

Time Periods Evaluated: In addition to evaluating construction noise impacts during the daytime (7:00 AM to 8:00 PM), this analysis evaluates construction noise during the nighttime hours (8:00 PM to 7:00 AM) to account for construction work days that are proposed to vary from 8 hours to continuous 24 hours during certain phases or construction operations on the Arena Site, as needed, with the significance of impact varying throughout the night due to the fluctuation in ambient conditions.

Scenarios Evaluated: Over the course of Proposed Project construction period from July 2021 to October 2024, construction could occur simultaneously on the four Project Site subareas during certain phases or periods of activity. To ensure that the worst case impacts have been identified and analyzed, the construction noise analysis evaluates impacts to noise-sensitive receptors under four scenarios that account for overlap of construction across all four Project Site subareas during the worst case construction days at the Arena Site, the West Parking Garage Site, the East Transportation and Hotel Site, and the Well Relocation Site.

Operational Impacts – Traffic Noise

Study Area: The traffic noise analysis evaluates increases in traffic based on traffic volume data developed as a part of the Transportation and Circulation analysis (see Section 3.14). Traffic noise was evaluated on 113 roadway segments within the approximately 20-square-mile study area considered in the traffic analysis.

Time Periods Evaluated: Traffic noise was analyzed during the Weekday AM Peak Period (7:00–9:00 AM), Weekday PM Peak Period (4:00–6:00 PM), Weekday Pre-Event Period (6:00–7:00 PM), Weekday Post-Event Period (9:30–10:30 PM), Weekend Pre-Event Peak Period (5:00–6:00 PM) and Weekend Post-Event Peak Period (9:30–10:30 PM).

Adjusted Baseline and Cumulative Conditions: Consistent with the Transportation and Circulation analysis, the traffic noise analysis evaluates Proposed Project impacts under both Adjusted Baseline and Cumulative conditions, including concurrent event scenarios. The Adjusted Baseline is the baseline against which the Proposed Project's potential impacts are measured. Additional information regarding the Adjusted Baseline transportation assumptions is provided in Section 3.0.5 of the Section 3.0, Introduction to Analysis, and in Section 3.14.2. Further discussion of Cumulative condition assumptions is provided in Section 3.0.6, and in Section 3.14.4 following Table 3.14-43.

Scenarios Evaluated: The traffic noise analysis evaluated the following Project scenarios.

- *Non-Event Day, Ancillary Uses:* This scenario includes weekday traffic during the AM and PM peak periods under Adjusted Baseline conditions, and operations of Project ancillary uses (i.e., team practice facility and offices, sports medicine clinic, plaza commercial and community uses, and hotel) on a non-event day.
- *Day-Time Corporate/Community Event:* This scenario includes weekday traffic during the AM peak period under Adjusted Baseline conditions, operations of Project ancillary uses, and a daytime corporate/community event at the Project ~~Arena~~ with approximately 2,000 attendees.

Proposed

- *Other Sporting Event or Gathering:* This scenario includes weekday traffic during the PM peak period under Adjusted Baseline conditions, operations of Project ancillary uses, and a sporting event or gathering at the Project Arena with approximately 7,500 attendees.
- *Major Event:* This scenario includes weekday pre- and post-event traffic and weekend pre- and post-event peak period traffic. Pre- and post-event traffic assumes 18,000 and 18,500 attendees, respectively. Weekday events are assumed to start at 7:00 PM and weekend events are assumed to start at 6:00 PM

In addition to the Project scenarios listed above, traffic noise was evaluated for the worst case weekday and weekend concurrent event scenarios, as described in Section 3.14, Transportation and Circulation. The concurrent event scenario evaluated on weekdays is the Adjusted Baseline with a Mid-Sized Event at the NFL Stadium and with a concert at The Forum ~~plus~~ a Major Event at the Proposed Project. The concurrent event condition evaluated on weekends is the Adjusted Baseline with an NFL Game at the NFL Stadium, a concert at The Forum, plus a Major Event at the Proposed Project ~~Arena~~.

Operational Impacts – Composite On-Site Noise

Study Area: On-site operational noise sources include amplified and crowd noise from arena events, mechanical equipment, vehicle noise (i.e., parking garages and media truck parking), and plaza-related amplified sound and crowd noise. Because the composite noise analysis is focused on noise sources at the Project Site, impacts were evaluated for noise-sensitive uses within approximately 500 feet of the Project Site.

Scenarios Evaluated: On-site activities and associated noise sources would vary based on the type of activity occurring at the Project Site. On-site composite noise was evaluated under the following scenarios:

- *Non-Event Day, Ancillary Uses:* Noise sources include plaza-related noise (patrons of ancillary uses and outdoor dining), pedestrian noise, parking lot and garage activity, and mechanical equipment.
- *Day-Time Corporate/Community Event:* Noise sources include plaza-related noise (patrons of ancillary uses, day-time corporate/community event attendees, and outdoor dining), pedestrian noise, parking lot and garage activity, and mechanical equipment.
- *Other Sporting Event or Gathering:* Noise sources include plaza-related noise (patrons of ancillary uses, other sporting event or gathering attendees, and outdoor dining), pedestrian noise, parking lot and garage activity, and mechanical equipment.
- *Major Event Pre-Event:* Noise sources include plaza-related noise (amplified sound at the outdoor plaza stage, crowd noise from attendees of outdoor performances, patrons of ancillary uses, and outdoor dining), pedestrian noise, parking lot and garage activity, media truck-related noise, and mechanical equipment.
- *Major Event During Event:* Noise sources include plaza-related noise (patrons of ancillary uses and outdoor dining), pedestrian noise, parking lot and garage activity, media truck-related noise, mechanical equipment, and event noise emanating from the arena when the doors open.

Traffic volume count data for existing conditions is presented in Section 3.14, Transportation and Circulation, and consists of traffic volumes along roadway segments that exist as of the collection of data. This data accounts for existing traffic volumes and trips generated by development that was currently in operation.

Existing roadway noise levels were calculated for the segments for which existing traffic volume data was collected (see Appendix K for calculations). Calculation of roadway noise levels under existing conditions was accomplished using the methodology described below in Section 3.11.4, and relies on peak hour traffic volume data provided by Fehr & Peers as presented in Section 3.14 and the posted speed limit. The roadway segments located near and immediately adjacent to the Project Site are considered to be those that are expected to be most directly affected by Project-related traffic. As described in Section 3.11.4 below, the roadway segments that would experience the greatest increase in traffic noise generated by the Proposed Project and where noise-sensitive receptors are located have been included in this analysis. As a result, out of the study area examined in Section 3.14, 113 segments have been selected for analysis. Existing traffic volume counts were not collected for all studied roadway segments. However, in order to identify the segments that have been selected for analysis in this section, all 113 segments are listed in **Table 3.11-2**. For calculated traffic noise levels for all roadway segments, see calculations included in Appendix K.

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Existing peak hour traffic noise under the Weekday AM Peak Period (7:00–9:00 AM), Weekday PM Peak Period (4:00–6:00 PM), Weekday Pre-Event Peak Period (6:00–7:00 PM), Weekday Post-Event Peak Period (9:30–10:30 PM), Weekend Pre Event Peak Period (5:00–6:00 PM), and Weekend Post Event Peak Period (9:30–10:30 PM) time periods is shown in Table 3.11-2.

Aircraft Noise

The nearest public use airports to the Project Site include LAX and Jack Northrop Field/Hawthorne Municipal Airport (HHR). The Project Site is located approximately two miles east of LAX, along the extended centerlines of Runways 25R and 25L, and approximately 1.4 miles due north of Runway 7-25 at HHR. There are no private airstrips located in the vicinity of the Project Site.

The Project Site is within the planning boundary/airport influence area (AIA) established for LAX in the Los Angeles County Airport Land Use Plan (ALUP) as shown in **Figure 3.11-3** (see further description of the relationship of the Project Site to the ALUP in Section 3.10, Land Use and Planning); it is not within the planning boundary or AIA for HHR. The planning boundary for LAX represents the combined areas around the airport subject to potential noise impacts and safety hazards associated with airport operations. The ALUP provides noise and safety policies governing development of compatible future land uses in areas around LAX. The Project Site is located within the CNEL 65 dBA contour established for LAX in the ALUP, but is not located within the CNEL 65 dBA contour for HHR. As a result of its exposure to noise from LAX, the Project is subject to the noise policies in the ALUP.

in Chapter 2, Project Description

The 14 CFR Part 150 noise contours (see Figure 2-4) show that parts of the Project Site located between West 102nd Street and West Century Boulevard are generally located in areas exposed to CNEL 65 dBA -70 dBA. This includes both the West and East Parking Garage sites, the Plaza area including commercial and community uses, most of the Arena and Practice and Athletic Training Facility, Office, and Sports Medicine Clinic, and the Hotel. Parts of the Project Site south of West 102nd Street are generally located in areas exposed to CNEL 70 dBA – 75 dBA. This includes part of the Arena and Practice and Athletic Training Facility, Office, and Sports Medicine Clinic, as well as the South Parking Garage. Although the 14 CFR Part 150 contours shown in Figure 2-4 are more recent than the 65 dBA contour shown in Figure 3.11-3, it has not been formally incorporated into the ALUP by the ALUC, therefore consistency of the Proposed Project in relation to both versions of the contours have been discussed.

Existing Groundborne Vibration Setting

The groundborne vibration level in residential areas is usually 50 VdB or lower, well below the threshold of perception for humans, which is around 65 VdB.²⁰ Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible. Although not sources of groundborne vibration, noise-induced building responses such as rattling of windows and walls from aircraft flyovers contribute to the existing vibration setting. The primary sources of existing groundborne vibration in the area surrounding the Project Site would be from adjacent industrial activities, including truck travel, heavy-duty vehicular travel (bus, refuse trucks, delivery trucks, etc.) on local roadways, and aircraft flyovers. A bus traveling at a distance of 50 feet typically generates groundborne vibration velocity levels of 63 VdB (approximately 0.006 in/sec PPV).²¹ Aircraft flyovers could generate vibration levels that would cause human annoyance; however, they would not generate building vibration levels that would cause building damage.²²

Existing Groundborne Noise Setting

As stated earlier, groundborne noise levels would generally be 20 to 50 decibels lower than the velocity level depending on the frequency level of the source.²³ With a background groundborne vibration level in residential areas of 50 VdB or lower, groundborne noise levels would be approximately 0 to 30 dBA. A bus traveling at a distance of 50 feet would generate groundborne noise levels of approximately 23 to 38 dBA. Typical vibration from construction equipment would fall under the low frequency range with vibratory equipment such as pile drivers falling in the mid frequency range.²⁴ With a vibration velocity of 108 VdB at five feet from the source, a

²⁰ Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018. p. 113.

²¹ Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018. p. 113.

²² National Aeronautics and Space Administration, 1992. *Building Vibrations Induced by Noise from Rotorcraft and Propeller Aircraft Flyovers*. June 1992. p. 10.

²³ Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018. p. 146.

²⁴ Roberts, Cedric. "Construction Noise and Vibration Impact on Sensitive Premises." *Acoustics* 2009, November 23–25, 2009, p. 6.

large bulldozer would generate groundborne noise levels of approximately 58 dBA. The approximate level of human perception of groundborne noise is 25 dBA for low frequency vibration (near 30 Hz) and 40 dBA for mid-frequency vibration (near 60 Hz).²⁵

3.11.3 Adjusted Baseline Environmental Setting

Section 3.11, Noise and Vibration, assumes the Adjusted Baseline Environmental Setting as described in Section 3.0, Introduction to the Analysis. Related to noise, the changes associated with the Adjusted Baseline include the operation of an NFL Stadium, performance venue, residential, commercial, and retail uses,

within the HPSP area referred to as the HPSP Adjusted Baseline projects.

The NFL Stadium is located at the southeastern corner of Pincay Drive and South Prairie Avenue and is designed to provide expandable capacity to accommodate various sporting events, concerts, and activities in addition to NFL games. Although a transparent glass canopy/roof is designed to provide an open-air experience while keeping crowd and event noise contained, the NFL Stadium is not fully enclosed and leakage of event noise from the NFL Stadium, including pre- and post-event activities would contribute to the ambient noise environment, as would the additional traffic generated by the uses on local and arterial streets.

The City of Champions Initiative (Exhibit M, Stadium Alternative Mitigation Measures, in the Initiative) imposed several mitigation measures to limit operational noise from the HPSP development and protect the existing neighborhoods, although it acknowledged that some event noise would be audible outside the boundaries of the property during a limited number of major special events. The key measures to address operational noise that are part of the Adjusted Baseline include:

- **G-7** The operation of the stadium shall comply with the provisions of Article 2 (Noise Regulations) of Chapter 5 of the Inglewood Municipal Code.
- **G-8** The use of vibratory rollers within 150 feet, or impact pile driving within 320 feet, of The Forum property line shall be limited to time periods that do not coincide with events occurring at The Forum.
- **G-9** Prior to the issuance of building permits, the project applicant shall utilize an acoustical engineer to demonstrate to the City of Inglewood that the 45 dBA interior noise standard has been achieved at residential dwelling units within the Project boundaries, as measured on a typical day, and not with respect to special events at the stadium.
- **G-10** All rooftop mechanical equipment shall be enclosed or screened from view from public streets with appropriate screening walls.
- **G-11** Firework Shows shall be limited to a maximum of 15 events per year, and each event shall not exceed 20 minutes in duration. All such events shall comply with FAA regulations. For purposes of this mitigation measure, Firework Shows shall be defined as a single, coordinated pyrotechnic display continuing for an uninterrupted period of time lasting longer than five minutes and involving pyrotechnic devices that reach more than 100 feet above the

²⁵ Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018. p. 120.

Stadium playing field. Separate from the foregoing limit on Firework Shows, the isolated use of pyrotechnic devices during stadium events shall be allowed.

- **G-12** Loading dock and trash/recycling areas for the stadium shall be located in the subterranean level, which shall preclude noise from this source at exterior locations.
- **G-13** The Project's in-house sound system (including the stadium and music for retail areas, if any) shall utilize a state of the art distributed speaker system capable of aiming the sound toward the seating areas, or other intended areas within the Project, to minimize sound spillage to the exterior of the Project.
- **G-14** Building mechanical/electrical equipment shall be designed such that it will not cause an increase in sound levels at any Off-Site residence of 3 dBA or greater above the Base Ambient Noise Level.

Further, the NFL Stadium and performance venue are located and designed to help reduce noise by locating the NFL Stadium away from the northern edge of the property (~~i.e., south of the stadium location proposed in 1995~~), and by placing the NFL Stadium playing surface well below existing grade, which reduces line-of-sight noise impacts on adjacent uses.

The City of Champions Initiative modified the City's noise ordinance such that during operation of the NFL Stadium, noise from sporting events and for up to 12 other special events occurring at the NFL Stadium each year (unless a higher number is otherwise permitted by the Permits and Licenses Committee) are exempt from the noise limits provided in Article 2 of the Municipal Code. Noise exceeding code limits from these few major events is not permitted to extend beyond 12:00 AM. With the exception of sporting events, up to 12 other special events, and any special events otherwise permitted by the Permits and Licenses Committee, the NFL Stadium must comply with the City of Inglewood noise ordinance.

Charles M. Salter Associates, Inc. prepared an acoustical model for the NFL Stadium which estimated that amplified music and announcements for a professional sporting event at the nearest residential property line (i.e., exterior noise) would be approximately 46 dBA on the west, 50 dBA on the east, and 51 dBA on the north. The model estimated that approximate sound levels from the NFL Stadium at the property line would range from 65 to 67 dBA on the east and west, and from 64 to 69 dBA on the north, depending on the configuration of concert within the NFL Stadium. The acoustical analysis estimates that these levels would drop by 5 to 10 dBA after the first row of houses.²⁶

Retail/restaurant uses within the HPSP area will be constructed immediately northeast of the intersection of West Century Boulevard and South Prairie Avenue and include a mix of retail shops, fine dining, specialty grocery store, and outdoor plazas. A walkable promenade will provide outdoor spaces for conversation, dining, and live amplified music, and will contribute to the ambient noise environment. Based on ESA's experience conducting noise measurements for live concerts, it is estimated that live music and amplified sound would result in a noise level of

²⁶ Charles M. Salter Associates, Inc., 2015. *Hollywood Park Results of Preliminary Acoustical Modeling*. February 13, 2015

approximately 95 dBA at 100 feet from the source. Conversation within the open spaces and outdoor dining areas would result in noise levels of 76 dBA at 3.3 feet from each person as a result of conversation and cheering.²⁷

HPSP Adjusted Baseline projects

Trip generation associated with the buildout and operation of the HPSP ~~area~~ has been estimated and traffic volumes in the area surrounding the Project Site have been projected to establish the Adjusted Baseline traffic environment along the roadway segments selected for analysis (see Section 3.11.4 below for discussion of segments selection). Additionally, trip generation associated with events at the NFL Stadium, The Forum, and concurrent events at both venues has been estimated and traffic volumes projected to establish the combined traffic environment during which one or more events are being held (see Section 3.14.5 for discussion of concurrent events). Based on turning movement volumes provided Section 3.14, Transportation and Circulation, and Appendix K, Adjusted Baseline and event traffic noise have been calculated and included in Tables 3.11-3 through 3.11-6.

3.11.4 Regulatory Setting

Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans identify general principles intended to guide and influence development plans; local noise ordinances establish standards and procedures for addressing specific noise sources and activities. Noise issues relevant to the Proposed Project are addressed in Title 24 of the California Code of Regulations, City of Inglewood General Plan policies and the City of Inglewood noise ordinance standards.

Federal

In 1972, the Noise Control Act (42 United States Code section 4901 et seq.) was passed by congress to promote limited noise environments in support of public health and welfare. It also established the US Environmental Protection Agency (US EPA) Office of Noise Abatement and Control to coordinate federal noise control activities. US EPA established guidelines for noise levels that would be considered safe for community exposure without the risk of adverse health or welfare effects. **Table 3.11-7** presents noise exposure levels highlighted by the guidelines.

In a 1974 study, US EPA found that to prevent hearing loss over the lifetime of exposure, the yearly average Leq should not exceed 70 dBA. To prevent interference and annoyance, the US EPA found that the Ldn should not exceed 55 dBA outdoors or 45 dBA indoors.²⁸ In 1982, noise control was largely passed to state and local governments.

²⁷ Olsen, W.O., 1998. "Average Speech Levels and Spectra in Various Speaking/Listening Conditions: A Summary of the Pearson, Bennett, & Fidell (1977) Report". American Journal of Audiology, 7(1059-0889), October 1998, p. 3.

²⁸ US Environmental Protection Agency, 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. March 1974, p. 34.

TABLE 3.11-3
ADJUSTED BASELINE TRAFFIC NOISE LEVELS

Segment	Peak Period Noise Level (dBA Leq)					
	Weekday AM (dBA Leq)	Weekday PM (dBA Leq)	<i>Weekday</i> -Friday Pre-Event (dBA Leq)	<i>Weekday</i> -Friday Post-Event (dBA Leq)	Weekend Pre-Event (dBA Leq)	Weekend Post-Event (dBA Leq)
Centinela between La Cienega Blvd and La Brea Ave	N/A	N/A	N/A	N/A	N/A	66.4
Centinela between La Brea Ave and Florence Ave	N/A	N/A	N/A	N/A	N/A	65.9
Florence Ave between La Brea Ave and Hillcrest Blvd	N/A	N/A	N/A	N/A	N/A	64.8
Florence Ave between Hillcrest Blvd and Centinela Ave	N/A	N/A	68.9	66.6	67.9	65.7
Florence Ave between Centinela Ave and South Prairie Ave	N/A	N/A	70.6	68.5	70.1	67.7
Florence Ave between South Prairie Ave and West Blvd	N/A	N/A	N/A	N/A	N/A	67.6
Manchester Blvd between Ash Ave/I-405 NB Off-Ramp and La Brea Ave	N/A	N/A	N/A	N/A	N/A	63.0
Manchester Blvd between La Brea Ave and Hillcrest Blvd	N/A	N/A	N/A	N/A	64.9	66.1
Manchester Blvd between Hillcrest Blvd and Spruce Ave	N/A	N/A	69.4	66.8	68.5	66.1
Manchester Blvd between Spruce Ave and South Prairie Ave	N/A	N/A	69.6	66.9	68.6	66.2
Manchester Blvd between Kareem Ct and Crenshaw Dr	N/A	N/A	N/A	N/A	N/A	67.1
Manchester Blvd between Crenshaw Dr and Crenshaw Blvd	N/A	N/A	N/A	N/A	N/A	66.7
Manchester Blvd between Crenshaw Blvd and Van Ness Ave	N/A	N/A	N/A	N/A	N/A	67.3
Manchester Blvd between Van Ness Ave and Western Ave	N/A	N/A	N/A	N/A	N/A	67.4
Manchester Blvd between Western Ave and Normandie Ave	N/A	N/A	N/A	N/A	N/A	67.7
Manchester Blvd between Normandie Ave and Vermont Ave	N/A	N/A	N/A	N/A	N/A	67.9
Manchester Blvd between Vermont Ave and Hoover St	N/A	N/A	N/A	N/A	N/A	68.8
Manchester Blvd between Hoover St and Figueroa St	N/A	N/A	N/A	N/A	N/A	69.1
Pincay Dr between South Prairie Ave and Kareem Ct	N/A	N/A	68.4	64.1	66.5	63.4
Pincay Dr between Kareem Ct and Crenshaw Blvd	N/A	N/A	N/A	N/A	N/A	63.7
Arbor Vitae St between La Cienega Blvd and Inglewood Ave	N/A	N/A	65.6	63.2	65.2	62.4
Arbor Vitae St between Inglewood Ave and La Brea Ave	N/A	N/A	65.4	63.2	64.8	62.5
Arbor Vitae St between La Brea Ave and Myrtle Ave	N/A	N/A	63.9	61.3	63.2	60.6
Arbor Vitae St between Myrtle Ave and South Prairie Ave	N/A	N/A	63.0	60.5	62.2	59.9
Hardy St between La Brea Ave and Myrtle Ave	N/A	N/A	59.4	56.5	58.3	56.2

3. Environmental Setting, Impacts, and Mitigation Measures

3.11 Noise and Vibration

STADIUM EVENTS
TABLE 3.11-4
ADJUSTED BASELINE PLUS NFL GAME TRAFFIC NOISE LEVELS

*(Weekday / Weekend levels
 refer to the mid size and NFL game
 scenarios?)*

Segment	Peak Period Noise Level (dBA Leq)			
	<i>Week day</i> Friday Pre-Event (dBA Leq)	<i>Week day</i> Friday Post-Event (dBA Leq)	Weekend Pre-Event (dBA Leq)	Weekend Post-Event (dBA Leq)
Centinela between La Cienega Blvd and La Brea Ave	69.7	67.6	69.5	66.7
Centinela between La Brea Ave and Florence Ave	69.7	66.9	68.6	66.0
Florence Ave between La Brea Ave and Hillcrest Blvd	69.0	65.8	67.0	64.8
Florence Ave between Hillcrest Blvd and Centinela Ave	69.7	66.6	67.9	65.7
Florence Ave between Centinela Ave and South Prairie Ave	71.5	69.0	70.5	68.2
Florence Ave between South Prairie Ave and West Blvd	71.6	69.5	70.4	68.7
Manchester Blvd between Ash Ave/I-405 NB Off-Ramp and La Brea Ave	68.6	69.5	67.7	69.3
Manchester Blvd between La Brea Ave and Hillcrest Blvd	70.8	70.7	69.6	70.4
Manchester Blvd between Hillcrest Blvd and Spruce Ave	71.0	70.7	69.7	70.4
Manchester Blvd between Spruce Ave and South Prairie Ave	71.1	70.8	69.8	70.4
Manchester Blvd between Kareem Ct and Crenshaw Dr	71.5	69.8	70.0	69.3
Manchester Blvd between Crenshaw Dr and Crenshaw Blvd	70.6	69.5	69.2	69.0
Manchester Blvd between Crenshaw Blvd and Van Ness Ave	71.6	70.5	70.4	69.9
Manchester Blvd between Van Ness Ave and Western Ave	71.6	70.5	70.7	69.9
Manchester Blvd between Western Ave and Normandie Ave	71.7	70.7	70.8	70.1
Manchester Blvd between Normandie Ave and Vermont Ave	71.7	70.6	70.9	70.0
Manchester Blvd between Vermont Ave and Hoover St	71.9	71.2	70.9	70.6
Manchester Blvd between Hoover St and Figueroa St	72.1	71.4	70.9	70.8
Pincay Dr between South Prairie Ave and Kareem Ct	71.7	68.6	67.5	68.2
Pincay Dr between Kareem Ct and Crenshaw Blvd	71.7	65.3	68.7	64.4
Arbor Vitae St between La Cienega Blvd and Inglewood Ave	65.9	63.5	65.6	62.6
Arbor Vitae St between Inglewood Ave and La Brea Ave	65.7	63.5	65.3	62.6
Arbor Vitae St between La Brea Ave and Myrtle Ave	64.3	61.7	63.9	60.8
Arbor Vitae St between Myrtle Ave and South Prairie Ave	63.6	61.0	63.0	60.1
Hardy St between La Brea Ave and Myrtle Ave	60.3	57.1	59.6	56.2

CONCERT
 TABLE 3.11-5
 ADJUSTED BASELINE PLUS CONCERT AT FORUM TRAFFIC NOISE LEVELS

Segment	Peak Period Noise Level (dBA Leq)			
	Weekday Friday Pre-Event (dBA Leq)	Weekday Friday Post-Event (dBA Leq)	Weekend Pre-Event (dBA Leq)	Weekend Post-Event (dBA Leq)
Centinela between La Cienega Blvd and La Brea Ave	69.9	68.1	69.6	67.3
Centinela between La Brea Ave and Florence Ave	69.8	66.8	68.8	65.9
Florence Ave between La Brea Ave and Hillcrest Blvd	68.2	65.8	67.0	64.8
Florence Ave between Hillcrest Blvd and Centinela Ave	68.9	66.6	67.9	65.7
Florence Ave between Centinela Ave and South Prairie Ave	71.1	69.0	70.5	68.1
Florence Ave between South Prairie Ave and West Blvd	71.3	70.2	70.5	69.6
Manchester Blvd between Ash Ave/I-405 NB Off-Ramp and La Brea Ave	69.0	67.8	67.9	67.4
Manchester Blvd between La Brea Ave and Hillcrest Blvd	71.2	69.5	69.9	69.0
Manchester Blvd between Hillcrest Blvd and Spruce Ave	71.3	69.5	70.1	69.0
Manchester Blvd between Spruce Ave and South Prairie Ave	71.7	69.8	70.3	69.4
Manchester Blvd between Kareem Ct and Crenshaw Dr	72.5	71.8	71.1	71.5
Manchester Blvd between Crenshaw Dr and Crenshaw Blvd	71.4	71.6	70.1	71.2
Manchester Blvd between Crenshaw Blvd and Van Ness Ave	72.3	71.6	71.1	71.4
Manchester Blvd between Van Ness Ave and Western Ave	72.2	71.8	71.3	71.5
Manchester Blvd between Western Ave and Normandie Ave	72.3	72.0	71.4	71.6
Manchester Blvd between Normandie Ave and Vermont Ave	72.4	72.1	71.4	71.7
Manchester Blvd between Vermont Ave and Hoover St	72.6	72.5	71.6	72.0
Manchester Blvd between Hoover St and Figueroa St	72.7	72.7	71.6	72.2
Pincay Dr between South Prairie Ave and Kareem Ct	67.1	63.7	65.0	62.6
Pincay Dr between Kareem Ct and Crenshaw Blvd	71.3	65.1	69.2	64.3
Arbor Vitae St between La Cienega Blvd and Inglewood Ave	66.7	64.4	66.0	63.7
Arbor Vitae St between Inglewood Ave and La Brea Ave	66.7	64.4	65.8	63.7
Arbor Vitae St between La Brea Ave and Myrtle Ave	66.0	64.5	64.9	64.0
Arbor Vitae St between Myrtle Ave and South Prairie Ave	65.7	64.2	64.4	63.8
Hardy St between La Brea Ave and Myrtle Ave	60.3	57.1	59.6	56.2
Hardy St between Myrtle Ave and South Prairie Ave	59.8	55.6	58.8	54.6

STADIUM EVENTS
 TABLE 3.11-6
 ADJUSTED BASELINE PLUS NFL GAME AND CONCERT AT FORUM TRAFFIC NOISE LEVELS

Segment	Peak Period Noise Level (dBA Leq)			
	Weekday Friday Pre-Event (dBA Leq)	Weekday Friday Post-Event (dBA Leq)	Weekend Pre-Event (dBA Leq)	Weekend Post-Event (dBA Leq)
Centinela between La Cienega Blvd and La Brea Ave	69.9	67.8	69.9	66.4
Centinela between La Brea Ave and Florence Ave	69.8	66.9	69.0	65.9
Florence Ave between La Brea Ave and Hillcrest Blvd	69.1	66.3	67.0	64.8
Florence Ave between Hillcrest Blvd and Centinela Ave	69.7	67.1	67.9	65.7
Florence Ave between Centinela Ave and South Prairie Ave	71.8	69.5	70.7	67.7
Florence Ave between South Prairie Ave and West Blvd	71.8	70.2	70.8	67.6
Manchester Blvd between Ash Ave/I-405 NB Off-Ramp and La Brea Ave	71.8	71.9	71.7	63.0
Manchester Blvd between La Brea Ave and Hillcrest Blvd	71.4	71.5	71.1	66.1
Manchester Blvd between Hillcrest Blvd and Spruce Ave	71.5	71.5	71.2	66.1
Manchester Blvd between Spruce Ave and South Prairie Ave	71.7	71.7	71.3	66.2
Manchester Blvd between Kareem Ct and Crenshaw Dr	72.2	71.2	71.8	67.1
Manchester Blvd between Crenshaw Dr and Crenshaw Blvd	71.3	71.0	70.8	66.7
Manchester Blvd between Crenshaw Blvd and Van Ness Ave	72.2	71.9	71.9	67.3
Manchester Blvd between Van Ness Ave and Western Ave	72.2	71.9	72.1	67.4
Manchester Blvd between Western Ave and Normandie Ave	72.3	72.0	72.2	67.7
Manchester Blvd between Normandie Ave and Vermont Ave	72.3	72.0	72.2	67.9
Manchester Blvd between Vermont Ave and Hoover St	72.4	72.4	72.3	68.8
Manchester Blvd between Hoover St and Figueroa St	72.6	72.6	72.3	69.1
Pincay Dr between South Prairie Ave and Kareem Ct	71.9	69.0	65.8	63.4
Pincay Dr between Kareem Ct and Crenshaw Blvd	72.0	67.4	71.0	63.7
Arbor Vitae St between La Cienega Blvd and Inglewood Ave	67.1	65.7	66.2	62.4
Arbor Vitae St between Inglewood Ave and La Brea Ave	67.1	65.7	65.9	62.5
Arbor Vitae St between La Brea Ave and Myrtle Ave	66.5	65.1	65.4	60.6
Arbor Vitae St between Myrtle Ave and South Prairie Ave	66.0	64.8	64.9	59.9
Hardy St between La Brea Ave and Myrtle Ave	60.3	57.1	59.6	56.2

of significance to apply to the proposed nighttime construction work. Further, because of the unique size, scale, planned construction schedule, and proximity of the Proposed Project to noise sensitive uses, for this EIR the City has elected to apply a threshold of significance for daytime construction noise, which could occur on a fluctuating and intermittent basis over a period of approximately 40 months.

Applied Criteria

For the reasons described above, the City has decided that in this EIR it will define “a substantial temporary or permanent increase in ambient noise levels” by utilizing the following additional thresholds. These thresholds are adapted from, but not identical to, the City of Los Angeles CEQA Thresholds Guide:³⁷

- Construction activities that would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or

These thresholds are similar to those in the City of LA CEQA Thresholds Guide but have been adapted to reflect the City of Inglewood’s Municipal Code noise control sections.

As stated above, the use of these thresholds in this Draft EIR responds to the unique circumstances of the Proposed Project and the Project Site. By utilizing these quantitative thresholds in this Draft EIR, the City is not making a decision whether to use these thresholds in CEQA documents on other proposed projects in the future. The City would, however, retain its authority as CEQA lead agency to utilize these or other thresholds, including relying exclusively on the provisions of Municipal Code section 5-41, for the consideration of construction noise, as appropriate to the circumstances of other projects in the future.

For operational impacts, the City recognizes that such impacts occur on the long-term, and, as a result, the City has determined that in this case the significance threshold should be more conservative. An increase in noise level of 3 dBA is generally regarded as an increase in noise that is barely perceivable.³⁸ For this reason, increases of less than 3 dBA would have no physical effect on the environment, and are not considered significant.³⁹ Therefore, for the purposes of this EIR, an increase in traffic noise of 3 dBA Leq and an increase in composite operational noise of 3 dBA Leq over existing ambient noise levels at a noise-sensitive use is considered a significant impact.⁴⁰

As described above, the City has adopted Noise Regulations that prohibit noise in excess of specified levels, depending on base ambient noise levels, the nature of the use where noise levels are measured, and the duration period of such noise. The Noise Regulations may prohibit any increase in ambient noise levels under specified circumstances. The City has not previously relied on the Noise Regulations to serve as significance thresholds for operational noise. The City has determined that

³⁷ City of Los Angeles, L.A. CEQA Thresholds Guide, Your Resource for Preparing CEQA Analyses in Los Angeles, 2006, p. 1.1-3.

³⁸ California Department of Transportation, 2013. *Technical Noise Supplement*. September 2013. p. 6-5.

³⁹ City of Los Angeles, 2006. *L.A. CEQA Thresholds Guide*. 2006, p. 1.2-3.

⁴⁰ California Department of Transportation, 2013. *Technical Noise Supplement*. September 2013. p. 6-5.

Use 2
separate thresholds
for daytime/
nighttime as
in prior
version.

Add'l note: or
stet, but fix s/v
agmt and
syntax for
single
threshold

Standard:
reference

the Noise Regulations should not serve as operational noise thresholds for the Proposed Project. The reason for this determination is that an increase in ambient noise would be imperceptible, or at most barely perceptible, where that increase is less than 3 dBA. Such an increase in ambient noise levels would not have a significant effect on the physical environment. The City has instead determined that the threshold should be set at a level that is actually perceivable. The City has therefore adapted its threshold from the City of LA thresholds, as described above.

^ CEQA Thresholds Guide

In the cumulative context, the Proposed Project's noise and vibration impacts are considered in conjunction with other reasonably foreseeable development, using the same thresholds set forth above.

Methodology and Assumptions

Construction Noise

On-Site Sources of Construction Noise

Construction noise impacts were assessed based on a comparative analysis of the noise levels resulting from operation of specified construction equipment and the noise levels of existing conditions at noise-sensitive off-site land uses. Noise impacts from on-site construction were evaluated by determining the noise levels generated by the different types of construction activity anticipated, calculating the construction-related noise level generated by the mix of equipment assumed for all construction activities at nearby noise-sensitive receptor locations, and comparing these construction-related noise levels to existing ambient noise levels (i.e., noise levels without construction noise) at those receptors.

The Computer Aided Noise Abatement (CadnaA) noise propagation program (Version 2019) was used to estimate the propagation of noise from Project construction. CadnaA is a Windows-based software program that predicts and assesses noise levels in the vicinity of noise sources based on International Organization for Standardization 9613-2 algorithms for noise propagation calculations. The calculations account for classical sound wave divergence plus attenuation factors resulting from air absorption, basic ground effects, and barrier/shielding.

Figure 3.11-2 identifies the location of noise-sensitive receptors evaluated in this analysis and the receptor groups used to present the results. For purposes of providing a range of construction noise levels experienced by various noise-sensitive receptors within each receptor group, the model evaluated multiple receiver points (along the property lines and near buildings at noise-sensitive uses at ground and upper levels) within each receptor group. For construction noise levels calculated at each of the receiver points and the location of each receiver point, see Appendix J.

Over the course of the construction of the Proposed Project, construction activities are anticipated to occur during both daytime hours (7:00 AM to 8:00 PM) as well as during nighttime hours (8:00 PM to 7:00 AM) during certain phases of construction activities. Construction activity during nighttime hours is expected to occur at the Arena Site and the Well Relocation Site during certain phases of construction, but not at the West Parking Garage Site or the East Transportation and Hotel Site. Activities such as nighttime delivery of large project materials that would disrupt

pain is a common method of measuring health effects or impacts of noise. Noise levels of 120 dB and 140 dB correspond to the threshold of pain and hearing damage for short term exposure.⁴¹

With respect to potential sleep disturbance, there are several factors that contribute to an individual's response to noise exposure. Long-term exposure to noise leading to sleep disturbance can potentially result in health effects as described above, under Environmental Setting. Although nighttime Project construction would not result in long-term exposure to elevated nighttime noise levels, for purposes of correlating nighttime construction activity with the potential for noise-related health effects, the potential for sleep disturbance has been estimated. When construction work days extend into nighttime hours, the Single Event Noise Exposure Level (SEL) is the appropriate measure of the potential for impacts. Based on FHWA Sound Level Descriptor (FHWA-HEP-17-053) the SEL is generally 5 to 10 dB higher than the Leq. Using the calculated Leq for nighttime construction activity at the receiver building façade, the SEL can be estimated with a 10 dB factor added to the Leq level, for a worst-case scenario of estimating the corresponding SEL level.

According to the Acoustical Society of America, receivers that would experience an indoor SEL of 50 dBA or lower would have an awakening probability of zero.⁴² As noted above, the SEL is assumed to be 10 dB higher than the nighttime construction Leq. Based on the assumption that standard building construction in warm climate area such as southern California offers an exterior-to-interior attenuation rate of 12 dB, it is assumed that indoor SEL would be 12 dB lower than exterior construction noise levels.⁴³ Based on the assumption that an indoor SEL of 50 dBA and lower would not result in awakenings, CadnaA was utilized to identify the area within which there is potential for awakening due to construction activity. The area surrounding the Project Site that would experience an indoor SEL of greater than 50 dBA (exterior construction noise level of greater than 52-dBA Leq) was identified.

There are several factors to consider with regard to potential sleep disturbance such as each individual's sensitivity of nighttime noise exposure, an individual's age, and the number of noise events. Non-acoustic factors such as temperature, humidity, and sleep disorders could also affect the quality of an individual's sleep.⁴⁴ According to WHO, an individual's ability to adapt to a new noise or new sleeping environment is rapid and awakenings are a relatively rare occurrence.⁴⁵ Due to the high variability of each individual's sensitivity to nighttime noise, uncertain factors related to nighttime construction activity such as number of peak noise level occurrences, and lack of an established or adopted threshold designating acceptable occurrences of awakenings, the estimated percent awakenings presented in this analysis is for informational

⁴¹ Kinsler, Lawrence E., Frey, A.R., Coppens, A.B., and Sanders, J.V., 1982. *Fundamentals of Acoustics*, Third Edition. 1982

⁴² Acoustical Society of America, 2018. *Rationale for Withdrawing ANSI/ASA S12.9-2008/Part 6*. Annex 3. July 22, 2018.

⁴³ United States Environmental Protection Agency, *Protective Noise Levels*, 1978. p. 11.

⁴⁴ Basner, M., & McGuire, S. (2018). WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Effects on Sleep. *International Journal of Environmental Research and Public Health*, 15(519).

⁴⁵ World Health Organization, *Night Noise Guidelines for Europe, Executive Summary*. 2009. p. 55.

the four Project-related event conditions analyzed in Section 3.14, Transportation and Circulation, are summarized below.

- The Non-Event Day, Ancillary Uses condition includes weekday traffic during the AM and PM peak period under existing conditions, operations of the HPSP Adjusted Baseline land uses that do not involve an event at the NFL Stadium, and operations of non-event related Project uses or ancillary uses (i.e., team practice facility and offices, sports medicine clinic, plaza commercial and community uses, and hotel) on a non-event day.
- The Day-Time Corporate/Community Event condition includes weekday traffic during the AM peak period under existing conditions, operations of Adjusted Baseline HPSP land uses that do not involve an event at the NFL Stadium, Project ancillary uses, and a day-time corporate/community event at the Project Site with approximately 2,000 persons in attendance.
- The Other Sporting Event or Gathering condition includes weekday traffic during the PM peak period under existing conditions, operations of Adjusted Baseline HPSP land uses that do not involve an event at the NFL Stadium, operations of Project ancillary uses, and a sporting event or gathering at the Project Site with approximately 7,500 persons in attendance.
- The Major Event condition includes weekday pre- and post-event traffic and weekend pre- and post-event peak period traffic. Pre- and post-event traffic assumes 18,000 persons and 18,500 persons, respectively.⁴⁸ Weekday events are assumed to start at 7:00 PM and weekend events are assumed to start at 6:00 PM

The traffic noise analysis utilizes projected traffic volumes generated as part of the analysis of Transportation and Circulation in Section 3.14 (see Appendix K). These volumes were used to determine Project-related operational traffic noise impacts for ~~Plus Project Event~~ ^{Plus Project Event} conditions by evaluating the increase in Project-related traffic under all four Project-related event conditions over Adjusted Baseline conditions.

Traffic noise was calculated for ~~all 153~~ ^{the study area} roadway segments analyzed in Section 3.14 (see Appendix K). The roadways that would not experience a 3.0 dBA Leq increase in traffic noise under at least one of the analyzed conditions and/or do not have sensitive receptors (as described above) adjacent to the roadway were screened out for inclusion in the analysis. As a result, out of the ~~153~~ roadway segments for which traffic noise was calculated, noise levels for 113 roadway segments where sensitive receptors are located and perceivable increases in traffic noise are anticipated have been included in this section (see Figure 3.11-4). For calculated traffic noise levels for all roadway segments, see calculations included in Appendix K.

⁴⁸ For analysis purposes, the Transportation and Circulation analysis (see Section 3.14) assumes that Project Major Events consist of a 18,000-person NBA Game for pre-event peak period analysis, and a 18,500-person concert for post-event peak period to capture the maximum (worst-case) number of trips during each respective peak period.

Concurrent Event Traffic Noise

Trip generation conditions based on potential concurrent events at The Forum, the NFL Stadium, and/or the Proposed Project with consideration of ambient growth in traffic and full project development were evaluated (see Appendix K). The worst-case concurrent event scenario for traffic noise on weekdays was determined to be the Adjusted Baseline with a Mid-Sized Event at the NFL Stadium and with a concert at The Forum, ^{with} a Major Event at the Proposed Project. The worst-case concurrent event scenario for traffic noise on weekends was determined to be the Adjusted Baseline with an NFL Game at the Stadium, a concert at The Forum, ^{plus} a Major Event at the Proposed Project. ^{and}

Roadway noise under these worst case weekday and weekend concurrent event days was calculated and compared to Adjusted Baseline plus concurrent event conditions without the Proposed Project to determine the overall change in the traffic noise environment and the contribution of the Proposed Project to this change. Table 3.11-10 summarizes the studied event scenarios. Traffic noise was calculated for all roadway segments (~~153 segments~~) and impacts were assessed for the 113 roadway segments that met the criteria for inclusion in this analysis, as described above. Calculation spreadsheets are included in Appendix J of this EIR.

Health Effects

The potential health consequences of noise impacts on sensitive receptors associated with Project-related traffic noise impacts was considered based on whether any significant increases in traffic noise (3 dBA or more) would expose noise-sensitive receptors to traffic noise levels greater than 85 dBA. As discussed above, long-term exposure to high levels of noise (85 dBA) can cause permanent hearing impairment.⁴⁹

evaluated in the study area.

Operational Noise Sources

Non-vehicular sources of noise are called stationary point-sources and include outdoor activities (such as amplified sound and crowd noise), stationary mechanical equipment (such as generators or heating, ventilation, and air conditioner (HVAC) systems), loading area truck activity, and parking lot/structure activity. Potential noise impacts from stationary point-sources were evaluated by identifying the types of sources included in the Proposed Project and the noise levels generated by these sources, calculating the future hourly Leq noise level from each noise source at receptor property lines, and comparing the calculated future noise levels to existing observed/measured ambient noise levels with a significance threshold of a 3 dBA increase over ambient conditions at the receptor property line.⁵⁰

⁴⁹ United States Department of Labor, Occupational Safety and Health Administration. Occupational Safety and Health Standards Part 1910, Standard 1910.95.

⁵⁰ California Department of Transportation, 2013. *Technical Noise Supplement*. September 2013. p. 6-5.

event has been calculated based on a reference noise level for “raised” voice of 65 dBA at 3.3 feet from the source.⁵⁴

During an Other Sporting Event or Gathering and Day-Time Corporate/Community Event, it is assumed that the majority of the people at the Project Site would be attending the event that is occurring within the proposed Arena. Under Non Event day conditions, there would not be an event otherwise drawing people to the plaza. Therefore, the occupancy of the plaza for an Other Sporting Event or Gathering, Day-Time Corporate/Community Event, and Non-Event day is assumed to be 25 percent of the maximum 5,334, approximately 1,334 people.

Plaza Rooftop Restaurant

The Proposed Project includes a potential for up to 15,000 sf of rooftop restaurant space that could be provided in the plaza and contribute to Project operational noise under all three Project analysis conditions. A portion of the 15,000 sf would consist of kitchen, storage, and office space. However, it has been conservatively assumed that the rooftop restaurant space would be located along West Century Boulevard and the total 15,000 sf area would include capacity for up to 1,000 people. Crowd noise under Major Event, Other Sporting Event or Gathering, Day-Time Corporate/Community Event, and Non-Event conditions has been calculated based on a reference noise level for “normal” speech of 58 dBA at 3.3 feet from the source.⁵⁵

Arena Noise

The exterior of the Arena Structure would be comprised of a range of textures and materials, including metal and glass, with integrated solar panels in the most exposed locations. The analysis of the Project Major Event During Event condition considers the potential for the Arena entrance doors to be open, with noise from a sold-out crowd cheering and from amplified sound inside the arena potentially being audible at nearby noise-sensitive receptors. For this analysis, the model assumes that a sold-out crowd of 18,000 people would be cheering with ten amplified speakers in use within the Arena, and that the noise level of 89.8 dBA Leq for “shouting” and 84.6 dBA Leq from amplified speakers would emanate from the Arena Structure entrance.

Pedestrian Noise

Under Project Major Event Pre Event, Major Event Post Event, Other Sporting Event or Gathering, Day-Time Corporate/Community Event, and Non-Event day conditions, it is anticipated that pedestrians would walk across the pedestrian bridge from the West Parking Garage to the Arena Site. According to Table 3.14-28 (see Section 3.14, Transportation and Circulation), the pedestrian bridge would provide comfortable walking area for 50 people at a given time. Pedestrians are also expected to walk along West Century Boulevard and the north-side sidewalk on West 102nd Street between the Arena Site and the East Transportation and

3.14-38

⁵⁴ Olsen, W. O., 1998. “Average Speech Levels and Spectra in Various Speaking/Listening Conditions: A Summary of the Pearson, Bennett, & Fidell (1977) Report”. American Journal of Audiology, vol. 7, no. 1059-0889, October 1998, p. 3.

⁵⁵ Olsen, W. O., 1998. “Average Speech Levels and Spectra in Various Speaking/Listening Conditions: A Summary of the Pearson, Bennett, & Fidell (1977) Report”. American Journal of Audiology, vol. 7, no. 1059-0889, October 1998, p. 3.

generated by a large bulldozer within five feet of a receptor building would reach an approximate level of 58 dBA, which is not greater than the airborne noise levels generated by construction equipment. Impacts related to groundborne noise are therefore not discussed further.

Sound Barriers

Chapter 2, Project Description

The placement and construction of temporary and permanent sound barriers on locations around the Project Site at the start of the first phase of construction would be included as project design features of the Proposed Project (see Figure 2-19). The temporary sound barriers would be placed during the initial phase of any construction activities on portions of the Project Site, and would only be present during the construction of the Proposed Project. The proposed permanent barriers would remain in place during the operational life of the Proposed Project.

Arena Site

A proposed 15-foot-high permanent sound barrier would be constructed along the southern boundary of the Arena Site, with a temporary, additional 7-foot-high sound barrier “topper” placed along the length of this permanent wall for the duration of construction activities on the Arena Site. Proposed permanent 12-foot-high sound barriers would be constructed along the shared boundaries of the Arena Site and the residences located at 10204 South Prairie Avenue and 10226 South Prairie Avenue prior to the start of any major construction activities on the Arena Site.

Two temporary 12-foot-high sound barriers are proposed along the western boundary of the Arena Site to be constructed along South Prairie Avenue between the residences located at 10204 South Prairie Avenue and 10226 South Prairie Avenue and from the northern boundary of 10204 South Prairie Avenue to approximately mid-block between West 101st Street and West 102nd Street.

A temporary 16-foot-high sound barrier is proposed along the shared boundary of the Arena Site and the Airport Park View Hotel, which would be replaced with a permanent 12-foot-high sound wall after the conclusion of major construction activities on the Arena Site. Similarly, the temporary 12-foot-high sound barrier proposed at the northeast corner of the Arena Site and West 102nd Street during construction would be replaced with a permanent 8-foot-high sound wall at the conclusion of major construction activities. A temporary 12-foot-high sound barrier is also proposed at the southeast corner of the Arena Site and West 102nd Street between the southern sidewalk of West 102nd Street and the northern facade of the industrial use located adjacent to the Arena Site to the east, south of West 102nd Street.

West Parking Garage Site

A proposed temporary 12-foot-high sound barrier would be placed along the western and southern boundaries of the West Parking Garage Site to remain in place during any construction activities occurring on this portion of the Project Site.

East Transportation and Hotel Site

A proposed temporary 8-foot-high sound barrier would be placed along the southern boundary of the East Transportation and Hotel Site during construction activities on this portion of the Project

More specifically, the results presented in Table 3.11-5 show that worst-case construction noise would exceed ambient noise levels by a maximum of 5.6 dBA Leq at the second floor receiver point within receptor group R5 (residential uses between West 101st and 102nd Streets, west of the West Parking Garage Site); a maximum of up to 15.4 dBA Leq at the ground floor receiver point, a maximum of up to 19.0 dBA Leq at the second floor receiver point, and a maximum of up to 19.6 dBA Leq at the third floor receiver point within receptor group R8 (hotel use adjacent to the Arena Site); a maximum of up to 11.9 dBA Leq at a ground floor receiver point within receptor group R14 (residential uses east of the Well Relocation Site); a maximum of up to 15.1 dBA Leq at a ground floor receiver point and a maximum of up to 6.8 dBA Leq at a second floor receiver point within receptor group R15 (Inglewood Southside Christian Church and early childhood educational use); a maximum of up to 14.7 dBA Leq at a ground floor receiver point and a maximum of up to 10.3 dBA Leq at a second floor receiver point within receptor group R16 (residential uses south of the Arena Site); and a maximum of up to 9.5 dBA Leq at a ground floor receiver point within receptor group R17 (residential uses located south of the Well Relocation Site).

(conform to format of other receptor site levels)

As demonstrated by the evaluation of impacts to noise-sensitive receptors within the receptor groups discussed above, daytime construction noise levels from worst-case construction activity would exceed the threshold of 5 dBA over ambient noise levels (Leq) to noise-sensitive receptors around the Project Site. Therefore, the daytime construction noise impacts of the Proposed Project would be **potentially significant**.

Nighttime Construction Noise

Hourly average nighttime construction noise levels (Leq) were calculated for nighttime construction activity at the Arena Site and the Well Relocation Site and compared to hourly ambient levels which decrease incrementally through the night before starting to rise in the early morning. No nighttime construction is proposed at the West Parking Garage Site or the East Transportation Hub and Hotel Site.

The model accounts for multiple receiver points within each receptor group. As a result, impacts within each receptor group may vary depending on the distance of each receiver point within the specific receptor group and the location of shielding (i.e., Project noise barriers and/or existing structures). **Figure 3.11-6** shows receiver points that would be impacted by worst-case nighttime construction at any point during the nighttime hours (8:00 PM – 7:00 AM). There are some cases where the nearest receivers are significantly impacted by Proposed Project construction while the impact other receivers, typically located at greater distances from the Project Site and/or situated behind existing structures, would be less than significant. **Table 3.11-16** shows the maximum hourly nighttime construction noise levels (Leq) as well as hourly ambient noise levels. As shown, impacts vary throughout the nighttime hours as ambient conditions naturally fluctuate.

Nighttime construction activity at the Arena Site would result in maximum noise levels that exceed the threshold of 5 dBA over ambient Leq levels during at least one nighttime hour at residences to the north, west, and south of the Arena Site, the hotel use at the former Airport Park View Hotel site to the north of the Arena Site, the Iglesia Evangelica Profetica Jesucristo Pronto Viene and

residential uses to the west of the Arena Site, the Inglewood Southside Christian Church and early childhood education uses to the south of the Arena Site, and residences east of the Well Relocation Site. More specifically, worst-case construction noise levels would exceed ambient noise levels during at least one nighttime hour by a maximum of up to 5.4 dBA Leq at a ground floor receiver point and a maximum of up to 7.1 dBA Leq at a second floor receiver point within receptor group R1 (residences north of West Century Boulevard, west of South Prairie Avenue); a maximum of up to 7.4 dBA Leq at a second floor receiver point within receptor group R6 (residences between West 102nd Street and West 103rd Street); a maximum of up to 6.8 dBA Leq at a ground floor receiver point within receptor group R7 (Iglesia Evangelica Profetica Jesucristo Pronto Viene and residential uses west of South Prairie Avenue, west of the Arena Site); a maximum of up to 11.2 dBA Leq at a second floor receiver point and a maximum of up to 15.0 dBA Leq at a third floor receiver point within receptor group R8 (hotel uses at the former Airport Park View Hotel site); within receptor group a maximum of up to 14.2 dBA Leq at a ground floor receiver point within receptor group R14 (residences east of the Well Relocation Site); a maximum of up to 9.4 dBA Leq at a second floor receiver point within receptor group R15 (Inglewood Southside Christian Church and early childhood educational use south of the Arena Site); and a maximum of up to 11.3 dBA Leq at a second floor receiver point within receptor group R16 (residences on West 104th Street, south of the Arena Site). Nighttime construction activity at the Well Relocation Site is not anticipated to result in noise levels experienced by noise-sensitive receptors greater than 5 dBA over ambient Leq conditions.

As demonstrated by the evaluation of impacts to noise-sensitive receptors within the receptor groups discussed above, nighttime noise from worst-case nighttime construction activity would exceed the threshold of 5 dBA over ambient levels (Leq) at noise-sensitive receptors around the Project site. Therefore, the impacts from nighttime construction activity would be **potentially significant**.

Organization
Insert
fig. 3.11-6
and
Table
3.11-16

Off-Site Construction Activity and Related Noise

Construction truck trips would occur during the Project construction period and would be associated with hauling material and excavated soil from the Project Site and delivering building materials, supplies, and concrete to the Project Site. Construction haul trucks would travel a designated haul route. Trips using the I-110 are assumed to travel to and from the Project Site via Manchester Avenue and South Prairie Avenue. Trips using the I-405 are assumed to travel to and from the Project Site via Manchester Boulevard and South Prairie Avenue or West Century Boulevard. Trips using the I-105 are assumed to travel to and from the Project Site via South Prairie Avenue. The construction phase with the greatest number of daily trucks is grading/excavation of the West Parking Garage Site with 760 daily one-way truck trips (380 round trips).

According to the construction schedule, grading/excavation of the West Parking Garage Site could overlap with Arena Site demolition and site preparation, site preparation and drainage/utilities/trenching of the West Parking Garage Site, site preparation of the East Transportation and Hotel Site, and Well Relocation Site demolition and sound wall installation. During the maximum

Use format "[Venue][Event] plus [Venue][Event] (Analysis Period)"

e.g. "Stadium Mid-Size Event plus Forum Concert plus Project Major Event Summary (Weekday Pre-Event)"

Traffic noise increases resulting from the Proposed Project under Non-Event Day AM and PM peak period, and Day-Time Event, Other Sporting Event or Gathering, Major Event Weekday Pre Event, and Major Event Weekend Pre Event peak conditions would not result in increases in traffic noise exceeding perceptible levels along roadway segments where sensitive uses are present. Therefore, impacts under these conditions would be less than significant. Under the Major Event Weekday Post Event condition, traffic noise increases caused by the Proposed Project would increase by 3.0 dBA Leq or greater and would exceed the established significance threshold on 22 roadway segments where sensitive uses are present. Under the Major Event Weekend Post Event condition, traffic noise increases caused by the Proposed Project are anticipated to be 3.0 dBA Leq or greater on 28 roadway segments where sensitive uses are present. Therefore, impacts of the Proposed Project under Major Event Weekday and Weekend Post Event conditions would be **potentially significant**.

Traffic Noise Analysis – Concurrent Events

Stadium Mid-Sized Event Plus Forum Plus Project Major Event (Weekday) ^{forum} Major Event
Impacts of the Proposed Project under the Stadium Mid-Sized Event Plus Forum Plus Project Major Event condition are shown in Table 3.11-22. As indicated, during the Weekday Pre-Event Peak Period the Proposed Project would cause increases in traffic noise along studied roadway segments ranging from 0.0 dBA Leq up to 2.2 dBA Leq. These increases would not exceed the 3 dBA Leq increase significance threshold. Therefore, impacts of the Proposed Project during Major Event Weekday Pre Event conditions would be **less than significant**.

During the Post Event Peak Period, the Proposed Project would cause increases in traffic noise along studied roadway segments that would range from 0.0 dBA Leq up to 4.3 dBA Leq. Under this condition, five (5) roadway segments (see Figure 3.11-10) would experience increases in traffic noise of 3.0 dBA Leq or greater and would exceed the significance threshold, resulting in **potentially significant impacts**.

NFL Game Plus Concert at Forum Plus Project

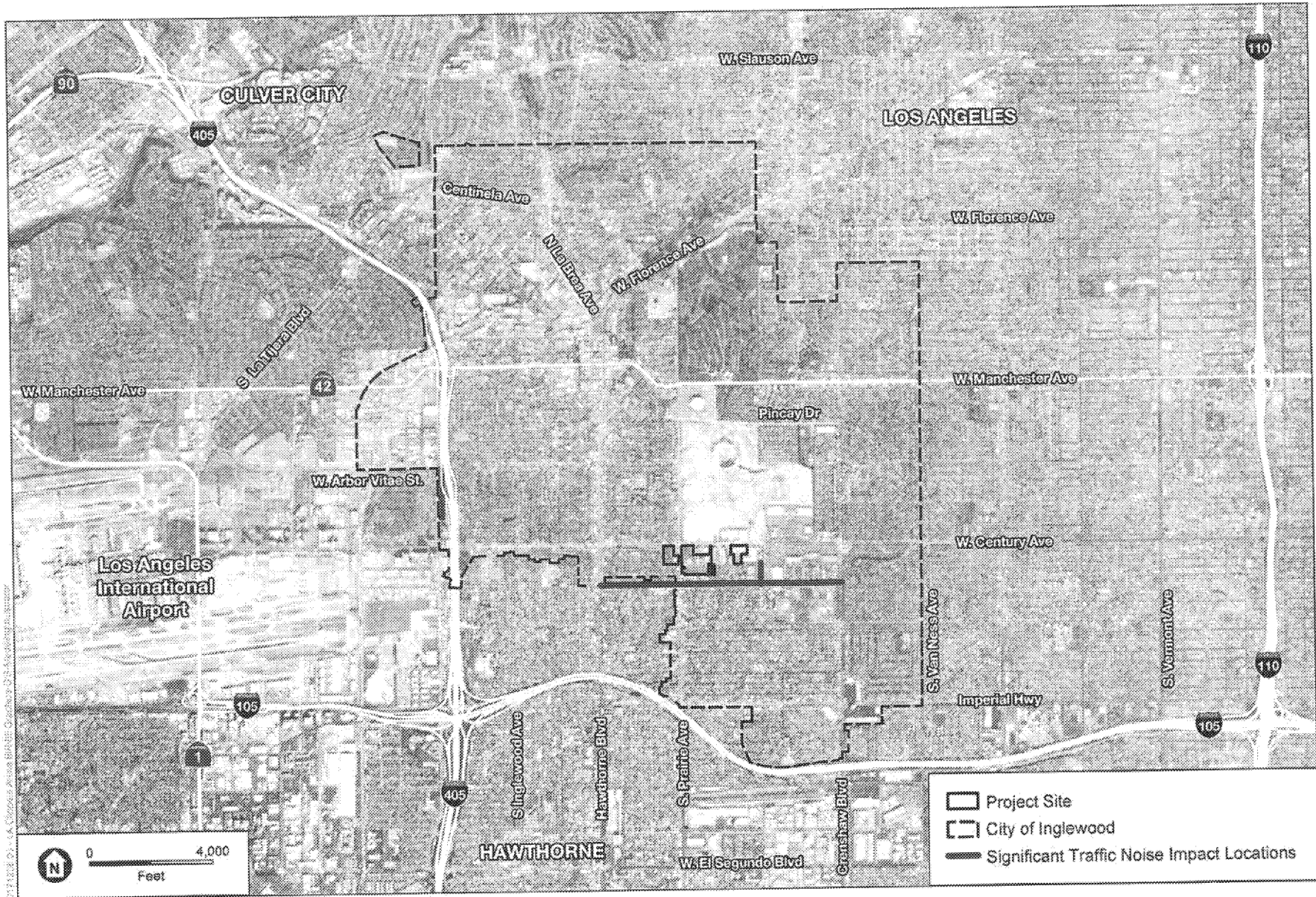
Impacts of the Proposed Project under the NFL Game Plus Concert at Forum Plus Project condition are shown in Table 3.11-23. As indicated, during the weekend Pre Event Peak Period the increase in traffic noise along studied roadway segments would range from 0.0 dBA Leq up to 2.4 dBA Leq. These increases would not exceed the 3 dBA Leq increase significance threshold. Therefore, impacts of the Proposed Project during Major Event Weekend Pre Event conditions would be **less than significant**.

As indicated in Table 3.11-23, during the weekend Post Event Peak Period the Proposed Project is anticipated to cause increases in traffic noise along studied roadway segments that would range from 0.0 dBA Leq to 4.9 dBA Leq. Under this condition, six roadway segments (see Figure 3.11-11) would experience increases in traffic noise of 3.0 dBA Leq or greater and would exceed the significance threshold, resulting in **potentially significant impacts**.

ex. of format.

make conforming changes

(specify event conditions to distinguish from impact starts in project only conditions on p. 106)



SOURCE: USDA, 2016; Esri, 2016; ESA, 2019

Inglewood Basketball and Entertainment Center

Figure 3.11-10
 Significant Traffic Noise Impact Locations -
 Adjusted Baseline Plus NFL Stadium Mid-Sized Event
 Plus Forum Plus Project (Weekday Post Event)

Concert
Major Event



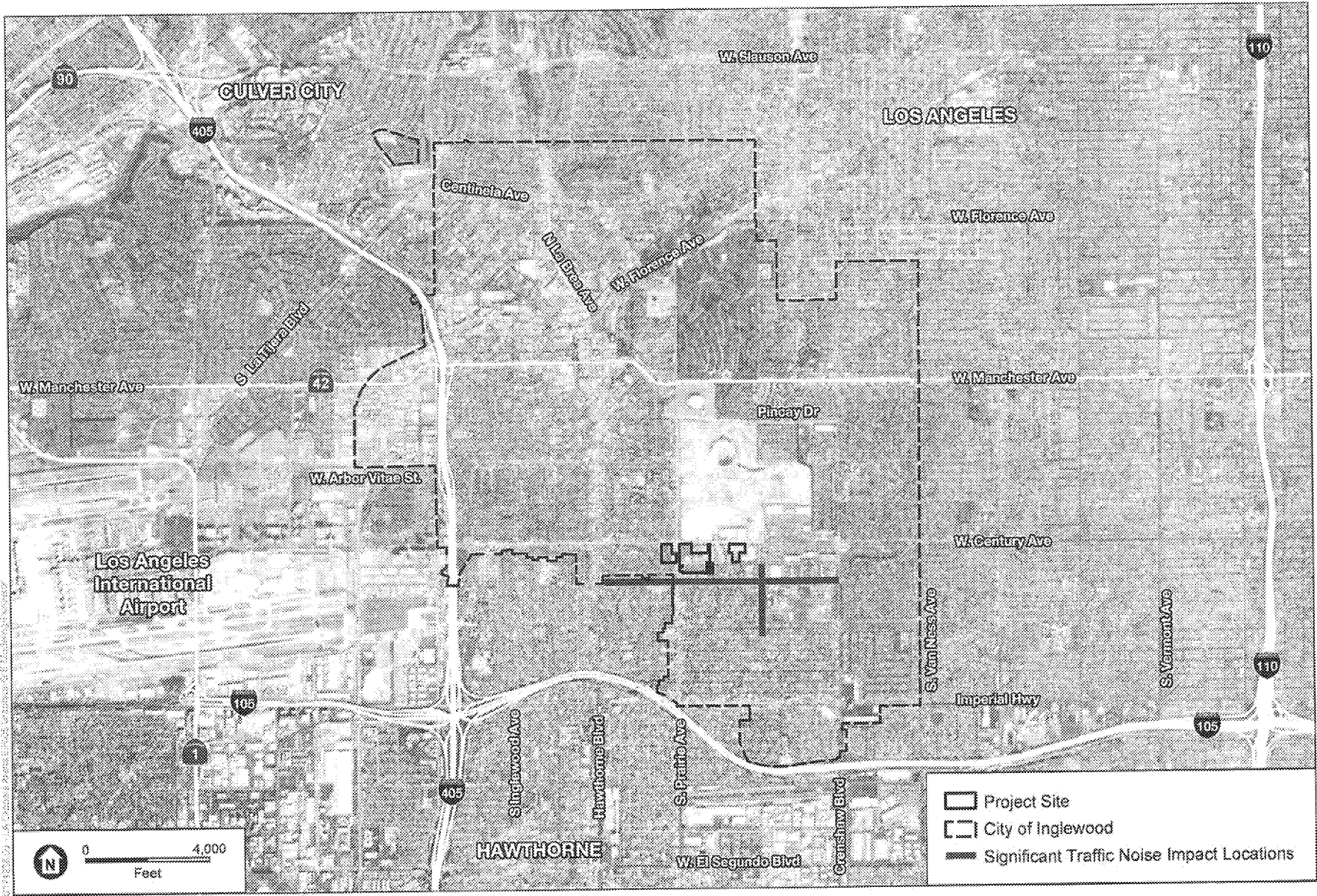
Table 3.11-22
ADJUSTED BASELINE PLUS STADIUM BIRD-SIZED EVENT PLUS FORUM PLUS PROJECT
Case # 4
Noise Exposure

Segment	Weekday Pre Event Peak Period				Weekday Post Event Peak Period			
	Adjusted Baseline Plus Stadium Forum Plus Project (dBA Leq)	Adjusted Baseline Plus Stadium Plus Forum Plus Project (dBA Leq)	Increase over Baseline (dBA Leq)	Exceeds Threshold?	Adjusted Baseline Plus Stadium Forum Plus Project (dBA Leq)	Adjusted Baseline Plus Stadium Plus Forum Plus Project (dBA Leq)	Increase over Baseline (dBA Leq)	Exceeds Threshold?
Centinella between La Cienega Blvd and La Brea Ave	69.9	70.0	0.1	No	67.8	68.1	0.3	No
Centinella between La Brea Ave and Florence Ave	69.9	69.9	0.1	No	69.9	69.9	0.0	No
Florence Ave between La Brea Ave and Hillcrest Blvd	69.1	69.1	0.1	No	69.3	69.5	0.2	No
Florence Ave between Hillcrest Blvd and Centinella Ave	69.7	69.7	0.0	No	67.4	67.2	0.1	No
Florence Ave between Centinella Ave and South Prairie Ave	71.6	71.7	0.1	No	69.5	69.6	0.1	No
Preforce Ave between South Prairie Ave and West Blvd	71.8	72.0	0.2	No	70.2	70.5	0.3	No
Manchester Blvd between Ash Ave/405 NB On-Ramp and La Brea Ave	71.8	72.0	0.2	No	71.9	72.2	0.3	No
Manchester Blvd between La Brea Ave and Hillcrest Blvd	71.4	71.6	0.2	No	71.5	71.8	0.2	No
Manchester Blvd between Hillcrest Blvd and Spruce Ave	71.5	71.8	0.3	No	71.5	71.8	0.3	No
Manchester Blvd between Spruce Ave and South Prairie Ave	71.7	72.1	0.4	No	71.7	72.0	0.3	No
Manchester Blvd between Karem Ct and Crenshaw Dr	72.2	72.5	0.3	No	71.2	71.6	0.3	No
Manchester Blvd between Crenshaw Dr and Crenshaw Blvd	71.3	71.7	0.4	No	71.0	71.3	0.4	No
Manchester Blvd between Crenshaw Blvd and Van Ness Ave	72.2	72.6	0.4	No	71.9	72.4	0.5	No
Manchester Blvd between Van Ness Ave and Wadswell Ave	72.2	72.6	0.4	No	71.9	72.4	0.5	No
Manchester Blvd between Western Ave and Burnside Ave	72.3	72.6	0.3	No	72.0	72.5	0.5	No
Manchester Blvd between Normandie Ave and Vermont Ave	72.3	72.6	0.3	No	72.0	72.5	0.5	No
Manchester Blvd between Vermont Ave and Hoover St	72.4	72.8	0.3	No	72.4	72.9	0.5	No
Manchester Blvd between Hoover St and Figueroa St	72.6	72.8	0.3	No	72.6	73.0	0.4	No
Piney Dr between South Prairie Ave and Karem Ct	71.9	72.2	0.3	No	69.0	69.1	0.1	No
Piney Dr between Karem Ct and Crenshaw Blvd	72.0	72.0	0.0	No	67.4	67.4	0.0	No
Arbor Vista St between La Cienega Blvd and Ingleswood Ave	67.1	67.4	0.4	No	65.7	66.3	0.6	No
Arbor Vista St between Ingleswood Ave and La Brea Ave	66.5	66.8	0.3	No	65.7	66.2	0.5	No
Arbor Vista St between La Brea Ave and Myrtle Ave	66.0	66.4	0.3	No	65.1	65.7	0.6	No
Arbor Vista St between Myrtle Ave and South Prairie Ave	60.3	60.7	0.3	No	64.8	65.4	0.6	No
Hardy St between La Brea Ave and Myrtle Ave	60.3	60.7	0.3	No	57.1	58.4	1.3	No
Hardy St between Myrtle Ave and South Prairie Ave	59.8	60.1	0.3	No	55.6	56.4	0.8	No
West Century Blvd between Comstock Way and La Cienega Blvd	73.3	73.8	0.5	No	74.9	75.0	1.0	No
West Century Blvd between 1405 on/off ramp and Palms Ave	71.9	73.0	1.0	No	71.2	72.8	1.6	No
West Century Blvd between Palms Ave and Ingleswood Ave	71.6	72.9	1.1	No	71.2	72.7	1.6	No
West Century Blvd between Ingleswood Ave and Fr Aseff-Tirone Ave	71.6	72.8	1.0	No	70.7	72.2	1.6	No
West Century Blvd between Fr Aseff-Tirone Ave and Centinella Ave	71.9	72.9	1.0	No	70.6	72.2	1.6	No
West Century Blvd between Centinella Ave and Centinella Ave	71.3	72.7	1.4	No	70.6	72.6	2.2	No
West Century Blvd between Myrtle Ave and Freeman Ave	71.3	72.8	1.5	No	70.6	72.9	2.2	No
West Century Blvd between Freeman Ave and South Prairie Ave	71.1	72.6	1.4	No	70.5	71.8	1.1	No

Stadium
TABLE 3.11-23
ADJUSTED BASELINE PLUS NFL GAME PLUS CONCEPT FORUM PLUS PROJECT

Major Event
CONCERT

Segment	Weekend Pre Event Peak Period				Weekend Post Event Peak Period			
	Adjusted Baseline Plus Stadium Plus Forum (dBA Leq)	Adjusted Baseline Plus Stadium Plus Forum Plus Project (dBA Leq)	Increase over Adjusted Baseline (dBA Leq)	Exceeds Threshold?	Adjusted Baseline Plus Stadium Plus Forum (dBA Leq)	Adjusted Baseline Plus Stadium Plus Forum Plus Project (dBA Leq)	Increase over Adjusted Baseline (dBA Leq)	Exceeds Threshold?
Centinella between La Cienega Blvd and La Brea Ave	69.0	69.9	0.1	No	67.0	67.3	0.3	No
Centinella between La Brea Ave and Foothill Ave	69.0	69.1	0.1	No	66.0	66.0	0.0	No
Florence Ave between La Brea Ave and Hillcrest Blvd	67.0	67.2	0.2	No	65.5	65.8	0.2	No
Florence Ave between Hillcrest Blvd and Centinella Ave	67.0	68.0	0.1	No	66.3	66.4	0.1	No
Florence Ave between Centinella Ave and South Prairie Ave	70.7	70.9	0.2	No	68.7	68.8	0.1	No
Florence Ave between South Prairie Ave and West Blvd	70.9	71.0	0.2	No	68.5	68.9	0.3	No
Manchester Blvd between Ash Ave+405 NB On-Ramps and La Brea Ave	71.7	72.0	0.3	No	71.7	72.1	0.3	No
Manchester Blvd between La Brea Ave and Hillcrest Blvd	71.1	71.3	0.2	No	71.2	71.5	0.3	No
Manchester Blvd between Hillcrest Blvd and Spruce Ave	71.2	71.4	0.3	No	71.2	71.5	0.3	No
Manchester Blvd between Spruce Ave and South Prairie Ave	71.3	71.8	0.5	No	71.4	71.8	0.3	No
Manchester Blvd between Karen Ct and Crestshaw Dr	71.8	72.0	0.3	No	70.8	71.2	0.4	No
Manchester Blvd between Crestshaw Dr and Crestshaw Blvd	70.8	71.1	0.3	No	70.8	71.0	0.4	No
Manchester Blvd between Crestshaw Blvd and Van Ness Ave	71.0	72.4	0.3	No	71.5	72.0	0.8	No
Manchester Blvd between Van Ness Ave and Western Ave	72.1	72.6	0.5	No	71.5	72.1	0.8	No
Manchester Blvd between Western Ave and Normandie Ave	72.2	72.7	0.4	No	71.6	72.2	0.5	No
Manchester Blvd between Normandie Ave and Vermont Ave	72.2	72.7	0.4	No	71.5	72.1	0.6	No
Manchester Blvd between Vermont Ave and Hoover St	72.3	72.7	0.4	No	71.8	72.4	0.5	No
Manchester Blvd between Hoover St and Figueroa St	72.3	72.7	0.4	No	72.1	72.6	0.5	No
Pharcy Dr between South Prairie Ave and Karen Ct	65.8	65.9	0.0	No	68.8	68.8	0.1	No
Pharcy Dr between Karen Ct and Crestshaw Blvd	71.0	71.5	0.5	No	68.9	68.9	0.0	No
Arbor Vista St between La Cienega Blvd and Ingleswood Ave	68.2	68.4	0.2	No	65.2	65.8	0.8	No
Arbor Vista St between Ingleswood Ave and La Brea Ave	65.8	66.1	0.2	No	65.2	65.7	0.5	No
Arbor Vista St between Myrtle Ave and Myrtle Ave	65.4	66.1	0.8	No	64.7	65.4	0.7	No
Arbor Vista St between Myrtle Ave and South Prairie Ave	64.9	65.7	0.8	No	64.4	65.1	0.7	No
Hardy St between La Brea Ave and Myrtle Ave	69.0	69.1	0.5	No	69.2	69.7	1.5	No
Hardy St between Myrtle Ave and South Prairie Ave	69.0	69.0	0.3	No	64.8	65.7	1.0	No
West Century Blvd between Centinella Ave and La Cienega Blvd	70.8	70.7	0.2	No	74.5	76.5	1.0	No
West Century Blvd between 1405 on/off Ramp and Felton Ave	70.9	72.0	1.1	No	70.7	72.4	1.7	No
West Century Blvd between Felton Ave and Ingleswood Ave	70.8	71.9	1.1	No	70.7	72.4	1.7	No
West Century Blvd between Ingleswood Ave and Fir Ave/Farmacia Ave	70.7	71.9	1.2	No	70.2	71.9	1.7	No
West Century Blvd between Fir Ave/Farmacia Ave and Sherrill Ave	70.8	72.0	1.2	No	70.1	71.8	1.7	No
West Century Blvd between Hawthorne Blvd/La Brea Blvd and Myrtle Ave	70.7	72.1	1.4	No	70.2	72.6	2.4	No
West Century Blvd between Myrtle Ave and Freeman Ave	70.6	72.1	1.5	No	70.2	72.8	2.4	No
West Century Blvd between Freeman Ave and South Prairie Ave	70.5	72.0	1.5	No	70.1	71.2	1.2	No



SOURCE: USDA, 2016; Esri, 2016; ESA, 2019

Inglewood Basketball and Entertainment Center

Figure 3.11-11
 Significant Traffic Noise Impacts –
 Scaled Adjusted Baseline Plus NFL Game Plus Forum Plus Project (Weekend Post Event)



Stadium
Concert
Major Event

Potential Health Effects of Roadside Noise Impacts

Traffic noise impacts would increase noise levels along roadways and noise levels of 56 to 72.8 dBA are predicted. While up to 28 roadway segments where noise-sensitive receptors are located are predicted to experience an increase of more than 3 dBA as discussed above, exposure to these levels of traffic noise would not rise to the level that would result in permanent hearing loss.⁶⁸

With respect to sleep disturbance, impacts related to Project-related traffic noise would occur during Major Event Post-Event conditions (9:30 PM – 10:30 PM) on weekdays and weekends, post-Major Event peak hour traffic, which could generate significant noise levels late into the evening hours up to 15-25 times a year, could disturb sleep during nighttime hours. However, after post-event traffic leaves the Project area, affected roadway segments would no longer be exposed to elevated traffic noise due to major events hosted at the Proposed Project arena. For the discussion regarding the health effects of sleep disturbance see Section 3.11.1. Taken together, significant traffic noise increases of the Proposed Project would not be expected to result in adverse health impacts.

On-Site Operational Noise Sources

As discussed above, non-vehicular on-site sources of noise include activities at the arena including crowd noise and amplified noise, outdoor activities (such as amplified sound and crowd noise), stationary mechanical equipment, loading area activity, parking lot/structure activity, and media truck/broadcast access activity. The composite operational noise levels, including off-site vehicular noise sources, on-site noise sources, and off-site pedestrian activity, generated as a result of the Proposed Project during Non-Event, Daytime Corporate/Community Event, and Other Sporting Event or Gathering conditions at each of the sensitive receptor property lines are shown in Table 3.11-24. Based on Table 2-3, increases in ambient noise related to Other Sporting Events or Gatherings with attendance up to 7,500 persons would occur approximately 35 days per year, and increases in ambient noise related to Corporate/Community Events with an attendance of a maximum 2,000 persons approximately 100 days per year.

Chapter 3,
Project
Description

The model accounts for multiple receiver points within each receptor group, and noise impacts within each receptor group may vary depending on the distance of each receiver point within the specific receptor group and the location of shielding (i.e., Project noise barriers and/or existing structures). The ambient noise level and Proposed Project composite operational noise level for the receiver point anticipated to experience the highest increase in ambient conditions is reported in Table 3.1-24. As indicated, under the Project Non Event, Daytime Corporate/Community Event, and Other Sporting Event or Gathering conditions, composite operational noise would not result in significant impacts at any of the receptor property lines (see Figures 3.11-12, 3.11-13, and 3.11-14). Operational impacts on non-Major Event days would be **less than significant**.

⁶⁸ United States Department of Labor, Occupational Safety and Health Administration, Occupational Safety and Health Standards Part 1910, Standard 1910.95.

During the Cumulative Plus Project Major Event Weekend Pre Event Peak Period, the cumulative increase in traffic noise along studied roadway segments would range from 0.1 dBA Leq up to 3.6 dBA Leq. Under this condition, four roadway segments would experience increases in traffic noise of 3.0 dBA Leq or greater and the cumulative impact would be **potentially significant**. Of those four roadway segments, the Proposed Project would not result in increases of greater than 1 dBA Leq, which is an increase that would be perceptible in a controlled laboratory setting, along any segments (see Table 3.11-21).⁸⁰ Therefore, the project's contribution is less than cumulatively considerable and the cumulative impact is **less than significant**.

During the Cumulative Plus Project Major Event Weekend Post Event Peak Period, the cumulative increase in traffic noise along studied roadway segments would range from 0.1 dBA Leq up to 5.4 dBA Leq. Under this condition, 33 roadway segments would experience increases in traffic noise of 3.0 dBA Leq or greater and the cumulative impact would be **potentially significant**. Of those 33 roadway segments, the Proposed Project would result in increases of greater than 1 dBA Leq for all segments, which is an increase that would be perceptible in a controlled laboratory setting, along any segments (see Table 3.11-21 and Figure 3.11-22).⁸¹ Therefore, the project's contribution would be cumulatively considerable and the cumulative impact is **potentially significant**.

Take Global Comment re: format of scenarios as p. 129

Concert
Major Event
Weekday Pre-Event
Weekday Post-Event
Mid-Size Event

Cumulative Plus Stadium Mid-Sized Event Plus Forum Plus Project Major Event
Impacts under the Cumulative Plus Stadium Mid-Sized Event Plus Forum Plus Project (Weekday Pre-Event) condition are shown in Table 3.11-35. As indicated, the cumulative increase in traffic noise along studied roadway segments would range from 0.1 dBA Leq up to 6.4 dBA Leq during the weekday Pre Event Peak Period. The increase in traffic noise along studied roadway segments would exceed the significance threshold of a 3 dBA Leq increase during the weekday Pre Event Peak Period along 21 roadway segments. Therefore, impacts under the Cumulative Plus Stadium Plus Forum Plus Project (Weekday Pre-Event) condition would be **potentially significant**. Although cumulative increase in traffic noise would result in significant impacts along 21 roadway segments, the Proposed Project contribution would not result in increases greater than 1 dBA Leq, which is an increase that would be perceptible unless in controlled laboratory setting (see Table 3.11-22).⁸² Therefore, the project's contribution would be less than cumulatively considerable and the cumulative impact is **less than significant**.

Concert
Major Event

During the Cumulative Plus Stadium Mid-Sized Event Plus Forum Plus Project (Weekday Post Event) condition, the increase in traffic noise along studied roadway segments would range from 0.1 dBA Leq up to 8.5 dBA Leq. Under this condition, 74 roadway segments would experience increases in traffic noise of 3.0 dBA Leq or greater and, thus, the cumulative impacts on these segments would be **potentially significant**. Of those 74 roadway segments where potentially significant cumulative impacts could occur, the Proposed Project would result in increases greater

⁸⁰ California Department of Transportation, 2013. Technical Noise Supplement. September 2013. p. 6-5

⁸¹ California Department of Transportation, 2013. Technical Noise Supplement. September 2013. p. 6-5

⁸² California Department of Transportation, 2013. Technical Noise Supplement. September 2013. p. 6-5.

than 1 dBA Leq, which is an increase that would be perceptible in a controlled laboratory setting along 67 segments (see Table 3.11-22 and Figure 3.11-23).⁸³ Therefore, the project's contribution would be cumulatively considerable and the cumulative impact is **potentially significant**.

Cumulative Plus ^{Stadium} NFL Game Plus Forum ^{Concert} Plus Project ^{Major Event (weekend)}
Impacts under the Cumulative Plus ^{Stadium} NFL Game Plus Forum ^{Concert} Plus Project (Weekend Pre Event) condition are shown in Table 3.11-36. As indicated, the cumulative increase in traffic noise along studied roadway segments would range from a decrease of -1.6 dBA Leq (where traffic volumes are anticipated to decrease) up to an increase of 6.6 dBA Leq. Under this condition, 21 roadway segments would experience increases in traffic noise of 3.0 dBA Leq or greater and the cumulative impact would be **potentially significant**. Of those 21 roadway segments, the Proposed Project would result in increases greater than 1 dBA Leq, which is an increase that would be perceptible in a controlled laboratory setting, along 12 segments (see Table 3.11-23 and Figure 3.11-24).⁸⁴ Therefore, the project's contribution would be cumulatively considerable and the cumulative impact is **potentially significant**.

During the Cumulative Plus ^{Stadium} NFL Game Plus Forum ^{Concert} Plus Project ^{Major Event} (Weekend Post Event) condition, the cumulative increase in traffic noise along studied roadway segments would range from a decrease of 1.0 dBA Leq up to an increase of 9.6 dBA Leq. Under this condition, West 108 roadway segments would experience increases in traffic noise of 3.0 dBA Leq or greater and the cumulative impact would be **potentially significant**. Of those 108 roadway segments, the Proposed Project would result in increases greater than 1 dBA Leq, which is an increase that would be perceptible in a controlled laboratory setting, along 47 segments (see Table 3.11-23 and Figure 3.11-25).⁸⁵ Therefore, the project's contribution would be cumulatively considerable and the cumulative impact is **potentially significant**.

The following Mitigation Measures were identified and would avoid or substantially lessen the project contribution to cumulative operational noise impacts under Non-Event Day, Day-Time Corporate/Community Event, Other Sporting Event or Gathering, and Major Event conditions, as described further below.

Mitigation Measure 3.11-6(a)

Implement Mitigation Measure 3.11-2(a). (Noise Reduction Plan).

Mitigation Measure 3.11-6(b)

Implement Mitigation Measure 3.14-2(b) (Implementation of a comprehensive Transportation Demand Management (TDM) program).

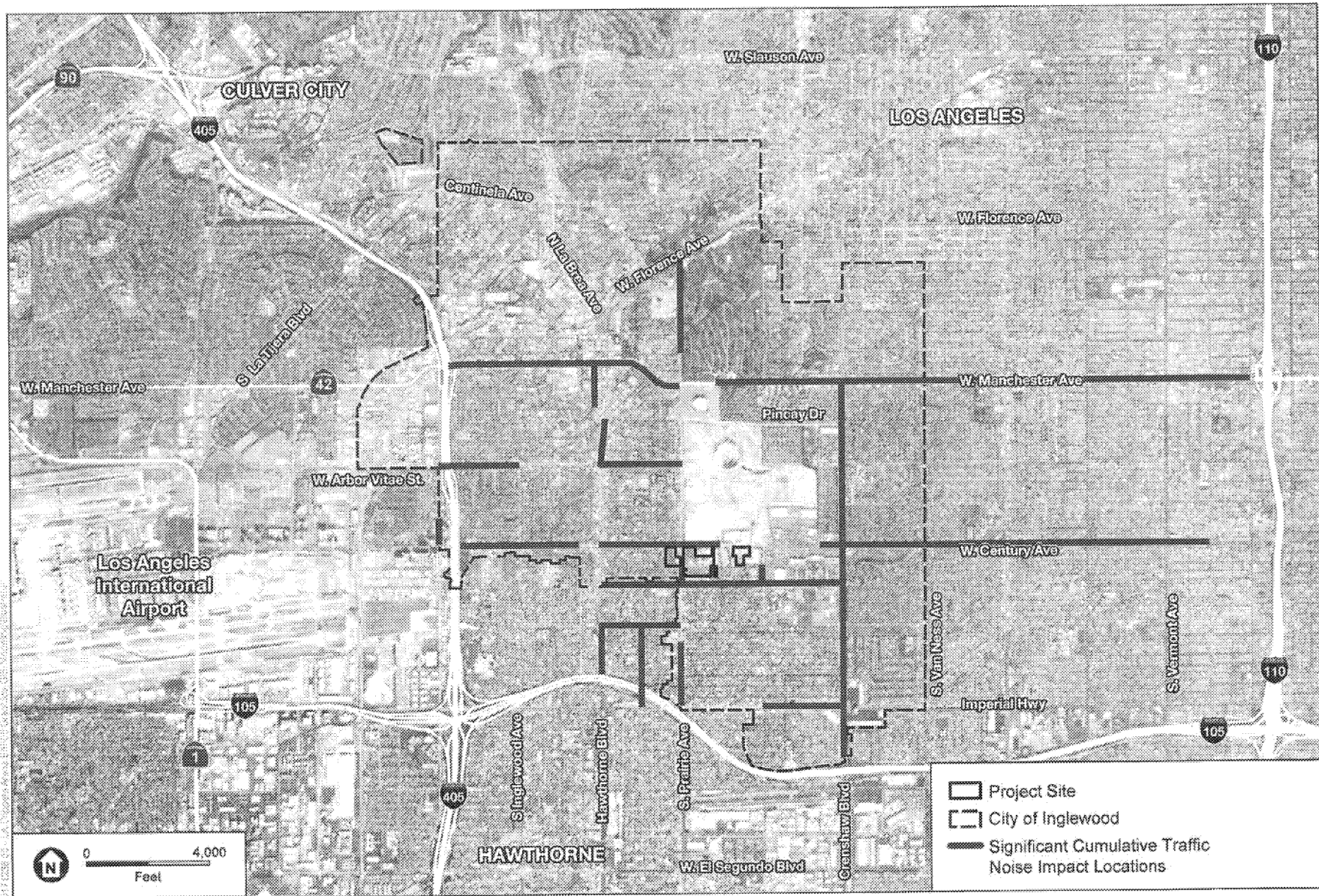
⁸³ California Department of Transportation, 2013. Technical Noise Supplement. September 2013. p. 6-5.

⁸⁴ California Department of Transportation, 2013. Technical Noise Supplement. September 2013. p. 6-5.

⁸⁵ California Department of Transportation, 2013. Technical Noise Supplement. September 2013. p. 6-5.

TABLE 3.11-35
CUMULATIVE PLUS STADIUM MID-SIZED EVENT PLUS FORUM PLUS PROJECT **Concert** Major Event

Segment	Weekday Pre Event Peak Period				Weekday Post Event Peak Period			
	Adjusted Baseline + Forum Plus Project (dBA Leq)	Cumulative + Stadium + Forum Plus Project (dBA Leq)	Increase over Adjusted Baseline (dBA Leq)	Exceeds Threshold?	Adjusted Baseline + Project (dBA Leq)	Cumulative + Project (dBA Leq)	Increase over Adjusted Baseline (dBA Leq)	Exceeds Threshold?
Centinella between La Cienega Blvd and La Brea Ave	69.5	70.1	0.4	No	67.3	69.2	1.9	No
Centinella between La Brea Ave and Florence Ave	69.5	70.3	0.8	No	68.8	67.2	-0.4	No
Florence Ave between La Brea Ave and Hillcrest Blvd	68.2	69.9	1.8	No	65.8	67.0	1.3	No
Florence Ave between Hillcrest Blvd and Centinella Ave	68.9	70.5	1.6	No	68.9	67.7	-1.1	No
Florence Ave between Centinella Ave and South Prairie Ave	70.9	72.3	1.4	No	68.7	68.9	0.2	No
Florence Ave between South Prairie Ave and West Blvd	71.0	72.5	1.5	No	68.8	70.7	2.1	No
Manchaster Blvd between Ash Averb-405 NB On Ramp and La Brea Ave	68.5	72.8	8.4	Yes	64.0	72.5	8.9	Yes
Manchaster Blvd between La Brea Ave and Hillcrest Blvd	69.7	72.4	2.6	No	67.0	72.1	5.1	Yes
Manchaster Blvd between Hillcrest Blvd and Spruce Ave	68.8	72.8	2.8	No	67.0	72.1	5.1	Yes
Manchaster Blvd between Spruce Ave and South Prairie Ave	69.9	72.8	2.8	No	67.1	72.3	5.2	Yes
Manchaster Blvd between Kuylen Ct and Chenshaw Dr	71.0	72.8	1.9	No	68.1	71.9	3.8	Yes
Manchaster Blvd between Chenshaw Dr and Chenshaw Blvd	69.9	72.5	2.6	No	67.6	71.8	4.2	Yes
Manchaster Blvd between Chenshaw Blvd and Van Ness Ave	71.8	73.7	2.7	No	68.3	72.8	4.6	Yes
Manchaster Blvd between Van Ness Ave and Western Ave	70.8	73.7	2.8	No	68.3	72.9	4.5	Yes
Manchaster Blvd between Western Ave and Normandie Ave	71.0	73.6	2.6	No	68.5	72.9	4.3	Yes
Manchaster Blvd between Normandie Ave and Vermont Ave	71.2	73.4	2.2	No	68.0	72.8	4.0	Yes
Manchaster Blvd between Vermont Ave and Harvard St	71.3	73.5	2.1	No	68.6	73.2	3.4	Yes
Manchaster Blvd between Harvard St and Figueroa St	71.6	73.6	2.1	No	70.9	73.3	3.3	Yes
Figueroa St between South Prairie Ave and Kuylen Ct	68.7	72.4	4.7	Yes	64.3	68.1	4.7	Yes
Figueroa St between Kuylen Ct and Chenshaw Blvd	69.4	72.4	2.8	No	64.7	67.4	2.8	No
Astor Place St between La Cienega Blvd and Highland Ave	68.9	68.0	-0.9	No	63.4	66.5	3.1	Yes
Astor Place St between Figueroa Ave and La Brea Ave	65.7	67.7	2.0	No	63.4	66.3	2.9	No
Astor Place St between La Brea Ave and Myrtle Ave	66.3	67.2	0.9	No	61.8	65.9	4.4	Yes
Harby St between Myrtle Ave and South Prairie Ave	63.8	66.9	3.2	Yes	63.8	66.0	4.9	Yes
Harby St between La Brea Ave and Myrtle Ave	66.3	61.1	-5.2	No	57.1	53.8	-1.8	No
Harby St between Myrtle Ave and South Prairie Ave	60.8	60.8	0.0	No	56.6	57.0	0.3	No
West Century Blvd between Caticourse Way and La Cienega Blvd	70.4	74.4	4.0	Yes	70.9	76.0	5.1	Yes
West Century Blvd between 1-405 on/off Ramp and Peñita Ave	73.5	73.5	0.0	Yes	68.5	73.1	4.5	Yes
West Century Blvd between Peñita Ave and Highland Ave	70.3	73.4	3.1	Yes	68.4	73.0	4.9	Yes
West Century Blvd between Highland Ave and Ave/Figueroa Ave	70.5	73.4	2.8	No	68.2	72.5	4.3	Yes
West Century Blvd between Ave/Figueroa Ave and Sepulveda Ave	70.5	73.4	2.8	No	68.1	72.5	4.4	Yes
West Century Blvd between Hawthorne Blvd/La Brea Blvd and Myrtle Ave	70.9	73.3	2.7	No	67.9	73.1	5.5	Yes
West Century Blvd between Myrtle Ave and Freeman Ave	70.5	73.3	2.8	No	67.5	73.1	5.5	Yes
West Century Blvd between Freeman Ave and South Prairie Ave	70.3	73.1	2.8	No	67.3	71.9	4.6	Yes
West Century Blvd between South Prairie Ave and Doty Ave	70.8	73.8	2.9	No	68.2	73.6	4.8	Yes
West Century Blvd between 11th Ave/Hilltop Ave and Chenshaw Blvd	71.3	73.8	2.5	No	68.4	72.8	4.4	Yes

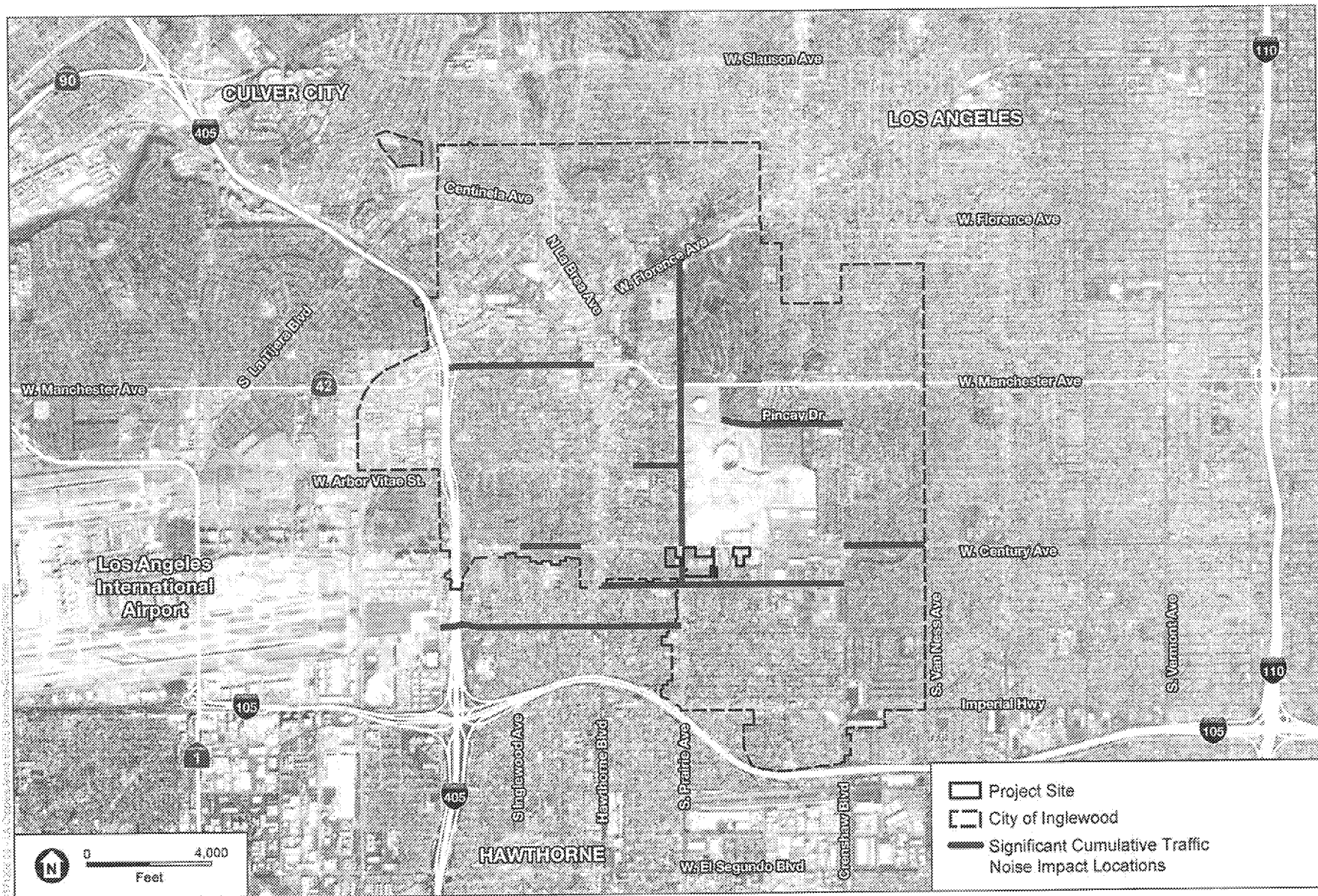


SOURCE: USDA, 2016; Esri, 2016; ESA, 2019

Inglewood Basketball and Entertainment Center

Figure 3.11-23
 Significant Cumulative Traffic Noise Impact Locations -
 NFL Stadium Mid-Sized Event Plus Forum Plus Project
 (Weekday Post Event)

Major Event
concert



SOURCE: USDA, 2016; Esri, 2016; ESA, 2019

Ingledwood Basketball and Entertainment Center

Figure 3.11-24
 Significant Cumulative Traffic Noise Impact Locations -
 NFL Stadium Mid-Sized Event Plus Forum Plus Project
 (Weekend Pre Event)

*NFL Game?
 (weekend event)*

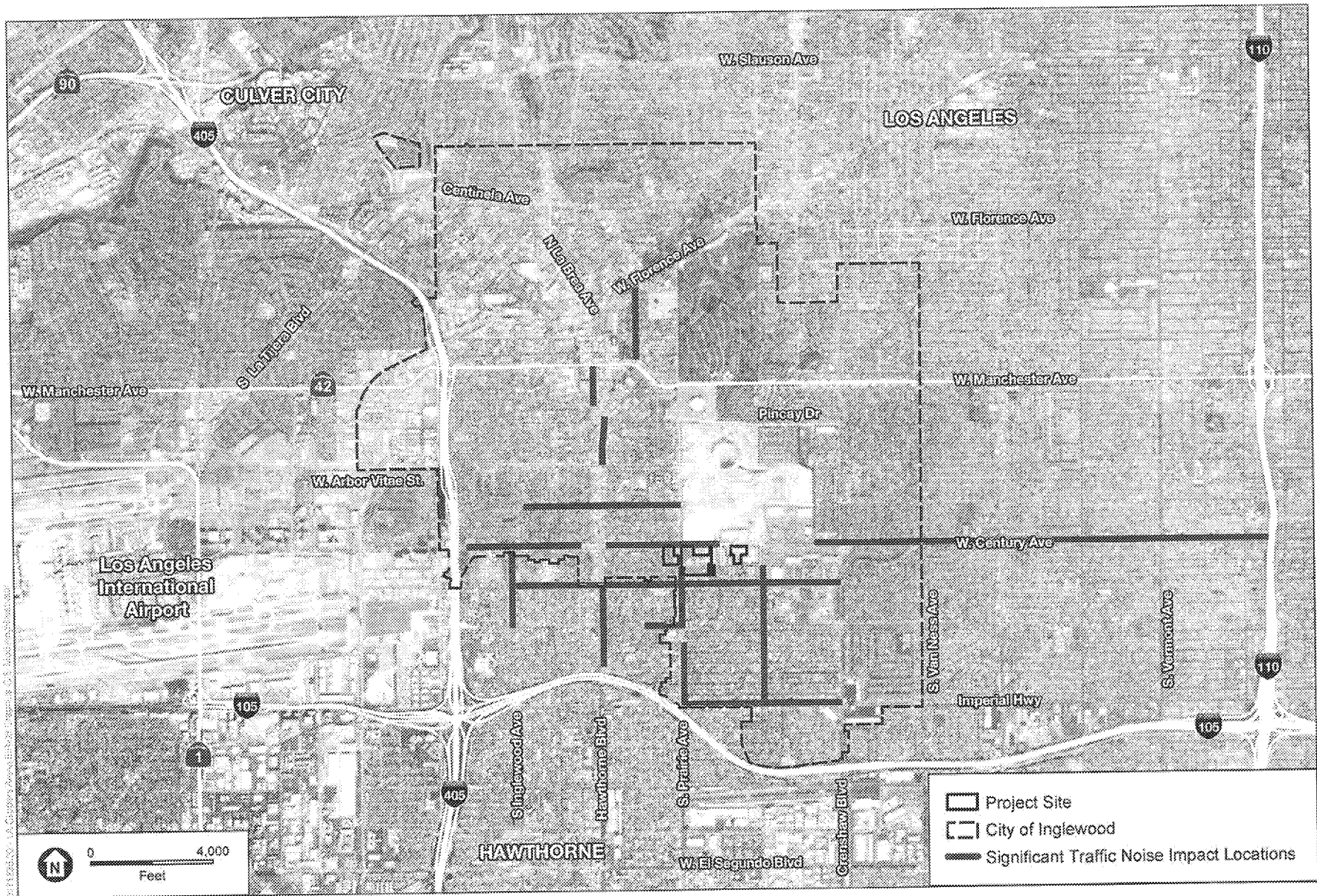
Major Event

concert



TABLE 3.11-36
CUMULATIVE PLUS NFL GAME PLUS PROJECT

Segment	Weekend Pre-Event Peak Period				Weekend Post-Event Peak Period			
	Adjusted Baseline + Forum Plus Project (dBA Leq)	Cumulative + Station Baseline (dBA Leq)	Increase over Adjusted Baseline (dBA Leq)	Exceeds Threshold?	Adjusted Baseline + Project (dBA Leq)	Cumulative + Project (dBA Leq)	Increase over Adjusted Baseline (dBA Leq)	Exceeds Threshold?
Cardelia between La Brea Ave and La Brea Ave	88.5	73.9	0.5	No	89.4	88.6	3.2	Yes
Cardelia between La Brea Ave and Florence Ave	88.8	83.7	1.2	No	89.8	89.2	3.4	Yes
Florence Ave between La Brea Ave and Hillcrest Blvd	87.0	88.7	1.7	No	84.8	88.2	3.4	Yes
Florence Ave between Hillcrest Blvd and Cardelia Ave	87.9	89.4	1.5	No	85.7	89.3	3.1	Yes
Florence Ave between Cardelia Ave and South Pacific Ave	79.5	71.7	1.2	No	87.7	71.2	3.5	Yes
Plymouth Ave between South Pacific Ave and West Blvd	79.3	71.7	1.4	No	87.6	71.2	3.6	Yes
Manchester Blvd between Van Ness Ave and Hillcrest Blvd	88.2	72.8	8.8	Yes	83.0	72.7	8.6	Yes
Manchester Blvd between La Brea Ave and Hillcrest Blvd	88.3	72.2	3.2	Yes	88.1	71.9	5.8	Yes
Manchester Blvd between Hillcrest Blvd and Spruce Ave	88.0	72.3	3.3	Yes	88.1	72.0	5.9	Yes
Manchester Blvd between Spruce Ave and South Pacific Ave	88.1	72.4	3.3	Yes	88.2	72.1	5.9	Yes
Manchester Blvd between Karen Ct and Chestnut Dr	78.0	72.6	2.7	No	87.1	72.3	5.2	Yes
Manchester Blvd between Chestnut Dr and Chestnut Blvd	88.2	79.0	2.9	No	80.7	71.7	8.8	No
Manchester Blvd between Chestnut Blvd and Van Ness Ave	79.1	73.5	3.4	Yes	87.3	73.2	5.8	Yes
Manchester Blvd between Van Ness Ave and Western Ave	79.4	73.7	3.3	Yes	87.4	73.4	8.0	Yes
Manchester Blvd between Western Ave and Mission Ave	79.6	73.5	3.1	Yes	87.7	73.3	8.8	Yes
Manchester Blvd between Mission Ave and Normandie Ave	79.6	73.4	2.8	No	87.9	73.1	5.2	Yes
Manchester Blvd between Normandie Ave and Vermont Ave	79.8	73.4	2.9	No	88.0	73.0	4.2	Yes
Manchester Blvd between Vermont Ave and Hoover St	79.5	73.4	2.8	No	88.1	72.9	3.8	Yes
Manchester Blvd between Hoover St and Figueroa St	87.0	88.4	1.6	No	83.4	84.7	3.8	Yes
Phoebus Dr between Karen Ct and Chestnut Blvd	88.1	71.8	3.7	Yes	83.7	84.7	1.3	No
Above Van St between La Cienega Blvd and Hollywood Ave	83.5	89.8	1.3	No	82.4	86.4	4.0	Yes
Above Van St between Hollywood Ave and La Brea Ave	83.2	88.4	1.2	No	82.5	85.8	3.4	Yes
Above Van St between La Brea Ave and Myrtle Ave	83.8	89.8	2.7	No	80.6	88.3	5.8	Yes
Above Van St between Myrtle Ave and South Pacific Ave	82.8	89.2	3.3	Yes	88.9	85.9	6.1	Yes
Henry St between La Brea Ave and Myrtle Ave	80.8	80.5	0.9	No	86.2	86.9	3.8	Yes
Henry St between Myrtle Ave and South Pacific Ave	58.8	59.9	0.7	No	54.8	59.1	4.4	Yes
West Century Blvd between Concomino Way and La Cienega Blvd	79.5	71.9	1.4	No	70.0	71.5	1.0	No
West Century Blvd between 14th Street Ramp and Palms Ave	79.3	72.7	2.4	No	87.6	72.2	4.7	Yes
West Century Blvd between Palms Ave and Hollywood Ave	79.1	72.0	2.5	No	81.5	72.1	4.8	Yes
West Century Blvd between Hollywood Ave and Fir Ave/Fremont Ave	78.1	72.5	2.6	No	87.3	72.2	5.0	Yes
West Century Blvd between Fir Ave/Fremont Ave and Chevalier Ave	78.1	72.7	2.5	No	87.0	72.3	5.1	Yes
West Century Blvd between Hawthorne Blvd and Spring Ave	88.8	72.7	2.8	No	88.7	72.4	5.7	Yes
West Century Blvd between Myrtle Ave and Fremont Ave	89.8	72.7	2.9	No	89.7	72.3	5.7	Yes
West Century Blvd between Fremont Ave and South Pacific Ave	89.0	72.8	2.9	No	88.3	72.2	5.9	Yes
West Century Blvd between South Pacific Ave and City Ave	79.5	73.8	2.9	No	87.2	73.2	5.9	Yes
West Century Blvd between 11th Ave/Sage Ave and Chestnut Blvd	71.5	73.8	2.3	No	87.5	73.5	8.0	Yes
West Century Blvd between Chestnut Blvd and 4th Ave	69.3	72.5	3.2	Yes	85.5	72.2	8.6	Yes



SOURCE: USDA, 2016; Esri, 2016; ESA, 2019

Inglewood Basketball and Entertainment Center

Figure 3.11-25
 Significant Cumulative Traffic Noise Impact Locations -
 Stadium NFL Game Plus Forum Plus Project (Weekend Post Event)
concert *Major Event*



Project construction would not be located adjacent to any cumulative projects. Therefore, Proposed Project impacts would not be affected by cumulative project construction activity. Therefore, the cumulative impact would be less than significant.

As described above, heavy-duty construction truck travel along the designated haul route(s) could result in exceedance of human annoyance thresholds. Should the construction of cumulative projects, especially Cumulative Project 67 which is a potentially large and proximate cumulative project, overlap with Proposed Project construction and should heavy-duty construction trips from cumulative projects utilize the same haul routes as the Proposed Project, the cumulative impact would be potentially significant. Because of the size and intensity of expected construction activity for the Proposed Project, the Proposed Project contribution would be cumulatively considerable. Thus, this cumulative impact would be significant.

Mitigation Measure 3.11-7

Implement Mitigation Measure 3.11-3(a, b, c). (Minimize Construction Equipment Vibration; Vibration, Crack, and Line and Grade Monitoring Program; and Designate Community Affairs Liaison).

Significance After Mitigation: With the implementation of Mitigation Measure 3.11-7, the Proposed Project would not result in the generation of excessive groundborne vibration levels exceeding structural damage thresholds during on-site construction activity by ensuring that vibration-inducing equipment are used at distances from existing building such that the generation of significant vibration levels would be avoided, and buildings would be protected through a crack monitoring and repair program. Vibration annoyance would be minimized through the designation of a Community Affairs Liaison. Thus, with implementation of Mitigation Measure 3.11-7, the contribution of the Proposed Project to the cumulative vibration-related structural damage impact would be less than considerable, and this cumulative impact would be considered less than significant.

Should be included

related to onsite construction activity

"addressed"

As described above, heavy-duty construction truck travel along the designated haul route(s) could result in exceedance of human annoyance thresholds. The distance at which heavy-duty trucks need to travel in order to avoid exceedance of human annoyance thresholds of 72 VdB for residential uses and 75 VdB for commercial and industrial uses is 25 feet and 20 feet, respectively. Potential mitigation to address this impact includes prohibiting travel along the right lane of the roadway. Limiting the lanes of travel for construction trucks, including haul trucks, where residential, commercial, or industrial uses could be impact would not be feasible because there would be no mechanism for enforcement. Additionally, the drivers of construction vehicles for cumulative projects would not be under the management of the project applicant or its construction contractors. Therefore, no feasible mitigation is available to mitigate cumulative on-road construction vibration impacts with regard to human annoyance and impacts would be significant and unavoidable.

Insert sentence:

while designation of a Community Affairs Liaison would address vibration impacts with regard

to human annoyance, the impact would not be reduced to a less than significant level.