В	0.075	No	0.569	А	0.834	D	0.265	Yes
2	Francisco Street & Olympic Boulevard	0.438	А	0.629	В	0.191	No	0.365	А	0.597	А	0.232	No
3	Figueroa Street & Olympic Boulevard	0.600	А	0.856	D	0.256	Yes	0.598	А	0.869	D	0.271	Yes
4	Flower Street & Olympic Boulevard	0.600	А	0.924	Е	0.324	Yes	0.530	А	0.865	D	0.335	Yes
5	Grand Avenue & Olympic Boulevard	0.404	А	0.608	В	0.204	No	0.355	А	0.468	А	0.113	No
6	Olive Street & Olympic Boulevard	0.508	А	0.727	С	0.219	Yes	0.445	А	0.613	В	0.168	No
7	Hill Street & Olympic Boulevard	0.537	А	0.689	В	0.152	No	0.435	А	0.508	А	0.073	No
8	Broadway & Olympic Boulevard	0.727	С	0.753	С	0.026	No	0.627	В	0.632	В	0.005	No
9	Main Street & Olympic Boulevard	0.572	А	0.609	В	0.037	No	0.568	А	0.579	А	0.011	No
10	Los Angeles Street & Olympic Boulevard	0.399	А	0.399	А	0.000	No	0.274	А	0.274	А	0.000	No
11	Santee Street & Olympic Boulevard	0.363	А	0.363	А	0.000	No	0.260	А	0.275	А	0.015	No
12	Maple Avenue & Olympic Boulevard	0.463	А	0.480	А	0.017	No	0.356	А	0.368	А	0.012	No
13	Maple Avenue & 9th Street	0.485	А	0.486	А	0.001	No	0.341	А	0.360	А	0.019	No
14	San Pedro Street & 9th Street	0.495	А	0.523	А	0.028	No	0.329	А	0.363	А	0.034	No
15	L.A. Live Way & 11th Street	0.219	А	0.109	А	-0.110	No	0.205	А	0.641	В	0.436	No
16	Figueroa Street & 11th Street	0.432	А	0.436	А	0.004	No	0.456	А	0.464	А	0.008	No
17	Flower Street & 11th Street	0.455	А	0.462	А	0.007	No	0.405	А	0.469	А	0.064	No
18	Grand Avenue & 11th Street	0.208	А	0.393	А	0.185	No	0.246	А	0.332	А	0.086	No
19	Olive Street & 11th Street	0.319	А	0.551	А	0.232	No	0.282	А	0.311	А	0.029	No
20	Figueroa Street & 12th Street	0.280	А	0.289	А	0.009	No	0.336	А	0.336	А	0.000	No
21	Flower Street & 12th Street	0.151	А	0.176	А	0.025	No	0.160	А	0.211	А	0.051	No
22	Grand Avenue & 12th Street	0.198	А	0.206	А	0.008	No	0.187	А	0.379	А	0.192	No
23	Olive Avenue & 12th Street	0.279	А	0.481	А	0.202	No	0.255	А	0.342	А	0.087	No
24	L.A. Live Way & Pico Boulevard	0.446	А	0.567	А	0.121	No	0.447	А	0.358	А	-0.089	No
25	L.A. Live Way & Bond Street/I-10 & I-110 Off-Ramps	0.250	А	0.415	А	0.165	No	0.255	А	0.326	А	0.071	No
26	Figueroa Street & Pico Boulevard	0.499	А	0.616	В	0.117	No	0.588	А	0.657	В	0.069	No
27	Flower Street & Pico Boulevard	0.295	А	0.502	А	0.207	No	0.305	А	0.507	А	0.202	No
28	Grand Avenue & Pico Boulevard	0.281	А	0.381	А	0.100	No	0.238	А	0.605	В	0.367	No
29	Olive Street & Pico Boulevard	0.280	А	0.524	А	0.244	No	0.272	А	0.344	А	0.072	No
30	Hill Street & Pico Boulevard	0.311	А	0.621	В	0.310	No	0.235	А	0.739	С	0.504	Yes
31	Broadway & Pico Boulevard	0.397	А	0.537	А	0.140	No	0.303	А	0.333	А	0.030	No
32	Main Street & Pico Boulevard	0.619	А	0.686	В	0.067	No	0.515	Α	0.547	А	0.032	No

				Pre-Even	Saturda t Hour (1	у Day 2:00–1:00 р.м.)				Post-Eve	у Day (4:30–5:30 р.м.)		
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future V Pro Condi	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
33	Blaine Street & Olympic Boulevard	0.599	А	0.943	E	0.344	Yes	0.579	А	0.857	D	0.278	Yes
34	Blaine Street & SR-110 SB Off-Ramp	0.265	А	0.635	В	0.370	No	0.217	А	0.389	А	0.172	No
35	Blaine Street & 11th Street	0.454	А	0.711	С	0.257	Yes	0.642	В	1.188	F	0.546	Yes
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.094	А	0.222	А	0.128	No	0.105	А	0.239	А	0.134	No
37	Figueroa Street & Venice Boulevard	0.424	А	0.544	А	0.120	No	0.516	А	0.902	E	0.386	Yes
38	Flower Street & Venice Boulevard	0.264	А	0.342	А	0.078	No	0.272	А	0.737	С	0.465	Yes
39	Grand Avenue & Venice Boulevard	0.176	А	0.251	А	0.075	No	0.160	А	0.626	В	0.466	No
40	Olive Street & Venice Boulevard	0.171	А	0.399	А	0.228	No	0.173	А	0.611	В	0.438	No
41	Grand Avenue & 17th Street	0.375	А	0.441	А	0.066	No	0.378	А	0.718	С	0.340	Yes
42	Olive Street & 17th Street	0.449	А	1.003	F	0.554	Yes	0.407	А	0.605	В	0.198	No
43	Hill Street & 17th Street	0.491	А	1.047	F	0.556	Yes	0.368	А	1.097	F	0.729	Yes
44	Broadway & 17th Street	0.456	А	1.065	F	0.609	Yes	0.339	А	0.487	А	0.148	No
45	Main Street & 17th Street	0.476	А	1.035	F	0.559	Yes	0.427	А	0.511	Α	0.084	No
46	Los Angeles Street & 17th Street	0.515	А	1.074	F	0.559	Yes	0.442	А	0.526	Α	0.084	No
47	Flower Street & 18th Street	0.091	А	0.095	А	0.004	No	0.091	А	0.179	Α	0.088	No
48	Grand Avenue & 18th Street	0.253	А	0.336	А	0.083	No	0.276	А	0.544	А	0.268	No
49	Olive Street & 18th Street	0.362	А	0.599	А	0.237	No	0.333	А	0.549	Α	0.216	No
50	Hill Street & 18th Street	0.287	А	0.373	А	0.086	No	0.267	А	1.242	F	0.975	Yes
51	Broadway & 18th Street	0.389	А	0.429	А	0.040	No	0.326	А	1.033	F	0.707	Yes
52	Main Street & 18th Street	0.470	А	0.470	А	0.000	No	0.423	А	1.080	F	0.657	Yes
53	Los Angeles Street & 18th Street	0.541	А	0.541	А	0.000	No	0.540	А	1.853	F	1.313	Yes
54	Figueroa Street & Washington Boulevard	0.520	А	0.592	А	0.072	No	0.479	А	0.709	С	0.230	Yes
55	Flower Street & Washington Boulevard	0.345	А	0.351	А	0.006	No	0.301	А	0.569	Α	0.268	No
56	Grand Avenue & Washington Boulevard	0.384	А	0.454	А	0.070	No	0.327	А	0.558	Α	0.231	No
57	Olive Street & Washington Boulevard	0.322	А	0.485	А	0.163	No	0.256	А	0.470	A	0.214	No
58	Hill Street & Washington Boulevard	0.306	А	0.496	А	0.190	No	0.236	А	0.388	Α	0.152	No
59	Broadway & Washington Boulevard	0.405	А	0.476	А	0.071	No	0.327	А	0.421	Α	0.094	No
60	Main Street & Washington Boulevard	0.569	А	0.598	А	0.029	No	0.485	А	0.651	В	0.166	No
61	Los Angeles Street & Washington Boulevard	0.249	А	0.278	А	0.029	No	0.231	А	0.340	Α	0.109	No
62	San Pedro Street & Washington Boulevard	0.525	А	0.527	А	0.002	No	0.442	А	0.608	В	0.166	No
63	Figueroa Street & Adams Boulevard	0.955	E	0.966	Е	0.011	Yes	0.925	Е	0.930	E	0.005	No
64	Flower Street & Adams Boulevard	0.386	А	0.403	А	0.017	No	0.390	А	0.546	A	0.156	No

				Pre-Ever	Saturda nt Hour (1	у Day 2:00–1:00 р.м.)				Post-Eve	Saturda ent Hour (у Day (4:30–5:30 р.м.)	
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future V Proj Condi	Vithout ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
65	I-110 NB Off-Ramps & Adams Boulevard	0.503	А	0.880	D	0.377	Yes	0.303	А	0.504	A	0.201	No
66	Grand Avenue & Adams Boulevard	0.334	А	0.524	А	0.190	No	0.291	А	0.359	А	0.068	No
67	Hill Street & Adams Boulevard	0.387	А	0.771	С	0.384	Yes	0.326	А	0.337	Α	0.011	No
68	Broadway & Adams Boulevard	0.357	А	0.436	Α	0.079	No	0.303	А	0.303	A	0.000	No
69	Main Street & Adams Boulevard	0.521	А	0.521	Α	0.000	No	0.438	А	0.438	A	0.000	No
70	Flower Street & Jefferson Boulevard	0.409	А	0.411	Α	0.002	No	0.411	А	0.540	A	0.129	No
71	Figueroa Street & Exposition Boulevard	0.688	В	0.703	С	0.015	No	0.595	А	0.643	В	0.048	No
72	Flower Street & 37th Street	0.277	А	0.278	А	0.001	No	0.309	А	0.455	Α	0.146	No
73	Hope Street & 37th Street	0.304	А	0.318	Α	0.014	No	0.321	А	0.322	Α	0.001	No
74	Hill Street & 37th Street	0.122	А	0.226	Α	0.104	No	0.138	А	0.138	Α	0.000	No
75	Broadway & 37th Street	0.151	А	0.153	Α	0.002	No	0.102	А	0.105	A	0.003	No
76	Figueroa Street & 39th Street	0.357	А	0.376	Α	0.019	No	0.359	А	0.365	Α	0.006	No
77	I-110 HOV Ramps & 39th Street	0.168	А	0.269	Α	0.101	No	0.187	А	0.344	Α	0.157	No
78	Figueroa Street & Martin Luther King Jr Boulevard	0.701	С	0.708	С	0.007	No	0.631	В	0.768	С	0.137	Yes
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.681	В	0.685	В	0.004	No	0.613	В	0.769	С	0.156	Yes
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.627	В	0.696	В	0.069	No	0.579	А	0.609	В	0.030	No
81	Georgia Street &9th Street	0.433	А	0.553	Α	0.120	No	0.485	А	0.722	С	0.237	Yes
82	Francisco Street & 9th Street	0.253	А	0.357	Α	0.104	No	0.231	А	0.575	Α	0.344	No
83	Figueroa Street & 9th Street	0.538	А	0.647	В	0.109	No	0.531	А	0.642	В	0.111	No
84	Flower Street & 9th Street	0.537	А	0.608	В	0.071	No	0.421	А	0.492	Α	0.071	No
85	Broadway & 9th Street	0.451	А	0.452	Α	0.001	No	0.337	А	0.395	Α	0.058	No
86	Bixel Street & 8th Street	0.527	А	0.527	Α	0.000	No	0.475	А	0.609	В	0.134	No
87	Francisco Street & 8th Street	0.260	А	0.543	Α	0.283	No	0.254	А	0.471	Α	0.217	No
88	Figueroa Street & 8th Street	0.418	А	0.986	E	0.568	Yes	0.471	А	0.754	С	0.283	Yes
89	Flower Street & 8th Street	0.391	А	0.755	С	0.364	Yes	0.358	А	0.559	Α	0.201	No
90	Hill Street & 8th Street	0.475	А	0.541	Α	0.066	No	0.391	А	0.395	Α	0.004	No
91	Broadway & 8th Street	0.713	С	0.743	С	0.030	No	0.546	А	0.546	Α	0.000	No
92	Bixel Street & Wilshire Boulevard	0.387	А	0.403	А	0.016	No	0.349	А	0.377	Α	0.028	No
93	Figueroa Street & Wilshire Boulevard	0.375	А	0.393	Α	0.018	No	0.479	А	0.820	D	0.341	Yes
94	Lucas Avenue & 6th Street	0.474	А	0.706	С	0.232	Yes	0.451	А	0.491	Α	0.040	No
95	Bixel Street & 6th Street	0.405	А	0.485	Α	0.080	No	0.388	А	0.404	Α	0.016	No
96	Figueroa Street & 6th Street	0.315	А	0.451	A	0.136	No	0.367	А	0.533	A	0.166	No

				Pre-Ever	Saturday nt Hour (1	у Day 2:00–1:00 р.м.)				Post-Eve	Saturda ent Hour	у Day (4:30–5:30 р.м.)	
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future V Proj Condi	Nithout ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
97	Flower Street & 6th Street	0.258	А	0.467	А	0.209	No	0.263	А	0.305	Α	0.042	No
98	Grand Avenue & 6th Street	0.243	А	0.338	А	0.095	No	0.202	А	0.275	A	0.073	No
99	Hill Street & 6th Street	0.385	А	0.397	А	0.012	No	0.349	А	0.513	Α	0.164	No
100	Spring Street & 6th Street	0.320	А	0.369	А	0.049	No	0.323	А	0.375	Α	0.052	No
101	Main Street & 6th Street	0.287	А	0.288	А	0.001	No	0.297	А	0.526	A	0.229	No
102	Figueroa Street & 5th Street	0.242	А	0.273	А	0.031	No	0.267	А	0.523	Α	0.256	No
103	Grand Avenue & 5th Street	0.218	А	0.307	А	0.089	No	0.223	А	0.277	Α	0.054	No
104	Olive Street & 5th Street	0.373	А	0.414	А	0.041	No	0.395	А	0.541	А	0.146	No
105	Hill Street & 5th Street	0.349	А	0.440	А	0.091	No	0.348	А	0.403	Α	0.055	No
106	Spring Street & 5th Street	0.269	А	0.329	А	0.060	No	0.266	А	0.268	Α	0.002	No
107	Main Street & 5th Street	0.197	А	0.199	А	0.002	No	0.207	А	0.297	Α	0.090	No
108	Figueroa Street & 2nd Street	0.306	А	0.311	А	0.005	No	0.275	А	0.484	А	0.209	No
109	Beaudry Street & 1st Street	0.184	А	0.184	А	0.000	No	0.231	А	0.233	Α	0.002	No
110	Hope Street & 1st Street	0.293	А	0.427	А	0.134	No	0.324	А	0.650	В	0.326	No
111	Grand Avenue & 1st Street	0.402	А	0.440	А	0.038	No	0.466	А	0.841	D	0.375	Yes
112	Olive Street & 1st Street	0.313	А	0.313	А	0.000	No	0.291	А	0.426	Α	0.135	No
113	Hill Street & 1st Street	0.393	А	0.469	А	0.076	No	0.488	А	0.654	В	0.166	No
114	Spring Street & 1st Street	0.321	А	0.410	А	0.089	No	0.356	А	0.362	А	0.006	No
115	Main Street & 1st Street	0.345	А	0.348	А	0.003	No	0.348	А	0.464	Α	0.116	No
116	Hope Street & Temple Street	0.299	А	0.347	А	0.048	No	0.358	А	0.523	Α	0.165	No
117	Main Street & Aliso Street	0.360	А	0.363	А	0.003	No	0.381	А	0.681	В	0.300	No
118	Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.305	А	0.306	А	0.001	No	0.312	А	0.387	Α	0.075	No
119	Grand Avenue & US-101 NB Ramps	0.497	А	0.497	А	0.000	No	0.560	А	1.008	F	0.448	Yes
120	Beaudry Avenue & Sunset Boulevard	0.806	D	0.806	D	0.000	No	0.633	В	0.633	В	0.000	No
121	Figueroa Street & Cesar Chavez Avenue	0.567	А	0.567	А	0.000	No	0.572	А	0.572	Α	0.000	No
122	Grand Avenue & Cesar Chavez Avenue	0.578	А	0.578	А	0.000	No	0.642	В	0.645	В	0.003	No
123	Spring Street & Cesar Chavez Avenue	0.662	В	0.733	С	0.071	Yes	0.660	В	0.664	В	0.004	No
124	Main Street & Cesar Chavez Avenue	0.547	А	0.549	А	0.002	No	0.595	А	0.631	В	0.036	No
125	Alameda Street & Cesar Chavez Avenue	0.653	В	0.653	В	0.000	No	0.660	В	0.660	В	0.000	No
126	Main Street & Alpine Street	0.312	А	0.328	А	0.016	No	0.254	А	0.271	Α	0.017	No
127	Alameda Street & Alpine Street	0.199	А	0.214	А	0.015	No	0.170	А	0.195	Α	0.025	No
128	Hill Street & Alpine Street	0.429	А	0.532	А	0.103	No	0.415	А	0.577	А	0.162	No

				Pre-Even	Saturday t Hour (1	у Day 2:00–1:00 р.м.)			Post-Eve	Saturda ent Hour (у Day (4:30–5:30 р.м.)		
		Future V Pro Condi	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future V Pro Condi	Nithout ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
129	Hill Street & College Street	0.543	А	0.645	В	0.102	No	0.573	А	0.735	С	0.162	Yes
130	Sunset Boulevard & Elysian Park Avenue	0.656	В	0.656	В	0.000	No	0.609	В	0.624	В	0.015	No
131	Glendale Boulevard & Bellevue Avenue	0.413	А	0.468	А	0.055	No	0.380	А	0.591	А	0.211	No
132	Glendale Boulevard & Temple Street	0.648	В	0.706	С	0.058	Yes	0.659	В	0.854	D	0.195	Yes
133	Alvarado Street & US-101 WB Ramps	0.565	А	0.566	А	0.001	No	0.550	А	0.614	В	0.064	No
134	Alvarado Street & US-101 EB Ramps	0.561	А	0.561	А	0.000	No	0.564	А	0.589	А	0.025	No
135	Alvarado Street & Beverly Boulevard	0.521	А	0.540	А	0.019	No	0.509	А	0.509	А	0.000	No
136	Vermont Avenue & 6th Street	0.660	В	0.669	В	0.009	No	0.748	С	0.763	С	0.015	No
137	Alvarado Street & 6th Street	0.574	А	0.594	А	0.020	No	0.554	А	0.585	А	0.031	No
138	Western Avenue & Wilshire Boulevard	0.659	В	0.712	С	0.053	Yes	0.760	С	0.776	С	0.016	No
139	Normandie Avenue & Wilshire Boulevard	0.685	В	0.706	С	0.021	No	0.638	В	0.639	В	0.001	No
140	Vermont Avenue & Wilshire Boulevard	0.788	С	0.803	D	0.015	No	0.780	С	0.798	С	0.018	No
141	Alvarado Street & Wilshire Boulevard	0.448	А	0.455	А	0.007	No	0.457	А	0.508	А	0.051	No
142	Vermont Avenue & 8th Street	0.727	С	0.740	С	0.013	No	0.703	С	0.704	С	0.001	No
143	Alvarado Street & 8th Street	0.544	А	0.575	А	0.031	No	0.471	А	0.563	А	0.092	No
144	Western Avenue & Olympic Boulevard	0.619	В	0.677	В	0.058	No	0.624	В	0.707	С	0.083	Yes
145	Normandie Avenue & Olympic Boulevard	0.615	В	0.665	В	0.050	No	0.595	А	0.668	В	0.073	No
146	Vermont Avenue & Olympic Boulevard	1.059	F	1.144	F	0.085	Yes	0.842	D	0.904	E	0.062	Yes
147	Alvarado Street & Olympic Boulevard	0.746	С	0.898	D	0.152	Yes	0.701	С	0.817	D	0.116	Yes
148	Union Avenue & Olympic Boulevard	0.617	В	0.775	С	0.158	Yes	0.569	А	0.663	В	0.094	No
149	Western Avenue & Pico Boulevard	0.673	В	0.698	В	0.025	No	0.705	С	0.717	С	0.012	No
150	Normandie Avenue & Pico Boulevard	0.605	В	0.627	В	0.022	No	0.622	В	0.629	В	0.007	No
151	Vermont Avenue & Pico Boulevard	0.721	С	0.769	С	0.048	Yes	0.657	В	0.715	С	0.058	Yes
152	Alvarado Street & Pico Boulevard	0.720	С	0.993	E	0.273	Yes	0.738	С	0.980	Е	0.242	Yes
153	Union Avenue & Pico Boulevard	0.631	В	0.634	В	0.003	No	0.585	А	0.765	С	0.180	Yes
154	Alvarado Street & Hoover Street	0.409	А	0.412	А	0.003	No	0.420	А	0.536	А	0.116	No
155	Western Avenue & Venice Boulevard	0.551	А	0.581	А	0.030	No	0.590	А	0.607	В	0.017	No
156	Normandie Avenue & Venice Boulevard	0.502	А	0.537	А	0.035	No	0.525	А	0.583	А	0.058	No
157	Vermont Avenue & Venice Boulevard	0.643	В	0.728	С	0.085	Yes	0.695	В	0.731	С	0.036	No
158	Hoover Street & Venice Boulevard	0.671	В	0.735	С	0.064	Yes	0.671	В	0.872	D	0.201	Yes
159	Western Avenue & Washington Boulevard	0.672	В	0.700	В	0.028	No	0.731	С	0.748	С	0.017	No
160	Normandie Avenue & Washington Boulevard	0.621	В	0.652	В	0.031	No	0.630	В	0.637	В	0.007	No

				Pre-Ever	Saturda nt Hour (1	у Day 2:00–1:00 р.м.)				Post-Eve	Saturda ent Hour	у Day (4:30–5:30 р.м.)	
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
161	Vermont Avenue & Washington Boulevard	0.800	С	0.899	D	0.099	Yes	0.816	D	0.825	D	0.009	No
162	Hoover Street & Washington Boulevard	0.633	В	0.759	С	0.126	Yes	0.740	С	0.856	D	0.116	Yes
163	I-10 WB Ramps & 20th Street	0.690	В	0.712	С	0.022	No	0.636	В	0.884	D	0.248	Yes
164	Vermont Avenue & I-10 EB Ramps	0.904	E	0.987	E	0.083	Yes	0.844	D	0.844	D	0.000	No
165	Hoover Street & I-10 EB Ramps	0.713	С	0.842	D	0.129	Yes	0.650	В	0.654	В	0.004	No
166	Hill Street & 16th Street	0.277	А	0.714	С	0.437	Yes	0.226	А	1.152	F	0.926	Yes
167	Broadway & 16th Street	0.278	А	0.484	Α	0.206	No	0.197	А	0.427	А	0.230	No
168	Main Street & 16th Street	0.458	А	0.598	Α	0.140	No	0.347	А	0.512	А	0.165	No
169	Los Angeles Street & 16th Street	0.266	А	0.448	Α	0.182	No	0.151	А	0.277	А	0.126	No
170	San Pedro Street & 16th Street	0.714	С	0.849	D	0.135	Yes	0.423	А	0.721	С	0.298	Yes
171	Central Avenue & 16th Street	0.585	А	0.597	Α	0.012	No	0.408	А	0.449	А	0.041	No
172	Central Avenue & Washington Boulevard	0.635	В	0.663	В	0.028	No	0.425	А	0.598	А	0.173	No
173	Wilton Place & Wilshire Boulevard	0.510	А	0.517	Α	0.007	No	0.597	А	0.611	В	0.014	No
174	Arlington Avenue & Olympic Boulevard	0.449	А	0.489	Α	0.040	No	0.516	А	0.551	А	0.035	No
175	Arlington Avenue & Pico Boulevard	0.425	А	0.430	Α	0.005	No	0.486	А	0.511	А	0.025	No
176	Arlington Avenue & Venice Boulevard	0.472	А	0.507	Α	0.035	No	0.727	С	0.790	С	0.063	Yes
177	Arlington Avenue & Washington Boulevard	0.559	А	0.597	A	0.038	No	0.605	В	0.609	В	0.004	No
	Total # of Impacted Intersections						32						36
	# of Impacted Intersections with FWP LOS C					44%	14					39%	14
	# of Impacted Intersections with FWP LOS D					19%	6					31%	11
	# of Impacted Intersections with FWP LOS F					10%	6					8%	3
	# of Impacted Intersections with FWDLOSE					1978	0					076	5
	# OI IMPACTED INTERSECTIONS WITH FVVP LOS F					19%	b					۲۷%	ŏ
Source:	The Mobility Group, 2011.												

				W Pre-Eve	/eekday I nt Hour (4	Evening 4:30–5:30 р.м.)				W Post-Eve	/eekday I nt Hour (Evening 9:00–10:00 р.м.)	
		Future Pro Cond	Without ject litions	Future Pro Cond	e With ject itions		Significant	Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
1	Georgia Street & Olympic Boulevard	0.651	В	0.757	С	0.106	Yes	0.322	А	0.522	А	0.200	No
2	Francisco Street & Olympic Boulevard	0.487	A	0.628	В	0.141	No	0.189	А	0.338	А	0.149	No
3	Figueroa Street & Olympic Boulevard	0.901	E	1.273	F	0.372	Yes	0.285	А	0.458	А	0.173	No
4	Flower Street & Olympic Boulevard	0.608	В	0.873	D	0.265	Yes	0.249	А	0.410	А	0.161	No
5	Grand Avenue & Olympic Boulevard	0.663	В	0.680	В	0.017	No	0.192	А	0.239	А	0.047	No
6	Olive Street & Olympic Boulevard	0.679	В	0.733	С	0.054	Yes	0.208	А	0.224	А	0.016	No
7	Hill Street & Olympic Boulevard	0.739	С	0.749	С	0.010	No	0.159	А	0.287	А	0.128	No
8	Broadway & Olympic Boulevard	0.869	D	0.894	D	0.025	Yes	0.253	А	0.262	А	0.009	No
9	Main Street & Olympic Boulevard	1.061	F	1.100	F	0.039	Yes	0.198	А	0.202	А	0.004	No
10	Los Angeles Street & Olympic Boulevard	0.441	Α	0.453	А	0.012	No	0.062	Α	0.069	А	0.007	No
11	Santee Street & Olympic Boulevard	0.351	Α	0.359	А	0.008	No	0.030	Α	0.037	А	0.007	No
12	Maple Avenue & Olympic Boulevard	0.472	Α	0.472	А	0.000	No	0.058	Α	0.071	А	0.013	No
13	Maple Avenue & 9th Street	0.489	А	0.497	А	0.008	No	0.065	А	0.070	А	0.005	No
14	San Pedro Street & 9th Street	0.613	В	0.639	В	0.026	No	0.077	A	0.089	А	0.012	No
15	L.A. Live Way & 11th Street	0.196	Α	0.113	А	-0.083	No	0.064	А	0.663	В	0.599	No
16	Figueroa Street & 11th Street	0.419	Α	0.489	А	0.070	No	0.157	Α	0.184	А	0.027	No
17	Flower Street & 11th Street	0.533	Α	0.577	А	0.044	No	0.152	Α	0.167	А	0.015	No
18	Grand Avenue & 11th Street	0.459	Α	0.762	С	0.303	Yes	0.099	Α	0.239	А	0.140	No
19	Olive Street & 11th Street	0.443	Α	0.637	В	0.194	No	0.127	Α	0.215	А	0.088	No
20	Figueroa Street & 12th Street	0.278	Α	0.341	А	0.063	No	0.070	А	0.070	А	0.000	No
21	Flower Street & 12th Street	0.305	Α	0.355	А	0.050	No	0.069	А	0.076	А	0.007	No
22	Grand Avenue & 12th Street	0.391	Α	0.431	А	0.040	No	0.100	Α	0.252	А	0.152	No
23	Olive Avenue & 12th Street	0.374	Α	0.498	А	0.124	No	0.096	Α	0.117	А	0.021	No
24	L.A. Live Way & Pico Boulevard	0.452	Α	0.585	А	0.133	No	0.160	Α	0.233	А	0.073	No
25	L.A. Live Way & Bond Street/I-10 & I-110 Off-Ramps	0.300	Α	0.364	А	0.064	No	0.072	Α	0.263	А	0.191	No
26	Figueroa Street & Pico Boulevard	0.559	Α	0.909	Е	0.350	Yes	0.149	А	0.304	А	0.155	No
27	Flower Street & Pico Boulevard	0.512	Α	0.767	С	0.255	Yes	0.117	А	0.281	А	0.164	No
28	Grand Avenue & Pico Boulevard	0.638	В	0.689	В	0.051	No	0.099	А	0.378	А	0.279	No
29	Olive Street & Pico Boulevard	0.425	Α	0.600	А	0.175	No	0.073	А	0.092	А	0.019	No
30	Hill Street & Pico Boulevard	0.531	А	0.758	С	0.227	Yes	0.064	Α	0.585	А	0.521	No
31	Broadway & Pico Boulevard	0.567	Α	0.681	В	0.114	No	0.201	A	0.275	А	0.074	No

				W Pre-Eve	/eekday I nt Hour (4	Evening 4:30–5:30 р.м.)			W Post-Eve	/eekday I nt Hour (Evening 9:00–10:00 р.м.)		
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
32	Main Street & Pico Boulevard	1.013	F	1.116	F	0.103	Yes	0.138	А	0.197	A	0.059	No
33	Blaine Street & Olympic Boulevard	0.718	С	0.823	D	0.105	Yes	0.352	А	0.429	А	0.077	No
34	Blaine Street & SR-110 SB Off-Ramp	0.225	А	0.847	D	0.622	Yes	0.107	А	0.135	А	0.028	No
35	Blaine Street & 11th Street	0.788	С	1.032	F	0.244	Yes	0.418	А	1.258	F	0.840	Yes
36	Convention Center Drive/Georgia Street & Venice Boulevard	0.148	А	0.360	А	0.212	No	0.036	А	0.117	А	0.081	No
37	Figueroa Street & Venice Boulevard	0.717	С	0.971	Е	0.254	Yes	0.121	А	0.282	А	0.161	No
38	Flower Street & Venice Boulevard	0.468	Α	0.614	В	0.146	No	0.097	А	0.379	А	0.282	No
39	Grand Avenue & Venice Boulevard	0.503	А	0.625	В	0.122	No	0.078	А	0.474	А	0.396	No
40	Olive Street & Venice Boulevard	0.358	А	0.622	В	0.264	No	0.070	А	0.565	А	0.495	No
41	Grand Avenue & 17th Street	0.760	С	0.836	D	0.076	Yes	0.161	А	0.358	А	0.197	No
42	Olive Street & 17th Street	0.568	А	0.997	Е	0.429	Yes	0.179	А	0.258	А	0.079	No
43	Hill Street & 17th Street	0.724	С	1.289	F	0.565	Yes	0.100	А	0.759	С	0.659	Yes
44	Broadway & 17th Street	0.653	В	1.199	F	0.546	Yes	0.108	А	0.174	А	0.066	No
45	Main Street & 17th Street	0.680	В	1.178	F	0.498	Yes	0.123	А	0.123	А	0.000	No
46	Los Angeles Street & 17th Street	0.589	А	1.087	F	0.498	Yes	0.095	А	0.095	А	0.000	No
47	Flower Street & 18th Street	0.239	А	0.275	А	0.036	No	0.063	А	0.106	А	0.043	No
48	Grand Avenue & 18th Street	0.428	А	0.490	А	0.062	No	0.080	А	0.275	А	0.195	No
49	Olive Street & 18th Street	0.385	А	0.569	А	0.184	No	0.119	А	0.341	А	0.222	No
50	Hill Street & 18th Street	0.534	А	0.534	А	0.000	No	0.064	А	1.070	F	1.006	Yes
51	Broadway & 18th Street	0.517	А	0.553	А	0.036	No	0.086	А	0.813	D	0.727	Yes
52	Main Street & 18th Street	0.625	В	0.625	В	0.000	No	0.145	А	0.832	D	0.687	Yes
53	Los Angeles Street & 18th Street	0.732	С	0.732	С	0.000	No	0.247	А	1.621	F	1.374	Yes
54	Figueroa Street & Washington Boulevard	0.717	С	0.832	D	0.115	Yes	0.269	А	0.427	А	0.158	No
55	Flower Street & Washington Boulevard	0.643	В	0.645	В	0.002	No	0.179	А	0.389	Α	0.210	No
56	Grand Avenue & Washington Boulevard	0.713	С	0.756	С	0.043	Yes	0.183	А	0.421	А	0.238	No
57	Olive Street & Washington Boulevard	0.529	Α	0.732	С	0.203	Yes	0.165	А	0.336	Α	0.171	No
58	Hill Street & Washington Boulevard	0.626	В	0.776	С	0.150	Yes	0.099	А	0.339	А	0.240	No
59	Broadway & Washington Boulevard	0.733	С	0.809	D	0.076	Yes	0.112	А	0.279	А	0.167	No
60	Main Street & Washington Boulevard	0.771	С	0.779	С	0.008	No	0.148	А	0.318	А	0.170	No
61	Los Angeles Street & Washington Boulevard	0.558	Α	0.582	А	0.024	No	0.062	А	0.195	А	0.133	No
62	San Pedro Street & Washington Boulevard	0.693	В	0.701	С	0.008	No	0.160	А	0.331	Α	0.171	No

				W Pre-Eve	/eekday I nt Hour (4	Evening 4:30–5:30 р.м.)			W Post-Eve	/eekday B nt Hour (Evening 9:00–10:00 р.м.)		
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
63	Figueroa Street & Adams Boulevard	1.015	F	1.025	F	0.010	Yes	0.333	А	0.379	Α	0.046	No
64	Flower Street & Adams Boulevard	0.899	D	0.912	E	0.013	Yes	0.315	А	0.667	В	0.352	No
65	I-110 NB Off-Ramps & Adams Boulevard	0.525	А	0.941	E	0.416	Yes	0.162	А	0.214	Α	0.052	No
66	Grand Avenue & Adams Boulevard	0.647	В	0.823	D	0.176	Yes	0.113	А	0.225	Α	0.112	No
67	Hill Street & Adams Boulevard	0.585	А	0.966	E	0.381	Yes	0.080	А	0.123	Α	0.043	No
68	Broadway & Adams Boulevard	0.616	В	0.620	В	0.004	No	0.088	А	0.094	Α	0.006	No
69	Main Street & Adams Boulevard	0.731	С	0.731	С	0.000	No	0.147	А	0.147	A	0.000	No
70	Flower Street & Jefferson Boulevard	0.542	А	0.547	Α	0.005	No	0.255	А	0.442	А	0.187	No
71	Figueroa Street & Exposition Boulevard	0.671	В	0.722	С	0.051	Yes	0.393	А	0.413	A	0.020	No
72	Flower Street & 37th Street	0.423	А	0.434	Α	0.011	No	0.229	А	0.480	Α	0.251	No
73	Hope Street & 37th Street	0.511	А	0.534	Α	0.023	No	0.202	А	0.202	Α	0.000	No
74	Hill Street & 37th Street	0.295	А	0.353	Α	0.058	No	0.030	А	0.048	Α	0.018	No
75	Broadway & 37th Street	0.413	А	0.418	Α	0.005	No	0.048	А	0.048	Α	0.000	No
76	Figueroa Street & 39th Street	0.528	А	0.548	Α	0.020	No	0.089	А	0.092	Α	0.003	No
77	I-110 HOV Ramps & 39th Street	0.496	А	0.636	В	0.140	No	0.041	А	0.173	A	0.132	No
78	Figueroa Street & Martin Luther King Jr Boulevard	0.788	С	0.788	С	0.000	No	0.349	А	0.455	Α	0.106	No
79	I-110 SB Ramps & Martin Luther King Jr Boulevard	0.738	С	0.743	С	0.005	No	0.421	А	0.548	Α	0.127	No
80	I-110 NB Ramps & Martin Luther King Jr Boulevard	0.784	С	0.846	D	0.062	Yes	0.319	А	0.323	Α	0.004	No
81	Georgia Street &9th Street	0.574	А	0.730	С	0.156	Yes	0.311	А	0.552	Α	0.241	No
82	Francisco Street & 9th Street	0.469	А	0.543	Α	0.074	No	0.105	А	0.273	Α	0.168	No
83	Figueroa Street & 9th Street	0.611	В	0.773	С	0.162	Yes	0.234	А	0.336	Α	0.102	No
84	Flower Street & 9th Street	0.547	А	0.643	В	0.096	No	0.199	А	0.245	Α	0.046	No
85	Broadway & 9th Street	0.623	В	0.628	В	0.005	No	0.101	А	0.139	Α	0.038	No
86	Bixel Street & 8th Street	1.057	F	1.084	F	0.027	Yes	0.301	А	0.431	Α	0.130	No
87	Francisco Street & 8th Street	0.489	А	0.574	Α	0.085	No	0.181	А	0.343	Α	0.162	No
88	Figueroa Street & 8th Street	0.935	Е	1.368	F	0.433	Yes	0.293	А	0.558	А	0.265	No
89	Flower Street & 8th Street	0.529	А	0.691	В	0.162	No	0.193	А	0.372	Α	0.179	No
90	Hill Street & 8th Street	0.559	А	0.617	В	0.058	No	0.101	А	0.136	Α	0.035	No
91	Broadway & 8th Street	0.729	С	0.752	С	0.023	No	0.173	А	0.173	А	0.000	No
92	Bixel Street & Wilshire Boulevard	0.535	А	0.575	Α	0.040	No	0.234	А	0.247	А	0.013	No
93	Figueroa Street & Wilshire Boulevard	1.284	F	1.343	F	0.059	Yes	0.339	А	0.620	В	0.281	No

			۷ Pre-Eve	Veekday I nt Hour (Evening 4:30–5:30 р.м.)				W Post-Eve	/eekday I nt Hour (Evening 9:00–10:00 р.м.)	
	Future Pro Conc	Without oject litions	Futur Pro Cond	e With ject itions		Significant	Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant
No. Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
94 Lucas Avenue & 6th Street	0.893	D	1.031	F	0.138	Yes	0.216	А	0.223	А	0.007	No
95 Bixel Street & 6th Street	0.748	С	0.817	D	0.069	Yes	0.207	А	0.207	А	0.000	No
96 Figueroa Street & 6th Street	0.922	E	1.177	F	0.255	Yes	0.189	А	0.304	А	0.115	No
97 Flower Street & 6th Street	0.431	A	0.661	В	0.230	No	0.139	А	0.171	А	0.032	No
98 Grand Avenue & 6th Street	0.407	A	0.513	А	0.106	No	0.094	А	0.156	А	0.062	No
99 Hill Street & 6th Street	0.482	А	0.503	А	0.021	No	0.115	А	0.280	А	0.165	No
100 Spring Street & 6th Street	0.480	А	0.523	А	0.043	No	0.182	А	0.232	А	0.050	No
101 Main Street & 6th Street	0.451	A	0.463	А	0.012	No	0.141	А	0.372	А	0.231	No
102 Figueroa Street & 5th Street	1.013	F	1.101	F	0.088	Yes	0.178	А	0.421	А	0.243	No
103 Grand Avenue & 5th Street	0.400	A	0.508	А	0.108	No	0.114	А	0.186	А	0.072	No
104 Olive Street & 5th Street	0.727	С	0.773	С	0.046	Yes	0.193	А	0.390	А	0.197	No
105 Hill Street & 5th Street	0.473	A	0.576	А	0.103	No	0.117	А	0.251	А	0.134	No
106 Spring Street & 5th Street	0.346	A	0.387	А	0.041	No	0.121	А	0.121	А	0.000	No
107 Main Street & 5th Street	0.317	A	0.328	А	0.011	No	0.083	А	0.145	А	0.062	No
108 Figueroa Street & 2nd Street	0.677	В	0.677	В	0.000	No	0.133	А	0.306	А	0.173	No
109 Beaudry Street & 1st Street	0.525	A	0.531	А	0.006	No	0.079	А	0.079	А	0.000	No
110 Hope Street & 1st Street	0.764	С	0.897	D	0.133	Yes	0.125	А	0.482	А	0.357	No
111 Grand Avenue & 1st Street	0.913	E	1.052	F	0.139	Yes	0.190	А	0.647	В	0.457	No
112 Olive Street & 1st Street	0.754	С	0.765	С	0.011	No	0.108	А	0.266	А	0.158	No
113 Hill Street & 1st Street	0.771	С	0.796	С	0.025	No	0.153	А	0.310	А	0.157	No
114 Spring Street & 1st Street	0.534	A	0.630	В	0.096	No	0.159	А	0.160	А	0.001	No
115 Main Street & 1st Street	0.784	С	0.799	С	0.015	No	0.162	А	0.274	А	0.112	No
116 Hope Street & Temple Street	0.799	С	0.849	D	0.050	Yes	0.165	А	0.336	А	0.171	No
117 Main Street & Aliso Street	0.587	A	0.604	В	0.017	No	0.182	А	0.512	А	0.330	No
118 Los Angeles Street & Aliso Street/US-101 SB On-Ramps	0.459	А	0.464	А	0.005	No	0.090	А	0.161	А	0.071	No
119 Grand Avenue & US-101 NB Ramps	0.917	E	0.917	E	0.000	No	0.484	А	0.956	Е	0.472	Yes
120 Beaudry Avenue & Sunset Boulevard	1.058	F	1.058	F	0.000	No	0.471	А	0.471	А	0.000	No
121 Figueroa Street & Cesar Chavez Avenue	0.845	D	0.845	D	0.000	No	0.424	А	0.424	А	0.000	No
122 Grand Avenue & Cesar Chavez Avenue	0.886	D	0.886	D	0.000	No	0.456	А	0.461	А	0.005	No
123 Spring Street & Cesar Chavez Avenue	0.843	D	0.904	E	0.061	Yes	0.514	А	0.514	А	0.000	No
124 Main Street & Cesar Chavez Avenue	0.783	С	0.789	С	0.006	No	0.237	А	0.268	A	0.031	No

				W Pre-Eve	Veekday I nt Hour (4	Evening 4:30–5:30 р.м.)				W Post-Eve	/eekday E nt Hour (Evening 9:00–10:00 р.м.)	
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
125	Alameda Street & Cesar Chavez Avenue	0.822	D	0.822	D	0.000	No	0.341	А	0.341	А	0.000	No
126	Main Street & Alpine Street	0.629	В	0.638	В	0.009	No	0.108	А	0.132	А	0.024	No
127	Alameda Street & Alpine Street	0.294	А	0.322	А	0.028	No	0.078	А	0.080	А	0.002	No
128	Hill Street & Alpine Street	0.736	С	0.736	С	0.000	No	0.165	А	0.321	А	0.156	No
129	Hill Street & College Street	0.862	D	0.862	D	0.000	No	0.207	А	0.363	А	0.156	No
130	Sunset Boulevard & Elysian Park Avenue	0.733	С	0.733	С	0.000	No	0.501	А	0.515	А	0.014	No
131	Glendale Boulevard & Bellevue Avenue	0.762	С	0.766	С	0.004	No	0.224	А	0.401	А	0.177	No
132	Glendale Boulevard & Temple Street	1.070	F	1.074	F	0.004	No	0.345	А	0.557	А	0.212	No
133	Alvarado Street & US-101 WB Ramps	0.619	В	0.619	В	0.000	No	0.412	А	0.412	А	0.000	No
134	Alvarado Street & US-101 EB Ramps	0.642	В	0.642	В	0.000	No	0.537	А	0.542	А	0.005	No
135	Alvarado Street & Beverly Boulevard	0.658	В	0.658	В	0.000	No	0.299	А	0.304	А	0.005	No
136	Vermont Avenue & 6th Street	0.855	D	0.867	D	0.012	No	0.554	А	0.567	А	0.013	No
137	Alvarado Street & 6th Street	0.691	В	0.691	В	0.000	No	0.344	А	0.349	А	0.005	No
138	Western Avenue & Wilshire Boulevard	0.869	D	0.893	D	0.024	Yes	0.559	А	0.581	А	0.022	No
139	Normandie Avenue & Wilshire Boulevard	0.957	E	0.992	E	0.035	Yes	0.502	А	0.525	А	0.023	No
140	Vermont Avenue & Wilshire Boulevard	1.027	F	1.081	F	0.054	Yes	0.576	А	0.602	В	0.026	No
141	Alvarado Street & Wilshire Boulevard	0.866	D	0.929	E	0.063	Yes	0.307	А	0.354	А	0.047	No
142	Vermont Avenue & 8th Street	0.786	С	0.800	С	0.014	No	0.562	А	0.564	А	0.002	No
143	Alvarado Street & 8th Street	0.662	В	0.662	В	0.000	No	0.245	А	0.343	А	0.098	No
144	Western Avenue & Olympic Boulevard	0.989	E	1.042	F	0.053	Yes	0.585	А	0.673	В	0.088	No
145	Normandie Avenue & Olympic Boulevard	0.745	С	0.794	С	0.049	Yes	0.371	А	0.447	А	0.076	No
146	Vermont Avenue & Olympic Boulevard	0.964	E	1.032	F	0.068	Yes	0.646	В	0.735	С	0.089	Yes
147	Alvarado Street & Olympic Boulevard	0.862	D	0.980	E	0.118	Yes	0.358	А	0.446	А	0.088	No
148	Union Avenue & Olympic Boulevard	0.725	С	0.857	D	0.132	Yes	0.270	А	0.333	А	0.063	No
149	Western Avenue & Pico Boulevard	0.720	С	0.745	С	0.025	No	0.412	А	0.449	А	0.037	No
150	Normandie Avenue & Pico Boulevard	0.602	В	0.627	В	0.025	No	0.284	А	0.294	А	0.010	No
151	Vermont Avenue & Pico Boulevard	0.766	С	0.829	D	0.063	Yes	0.438	А	0.530	А	0.092	No
152	Alvarado Street & Pico Boulevard	0.743	С	0.999	E	0.256	Yes	0.283	А	0.494	А	0.211	No
153	Union Avenue & Pico Boulevard	0.680	В	0.846	D	0.166	Yes	0.215	А	0.425	А	0.210	No
154	Alvarado Street & Hoover Street	0.565	А	0.570	A	0.005	No	0.225	А	0.334	А	0.109	No
155	Western Avenue & Venice Boulevard	0.714	С	0.779	С	0.065	Yes	0.359	А	0.419	А	0.060	No

				۷ Pre-Eve	Veekday nt Hour (Evening 4:30–5:30 р.м.)				W Post-Eve	/eekday nt Hour (Evening 9:00–10:00 р.м.)	
		Future Pro Cond	Without bject litions	Futur Pro Cond	e With ject litions		Significant	Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
156	Normandie Avenue & Venice Boulevard	0.713	С	0.769	С	0.056	Yes	0.281	А	0.357	А	0.076	No
157	Vermont Avenue & Venice Boulevard	0.763	С	0.858	D	0.095	Yes	0.383	А	0.527	А	0.144	No
158	Hoover Street & Venice Boulevard	0.870	D	0.991	E	0.121	Yes	0.344	А	0.501	А	0.157	No
159	Western Avenue & Washington Boulevard	0.757	С	0.790	С	0.033	No	0.443	А	0.509	А	0.066	No
160	Normandie Avenue & Washington Boulevard	0.756	С	0.794	С	0.038	No	0.326	А	0.364	А	0.038	No
161	Vermont Avenue & Washington Boulevard	0.910	E	1.010	F	0.100	Yes	0.458	А	0.550	А	0.092	No
162	Hoover Street & Washington Boulevard	0.826	D	0.951	E	0.125	Yes	0.343	А	0.434	А	0.091	No
163	I-10 WB Ramps & 20th Street	0.678	В	0.753	С	0.075	Yes	0.332	А	0.497	Α	0.165	No
164	Vermont Avenue & I-10 EB Ramps	0.783	С	0.850	D	0.067	Yes	0.546	А	0.546	А	0.000	No
165	Hoover Street & I-10 EB Ramps	0.736	С	0.840	D	0.104	Yes	0.480	А	0.480	А	0.000	No
166	Hill Street & 16th Street	0.509	А	0.797	С	0.288	Yes	0.061	А	0.966	E	0.905	Yes
167	Broadway & 16th Street	0.426	A	0.569	А	0.143	No	0.064	А	0.449	А	0.385	No
168	Main Street & 16th Street	0.773	С	0.927	E	0.154	Yes	0.095	А	0.260	А	0.163	No
169	Los Angeles Street & 16th Street	0.364	Α	0.615	В	0.251	No	0.033	А	0.128	А	0.095	No
170	San Pedro Street & 16th Street	0.711	С	0.855	D	0.144	Yes	0.096	А	0.415	А	0.319	No
171	Central Avenue & 16th Street	0.633	В	0.659	В	0.026	No	0.176	А	0.209	А	0.033	No
172	Central Avenue & Washington Boulevard	0.828	D	0.858	D	0.030	Yes	0.181	А	0.315	А	0.134	No
173	Wilton Place & Wilshire Boulevard	0.746	С	0.757	С	0.011	No	0.369	А	0.374	А	0.005	No
174	Arlington Avenue & Olympic Boulevard	0.683	В	0.723	С	0.040	Yes	0.395	А	0.454	А	0.059	No
175	Arlington Avenue & Pico Boulevard	0.651	В	0.669	В	0.018	No	0.235	А	0.262	А	0.027	No
176	Arlington Avenue & Venice Boulevard	0.887	D	0.945	E	0.058	Yes	0.298	А	0.365	А	0.067	No
177	Arlington Avenue & Washington Boulevard	0.725	С	0.771	С	0.046	Yes	0.346	А	0.346	А	0.000	No
178	Crenshaw Boulevard & Wilshire Boulevard	0.821	D	0.823	D	0.002	No						
179	Crenshaw Boulevard & Olympic Boulevard	0.885	D	0.935	E	0.050	Yes						
180	Crenshaw Boulevard & Pico Boulevard	0.778	С	0.793	С	0.015	No						
181	Crenshaw Boulevard & Venice Boulevard	0.942	E	0.973	E	0.031	Yes						
182	Crenshaw Boulevard & Washington Boulevard	0.894	D	0.960	E	0.066	Yes						
183	San Vicente Boulevard & Venice Boulevard	0.529	A	0.562	А	0.033	No						
184	La Brea Avenue & Olympic Boulevard	0.848	D	0.891	D	0.043	Yes						
185	La Brea Avenue & Venice Boulevard	0.819	D	0.828	D	0.009	No						

				۷ Pre-Eve	Veekday nt Hour (Evening 4:30–5:30 р.м.)				۷ Post-Eve	Veekday nt Hour (Evening 9:00–10:00 р.м.)	
		Future Pro Cond	Without ject itions	Future Pro Cond	e With ject itions		Significant	Future Pro Cond	Without ject litions	Futur Pro Cond	e With Ject litions		Significant
No.	Intersection	V/C	LOS	V/C	LOS	Change in V/C	Impact	V/C	LOS	V/C	LOS	Change in V/C	Impact
186	La Brea Avenue & Washington Boulevard	0.746	С	0.776	С	0.030	No						
187	Fairfax Avenue & Olympic Boulevard	0.840	D	0.858	D	0.018	No						
	Total # of Impacted Intersections						79						9
	# of Impacted Intersections with FWP LOS C					26%	19					22%	2
	# of Impacted Intersections with FWP LOS D					29%	22					33%	2
	# of Impacted Intersections with FWP LOS E					21%	18					11%	2
	# of Impacted Intersections with FWP LOS F					24%	20					33%	3
Source	: The Mobility Group, 2011.												

 Table IV.B.1-19

 Future With Project 2017—Summary of Pico-Union Neighborhood Traffic Analysis

Diversion Routes	Street Type ^ª	Existing Average Daily Traffic Volumes	Future Without Project	Project Only Daily Volumes	Future With Project	Project Related Increase ^b	Significant Impact Thresholds (Project Related Increase) ^f	Significant Impact Yes/No ^f
Sunday	•						•	
Albany St (Btw Olympic & 11th)	MA	2,150	2,150	110	2,260	5%	N/A	N/A
Valencia St (Btw Olympic & 11th)	С	1,235	1,235	107	1,342	8%	N/A	N/A
Union Ave (Btw Olympic & 11th)	SA	13,215	13,399 ^d	432 ^e	13,831	3%	N/A	N/A
11th St (Btw Valencia & Albany)	С	3,690	3,690	-472 ^e	3,218	-15%	N/A	N/A
Albany St (Btw 14th & Venice)	SA	1,025	1,025	30	1,055	3%	N/A	N/A
Valencia St (Btw 14th & Venice)	С	865	865	30	895	30	N/A	N/A
Toberman St (Btw 14th & Venice)	L	990	990	30	1,020	3%	12% or more	No
Union Avenue (Btw 14th & Venice)	SA	14,160	14,469 ^d	201 ^e	14,670	1%	N/A	N/A
Constance St (Btw 14th & Venice)	L	605	605	10	615	10	120 or more	No
Burlington Ave (Btw 14th & Venice)	L	980	980	10	990	10	120 or more	No
Bonnie Brae St (Btw 14th & Venice)	L	930	930	9	939	9	120 or more	No
Union Ave (Btw 17th & 18th)	SA	14,160 ^c	14,469 ^d	33	14,502	0%	N/A	N/A
Burlington Ave (Btw 17th & 18th)	L	1,345	1,345	18	1,363	1%	12% or more	No
Bonnie Brae St (Btw 17th & 18th)	L	725	725	0	725	0	120 or more	No
Alvarado Terrace	L	790	790	158	948	158	120 or more	Yes
Westlake Avenue	L	510	510	119	629	119	120 or more	No
	•	.	Saturo	lay			 	
Albany St (Btw Olympic & 11th)	MA	4,760	4,760	109	4,869	2%	N/A	N/A
Valencia St (Btw Olympic & 11th)	С	1,475	1,475	106	1,581	7%	N/A	N/A
Union Ave (Btw Olympic & 11th)	SA	13,535	13,724 ^d	432 ^e	14,156	3%	N/A	N/A
11th St (Btw Valencia & Albany)	С	4,740	4,740	-165 ^e	4,575	-4%	N/A	N/A
Albany St (Btw 14th & Venice)	SA	1,205	1,205	40	1,245	3%	N/A	N/A
Valencia St (Btw 14th & Venice)	С	1,025	1,025	40	1,065	4%	N/A	N/A
Toberman St (Btw 14th & Venice)	L	1,080	1,080	40	1,120	4%	12% or more	No
Union Avenue (Btw 14th & Venice)	SA	13,120	13,427 ^d	40	13,466	0%	N/A	N/A
Constance St (Btw 14th & Venice)	L	660	660	14	674	14	120 or more	No
Burlington Ave (Btw 14th & Venice)	L	1,200	1,200	14	1,214	1%	12% or more	No
Bonnie Brae St (Btw 14th & Venice)	L	1,130	1,130	12	1,142	1%	12% or more	No
Union Ave (Btw 17th & 18th)	SA	13,120 °	13,427 ^d	35	13,461	0%	N/A	N/A
Burlington Ave (Btw 17th & 18th)	L	1,595	1,595	19	1,614	1%	12% or more	No
Bonnie Brae St (Btw 17th & 18th)	L	850	850	0	850	0	120 or more	No
Alvarado Terrace	L	1,045	1,045	164	1,209	14%	12% or more	Yes
Westlake Avenue	L	790	790	122	912	122	120 or more	Yes
	•		Weeko	day			I	
Albany St (Btw Olympic & 11th)	MA	3,380	3,380	119	3,499	3%	N/A	N/A
Valencia St (Btw Olympic & 11th)	С	2,175	2,175	115	2,290	5%	N/A	N/A
Union Ave (Btw Olympic & 11th)	SA	14,400	14,617 ^d	293 ^e	14,911	2%	N/A	N/A
11th St (Btw Valencia & Albany)	С	4,810	4,810	-321 ^e	4,489	-7%	N/A	N/A
Albany St (Btw 14th & Venice)	SA	1,265	1,265	39	1,304	3%	N/A	N/A
Valencia St (Btw 14th & Venice)	С	1,090	1,090	39	1,129	3%	N/A	N/A
Toberman St (Btw 14th & Venice)	L	1,105	1,105	39	1,144	3%	12% or more	No
Union Avenue (Btw 14th & Venice)	SA	12,200	12,498 ^d	71 ^e	12,569	1%	N/A	N/A
Constance St (Btw 14th & Venice)	L	755	755	14	769	14	120 or more	No
Burlington Ave (Btw 14th & Venice)	L	1,320	1,320	14	1,334	1%	12% or more	No

Table IV.B.1-19 (Continued) Future With Project 2017—Summary of Pico-Union Neighborhood Traffic Analysis

Diversion Routes	Street Type ^a	Existing Average Daily Traffic Volumes	Future Without Project	Project Only Daily Volumes	Future With Project	Project Related Increase ^b	Significant Impact Thresholds (Project Related Increase) ^f	Significant Impact Yes/No ^f
Bonnie Brae St (Btw 14th & Venice)	L	930	930	12	942	12	120 or more	No
Union Ave (Btw 17th & 18th)	SA	12,200 ^c	12,498 ^d	40	12,538	0%	N/A	N/A
Burlington Ave (Btw 17th & 18th)	L	1,905	1,905	21	1,926	1%	12% or more	No
Bonnie Brae St (Btw 17th & 18th)	L	720	720	0	720	0	120 or more	No
Alvarado Terrace	L	855	855	159	1,014	16%	12% or more	Yes
Westlake Avenue	L	605	605	120	725	120	120 or more	Yes
Noto								

MA = Major Arterial, SA = Secondary Arterial, C = Collector, L = Local

For Future With Project ADT less than 1,000, significant impact threshold is based on the number of project added trips.

ADT for this link is based on the ADT of Union Avenue between 14th Street and Venice Boulevard.

Includes volumes from Related Projects and ambient growth on Union Avenue.

Includes diverted volumes due to Chick Hearn Court and L.A. Live Way street closures during events.

N/A = No City thresholds for Collector or Arterial streets.

= Local Street

 Table IV.B.1-20

 Intersection Locations Where V/C Credit Applied for Proposed ATSAC Intersection Improvements

1	Georgia Street & Olympic Boulevard
2	Francisco Street & Olympic Boulevard
3	Figueroa Street & Olympic Boulevard
4	Flower Street & Olympic Boulevard
5	L.A. Live Way & 11th Street
6	Figueroa Street & 11th Street
7	Flower Street & 11th Street
8	Figueroa Street & 12th Street
9	Flower Street & 12th Street
10	L.A. Live Way & Pico Boulevard
11	Figueroa Street & Pico Boulevard
12	Flower Street & Pico Boulevard
13	Blaine Street & Olympic Boulevard
14	Blaine Street & SR-110 SB Off-Ramp
15	Blaine Street & 11th Street
16	Convention Center Drive & Venice Boulevard
17	Figueroa Street & Venice Boulevard
18	Flower Street & Venice Boulevard
19	Grand Avenue & Venice Boulevard
20	Olive Street & Venice Boulevard
21	Grand Avenue & 17th Street
22	Olive Street & 17th Street
23	Hill Street & 17th Street
24	Broadway & 17th Street
25	Main Street & 17th Street
26	Los Angeles Street & 17th Street
27	Flower Street & 18th Street
28	Grand Avenue & 18th Street
29	Olive Street & 18th Street
30	Hill Street & 18th Street
31	Broadway & 18th Street
32	Main Street & 18th Street
33	Los Angeles Street & 18th Street
34	Figueroa Street & Adams Boulevard
35	Flower Street & Adams Boulevard
36	I-110 NB Off-Ramps & Adams Boulevard
37	Grand Avenue & Adams Boulevard
38	Hill Street & Adams Boulevard
Table IV.B.1-20 (Continued)

Intersection Locations Where V/C Credit Applied for Proposed ATSAC Intersection Improvements

39	Broadway & Adams Boulevard
40	Main Street & Adams Boulevard
41	Georgia Street & 9th Street
42	Francisco Street & 9th Street
43	Figueroa Street & 9th Street
44	Flower Street & 9th Street
45	Bixel Street & 8th Street
46	Figueroa Street & 8th Street
47	Figueroa Street & 8th Street
48	Flower Street & 8th Street
49	Figueroa Street & Wilshire Boulevard
50	Lucas Street & 6th Street
51	Figueroa Street & 6th Street
52	Flower Street & 6th Street
53	Figueroa Street & 5th Street
54	Figueroa Street & 2nd Street
55	Hope Street & 1st Street
56	Grand Avenue & 1st Street
57	Olive Street & 1st Street
58	Hill Street & 1st Street
59	Hope Street & Temple Street
60	Grand Avenue & US-101 NB Ramps
61	Grand Avenue & Cesar Chavez Avenue
62	Broadway & Cesar Chavez Avenue
63	Alvarado Street & Olympic Boulevard
64	Union Avenue & Olympic Boulevard
65	Vermont Avenue & Pico Boulevard
66	Alvarado Street & Pico Boulevard
67	Union Avenue & Pico Boulevard
68	Alvarado Street & Hoover Street
69	Vermont Avenue & Venice Boulevard
70	Hoover Street & Venice Boulevard
71	Vermont Avenue & Washington Boulevard
72	Hoover Street & Washington Boulevard
73	I-10 WB Ramps & 20th Street
74	Vermont Avenue & I-10 EB Ramps
75	Hoover Street & I-10 EB Ramps
76	Hill Street & 16th Street

Table IV.B.1-20 (Continued) Intersection Locations Where V/C Credit Applied for Proposed ATSAC Intersection Improvements

77	Main Street & 16th Street			
78	Los Angeles Street & 16th Street			
79	San Pedro Street & 16th Street			
Source: The Mobility Group, March 6, 2012.				

Table IV.B.1-21
Future With Project With Mitigation—Impacted Intersection Summary

	# of Impacted Intersections in Future With Project	# of Impacted Intersections in Future With Project With Mitigation ^a	Net Change Impacted Intersections ^b	# of Partial Mitigated Intersections
Sunday Pre-Event Hour	11	4	-7	-3
Sunday Pre-Event Hour	18	20	+2	-9
Saturday Pre-Event Hour	31	28	-3	-24
Saturday Post-Event Hour	36	42	+6	-12
Weekday Evening Pre-Event Hour	77	72	-5	-41
Weekday Evening Post-Event Hour	9	6	-3	-4

^a Includes physical mitigation, 0.01 credit for intersection improvements, and post-event street closure.

^b Net change includes any mitigated location due to street closure, and any new impact due to street closure.

Source: The Mobility Group, March 6, 2012.

	# of Impacted Intersections in Future With Project	Future With Project With Mitigation ^a	Net Change Impacted Intersections				
Sunday Pre-Event Hour (12:00–1:00 P.M.)							
# of Impacted Intersections	11	4	-7				
LOS C	4	1	-3				
LOS D	5	1	-4				
LOS E	2	2	0				
LOS F	0	0	0				
Sunday Post-Event Hour (4:30–5:30 P.M.)							
# of Impacted Intersections	18	20	+2				
LOS C	7	6	-1				
LOS D	6	8	+2				
LOS E	2	6	+4				
LOS F	3	0	-3				
^a Mitigation includes full street closure (for 0.01 credit for certain intersections. Source: The Mobility Group, March 6, 2012.	post-event only), ph	ysical intersection	improvements, and				

Table IV.B.1-22	
Future With Project With Mitigation—Sunday Day Impacted Intersection Summa	ary

	# of Impacted Intersections in Future With Project	Future With Project With Mitigation ^a	Net Change Impacted Intersections
Saturday Pre-Event Hour (12:00–1:00 P.M.)			
# of Impacted Intersections	31	28	-3
LOS C	14	15	+1
LOS D	6	6	0
LOS E	5	6	+1
LOS F	6	1	-5
Saturday Post-Event Hour (4:30–5:30 P.M.)			
# of Impacted Intersections	36	42	+6
LOS C	14	17	+3
LOS D	11	12	+1
LOS E	3	7	+4
LOS F	8	6	-2
^a Mitigation includes full street closure (for p	post-event only), phy	/sical intersection i	mprovements, and

Table IV.B.1-23 Future With Project With Mitigation—Saturday Day Impacted Intersection Summary

0.01 credit for certain intersections.

Source: The Mobility Group, March 6, 2012.

Table IV.B.1-24	
Future With Project With Mitigation—Weekday Evening Impacted Intersection Summary	,

	# of Impacted Intersections in Future With Project	Future With Project With Mitigation ^a	Net Change Impacted Intersections
Weekday Evening Pre-Event Hour (4:30–5:30 P.M.)			
# of Impacted Intersections	77	72	-5
LOS C	17	18	+1
LOS D	22	23	+1
LOS E	18	18	0
LOS F	20	13	-7
Weekday Evening Post-Event Hour (9:00–10:30 P.M.)			
# of Impacted Intersections	9	6	-3
LOS C	2	2	0
LOS D	2	1	-1
LOS E	2	3	+1
LOS F	3	0	-3

^a Mitigation includes full street closure (for post-event only), physical intersection improvements, and 0.01 credit for certain intersections.

Source: The Mobility Group, March 6, 2012.

Table IV.B.1-25 Additional Transit Service to Meet Policy Load Factors Number of Additional Rail Cars/Buses—Future With Project

	Sund	Sunday Day		Saturday Day		Weekday Evening	
Transit Line	Pre-Event Hour	Post-Event Hour	Pre-Event Hour	Post-Event Hour	Pre-Event Hour	Post-Event Hour	
Red	—	6	1	5	—	13	
Purple	—	—	—	—	-	—	
Red/Purple	—	—	—	—	_	3	
Blue	3	8	4	9	-	18	
Ехро	—	1	—	1	_	10	
Green (East)	—	—	—	—		5	
Green (West)	—	—	—	—		4	
Gold (Pasadena)	—	—	—	—	-	2	
Gold (East LA)	—	—	—	—	-	4	
Metrolink	1	2	—	1	_	—	
Silver Line (Artesia T.C.)	2	3	1	2	_	3	
Silver Line (El Monte)	2	3	1	2		3	
Bus—Rapid	—	1	—	—		7	
Bus—Express	2	3	1	2		5	
Bus-Local	—	—	1	—	_	—	
Source: The Mobility Group, March 6, 2012.							









10/25/11

Figure IV.B.1-4 Southern California Metrolink Service

Source: The Mobility Group, 2011







Page IV.B.1-301















Figure IV.B.1-12 Project Trip Distribution - Weekday





Figure IV.B.1-13 Project Trip Distribution - Weekend

























