

### 3.12.1 Introduction

This section describes the geographic and regulatory setting for noise, discusses noise impacts that would result from the *2020 LA River Master Plan* and its elements, determines the significance of impacts, and identifies mitigation measures that would reduce or avoid significant impacts, where feasible.

As described in Chapter 2, *Project Description*, the study area passes through the jurisdiction of the unincorporated County and 17 different cities along the LA River's 51-mile journey from the Santa Susana Mountains to the Pacific Ocean in Long Beach and is divided into a series of nine distinct geographical sections, or planning frames, related to jurisdictional, hydraulic, and ecological zones. Each of these 18 jurisdictions has promulgated guidance (discussed below) to regulate noise within its specific jurisdiction. The existing noise environment and project-related noise contributions are discussed as they relate to land uses located within these frames and jurisdictions.

The analysis in this section includes impact determinations under CEQA for the *2020 LA River Master Plan* that are applicable to all 18 jurisdictions in the study area, including the County and non-County jurisdictions (17 cities). Except for significant and unavoidable impacts, all identified significant environmental effects of the proposed *2020 LA River Master Plan* can be avoided or reduced to a less-than-significant level if the mitigation measures identified in this PEIR are implemented. These mitigation measures will be implemented for subsequent projects that are carried out by the County. Because some later activities under the *2020 LA River Master Plan* would not be carried out by the County, the County cannot enforce or guarantee that the mitigation measures would be incorporated. Therefore, where this PEIR concludes a less-than-significant impact for later activities carried out by the County, the impact would be significant and unavoidable when these activities are not carried out by the County.

#### 3.12.1.1 Noise Fundamentals

Noise is commonly defined as unwanted sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is often defined as sound that is objectionable because it is disturbing or annoying.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors, which affect the propagation path to the receptor, determine the sound level and the characteristics of the noise perceived by the receptor.

Technical acoustical terms used in this section are defined in Table 3.12-1.

**Table 3.12-1. Definitions of Acoustical Terms**

<b>Term</b>	<b>Definition</b>
Decibel (dB)	A unit describing the amplitude of sound equal to 20 times the logarithm to base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micropascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals in air). Sound pressure level is the quantity that is measured directly by a sound level meter.
Frequency (Hertz [Hz])	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sounds are below 20 Hz, and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level ( $L_{eq}$ )	The average A-weighted noise level during the measurement period. The hourly $L_{eq}$ used for this report is denoted as dBA $L_{eq}[h]$ .
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day, which is obtained by adding 5 dB to sound levels in the evening from 7 p.m. to 10 p.m. and 10 dB to sound levels between 10 p.m. and 7 a.m.
Day/Night Noise Level ( $L_{dn}$ )	The average A-weighted noise level during a 24-hour day, which is obtained by adding 10 dB to sound levels measured at night between 10 p.m. and 7 a.m.
$L_2, L_8, L_{25}, L_{50}, L_{90}, L_{99}$	A-weighted noise levels that are exceeded 2%, 8%, 25%, 50%, 90%, and 99% of the time during the measurement period.
Maximum Sound Level ( $L_{max}$ )	The maximum sound level measured during the measurement period.
Minimum Sound Level ( $L_{min}$ )	The minimum sound level measured during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.

## Sound Descriptors

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micropascals ( $\mu\text{Pa}$ ). One  $\mu\text{Pa}$  is approximately one hundred-billionth (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000  $\mu\text{Pa}$ . Because of this large range of values, sound is rarely expressed in terms of  $\mu\text{Pa}$ . Instead, a logarithmic scale is used to describe the sound pressure level (also referred to simply as the sound level) in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20  $\mu\text{Pa}$ .

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound pressure level in that range. In general, people are most sensitive to the frequency range of 1,000 to 8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on human sensitivity to those frequencies. The A-weighted sound level (expressed in units of dBA) can be computed on the basis of this information.

The A-weighting scale approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments regarding the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Table 3.12-2 describes typical A-weighted sound levels for various noise sources.

**Table 3.12-2. Typical A-Weighted Sound Levels**

Common Outdoor Noise Source	Sound Level (dBA)	Common Indoor Noise Source
	— 110 —	Rock band
Jet flying at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher in next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library

Common Outdoor Noise Source	Sound Level (dBA)	Common Indoor Noise Source
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013a.

## Decibel Addition

Because decibels are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one excavator produces a sound pressure level of 80 dBA, two excavators would not produce 160 dBA. Rather, they would combine to produce 83 dBA. The cumulative sound level of any number of sources, such as excavators, can be determined using decibel addition.

## Noise Descriptors

Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations is utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time varying events. This energy-equivalent sound/noise descriptor is called  $L_{eq}$ . A common averaging period is hourly, but  $L_{eq}$  can describe any series of noise events of arbitrary duration. The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within approximately plus or minus 1 dBA. Two metrics describe the 24-hour average: day/night noise level ( $L_{dn}$ ) and Community Noise Equivalent Level (CNEL) (defined in Table 3.12-1). Both include penalties for noise during nighttime hours; CNEL also penalizes noise during the evening. CNEL and  $L_{dn}$  are normally within 1 dBA of each other and used interchangeably in this section.

## Human Response to Noise

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of 1 dBA. In the normal environment, the healthy human ear can detect changes of about 2 dBA; however, it is widely accepted that changes of 3 dBA in the normal environment are considered just noticeable to most people. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as being twice as loud. Accordingly, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) resulting in a 3-dB increase in sound would generally be barely detectable.

## Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the following important factors.

## Geometric Spreading

Sound from a single source (i.e., a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. Highway noise is not a single stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a “line” source) rather than from a point. This results in cylindrical spreading rather than the spherical spreading resulting from a point source. The change in sound level (i.e., attenuation) from a line source is 3 dBA per doubling of distance.

## Ground Absorption

Usually the noise path between the source and the observer is very close to the ground. The excess noise attenuation from ground absorption occurs due to acoustic energy losses on sound wave reflection. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is done for simplification only; for distances of less than 200 feet, prediction results based on this scheme are sufficiently accurate. For acoustically “hard” sites (i.e., sites with a reflective surface, such as a parking lot or a smooth body of water, between the source and the receptor), no excess ground attenuation is assumed because the sound wave is reflected without energy losses. For acoustically absorptive or “soft” sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

## Atmospheric Effects

Research by the California Department of Transportation (Caltrans) and others has shown that atmospheric conditions can have a major effect on noise levels. Wind has been shown to be the single most important meteorological factor within approximately 500 feet, whereas vertical air temperature gradients are more important over longer distances. Other factors, such as air temperature, humidity, and turbulence, also have major effects. Receptors downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lower noise levels. Increased sound levels can also occur because of temperature inversion conditions (i.e., increasing temperature with elevation, with cooler air near the surface, where the sound source tends to be and the warmer air above which acts as a cap, causing a reflection of ground level-generated sound).

## Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receptor, surface weight, solidity, and frequency of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor with the specific purpose of reducing noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. A higher barrier may provide as much as 20 dB of noise reduction.

### 3.12.1.2 Groundborne Vibration Fundamentals

Groundborne vibration is an oscillatory motion of the soil with respect to the equilibrium position and can be quantified in terms of velocity or acceleration. Groundborne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are heavy construction equipment (such as blasting and pile driving), steel-wheeled trains, and heavy trucks on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible.

Groundborne vibration can be described in terms of peak particle velocity (PPV). PPV is defined as the maximum instantaneous positive or negative peak amplitude of the vibration velocity. The unit of measurement for PPV is inches per second (in/s). For transient vibration sources (single isolated vibration events such as blasting), the human response to vibration varies from barely perceptible at a PPV of 0.04 in/s, to distinctly perceptible at a PPV of 0.25 in/s, and severe at a PPV of 2.0 in/s. For continuous or frequent intermittent vibration sources (such as impact pile driving or vibratory compaction equipment), the human response to vibration varies from barely perceptible at a PPV of 0.01 in/s, to distinctly perceptible at a PPV of 0.04 in/s, and severe at a PPV of 0.4 in/s (Caltrans 2013b). If a person is engaged in any type of physical activity, vibration tolerance increases considerably.

### 3.12.2 Setting

The study area is a 2-mile-wide, 51-mile-long corridor following the LA River from its headwaters in Canoga Park to the Pacific Ocean in Long Beach. The LA River is generally a concrete channel that is below grade of the surrounding land uses. The land uses within the jurisdictions along the study area range from locations that are noise sensitive such as residential, recreational, and institutional (such as schools) to non-noise sensitive such as industrial and commercial land uses. The existing measured noise environment was quantified via short- and long-term field measurements (discussed below).

#### 3.12.2.1 Geographic

##### Regional Setting

The study area is regionally diverse and varied with respect to the type of land uses. Land uses along the study area range from residential (single-family and multi-family residences) land uses in the north and south to commercial, industrial, and open space throughout the middle portion of the study area. A more detailed discussion is included below. Primary existing noise sources within the study area include traffic along the local and regional roadway network, including Interstate (I-) 710, I-10, and I-5. Other existing noise sources are commercial/industrial activities and ambient noise, such as birds, trees rustling, aircraft overflights, and general neighborhood noise (e.g., children playing).

In order to quantify the existing ambient noise conditions throughout the project area, noise monitoring was conducted at 29 locations in the vicinity and along the LA River on May 13 through May 15, 2020, and June 10, 2020. Long-term (LT) noise monitoring was conducted at five locations,

designated LT1 through LT5, and short-term (ST) noise monitoring was conducted at 24 locations, designated ST1 through ST24. Ambient field measurements were taken at representative land uses with consideration given to locations that would be considered noise sensitive. All measurement locations are indicated on Figure 3.12-1. These locations were selected to document the existing noise environment. Field measurement locations were chosen to represent noise-sensitive land uses within the study area and within individual jurisdictions. The sound-level meters used for both the LT and ST noise monitoring were field calibrated, using a Larson Davis CAL200 acoustical calibrator, prior to each measurement to ensure accuracy; the calibration was also rechecked at the conclusion of each measurement. Field noise survey sheets and measurement location photos are provided in Appendix H.

### Long-Term Noise Measurements

LT ambient noise measurements were conducted between May 13 and 15, 2020, at five locations near the project sites using Type 2 sound-level meters. LT measurement sites were selected to capture daily noise level patterns and statistics continuously over 1-hour intervals. Approximately 3 days of continuous data were recorded at each location. Table 3.12-3 summarizes the results of the LT noise measurements in terms of the range of daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) average ( $L_{eq}$ ) and maximum noise levels ( $L_{max}$ ).

**Table 3.12-3. Summary of Noise Measurement Results (Long Term)<sup>1</sup>**

Site#	Location/Frame	Start Date	Range of CNEL (dBA)	Range of Hourly $L_{eq}$ Values (average), dBA	Range of $L_{max}$ Values, dBA
LT1	Intersection of Valley Heart Dr and Columbus Ave/8	05/13/20	66–64	50–69	44–85
LT2	Bike path off Riverdale Ave/6	05/13/20	66	56–69	54–93
LT3	Maywood Riverfront Park/4	05/13/20	74–76	61–75	52–103
LT4	Hollydale Regional Park/3	05/13/20	63–65	51–68	59–94
LT5	Bike Path North of Ocean Blvd/1	05/13/20	71	57–72	69–99

Source: ICF field noise measurements (see Appendix H).

<sup>1</sup> It should be noted that field measurements were conducted during the time frame when the COVID-19 Stay-at-Home Order (Executive Order N-33-20) was in effect throughout Los Angeles County. Therefore, traffic volumes along local roadways may have been depressed.

### Short-Term Noise Measurements

ST measurement locations were selected to supplement LT measurements at surrounding land uses. ST noise measurements were taken at 24 locations on Wednesday, May 13, through Friday, May 15, 2020, and June 10, 2020. All field measurements were taken with a Larson Davis Model 831 Type 1 sound-level meter. Each measurement lasted approximately 20 minutes and was conducted with the meter mounted on a tripod at a height of 5 feet above the ground, with a wind screen installed over the measurement microphone to reduce the effects of wind-related interference. Noise metrics—including  $L_{eq}$ ,  $L_{min}$ ,  $L_{max}$ ,  $L_{1.67}$ ,  $L_{8.33}$ ,  $L_{25}$ ,  $L_{50}$ ,  $L_{90}$ , and  $L_{99}$  noise descriptors, defined in Table 3.12-1—

were recorded subsequent to the conclusion of each measurement. Data from the measurements are shown in Table 3.12-4.

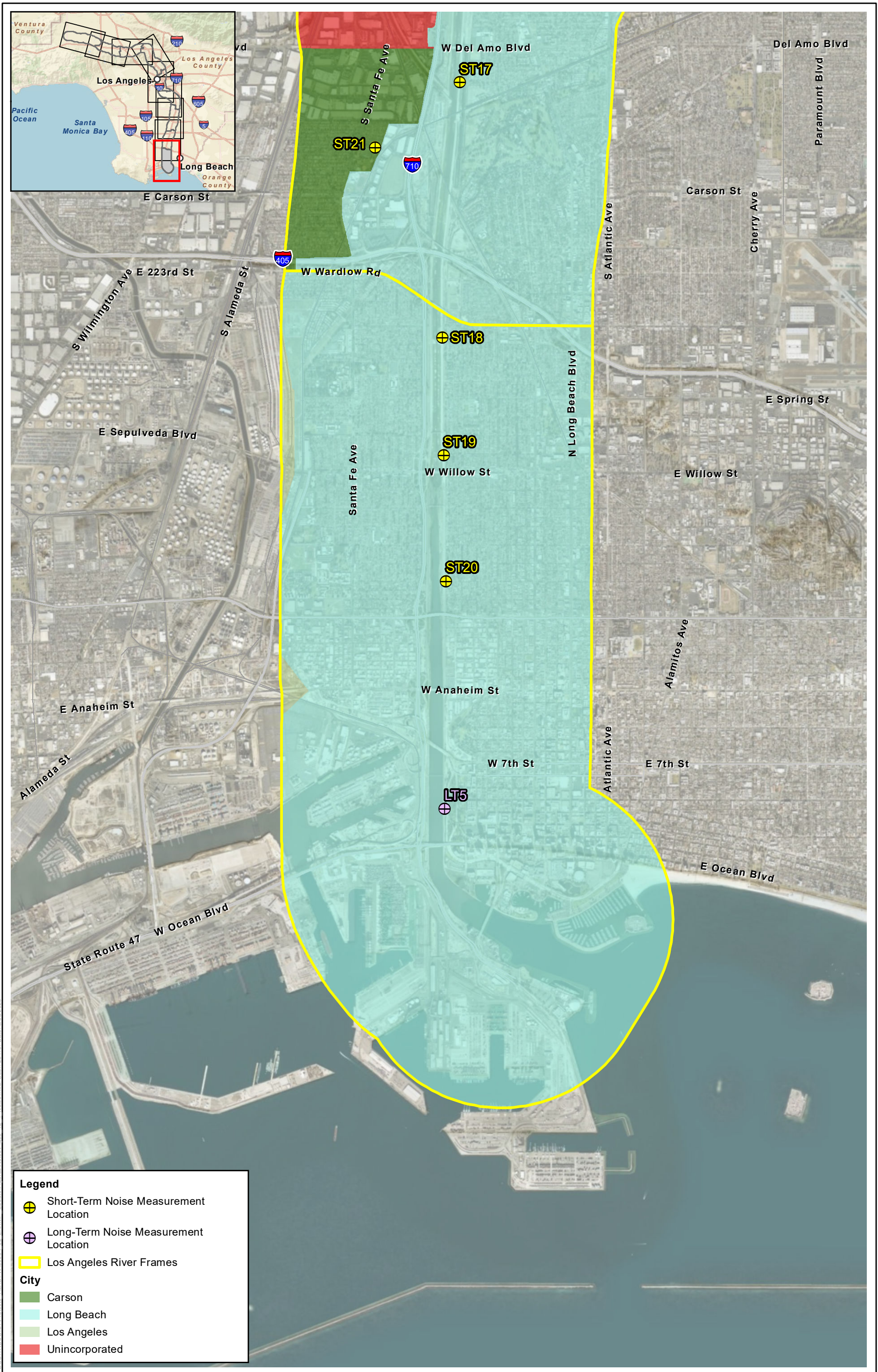
**Table 3.12-4. Summary of Noise Measurement Results (Short Term)<sup>1</sup>**

Site#	Location/Frame	Date	Time of Day	Hourly Leq Values (average), dBA	L <sub>max</sub> Values, dBA
ST1	Near 6801 Delvo Avenue/9	05/14/20	08:43	57.9	68.8
ST2	Intersection of White Oak Avenue and Erwin Street/9	05/14/20	09:31	58.0	66.0
ST3	Near 4700 Tyrone Avenue/8	05/14/20	10:15	60.7	69.5
ST4	13236 Valleyheart Drive/8	05/14/20	10:58	47.4	58.1
ST5	12067 Guerin Street/8	05/14/20	12:11	54.7	70.7
ST6	Smoke House Restaurant 4420 Lakeside Dr/7	05/14/20	12:42	54.3	67.4
ST7	Betty Davis Picnic Area/6	05/14/20	13:24	64.1	68.8
ST8	Los Feliz Golf Course/6	05/14/20	14:30	64.3	73.3
ST9	Elysian Park/6	05/14/20	15:25	58.6	71.8
ST10	837 Commercial Street/5	05/14/20	16:06	56.3	71.4
ST11	5119 South Atlantic Boulevard/4	05/14/20	16:52	63.6	72.5
ST12	6303 River Drive/4	05/15/20	10:14	58.2	73.3
ST13	Thunderbird Villa Mobile Home Park/3	05/15/20	11:05	53.7	69.5
ST14	Ralph C Dills Park/3	05/15/20	12:44	51.4	60.3
ST15	E 72 <sup>nd</sup> Street Parking Lot/3	05/15/20	13:33	52.2	58.6
ST16	Trail off Deforest Avenue/2	05/13/20	16:25	51.1	59.4
ST17	Bike Path off 48 <sup>th</sup> Street/2	05/15/20	14:15	58.8	68.4
ST18	Bike Path near Wrigley Greenbelt/1	05/13/20	15:04	60.5	65.6
ST19	Bike Path near Deforest Avenue/1	05/13/20	14:00	60.3	69.3
ST20	End of road near 930 W 20 <sup>th</sup> Street/1	05/13/20	13:06	52.2	66.5
ST21	Near Dominguez Park/2	06/10/20	10:15	53.2	70.1
ST22	Near 4827 E. Rose Street/3	06/10/20	09:33	64.6	70.8
ST23	Near 5532 Olanda Street/3	06/10/20	09:00	65.2	75.2
ST24	Near 10975 Wright Road/3	06/10/20	08:25	68.9	81.7

Source: ICF field noise measurements (see Appendix H).

<sup>1</sup> It should be noted that field measurements were conducted during the time frame when the COVID-19 Stay-at-Home Order (Executive Order N-33-20) was in effect throughout Los Angeles County. Therefore, traffic volumes along local roadways may have been depressed.



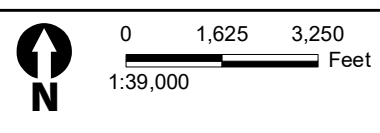


**Legend**

- Short-Term Noise Measurement Location
- Long-Term Noise Measurement Location
- Los Angeles River Frames

**City**

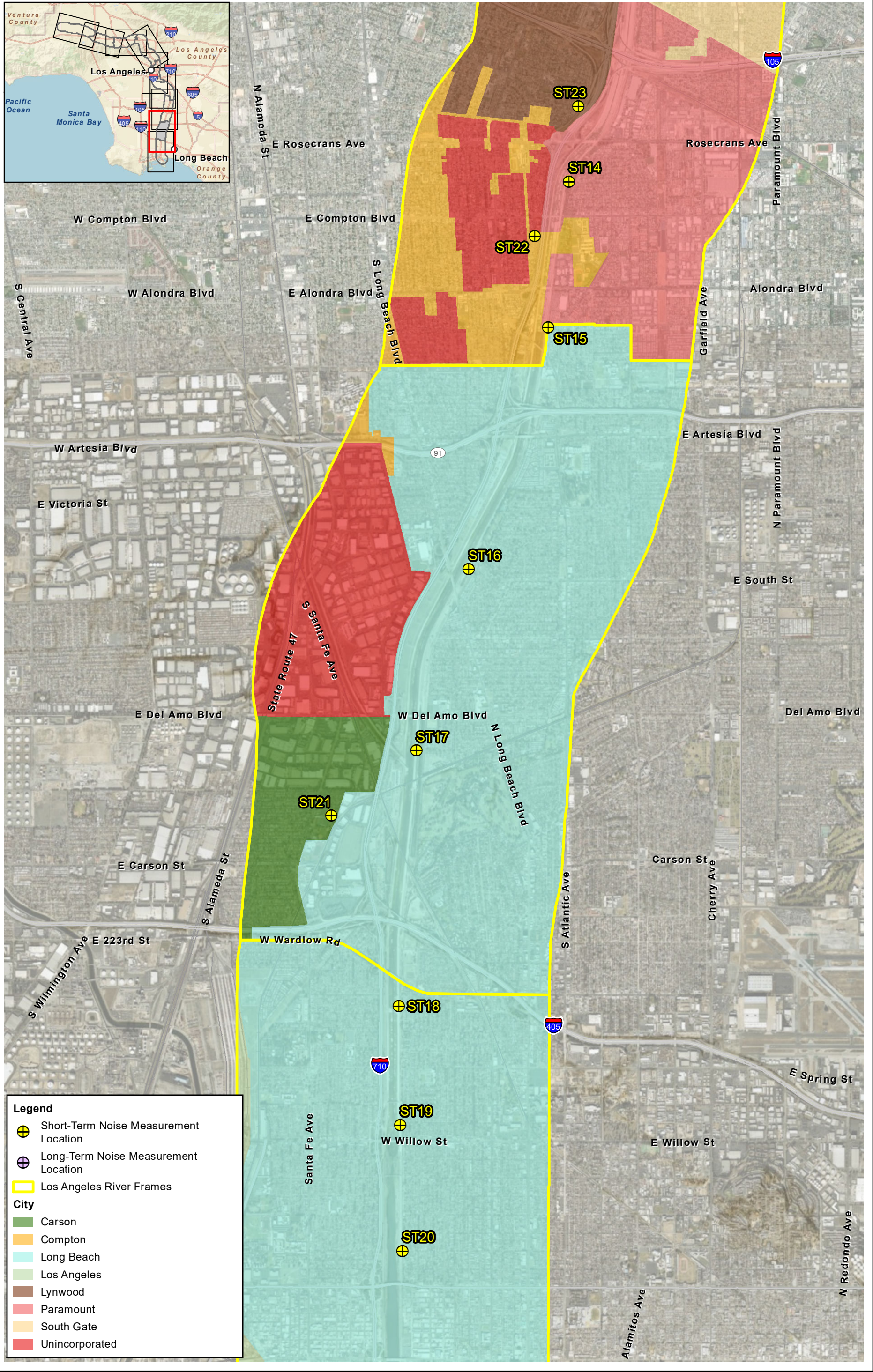
- Carson
- Long Beach
- Los Angeles
- Unincorporated



**Figure 3.12-1 - Frame 1  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

Source: County of Los Angeles; ESRI

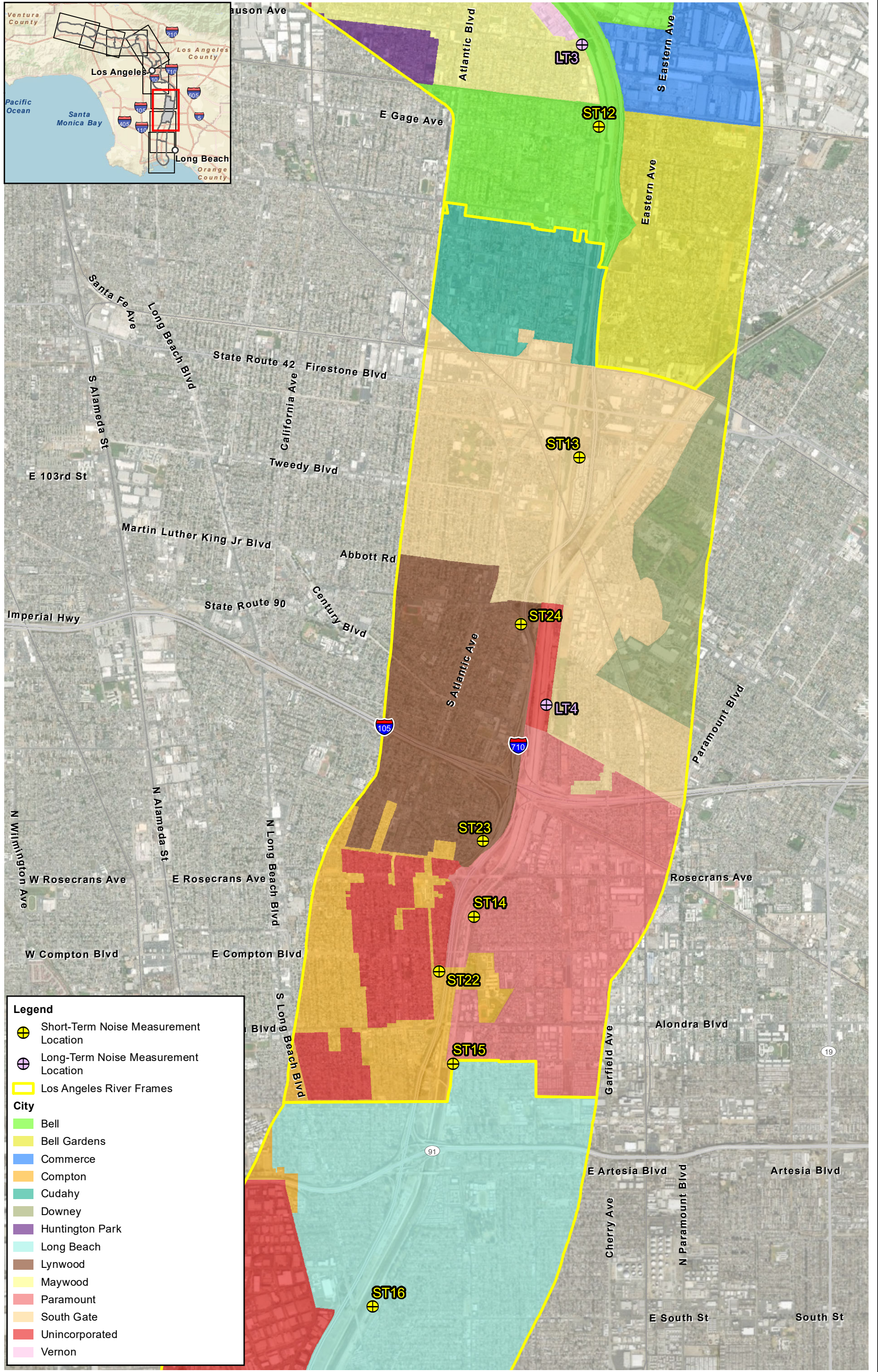
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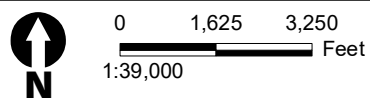
**Figure 3.12-1 - Frame 2  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

0 1,625 3,250  
1:39,000 Feet

Source: County of Los Angeles; ESRI

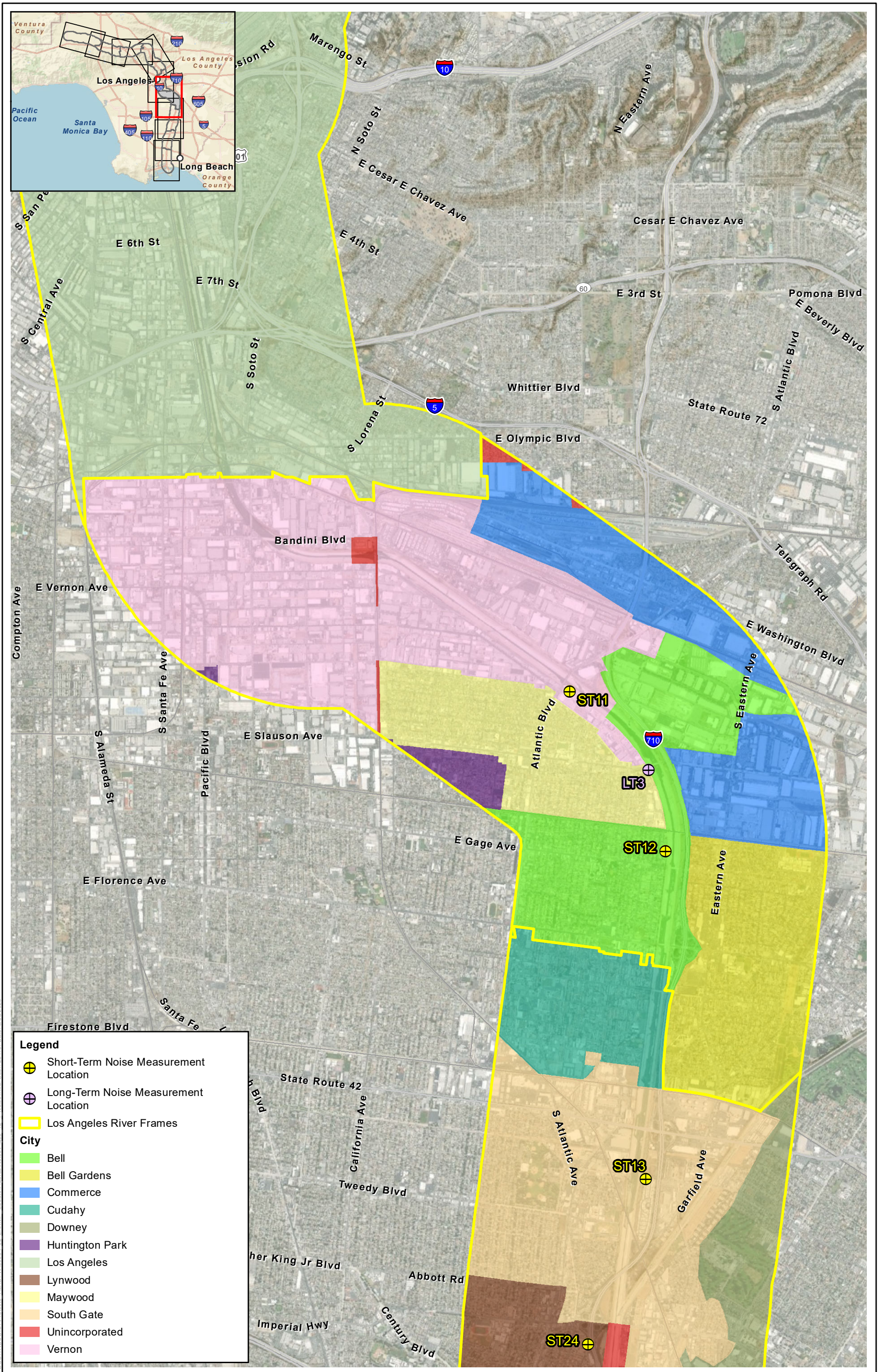


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**Figure 3.12-1 - Frame 3  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

Source: County of Los Angeles; ESRI

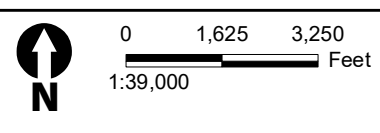


**Legend**

- Short-Term Noise Measurement Location
- Long-Term Noise Measurement Location
- Los Angeles River Frames

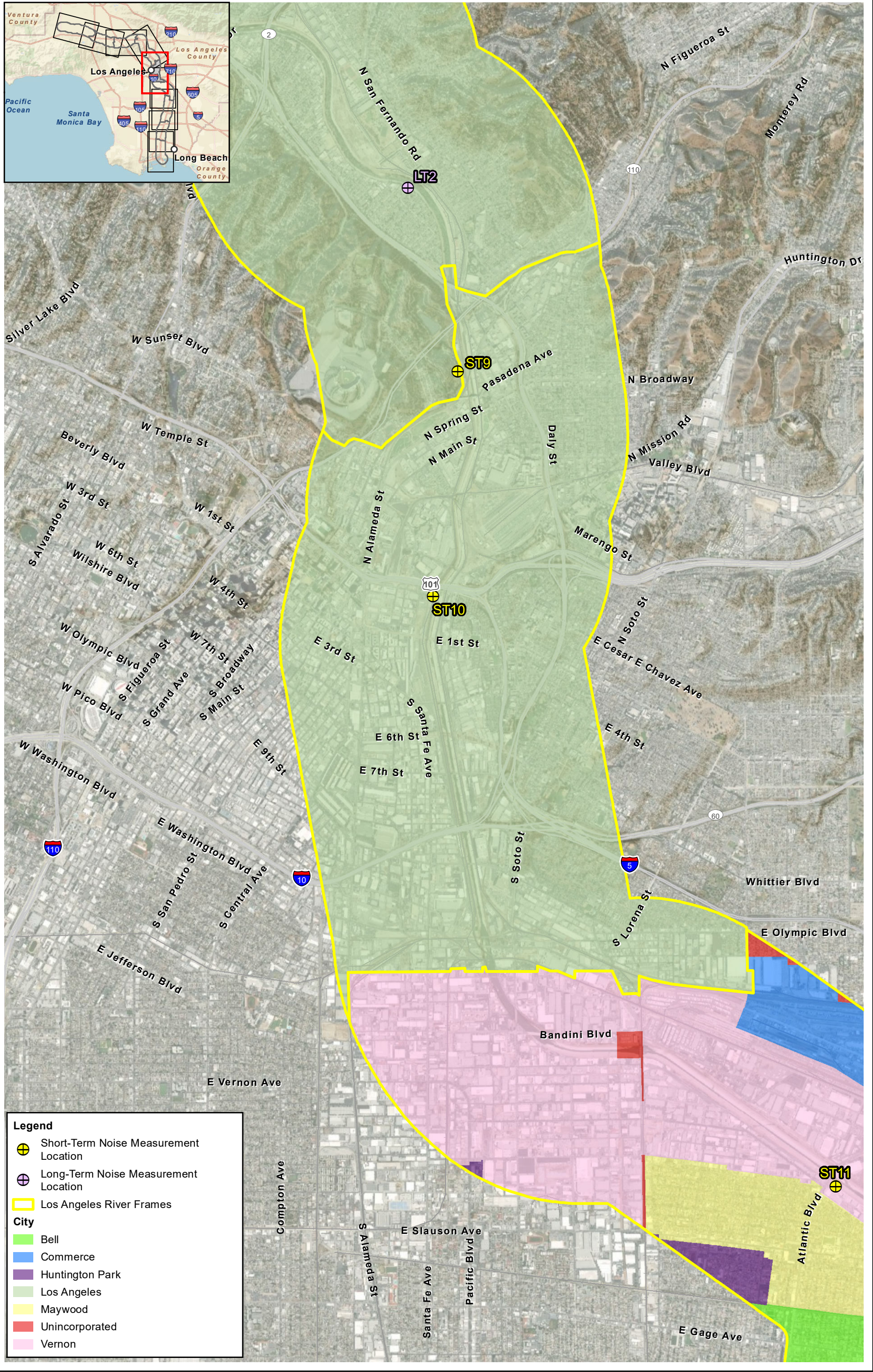
**City**

- Bell
- Bell Gardens
- Commerce
- Cudahy
- Downey
- Huntington Park
- Los Angeles
- Lynwood
- Maywood
- South Gate
- Unincorporated
- Vernon



**Figure 3.12-1 - Frame 4  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

Source: County of Los Angeles; ESRI

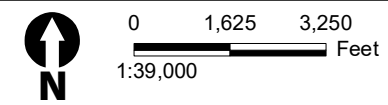


**Legend**

- Short-Term Noise Measurement Location
- Long-Term Noise Measurement Location
- Los Angeles River Frames

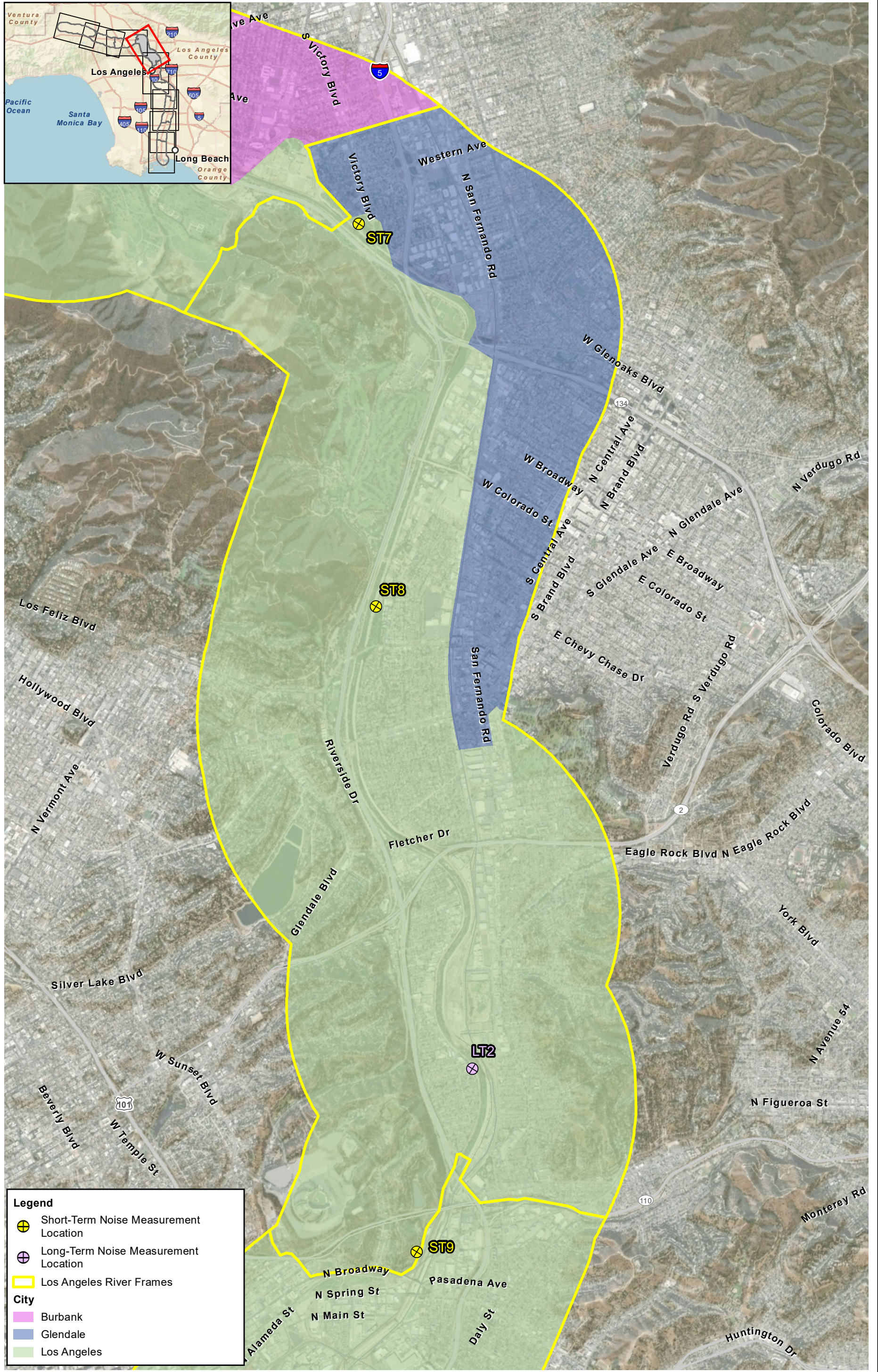
**City**

- Bell
- Commerce
- Huntington Park
- Los Angeles
- Maywood
- Unincorporated
- Vernon



**Figure 3.12-1 - Frame 5  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

Source: County of Los Angeles; ESRI

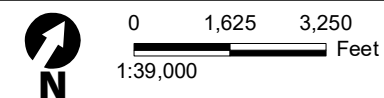


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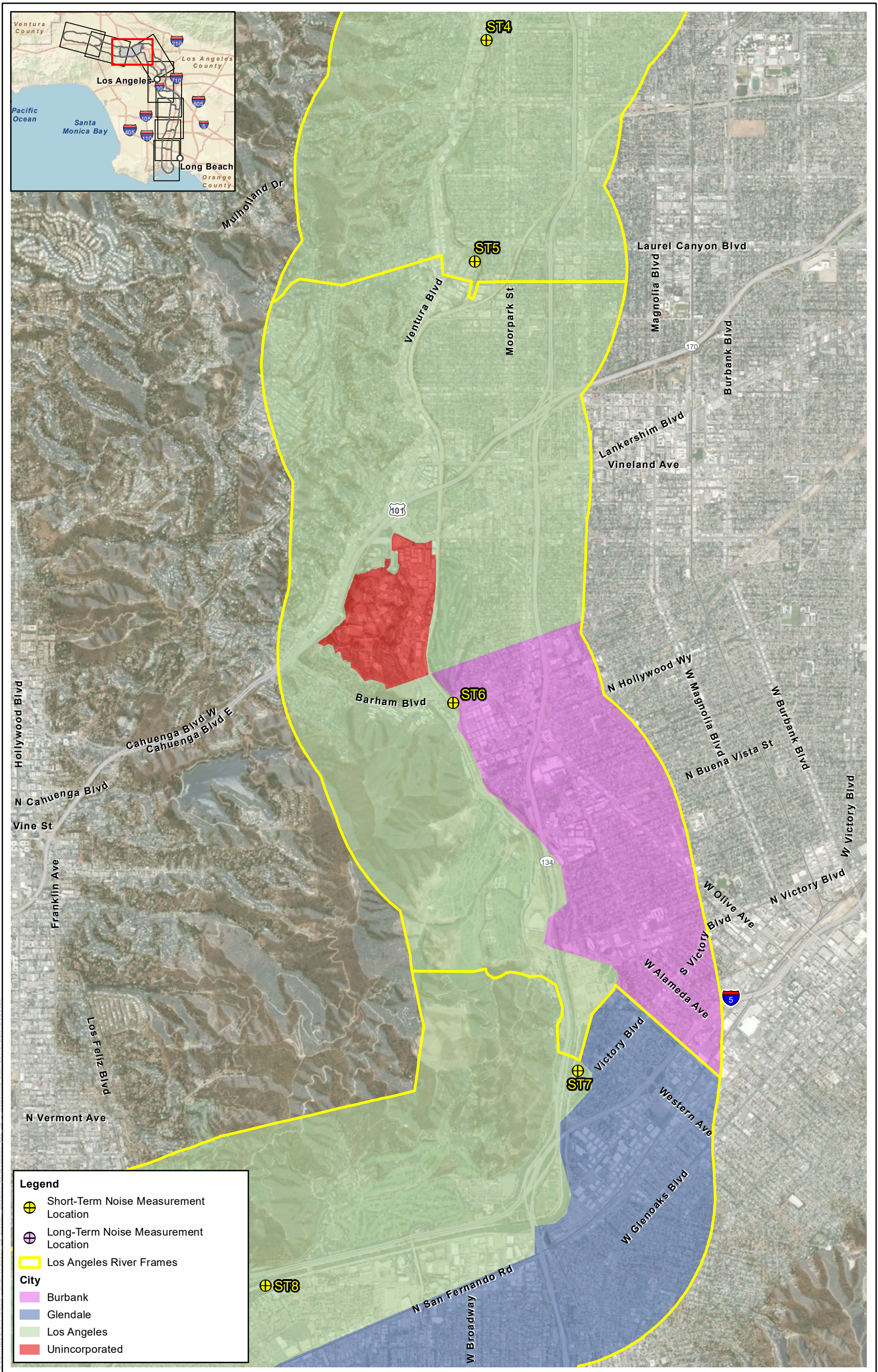
- Short-Term Noise Measurement Location
- Long-Term Noise Measurement Location
- Los Angeles River Frames

**City**

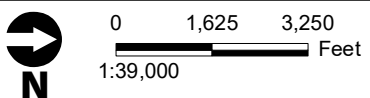
- Burbank
- Glendale
- Los Angeles



**Figure 3.12-1 - Frame 6  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

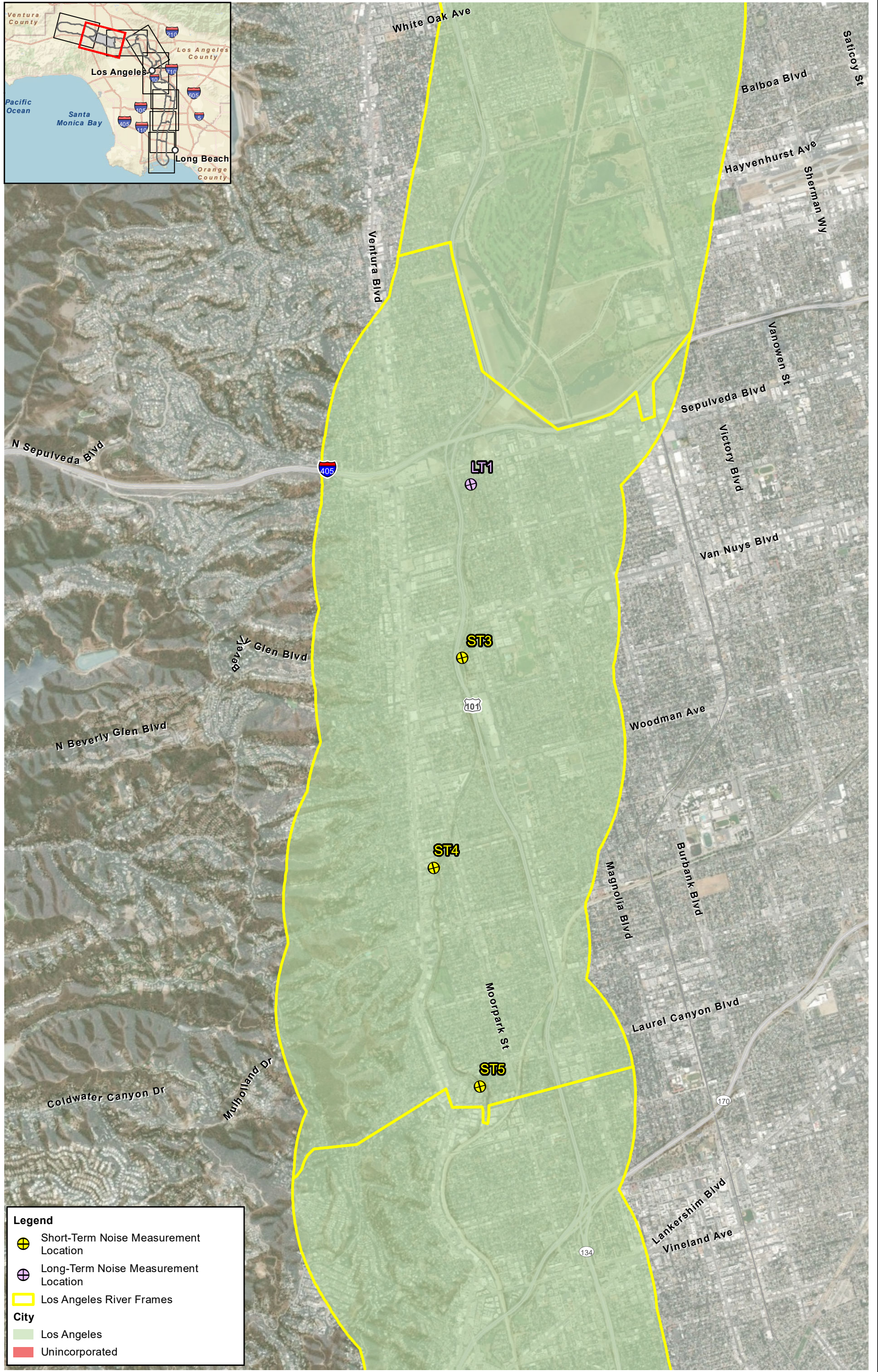


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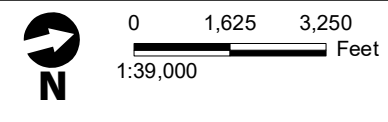


**Figure 3.12-1 - Frame 7**  
**Noise Measurement Locations**  
**Los Angeles River Master Plan Update Program EIR Study Area**

Source: County of Los Angeles; ESRI



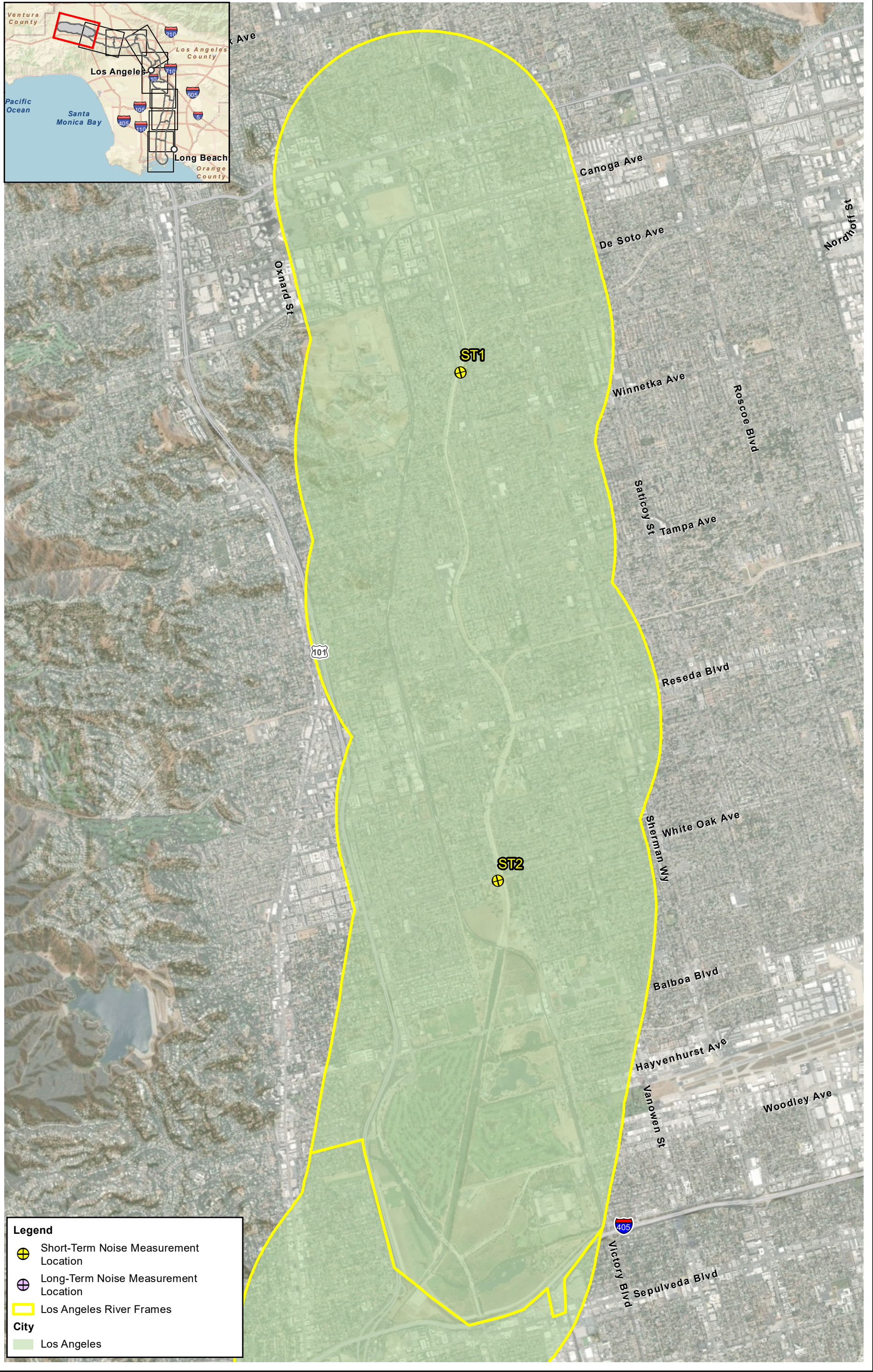
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**Figure 3.12-1 - Frame 8  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

Source: County of Los Angeles; ESRI



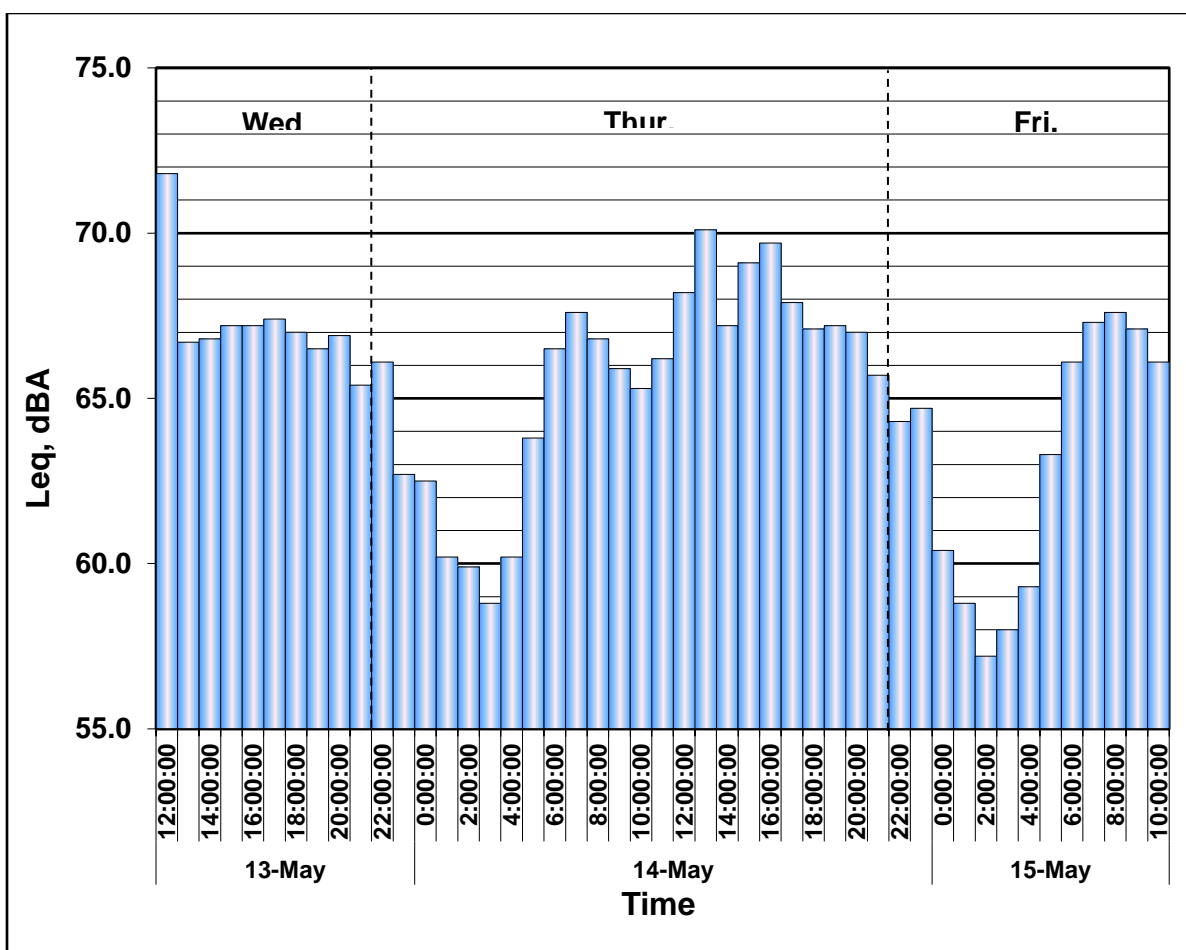


**Figure 3.12-1 - Frame 9  
Noise Measurement Locations  
Los Angeles River Master Plan Update Program EIR Study Area**

### Frames 1 and 2

Frames 1 and 2 include the Cities of Long Beach and Los Angeles. Land uses along the study area fall completely within the City of Long Beach. The City of Carson and unincorporated Los Angeles County are within the study area but do not directly fall along the river. Land uses are generally a mix of residential, commercial, and industrial. Seven field measurements (six ST measurements and one LT measurement) were conducted within these frames: ST16 through ST20 and ST24, and LT5. Measured ST results, as presented in Table 3.12-4, ranged from 51.1 dBA  $L_{eq}$  to 60.5 dBA  $L_{eq}$ . Field measurements conducted were generally representative of noise-sensitive land uses along the study area, including residential and recreational land uses. Figure 3.12-2 shows the 24-hour noise pattern associated with LT5.

**Figure 3.12-2. Long-Term Measurement LT5**



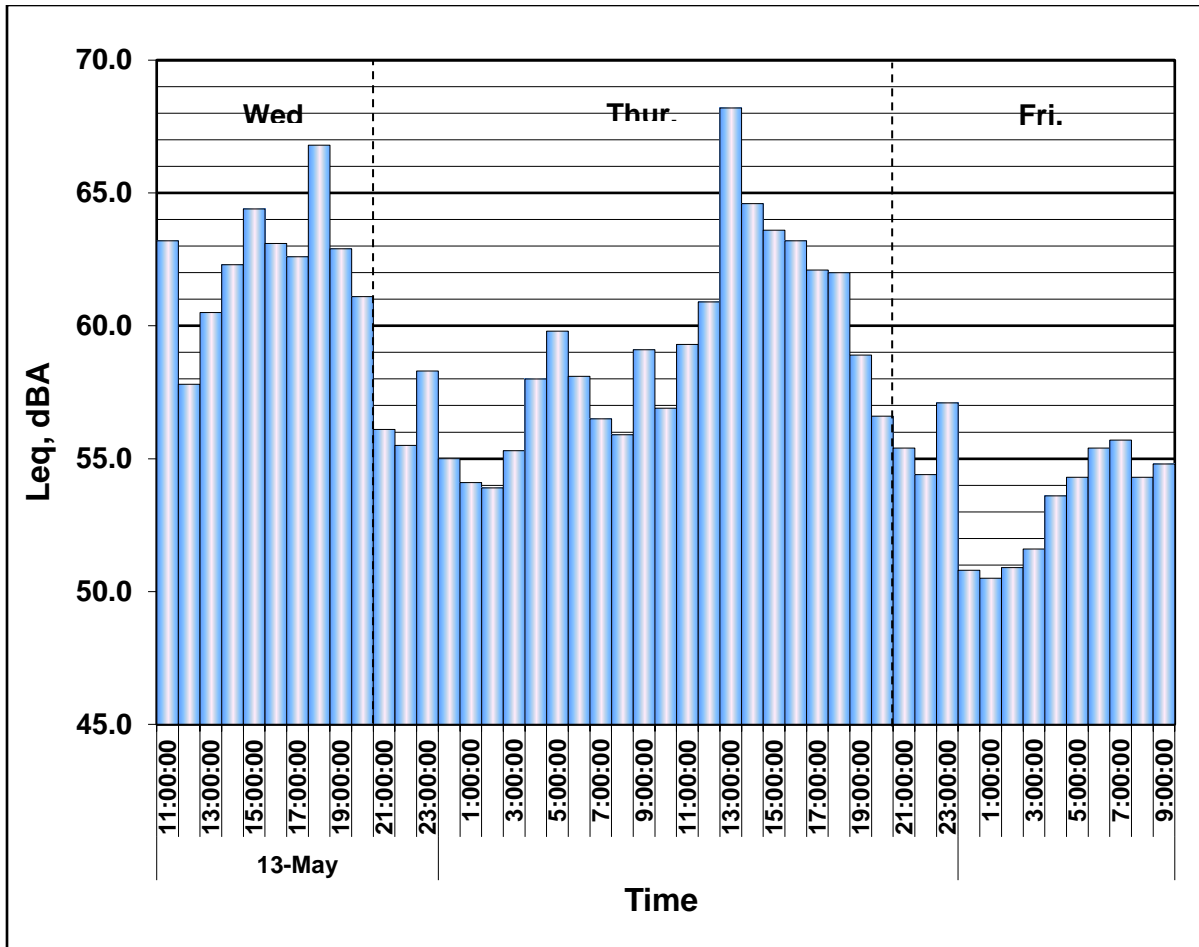
Source: ICF field noise measurements (see Appendix H).

### Frame 3

Frame 3 includes the Cities of Compton, Paramount, Lynwood, South Gate, and Cudahy, and portions of unincorporated Los Angeles County. Land uses along the study area fall completely within these municipalities. Land uses within these municipalities are generally residential with some commercial and recreational uses throughout the study area. Seven field measurements (six ST measurements and one LT measurement) were conducted within these frames: ST13 through ST15,

ST22 through ST24, and LT4. Measured ST results, as presented in Table 3.12-4, ranged from 51.4 dBA  $L_{eq}$  to 53.7 dBA  $L_{eq}$ . Field measurements conducted were generally representative of noise-sensitive land uses along the study area including residential and recreational land uses. Figure 3.12-3 shows the diurnal pattern associated with LT4.

**Figure 3.12-3. Long-Term Measurement LT4**

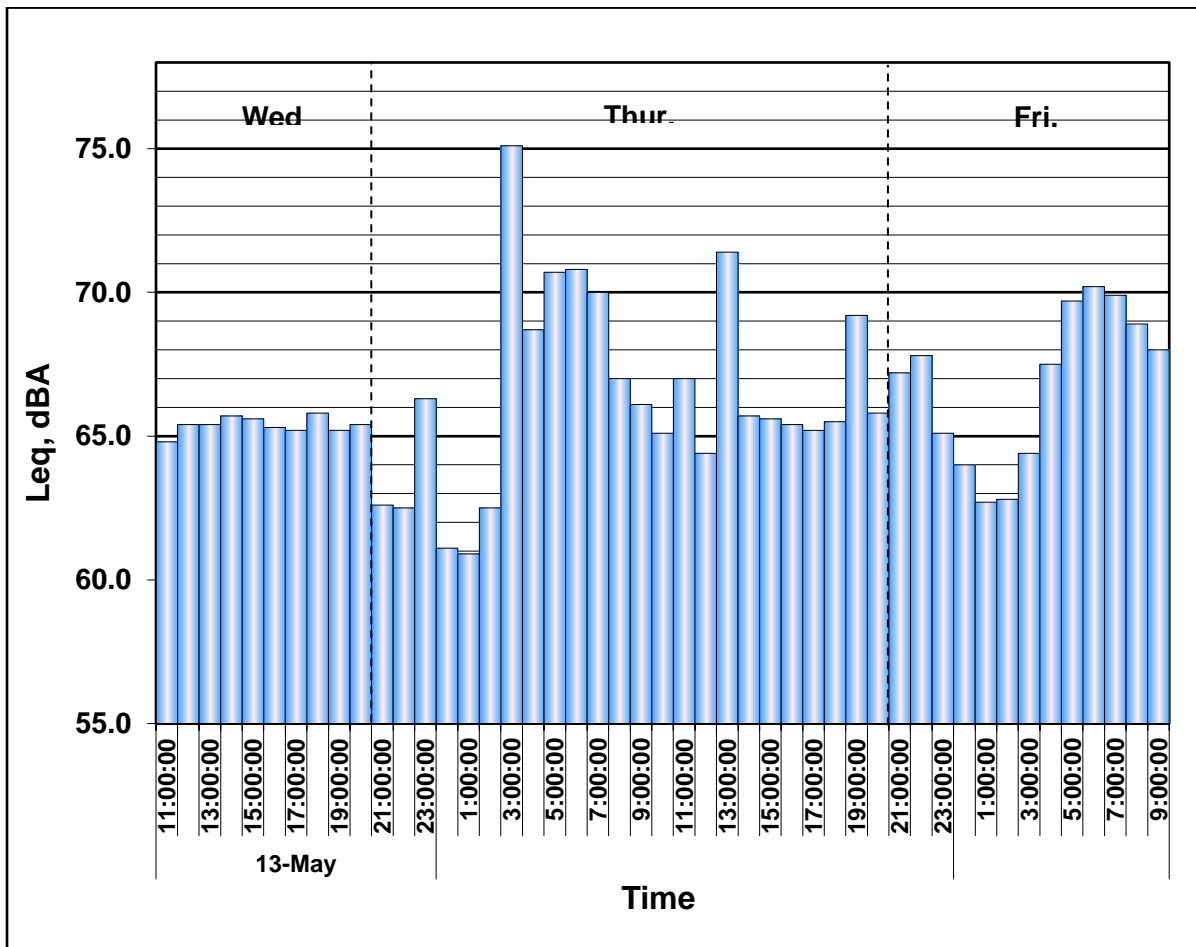


Source: ICF field noise measurements (see Appendix H).

**Frame 4**

Frame 4 includes the Cities of Bell Garden, Bell, Maywood, Commerce, and Vernon, and portions of unincorporated Los Angeles County. Land uses along the study area fall completely within these municipalities. The City of Huntington Park is within the study area but does not directly fall along the LA River. Land uses within these municipalities are generally industrial/commercial with some residential at the southern terminus of Frame 4. Three field measurements (two ST measurements and one LT measurement) were conducted within these frames: ST11 and ST12 and LT3. Measured ST results, as presented in Table 3.12-4, ranged from 58.2 dBA  $L_{eq}$  to 63.6 dBA  $L_{eq}$ . Field measurements conducted were generally representative of noise-sensitive land uses along the study area, including residential and commercial land uses. Figure 3.12-4 shows the diurnal pattern associated with LT3.

**Figure 3.12-4. Long-Term Measurement LT3**

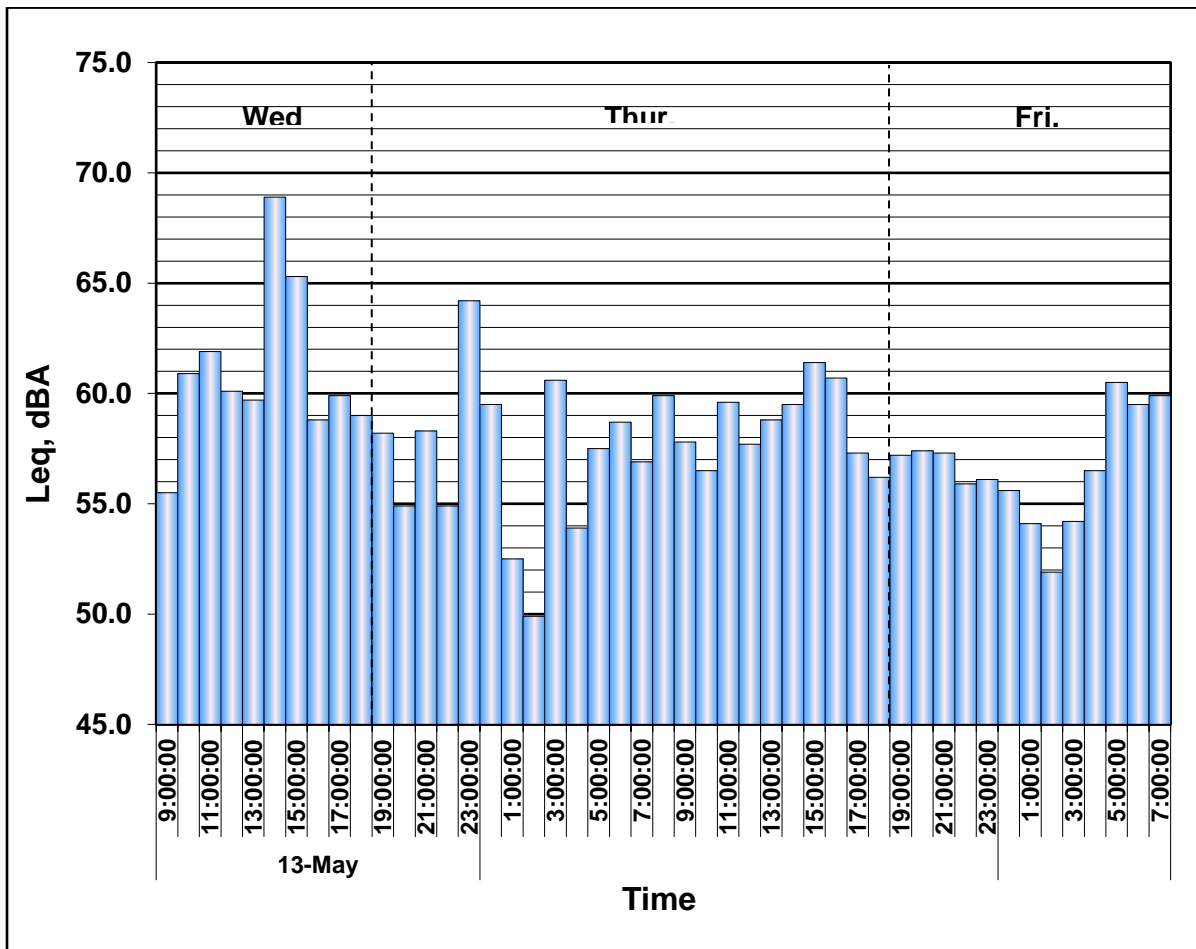


Source: ICF field noise measurements (see Appendix H).

**Frames 5 through 9**

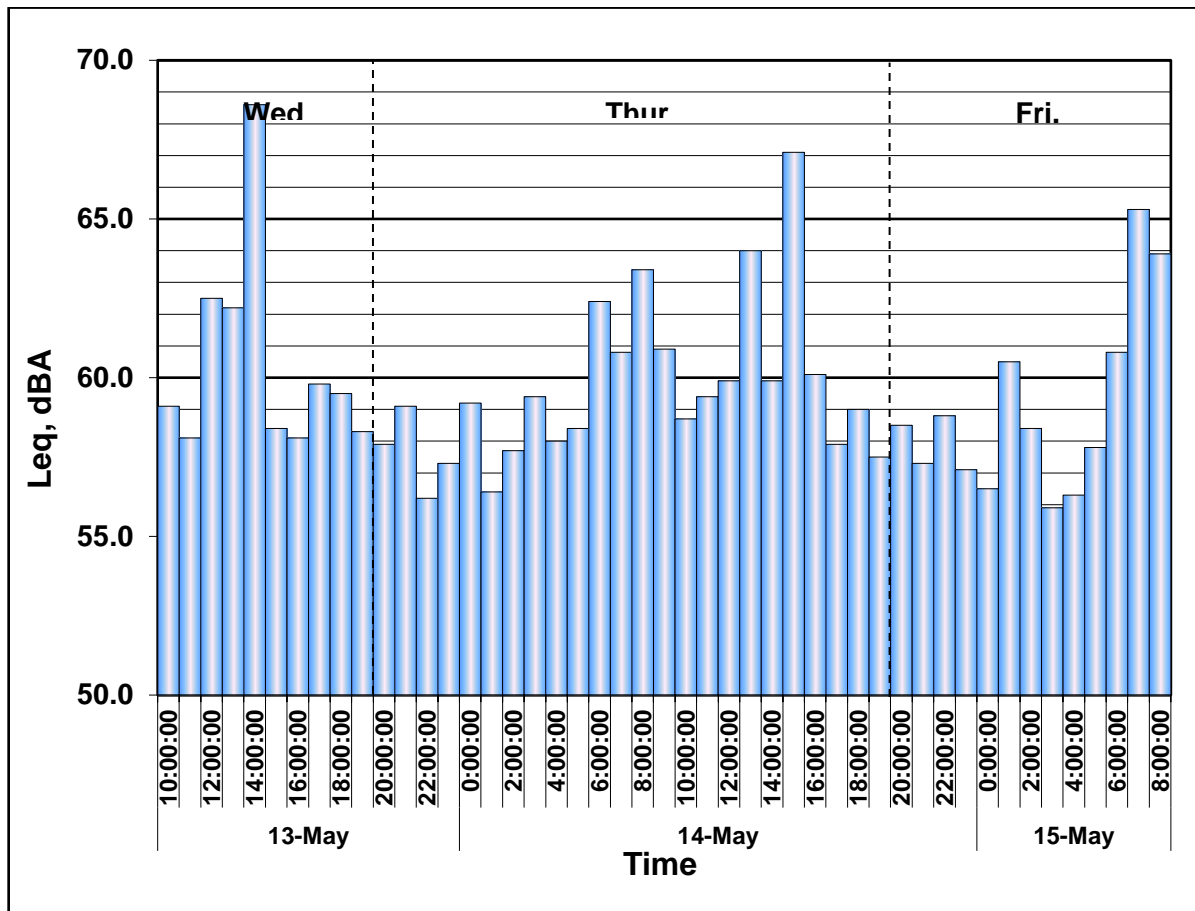
Frames 5 through 9 include the Cities of Los Angeles, Burbank, and Glendale, and portions of unincorporated Los Angeles County. Land uses along the study area fall completely within these municipalities. Land uses within these municipalities are generally industrial/commercial (within Frame 5) and transition into a general mix of residential and commercial with some institutional and recreational land uses peppered throughout the study area. Twelve field measurements (10 ST measurements and 2 LT measurement) were conducted within these frames: ST1 through ST10, and LT1 and LT2. Measured ST results, as presented in Table 3.12-4, ranged from 54.3 dBA  $L_{eq}$  to 64.3 dBA  $L_{eq}$ . Field measurements conducted were generally representative of noise-sensitive land uses along the study area, including commercial, recreational, and residential land uses. Figure 3.12-5 and Figure 3.12-6 show the diurnal pattern associated with LT1 and LT2.

Figure 3.12-5. Long-Term Measurement LT1



Source: ICF field noise measurements (see Appendix H).

**Figure 3.12-6. Long-Term Measurement LT2**



Source: ICF field noise measurements (see Appendix H).

### 3.12.2.2 Regulatory

This section identifies laws, regulations, and ordinances that are relevant to the impact analysis of noise in this PEIR.

#### Federal

There are no federal noise standards that specifically apply to the proposed Project.

The Federal Transit Administration (FTA) has adopted vibration standards that evaluate the damage potential of vibration sources that may be present during construction. The vibration standards are included in the FTA’s *Transit Noise and Vibration Assessment Manual* (FTA 2018) and are presented in Table 3.12-5.

**Table 3.12-5. Construction Vibration Damage Criteria**

<b>Building and Structural Category</b>	<b>PPV (in/sec)</b>	<b>Approximate L<sub>v</sub><sup>1</sup></b>
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA 2018.

<sup>1</sup> RMS velocity in decibels, VdB re 1 micro-in/sec

RMS = root-mean-square; VdB = vibration velocity in decibels

## State

### California Department of Health Services Noise Standards

The California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These guidelines for land use and noise exposure compatibility are shown in Table 3.12-6. In addition, Section 65302(f) of the California Government Code requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must: (1) identify and appraise noise problems in the community, (2) recognize Office of Noise Control guidelines, and (3) analyze and quantify current and projected noise levels.

**Table 3.12-6. DHS Community Noise Exposure (L<sub>dn</sub> or CNEL)**

<b>Land Use</b>	<b>Normally Acceptable<sup>1</sup></b>	<b>Conditionally Acceptable<sup>2</sup></b>	<b>Normally Unacceptable<sup>3</sup></b>	<b>Clearly Unacceptable<sup>4</sup></b>
Residential- Low Density, Single-family, Duplex, Mobile Homes	50-60	55-70	70-75	above 75
Residential- Multi. Family	50-65	60-70	70-75	above 75
Transient Lodging -Motels, Hotels	50-65	60-70	70-80	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	above 80
Auditoriums, Concert Halls, Amphitheaters	--	50-70	--	above 70
Sports Arena, Outdoor Spectator Sports	--	50-75	--	above 75
Playgrounds, Neighborhood Parks	50-70	--	67-75	above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-75	--	70-80	above 80
Office Buildings, Business and Professional Commercial	50-70	67-77	above 75	--

Land Use	Normally Acceptable <sup>1</sup>	Conditionally Acceptable <sup>2</sup>	Normally Unacceptable <sup>3</sup>	Clearly Unacceptable <sup>4</sup>
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

Source: State of California, Governor's Office of Planning and Research 2017.

- <sup>1</sup> Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
- <sup>2</sup> Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
- <sup>3</sup> Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- <sup>4</sup> Clearly Unacceptable: New construction or development should generally not be undertaken.

### California Department of Transportation

Many jurisdictions in the study area do not set a basic criterion for limiting ground-borne vibration. Although this is sensible for the evaluation of operational vibration sources, it does not fully address the range of potential vibration impacts that might occur as a result of construction activities. Caltrans provides suggested criteria to address potential building damage as well as human annoyance as a result of construction-related ground-borne vibration. Therefore, although the proposed Project would not be subject to Caltrans oversight, guidance published by the agency nonetheless provides criteria that could be useful in establishing vibration thresholds for the Project. Guideline criteria from Caltrans' widely referenced *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013b) are provided in Table 3.12-7 and Table 3.12-8.

**Table 3.12-7. Caltrans Guideline Vibration Damage Criteria**

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2013b, as cited in LACFCD 2015.

Note: Transient sources create a single isolated vibration event, such as blasting or the use of drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.



**Table 3.12-8. Caltrans Guideline Vibration Annoyance Criteria**

<b>Human Response</b>	<b>Maximum PPV (in/sec)</b>	
	<b>Transient Sources</b>	<b>Continuous/Frequent Intermittent Sources</b>
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans 2013b, as cited in LACFCD 2015.

Note: Transient sources create a single isolated vibration event, such as blasting or the use of drop balls.

Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

## Local

As described in Chapter 2, *Project Description*, the study area is divided into series of nine distinct planning frames. Each individual jurisdiction includes guidance documentation in the form of general plans and regulatory thresholds and requirements that set thresholds for noise. These are described by frame below.

### Frame 1

#### City of Long Beach

##### *City of Long Beach Municipal Code*

##### *Construction*

Section 8.80.202 regulates construction activities where a building or other related permit is required or was issued by the Building Official and shall not apply to any construction activities within the Long Beach harbor district as established pursuant to Section 201 of the City Charter. The regulations state:

- A. Weekdays and federal holidays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of seven p.m. and seven a.m. the following day on weekdays, except for emergency work authorized by the Building Official. For purposes of this Section, a federal holiday shall be considered a weekday.
- B. Saturdays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of seven p.m. on Friday and nine a.m. on Saturday and after six p.m. on Saturday, except for emergency work authorized by the Building Official.
- C. Sundays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity at any time on Sunday, except for emergency work authorized by the Building Official or except for work authorized by permit issued by the Noise Control Officer.

- D. Owner's/employer's responsibility. It is unlawful for the landowner, construction company owner, contractor, subcontractor or employer of persons working, laboring, building, or assisting in construction to permit construction activities in violation of provisions in this Section.
- E. Sunday work permits. Any person who wants to do construction work on a Sunday must apply for a work permit from the Noise Control Officer. The Noise Control Officer may issue a Sunday work permit if there is good cause shown; and in issuing such a permit, consideration will be given to the nature of the work and its proximity to residential areas. The permit may allow work on Sundays, only between nine a.m. and six p.m., and it shall designate the specific dates when it is allowed.

### *Operations*

The City of Long Beach has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Long Beach Municipal Code Section 8.80.150 presents the following exterior noise limits (sound levels by receiving land use district):

- A. The noise standards for the various land use districts identified by the noise control office as presented in Table A in Section 8.80.160 shall, unless otherwise specifically indicated, apply to all such property within a designated district.
- B. No person shall operate or cause to be operated any source of sound at any location within the incorporated limits of the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured from any other property, either incorporated or unincorporated, to exceed:
  - 1. The noise standard for that land use district as specified in Table A in Section 8.80.160 for a cumulative period of more than thirty (30) minutes in any hour; or
  - 2. The noise standard plus five (5) decibels for a cumulative period of more than fifteen (15) minutes in any hour; or
  - 3. The noise standard plus ten (10) decibels for a cumulative period of more than five (5) minutes in any hour; or
  - 4. The noise standard plus fifteen (15) decibels for a cumulative period of more than one (1) minute in any hour; or
  - 5. The noise standard plus twenty (20) decibels or the maximum measured ambient, for any period of time.
- C. If the measured ambient level exceeds that permissible within any of the first four (4) noise limit categories in Subsection B of this Section, the allowable noise exposure standard shall be increased in five (5) decibels increments in each category as appropriate to encompass or reflect the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category in Subsection B of this Section, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.
- D. If the measurement location is on a boundary between two (2) different districts, the noise level limit applicable shall be the arithmetic mean of the two (2) districts.
- E. If possible, the ambient noise shall be measured at the same location along the property line utilized in Subsection B of this Section, with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, then the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance such that the offending noise from the source is inaudible. If the difference

between the noise levels with noise source operating and not operating is six (6) decibels or greater, then the noise measurement of the alleged source can be considered valid with a small correction applied to account for the contribution of the ambient noise. The correction is to be applied in accordance with data shown in Table B in Section 8.80.160.

Long Beach Municipal Code Section 8.80.160 presents the following exterior noise limits guidance regarding correction for character of sound:

In the event that alleged offensive noise contains a steady audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting or contains music or speech conveying informational content, the standard limits set forth in Table A shall be reduced by five (5) decibels.

**Table A: Exterior Noise Limits at Receiving Land Uses**

Receiving Land Use District*	Time Period	Noise Level** (dBA)
District One	Night: 10:00 p.m.–7:00 a.m.	45
	Day: 7:00 a.m.–10:00 p.m.	50
District Two	Night: 10:00 p.m.–7:00 a.m.	55
	Day: 7:00 a.m.–10:00 p.m.	60
District Three	Any time	65
District Four	Any time	70
District Five	Regulated by other agencies and laws	NA

\* District One: Predominantly residential with other land use types also present  
 District Two: Predominantly commercial with other land use types also present  
 Districts Three and Four: Predominantly industrial with other land types use also present  
 District Five: Airport, freeways and waterways regulated by other agencies

\*\* Districts Three and Four limits are intended primarily for use at their boundaries rather than for noise control within those districts.

### **City of Long Beach General Plan**

The *City of Long Beach General Plan* is in the process of being updated. As such, the information included is from the Draft 2019 Noise Section (City of Long Beach 2019). The Noise Element includes a table displaying vibration damage criteria (Table N-1) and a land use compatibility matrix for noise exposure and construction vibration criteria (Table N-2) and sets forth strategies and policies related to land use compatibility, construction noise, and noise management designed to guide to reduce noise and ensure noise compatibility with existing land uses.

**Table N-1: Construction Vibration Damage Criteria**

Building Category	PPV (in/sec)	Approximate L <sub>v</sub> (VdB) <sup>1</sup>
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: Table 12-3, Transit Noise and Vibration Impact Assessment (FTA 2006).

<sup>1</sup> RMS VdB re 1 microinches per second ( $\mu\text{in}/\text{sec}$ ).

$\mu\text{in}/\text{sec}$  = microinches per second; FTA = Federal Transit Administration; in/sec = inches per second; LV = velocity in decibels; PPV = peak particle velocity; RMS = root-mean-square; VdB = vibration velocity in decibels

**Table N-2: Land Use Compatibility Matrix for Noise Exposure**

Land Use Category	Community Noise Exposure L <sub>dn</sub> or CNEL, dB						
	55	60	65	70	75	80	85
Residential – Low Density Single Family Duplex, Mobile Homes	Compatible	Compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Residential – Multi-Family	Compatible	Compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Transient Lodging – Hotels, Motels	Compatible	Compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Schools, Libraries, Churches, Hospitals, Nursing Homes	Compatible	Compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Auditoriums, Concert Halls, Amphitheaters	Compatible	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Sports Arenas, Outdoor Spectator Sports	Compatible	Compatible	Compatible	Compatible	Compatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Playgrounds, Neighborhood Parks	Compatible	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Compatible	Compatible	Compatible	Compatible	Compatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Office Buildings – Business, Commercial & Professional	Compatible	Compatible	Compatible	Compatible	Compatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Industrial, Manufacturing, Utilities, Agriculture	Compatible	Compatible	Compatible	Compatible	Compatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible

Land Use Category	Community Noise Exposure $L_{dn}$ or CNEL, dB						
	55	60	65	70	75	80	85
Normally Acceptable	<i>Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</i>						
Conditionally Unacceptable	<i>New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.</i>						
Normally Unacceptable	<i>New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.</i>						
Clearly Unacceptable	<i>New construction or development should generally not be undertaken.</i>						
<i>Source: California Office of Planning and Research, General Plan Guidelines (2017), Appendix D.</i>							

**Strategy No. 1:** Apply site planning and other design strategies to reduce noise impacts, especially within the Founding and Contemporary Neighborhoods, Multifamily Residential—Low and Moderate, and Neighborhood Serving Centers and Corridors – Low and Moderate Place Types.

- **Policy N 1-1:** Integrate noise considerations into the land use planning process in order to prevent new land use noise conflicts.
- **Policy N 1-2:** Require noise attenuation measures to be incorporated into all development and redevelopment of noise sensitive uses, including residential, health care facilities, schools, libraries, senior facilities, and churches in close proximity to existing or known planned rail lines.
- **Policy N 1-3:** Ensure development and redevelopment is considerate of the natural topography of a site in order to reduce noise impacts.
- **Policy N 1-4:** Encourage developers or landowners to incorporate noise reduction features in the site planning process.
- **Policy N 1-5:** Incorporate urban design strategies such as courtyards, paseos, alleys, plazas and open space areas to provide a buffer to noise sensitive uses.
- **Policy N 1-6:** Ensure that project site planning, design, and function minimize the potential adverse impacts of noise.
- **Policy N 1-7:** Encourage educational facilities to locate playgrounds, sports fields, and other outdoor activity areas away from residential areas.
- **Policy N 1-8:** Require new development to provide facilities which support the use of alternative transportation modes, including, walking, bicycling, carpooling and, transit.
- **Policy N 1-9:** Utilize noise barriers after all practical design-related noise measures have been integrated into the project. In instances where sound walls are necessary, they should be incorporated into the architectural and site character of the development and pedestrian access should be integrated.

**Strategy No. 12:** Minimize construction noise and vibration levels in residential areas and in other locations near noise sensitive uses, where possible.

- **Policy N 12-1:** Reduce construction, maintenance, and nuisance noise at the source, when possible, to reduce noise conflicts.

- **Policy N 12-2:** Continue to limit the allowable hours for construction activities and maintenance operations near sensitive uses.
- **Policy N 12-3:** As part of the City’s Municipal Code, establish noise levels standards based on Place, Type and time of day, to which construction noise shall conform.
- **Policy N 12-4:** Encourage off-site fabrication to reduce needed onsite construction activities and corresponding noise levels and duration.
- **Policy N 12-5:** Require that all construction activities incorporate best business practices, such as:
  - Schedule high-noise and vibration-producing activities to a shorter window of time during the day outside early morning hours to minimize disruption to sensitive uses.
  - Grading and construction contractors should use equipment that generates lower noise and vibration levels, such as rubber-tired equipment rather than metal-tracked equipment.
  - Construction haul truck and materials delivery traffic should avoid residential areas whenever feasible.
  - The construction contractor should place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible.
  - The construction contractor should use on-site electrical sources to power equipment rather than diesel generators, where feasible.
  - All residential units located within 500 ft of a construction site should be sent a notice regarding the construction schedule. A sign legible at a distance of 50 ft should also be posted at the construction site. All notices and the signs should indicate the dates and durations of construction activities, as well as provide a telephone number for a “noise disturbance coordinator.”
  - A “noise disturbance coordinator” should be established by the project developer. The disturbance coordinator should be responsible for responding to any local complaints about construction noise. The disturbance coordinator should determine the cause of the noise complaint (e.g., starting too early, bad muffler) and should be required to implement reasonable measures to reduce noise levels.
- **Policy N 12-6:** Continue to provide information bulletins dispersing information on municipal code requirements and recommended best practices.
- **Policy N 12-7:** Work together with the AQMD to encourage the retirement of older construction equipment in favor of newer, quieter, and less polluting equipment.

## City of Los Angeles

### *City of Los Angeles Municipal Code (2020)*

#### *Construction*

Section 41.40, Noise Due to Construction, Excavation Work, prohibits construction and excavation activities:

- (a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power driven drill, riveting

- machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified....
- (b) The provisions of Subsection (a) shall not apply to any person who performs the construction, repair or excavation work involved pursuant to the express written permission of the Board of Police Commissioners through its Executive Director....
- (c) No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair or servicing of construction equipment and the jobsite delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specified. The provisions of this subsection shall not apply to persons engaged in the emergency repair of:
1. Any building or structure,
  2. Earth supporting or endangering any building or structure,
  3. Any public utility, or
  4. Any public way or adjacent earth.

### *Operations*

Section 112.02 regulates noise from stationary noise sources such as air conditioning/heating, refrigeration, and pumps:

- (a) It shall be unlawful for any person, within any zone of the city to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, to exceed the ambient noise level by more than five (5) decibels

Section 116.01 regulates loud, unnecessary, or unusual noise:

Notwithstanding any other provisions of this chapter and in addition thereto, it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary, and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standard which may be considered in determining whether a violation of the provisions of this section exists may include, but not be limited to, the following:

- (a) The level of noise;
- (b) Whether the nature of the noise is usual or unusual;
- (c) Whether the origin of the noise is natural or unnatural;
- (d) The level and intensity of the background noise, if any;
- (e) The proximity of the noise to residential sleeping facilities;
- (f) The nature and zoning of the area within which the noise emanates;

- (g) The density of the inhabitation of the area within which the noise emanates;
- (h) The time of the day and night the noise occurs;
- (i) The duration of the noise;
- (j) Whether the noise is recurrent, intermittent, or constant; and
- (k) Whether the noise is produced by a commercial or noncommercial activity.

Section 112.05 defines the maximum noise level of powered equipment or powered hand tools.

Between the hours of 7:00 a.m. and 10:00 p.m., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

- (a) 75dB(A) for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;
- (b) 75dB(A) for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;
- (c) 65dB(A) for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors;

The noise limits for particular equipment listed above in (a), (b) and (c) shall be deemed to be superseded and replaced by noise limits for such equipment from and after their establishment by final regulations adopted by the Federal Environmental Protection Agency and published in the Federal Register.

Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.

### ***City of Los Angeles CEQA Threshold Guide***

The City of Los Angeles CEQA Threshold Guide (2006) includes screening processes for project construction and operations.

#### ***Construction***

##### **1. INITIAL STUDY SCREENING PROCESS**

##### **C. Screening Criteria**

- Would construction activities occur within 500 feet of a noise sensitive use?
- For projects located within the City of Los Angeles, would construction occur between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at anytime on Sunday?

A “yes” response to any of the preceding questions indicates further study in an expanded Initial Study, Negative Declaration, Mitigated Negative Declaration, or EIR may be required. Refer to the Significance Threshold for Construction Noise and review the associated Methodology to Determine Significance, as appropriate.



A “no” response to all of the preceding questions indicates that there would normally be no significant impact from the proposed project.

#### **D. Evaluation of Screening Criteria**

Review the description of the proposed project, including information on construction activities. Consult a map showing the location of noise sensitive uses within 500 feet of the project site. Noise sensitive uses include residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. Determine whether construction activities would occur within 500 feet of a noise sensitive use or during the hours specified in the Screening Criteria.

### **2. DETERMINATION OF SIGNIFICANCE**

#### **A. Significance Threshold**

A project would normally have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use;
- Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or
- Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday.

#### *Operations*

### **1. INITIAL STUDY SCREENING PROCESS**

#### **C. Screening Criteria**

- Would the proposed project introduce a stationary noise source likely to be audible beyond the property line of the project site?
- Would the project include 75 or more dwelling units, 100,000 square feet (sf) or greater of nonresidential development or have the potential to generate 1,000 or more average daily vehicle trips?

A “yes” response to any of the preceding questions indicates further study in an expanded Initial Study, Negative Declaration, Mitigated Negative Declaration, or EIR may be required. Refer to the Significance Threshold for Operational Noise, and review the associated Methodology to Determine Significance, as appropriate.

A “no” response to all of the preceding questions indicates that there would normally be no significant impact from Operational Noise from the proposed project.

#### **D. Evaluation of Screening Criteria**

Review the description of the proposed project and the project traffic study to determine the size of each land use involved, information on stationary noise sources such as machinery or motorized equipment, and the vehicle trips that would be generated by the project. L.1. INTERSECTION CAPACITY explains how to calculate the number of average daily vehicle trips.

Determine the noise level from stationary sources at the property line by evaluating the decibel output of each source, the distance to the property line and the path over which the sound travels. Use an applicable noise model, as needed. In general, at a distance of 50 feet from the source over a hard surface, the decibel level decreases by 3 dBA, and over a soft surface (such as grass) the

decibel level decreases by 4.5 dBA. For every doubling of distance thereafter, noise levels drop another 3 dBA over a hard surface and 4.5 dBA over a soft surface.

## 2. DETERMINATION OF SIGNIFICANCE

A project would normally have a significant impact on noise levels from project operations if the project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the “normally unacceptable” or “clearly unacceptable” category, or any 5 dBA or greater noise increase (see the chart below).

Land Use	Community Noise Exposure (CNEL, dB)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Single-Family, Duplex, Mobile Homes	50-60	55-70	70-75	above 70
Multi-Family Homes	50-65	60-70	70-75	above 70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	above 80
Transient Lodging – Motels, Hotels	50-65	60-70	70-80	above 80
Auditoriums, Concert Halls, Amphitheaters	--	50-70	--	above 65
Sports Arena, Outdoor Spectator Sports	--	50-75	--	above 70
Playgrounds, Neighborhood Parks	50-70	--	67-75	above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-75	--	70-80	above 80
Office Buildings, Business and Professional Commercial	50-70	67-77	above 75	--
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	above 75	--

**Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

**Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

**Normally Unacceptable:** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**Clearly Unacceptable:** New construction or development should generally not be undertaken.

Source: California Department of Health Services (DHS).

### **City of Los Angeles General Plan**

The *City of Los Angeles General Plan* includes two objectives and policies (Chapter III) related to non-airport noise and land use compatibility as well as 14 implementation processes (Chapter IV) related to land use compatibility and reducing noise (City of Los Angeles 1999).

#### **Objective 2 (Nonairport)**

Reduce or eliminate nonairport related intrusive noise, especially relative to noise sensitive uses.

**Policy**

- 2.2 Enforce and/or implement applicable city, state and federal regulations intended to mitigate proposed noise producing activities, re-duce intrusive noise and alleviate noise that is deemed a public nuisance. (P5 through P10)
- P5** Continue to enforce, as applicable, city, state and federal regulations intended to abate or eliminate disturbances of the peace and other intrusive noise.
- P8** Continue to periodically update guidelines for California Environmental Quality Act-required land development project review by city agencies.

**Objective 3 (Land Use Development)**

Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.

**Policy**

- 3.1 Develop land use policies and programs that will reduce or eliminate potential and existing noise impacts. (P11 through P18)
- P11** For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses, as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures. Examples of mitigation measures to consider:
- (a) increase the distance from the noise source and the receptor by providing land use buffers, e.g., parking lots, landscaped setbacks or open areas, utility yards, maintenance facilities, etc.;
  - (b) orient structures, use berms or sound walls, utilize terrain or use other means to block or deflect noise, provided it is not deflected to other noise-sensitive uses and that the barrier does not create a hiding place for potential criminal activity;
  - (c) require projects with noise generating components (e.g., auto repair and maintenance facilities) to have no openings in building walls that face sensitive uses;
  - (d) limit the hours of operation of a noise generating use;
  - (e) limit the use of the site to prohibit potential noise generating uses that otherwise are allowed by right within the zone classification of the project site;
  - (f) require that potential noise impacts associated with project construction be minimized by such measures as designating haul routes, re-quiring less noisy equipment, enclosing or orienting noisy equipment (e.g., electrical generators) away from noise sensitive uses, imposing construction hours that are more re-strictive than those set forth in the Los Angeles Municipal Code, requiring vehicle parking and deployment activities to be separated and buffered from sensitive uses; or
  - (g) determine impacts on noise sensitive uses, such as public school classrooms, which are active primarily during the daytime and evening hours, by weighting the impact measurement to the potential interior noise level (or for exterior uses, e.g., outdoor theaters, to the exterior noise level) over the typical hours of use, in-stead of using a 24-hour measurement.
  - (h) other appropriate measures.
- P13** Continue to plan, design and construct or oversee construction of public projects, and projects on city owned properties, so as to minimize potential noise impacts on noise

sensitive uses and to maintain or reduce existing ambient noise levels. Examples of noise management strategies to consider:

- (a) site or alignment selection to minimize potential noise incompatibility;
- (b) orientation of noise sources away from noise sensitive uses;
- (c) placement of structures between noise generators and noise sensitive receptors;
- (d) enclosure of noise sources;
- (e) erection of sound walls, berms or other noise buffers or deflectors, providing that they do not deflect sound to other noise sensitive uses and that the barrier does not create a hiding place for potential criminal activity;
- (f) restricted hours of operation;
- (g) modification of noise sources (e.g., utilizing less noisy equipment); or
- (h) determine impacts on noise sensitive uses, such as public school classrooms, which are active primarily during the daytime and evening hours, by weighting the impact measurement to the potential interior noise level (or for exterior uses, e.g., outdoor theaters, to the exterior noise level) over the typical hours of use, in-stead of using a 24-hour measurement.
- (i) other appropriate measures.

**P14** Continue to periodically update general plan public facilities and utilities elements, taking into account existing and potential noise impacts.

**P15** Continue to take into consideration, during updating/revision of the city's general plan community plans, noise impacts from freeways, highways, outdoor theaters and other significant noise sources and to incorporate appropriate policies and programs into the plans that will enhance land use compatibility.

**P16** Use, as appropriate, the "Guidelines for Noise Compatible Land Use" (Exhibit I),<sup>1</sup> or other measures that are acceptable to the city, to guide land use and zoning reclassification, subdivision, conditional use and use variance determinations and environmental assessment considerations, especially relative to sensitive uses, as defined by this chapter, within a CNEL of 65 dB airport noise exposure areas and within a line-of-sight of freeways, major high-ways, railroads or truck haul routes.

#### Exhibit I: Guidelines for Noise Compatible Land Use<sup>1</sup>

Land Use Category	Day-Night Average Exterior Sound Level (CNEL dB)						
	50	55	60	65	70	75	80
Residential Single Family, Duplex, Mobile Home	A	C	C	C	N	U	U
Residential Multi-Family	A	A	C	C	N	U	U
Transient Lodging, Motel, Hotel	A	A	C	C	N	U	U
School, Library, Church, Hospital, Nursing Home	A	A	C	C	N	N	U
Auditorium, Concert Hall, Amphitheater	C	C	C	C/N	U	U	U
Sports Arena, Outdoor Spectator Sports	C	C	C	C	C/U	U	U

Land Use Category	Day-Night Average Exterior Sound Level (CNEL dB)						
	50	55	60	65	70	75	80
Playground, Neighborhood Park	A	A	A	A/N	N	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	N	A/N	U
Office Building, Business, Commercial, Professional	A	A	A	A/C	C	C/N	N
Agriculture, Industrial, Manufacturing, Utilities	A	A	A	A	A/C	C/N	N

<sup>1</sup> Based on the Governor's Office of Planning and Research, *General Plan Guidelines*, 1990. To help guide determination of appropriate land use and mitigation measures vis- a-vis existing or anticipated ambient noise levels.

A = Normally acceptable. Specified land use is satisfactory, based upon assumption buildings involved are conventional construction, without any special noise insulation.

C = Conditionally acceptable. New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning normally will suffice.

N = Normally unacceptable. New construction or development generally should be discouraged. A detailed analysis of noise reduction requirements must be made and noise insulation features included in the design of a project.

U = Clearly unacceptable. New construction or development generally should not be undertaken.

## Frame 2

### City of Long Beach

Applicable regulations are described above.

### City of Los Angeles

Applicable regulations are described above.

### City of Carson

#### *City of Carson Municipal Code*

##### *Construction*

The City of Carson (2007) has adopted the Los Angeles County Code (Section 12.08.440 Construction Noise) included below. However, the County's Code has been amended by the City of Carson as follows:

#### **Section 5502 Amendments to Noise Control Ordinance**

(c) By amending subsection B1 of Section 12.08.440 to read:

12.08.440B1. Noise Restrictions at Affected Structures. The contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in the following schedule:

1. At Residential Structures.

- a. Mobile Equipment. Maximum noise levels for Non-scheduled, intermittent, short-term operation of twenty (20) days or less for construction equipment:
- a) Maximum noise levels for non-scheduled, intermittent, short-term operations of twenty (20) days or less for construction equipment:

	<b>Single-Family Residential</b>	<b>Multi-Family Residential</b>
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75 dBA	80 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60 dBA	64 dBA

- b) Maximum noise level for repetitively scheduled and relatively long-term operation of twenty-one (21) days or more for construction equipment:

	<b>Single-Family Residential</b>	<b>Multi-Family Residential</b>
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	65 dBA	70 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	55 dBA	60 dBA

### *Operation*

The City of Carson (2007) has adopted the Los Angeles County Code for operations included below. However, the County Code (Section 12.08.390 - Exterior noise standards—Citations for violations authorized when) has been amended as follows:

12.08.390B. Unless otherwise herein provided, no person shall operate or cause to be operated, any source of sound at any location within the unincorporated county, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level, when measured on any other property either incorporated or unincorporated, to exceed any of the following exterior noise standards:

Standard No. 1 – shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any 30-minute period. Standard No. 1 shall be the applicable noise level from subsection A of this Section; or, if the ambient L50 exceeds the foregoing level, then the ambient L50 becomes the exterior noise level for Standard No. 1.

Standard No. 2 – shall be the exterior noise level which may not be exceeded for a cumulative period of more than 7.5 minutes in any 30-minute period. Standard No. 2 shall be the applicable noise level from subsection A of this Section plus 5dB; or, if the ambient L25 exceeds the foregoing level, then the ambient L25 becomes the exterior noise level for Standard No. 2.

Standard No. 3 – shall be the exterior noise level which may not be exceeded for a cumulative period of more than 2.5 minutes in any 30-minute period. Standard No. 3 shall be the applicable noise level from subsection A of this Section plus 20dB; or, if the ambient L8.3 exceeds the foregoing level, then the ambient L8.3 becomes the exterior noise level for Standard No. 3.

Standard No. 4 – shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 seconds in any 30-minute period. Standard No. 4 shall be the applicable noise level from subsection A of this Section plus 15dB; or, if the ambient L1.7 exceeds the foregoing level, then the ambient L1.7 becomes the exterior noise level for Standard No. 4.

Standard No. 5 – shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from subsection A of this Section plus 20dB; or, if

the ambient L0 exceeds the foregoing level then the ambient L0 becomes the exterior noise level for Standard No. 5.

### **City of Carson General Plan**

The *Carson General Plan* includes the City of Carson's Noise and Land Use Compatibility Matrix, Interior and Exterior Noise Standards, and Noise Ordinance Standards (included below), as well as goals, objectives, and policies included in Chapter 4 (City of Carson 2004).

**Table N-2  
Noise and Land Use Compatibility Matrix**

<b>Land Use Category</b>	<b>Community Noise Exposure L<sub>dn</sub> or CNEL, dB</b>			
	<b>Normally Acceptable</b>	<b>Conditionally Acceptable</b>	<b>Normally Unacceptable</b>	<b>Clearly Unacceptable</b>
Residential-Low Density	50-60	60-65	65-75	75-85
Residential-Multiple Family	50-60	60-65	65-75	75-85
Transient Lodging-Motel, Hotels	50-65	65-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-65	65-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-65	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50-70	NA	70-85
Playgrounds, Neighborhood Parks	50-70	NA	70-75	75-85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	80-85
Office Buildings, Business Commercial and Professional	50-67.5	67.5-75	75-85	NA
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-75	75-85	NA

Source: Modified from U.S. Department of Housing and Urban Development Guidelines and State of California Standards.

**NOTES: NORMALLY ACCEPTABLE**

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

**CONDITIONALLY ACCEPTABLE**

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

**NORMALLY UNACCEPTABLE**

New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**CLEARLY UNACCEPTABLE**

New construction or development should generally not be undertaken.  
 NA: Not Applicable

**Table N-3  
 Interior and Exterior Noise Standards**

Land Use Categories		CNEL	
Categories	Uses	Interior <sup>1</sup>	Exterior <sup>2</sup>
Residential	Single family Duplex, Multiple Family	45-55	50-60
	Mobile Home	45	65
Commercial Industrial Institutional	Hotel, Motel, Transient Lodging	45	--
	Commercial Retail, Bank, Restaurant	55	--
	Office Building, Research and Development, Professional Offices, City Office Building	50	--
	Amphitheater, Concert Hall, Auditorium, Meeting Hall	45	--
	Gymnasium (Multipurpose)	50	--
	Sports Club	55	--
	Manufacturing, Warehousing, Wholesale, Utilities	65	--
	Movie Theaters	45	--
Institutional	Hospital, Schools' Classrooms	45	65
	Church, Library	45	--
Open Space	Parks	--	65

NOTES:

- <sup>1</sup> Indoor environmental including: Bedrooms, living areas, bathrooms, toilets, closets, corridors.
- <sup>2</sup> Outdoor environment limited to: Private yard of single family  
 Multi-family private patio or balcony which is served by a means of exit from inside the dwelling  
 Balconies 6 feet deep or less are exempt Mobile home park  
 Park's picnic area School's playground
- <sup>3</sup> Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
- <sup>4</sup> Exterior noise levels should be such that interior noise levels will not exceed 45 CNEL.

**Table N-4  
 Noise Ordinance Standards**

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval (dB)	Exterior Noise Level	Interior Noise Level
I	Noise Sensitive-Area	Anytime	45	--
II	Residential Properties	10:00 p.m. to 7:00 a.m. (nighttime)	45	--
		7:00 a.m. to 10:00 p.m. (daytime)	50	--



III	Commercial Properties	10:00 p.m. to 7:00 a.m. (nighttime)	55	--
		7:00 a.m. to 10:00 p.m. (daytime)	60	--
IV	Industrial Properties	Anytime	70	--
All Zones	Multi-family	10:00 p.m.–7:00 a.m.	--	40
	Residential	7:00 a.m.–10:00 p.m.	--	45

Source: Section 12.08.490 and 12.08.400 in County of County of Los Angeles County Code. Nov. 2001.

- **Goal N-1:** Maximize efficiency in noise abatement efforts through clear and effective policies, plans and ordinances
  - **Policy N-1.1:** Continue to implement the City's Noise Ordinance and Noise Control Program.
- **Goal N-2:** Minimize noise impacts on residential uses and noise sensitive receptors along the City's streets, ensuring that the City's interior and exterior noise levels are not exceeded.
  - **Policy N-2.1:** Limit truck traffic to specific routes and designated hours of travel, where necessary, as defined in the Transportation and Infrastructure Element and by the City's Development Services Group. Said routes and hours shall be reviewed periodically to ensure the protection of sensitive receptors and residential neighborhoods.
  - **Policy N-2.5:** Discourage through traffic in residential neighborhoods.
- **Goal N-7:** Incorporate noise considerations into land use planning decisions.
  - **Policy N-7.1:** Incorporate noise considerations into land use planning decisions by establishing acceptable limits of noise for various land uses throughout the community.
  - **Policy N-7.2:** Continue to incorporate noise assessments into the environmental review process, as needed. Said assessments shall identify potential noise sources, potential noise impacts, and appropriate sound attenuation. In non-residential projects, potential noise sources shall include truck pick-up and loading areas, locations of mechanical and electrical equipment, and similar noise sources. Require mitigation of all significant noise impacts as a condition of project approval.
  - **Policy N-7.4:** Ensure acceptable noise levels near schools, hospitals, convalescent homes, churches, and other noise sensitive areas in accordance with Table N-2. To this end, require buffers or appropriate mitigation of potential noise sources. Such sources include, but are not limited to truck pickup and loading areas, mechanical and electrical equipment, exterior speaker boxes, and public address systems.
  - **Policy N-IM-7.1:** Adopt the noise standards presented in Table N-2, Noise and Land Use Compatibility Matrix, which identify interior and exterior noise standards in relation to specific land uses.
  - **Policy N-IM-7.2:** Ensure that the noise standards fully integrate noise considerations into land use planning decisions to prevent new noise/land use conflicts. Use the criteria of Table N-2.

**City of Compton**

**City of Compton Municipal Code**

*Construction*

The Compton Municipal Code Section 7-12.22 (City of Compton 1985) restricts construction, including the use of pile drivers, hoists, steam shovels, etc., such that,

No person shall cause or permit any work to be done or do any work on the erection (including excavation), unless the noise caused thereby is confined within a building, or use any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist, unless the noise caused thereby is confined within a building, other than between the hours of 7:00 a.m. and 7:00 p.m. on Monday through Saturday, except in cases of urgent necessity in the interest of public health and safety and then only with a permit from the Building Official. No such permit shall be granted for a period of more than three (3) days but may be renewed from time to time so long as the emergency exists.

*Operation*

The Compton Municipal Code Section 7-12.4, Presumed Ambient Noise Level, provides the following.

When “ambient noise level is referred to in this section, it shall mean the higher of the following (1) actual ambient noise level, or (2) presumed ambient noise level as determined from the chart below.

Zone	Time	Sound Level A, Decibels Community Environment Classification				
		Very Quiet		Quiet	Slightly Noisy	
		Rural	Suburban	Suburban	Suburban	Urban
R1 and R2	10:00 p.m. to 7:00 a.m.	35	50	40	55	45
R1 and R2	7:00 p.m. to 10:00 p.m.	40	55	45	60	50
R1 and R2	7:00 a.m. to 7:00 p.m.	45	65	50	65	55
R3 and R4	10:00 p.m. to 7:00 a.m.	40	70	45	70	50
R3 and R4	7:00 a.m. to 10:00 p.m.	45		50		55
Commercial	10:00 p.m. to 7:00 a.m.					
Commercial	7:00 a.m. to 10:00 p.m.					
M1	Anytime					
M2	Anytime					

The Compton Municipal Code Section 7-12.11 (City of Compton 1985) restricts machinery, equipment, fans, and air conditioners.

It shall be unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus or similar mechanical device in any manner so as to create any noise which

would cause the noise level at the property line of any property to exceed the ambient noise level by more than five (5) decibels. For the purposes of this section, 'noise level' shall mean measured sound level with the following values added as corrections for time duration and character of the noise:

- a. Add one and only one of the following corrections for time duration:
  1. Noise persists for more than five minutes out of any one hour.
  2. Noise persists for more than one minute but not more than five minutes out of any one hour.
  3. Noise persists for one minute or less out of any one hour.
- b. Add one and only one of the following corrections for unusual character:
  1. Noise has no unusual character.
  2. Noise contains a piercing pure tone.
  3. Noise is impulsive or rattling in nature.
  4. Noise carries speech, music or other information content.

### ***City of Compton General Plan***





The *Draft Compton General Plan 2030* includes the City of Compton's Noise and Land Use Compatibility Matrix, Interior and Exterior Noise Standards, and Noise Ordinance Standards (included below), as well as goals and policies (City of Compton 2011).

- **Noise Goal 2.** Incorporate noise considerations into land use planning decisions.
  - **Noise Policy 2.1.** The City of Compton will require noise studies for new development projects and expansion of existing developments that will result in construction activities in excess of 30 days or projects that are 5,000 square feet or more of building or structure area or fifteen units or more, to measure and propose mitigation measures for noise impacts on the nearby community, especially on existing noise-sensitive land uses.
- **Noise Goal 3.** Control non-transportation noise impacts.
  - **Noise Policy 3.1.** The City of Compton will enforce the State standard of 65 dbA for exterior noise levels for all commercial uses.
  - **Noise Policy 3.3.** The City of Compton will require sound attenuation devices on construction equipment.
- **Noise Goal 3.** Control non-transportation noise impacts.
  - **Noise Policy 3.1.** The City of Compton will enforce the State standard of 65 dbA for exterior noise levels for all commercial uses.
  - **Noise Policy 3.3.** The City of Compton will require sound attenuation devices on construction equipment.

Exhibit 7-3 from the *Draft Compton General Plan 2030* presents the city's land use compatibility standards for community noise environments.

## EXHIBIT 7-3 STATE OF CALIFORNIA RECOMMENDED LAND USE COMPATIBILITY STANDARDS

SOURCE: STATE OF CALIFORNIA

Land Use Categories		Community Noise Equivalent Level (in dBA, CNEL)					
		<55	60	65	70	75	80>
Residential	Single-family, Duplex, Multiple-family	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	Mobile Homes, Mixed Use	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
Commercial	Hotel, Motel, Other Lodging	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	General Commercial, Retail	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	Office	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
Industrial	Business Park, Research & Development	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	Manufacturing, Warehousing	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
Institutional	Hospitals, Schools, Libraries	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	Churches, Civic Uses	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
Recreation and Open Space	Public Parks	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	Golf Course, Natural Habitat	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	Commercial Recreation	Light Blue	Light Blue	Yellow	Orange	Red	Dark Red
	<b>CLEARLY COMPATIBLE</b>	Ambient noise levels are not significant enough to require special construction and/or noise mitigation.					
	<b>NORMALLY COMPATIBLE</b>	Most land uses will not be affected by ambient noise. Some form of design measures and/or mitigation may be required for noise sensitive land uses.					
	<b>CLEARLY INCOMPATIBLE</b>	Noise sensitive land uses should not be located in these areas unless mitigation is employed to reduce interior noise levels.					
	<b>NORMALLY INCOMPATIBLE</b>	Noise sensitive land uses should not be located in these areas due to excessive and continuous high ambient noise.					

The Compton Municipal Code (City of Compton 1985) regulates noise levels in the city by referencing the Los Angeles County Noise Control Ordinance. The code makes it unlawful for any person to make or cause any loud, unnecessary, and unusual noise that disturbs the peace or quiet of any neighborhood or causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standard that may be referred to in determining whether a violation exists may include, but not be limited to, the following: the level of noise; whether the nature of the noise is usual or unusual; the level and intensity of any background noise; the proximity of the noise to residential sleeping facilities; the nature and zoning of the area within which the noise emanates; the time of the day or night the noise occurs; the duration of the noise; and whether the noise is recurrent, intermittent, or constant.

**Unincorporated County**

**Los Angeles County Code**

*Construction*

The Los Angeles County Code Part 4 section 12.08.440 restricts construction noise (Los Angeles County 1978).

12.08.440 - Construction noise.

A. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited.

B. Noise Restrictions at Affected Structures. The contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in the following schedule:

i. At Residential Structures.

a. Mobile Equipment. Maximum noise levels for nonscheduled, intermittent, short- term operation (less than 10 days) of mobile equipment:

	<b>Single-family residential</b>	<b>Multi-family residential</b>	<b>Semiresidential/ Commercial</b>
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75 dBA	80 dBA	85 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA

b. Stationary Equipment. Maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:

	<b>Single-family residential</b>	<b>Multi-family residential</b>	<b>Semiresidential/ Commercial</b>
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60 dBA	65 dBA	70 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

C. All mobile or stationary internal-combustion-engine powered equipment or machinery to be equipped with suitable exhaust and air-intake silencers in proper working order.

Part 5 – EXEMPTIONS, Section 12.08.570 – Activities exempt from chapter restrictions, exemption H, Public Health and Safety Activities, states that:

All transportation, flood control, and utility company maintenance and construction operations at any time on public right-of-way, and those situations which may occur on private real property deemed necessary to serve the best interest of the public and to protect the public's health and well

being, including but not limited to street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, snow removal, house moving, vacuuming catchbasins, removal of damaged poles and vehicles, repair of water hydrants and mains, gas lines, oil lines, sewers, etc.

The Los Angeles County Code (Los Angeles County 1978) also specifies operating or permitting the operation of any device that creates vibration, which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hz (Los Angeles County Code, Section 12.08.560 Vibration (Ord. 11778 § 2 (Art. 5 § 501[d]), 1978; Ord. 11773 § 2 (Art. 5 § 501[d]), 1978).

### Operation

12.08.390 - Exterior noise standards—Citations for violations authorized when.

A. Unless otherwise herein provided, the following exterior noise levels shall apply to all receptor properties within a designated noise zone:

Noise Zone	Designated Noise Zone Land Use (Receptor property)	Time Interval	Exterior Noise Level (dB)
I	Noise- sensitive area	Anytime	45
II	Residential properties	10:00 p.m. to 7:00 a.m. (nighttime)	45
		7:00 a.m. to 10:00 p.m. (daytime)	50
III	Commercial properties	10:00 p.m. to 7:00 a.m. (nighttime)	55
		7:00 a.m. to 10:00 p.m. (daytime)	60
IV	Industrial properties	Anytime	70

B. Unless otherwise herein provided, no person shall operate or cause to be operated, any source of sound at any location within the unincorporated county, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level, when measured on any other property either incorporated or unincorporated, to exceed any of the following exterior noise standards:

- Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level from subsection A of this section; or, if the ambient L50 exceeds the foregoing level, then the ambient L50 becomes the exterior noise level for Standard No. 1.
- Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from subsection A of this section plus 5dB; or, if the ambient L25 exceeds the foregoing level, then the ambient L25 becomes the exterior noise level for Standard No. 2.
- Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable noise level from subsection A of this section plus 20dB; or, if the ambient L8.3 exceeds the foregoing level, then the ambient L8.3 becomes exterior noise level for Standard No. 3.
- Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level from subsection A of this section plus 15dB; or, if the ambient L1.7 exceeds the foregoing level, then the ambient L1.7 becomes the exterior noise level for Standard No. 4.

- Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from subsection A of this section plus 20dB; or, if the ambient L0 exceeds the foregoing level then the ambient L0 becomes the exterior noise level for Standard No. 5.
- C. If the measurement location is on a boundary property between two different zones, the exterior noise level utilized in subsection B of this section to determine the exterior standard shall be the arithmetic mean of the exterior noise levels in subsection A of the subject zones. Except as provided for above in this subsection C, when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level as designated in subsection A shall be the daytime exterior noise level for the subject receptor property.
- D. The ambient noise histogram shall be measured at the same location along the property line utilized in subsection B of this section, with the alleged intruding noise source inoperative. If for any reason the alleged intruding noise source cannot be turned off, the ambient noise histogram will be estimated by performing a measurement in the same general area of the alleged intruding noise source but at a sufficient distance such that the noise from the alleged intruding noise source is at least 10dB below the ambient noise histogram in order that only the actual ambient noise histogram be measured. If the difference between the ambient noise histogram and the alleged intruding noise source is 5 to 10dB, then the level of the ambient noise histogram itself can be reasonably determined by subtracting a one- decibel correction to account for the contribution of the alleged intruding noise source.
- E. In the event the intrusive exceeds the exterior noise standards as set forth in subsections B and C of this section at a specific receptor property and the health officer has reason to believe that this violation at said specific receptor property was unanticipated and due to abnormal atmospheric conditions, the health officer shall issue an abatement notice in lieu of a citation. If the specific violation is abated, no citation shall be issued therefor. If, however, the specific violation is not abated, the health officer may issue a citation.

### **Frame 3**

#### **City of Compton**

Applicable regulations are described above.

#### **Unincorporated County**

Applicable regulations are described above.

#### **City of Cudahy**

#### ***City of Cudahy Municipal Code***

#### *Operation*

20.60.070 Noise.

#### *C. Exterior noise standards.*

1. No person shall create or allow the creation of noise that causes the exterior noise level to exceed the noise standards set forth in Table 20.60-1.

**Table 20.60-1. Maximum Exterior Noise Standards**

<b>Noise Level (dBA L<sub>max</sub>)</b>		
<b>Receiving Land Use Category</b>	<b>10:00 p.m.–7:00 a.m.</b>	<b>7:00 a.m.–10:00 p.m.</b>
Residential (except multi-family)	45	65
Multi-family residential and mobile home parks	50	65
Commercial and mixed-use	60	65
Industrial	70	70

2. Increases in the allowable exterior noise levels listed in Table 20.60-1 may be permitted in accordance with the standards outlined in Table 20.60-2:

**Table 20.60-2. Permitted Increases in Noise Levels**

<b>Permitted Increase (dBA)</b>	<b>Duration (cumulative minutes per hour)</b>
5	15
10	5
15	1
20	Less than 1 minute

D. *Interior Noise Standards.*

1. No person shall operate, or cause to be operated, any source of sound within a residential dwelling unit or allow the creation of noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level, when measured inside a neighboring receiving dwelling unit, to exceed the environmental and/or nuisance interpretation of the applicable limits shown in Table 20.60-3:

**Table 20.60-3. Maximum Interior Noise Standards**

<b>Land Use Type</b>	<b>Time Period</b>	<b>Maximum Noise Level (dBA)</b>	
		<b>Any time</b>	<b>1 min./1 hr.</b>
Residential	10:00 p.m. to 7:00 a.m.	35	40
	7:00 a.m. to 10:00 p.m.	45	50
Mixed-use residential	All hours	45	50

20.60.090 Vibration.

- A. *No Detectable Vibration.* No vibration shall be detectable beyond the property line of the site from which the vibration is emanating. The ground vibration caused by moving vehicles, trains, aircraft, or temporary construction/demolition activity is exempted.

**City of Cudahy General Plan**

*Operations*

The *Cudahy 2040 General Plan* includes the City of Cudahy's Noise and Land Use Compatibility Matrix (included below), goals, policies, and implementation measures used to reduce noise impacts within the city (City of Cudahy 2018).



**Table NE-3: Cudahy Land Use Compatibility Standards for Community Noise Environments**

Land Use Category	Community Noise Equivalent (CNEL), dB						
	55	60	65	70	75	80	85
Low-Density Residential							
Medium-Density Residential							
High-Density Residential							
Mixed Use Districts (civic, commercial)							
Neighborhood Commercial							
Entertainment							
Innovation Industrial							
Light Industrial							
Schools and Public Facilities (outside of Mixed-Use Civic)							
Open Space/Parks/ Recreation							
Key							
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable			
	Specified land use is satisfactory, assuming buildings are of conventional construction	New development should be undertaken only after detailed analysis of noise reduction requirements are made	New development should be generally discouraged, if not, a detailed analysis of noise reduction requirements must be made	New development should generally not be undertaken			

- **Goal NE-1.** Protect noise sensitive uses.
  - **Policy NE 1.1:** Limit hours of operation at all noise generation sources adjacent to noise sensitive areas or uses.
  - **Policy NE 1.2:** Require all exterior noise sources (construction operations air compressors, pumps, fans, and leaf blowers) to use available noise suppression techniques and devices to lower exterior noise to acceptable levels which are compatible with adjacent land uses.
- **Goal NE-2.** Clear and enforced noise regulations.
  - **Policy NE 2.5:** Require noise created by new non-transportation noise sources to be mitigated so as not to exceed acceptable interior and exterior noise level standards.
  - **Policy NE 2.6:** Implement appropriate standard construction noise controls for all construction projects.

## City of Downey

### *City of Downey Municipal Code*

#### *Construction*

The Downey Municipal Code Section 4606.5 exempts construction noise from the noise requirements of the municipal code (City of Downey 2020):

Construction, repair or remodeling equipment and devices and other related construction noise sources shall be exempted from the provisions of this chapter provided a valid permit for such construction, repair, or remodeling shall have been obtained from the City. In any circumstance other than emergency work, no repair or remodeling shall take place between the hours of 9:00 p.m. of one day and 7:00 a.m. of the following day, and no repair or remodeling shall exceed eighty-five (85) db(A) across any property boundary at any time during the course of a twenty-four (24) hour day.

#### *Operation*

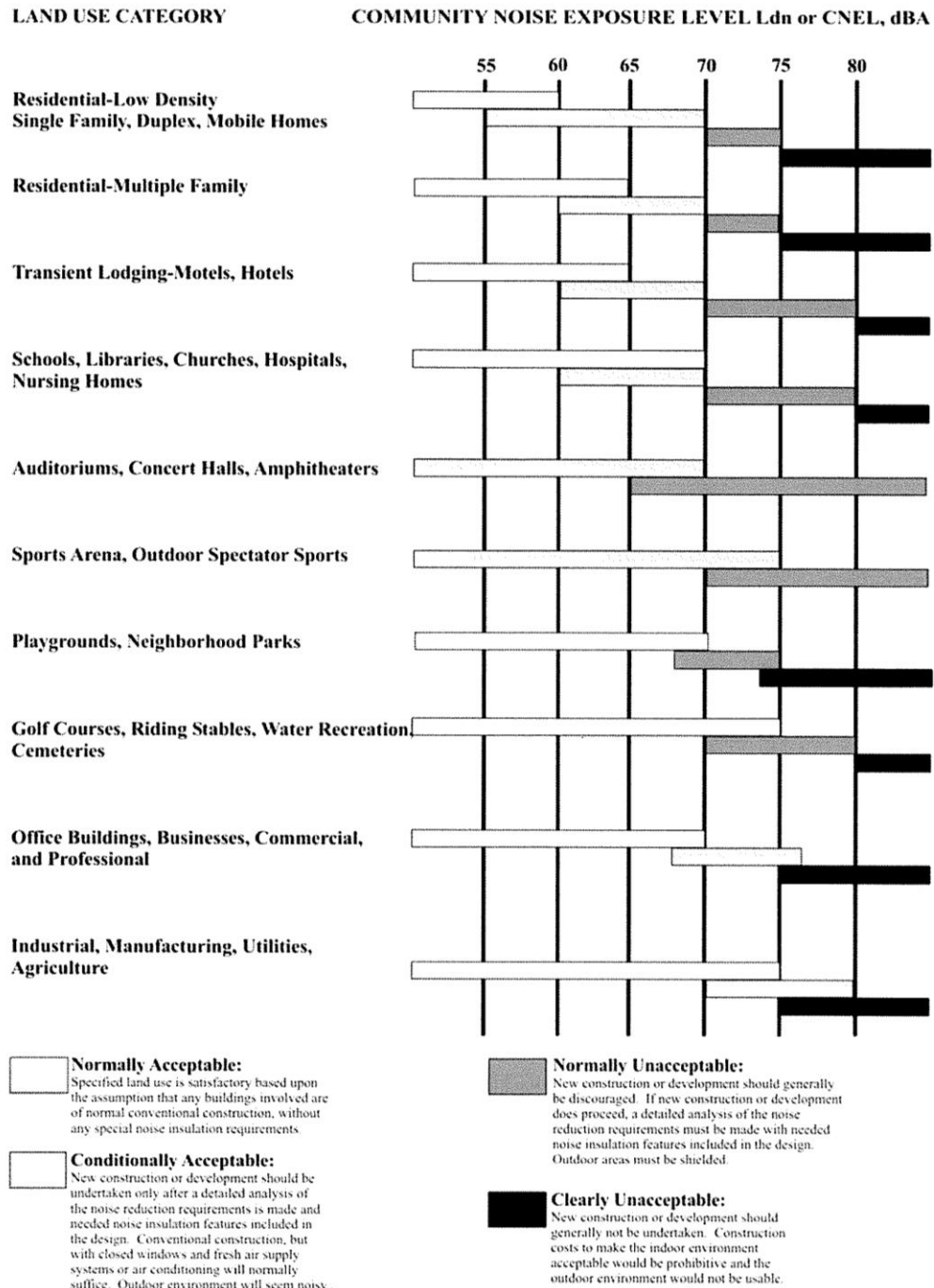
The Downey Municipal Code Section 4606.2 restricts noise from equipment and machinery (City of Downey 2020):

- (a) No person shall use, operate, or permit to be used or operated within any R-1, R-2, or R-3 Zone, as defined in Chapter 1 of Article IX of this code, any power tool, machine, or equipment, or any other tool, machine, or equipment, between the hours of 10:00 p.m. and 7:00 a.m. in such a manner that the noise therefrom disturbs or interferes with the peace, comfort, or welfare of the neighboring inhabitants.
- (b) No person shall use, operate, or permit to be used or operated within any commercial (C) or manufacturing (M) Zone, as defined in Chapter 1 of Article IX of this code, which is within three hundred (300') feet of a residential use, any power tool, machine, or equipment, or any other tool, machine, or equipment, between the hours of 10:00 p.m. and 7:00 a.m. in such a manner that the noise therefrom disturbs or interferes with the peace, comfort, or welfare of the neighboring residential inhabitants. (Added by Ord. 323, adopted 12-12-66; renumbered by Ord. 393, adopted 4-12-71; amended by Ord. 508, adopted 6-22-76; amended by Ord. 08-1225, adopted 2-12-08)

**City of Downey General Plan**

The *Downey Vision 2025 General Plan* includes the City of Downey’s Noise and Land Use Compatibility Matrix and acceptable noise levels for land uses (included below), goals, policies, and programs designed to reduce noise within the city (City of Downey 2005).

**FIGURE 6-1.2  
NOISE/LAND USE COMPATIBILITY MATRIX**



Source: California Office of Noise Control

**FIGURE 6-1.3  
ACCEPTABLE NOISE LEVELS FOR LAND USES**

<b>Land Use</b>	<b>Interior</b>	<b>Exterior</b>
Residential	45 dB (A) and below	60 dB (A) and below
Schools, parks, and other non-residential noise-sensitive land uses	45 dB (A) and below	60 dB (A) and below
Commercial	65 dB (A) and below	--
Industrial	70 dB (A) and below	--

**NOTES:**

All noise levels are CNEL, Community Noise Equivalent Level.

Interior noise levels based on windows closed.

Exterior areas for residential limited to rear yards of single-family uses, and patios/balconies and common recreational areas of multiple-family uses. Exterior areas for schools limited to playgrounds areas, picnic areas, and other areas of frequent human use.

- **Goal 6.1:** Protect persons from exposure to excessive noise:
  - **Policy 6.1.1:** Minimize noise impacts onto noise-sensitive uses
- **Program 6.1.1.2:** Ensure that new developments within areas with exterior noise at unacceptable levels are designed to maintain interior noise levels at acceptable levels.
- **Program 6.1.1.3:** Continue to enforce provisions prohibiting construction activities during noise-sensitive hours.

## **City of Lynwood**

### ***City of Lynwood Municipal Code***

#### *Construction*

The Lynwood Municipal Code Section 3-12.13, Construction of Buildings and Projects, limits noise from the noise requirements of the municipal code (City of Lynwood 2018):

It shall be unlawful for any person within a residential zone, or within a radius of five hundred feet (500') therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of ten o'clock (10:00) P.M. of one day and seven o'clock (7:00) A.M. of the next day in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit therefor has been duly obtained from the director of development services or his or her designee. No permit shall be required to perform "emergency work" as defined in subsection 3-12.2 of this section.

#### *Operation*

The Lynwood Municipal Code Section 3-12.5, Ambient Noise Level, states (City of Lynwood 2018):

- (a) It is unlawful for any person within the city to make, cause, or allow to be produced noise which is received on property occupied by another person within the designated zone in excess of the following levels, except as expressly provided otherwise in this section:

### Standards

Zone	Day 7:00 a.m. to 7:00 p.m.	Evening 7:00 p.m. to 10:00 p.m.	Night 10:00 p.m. to 7:00 a.m.
R-1 and R-2	60	60	60
R-3	60	60	55
Commercial	65	65	60
Manufacturing	75	75	75

(b) At the boundary line between two (2) different zones, the noise level of the quieter zone shall be used. (Ord. #1570, §2)

#### ***City of Lynwood General Plan***

The *City of Lynwood General Plan* includes goals, policies, and implementation measures to manage noise within the city (City of Lynwood 2003).

- **Goal NOI-1.** Protect those living, working, and visiting the community from exposure to excessive noise.
  - **Policy NOI-1.3:** Protect Residential Areas: Ensure that exterior noise levels for dwellings in residential areas do not exceed exterior noise level of 65 dBA CNEL and interior noise levels of 45 dBA CNEL.
  - **Policy NOI-1.5:** Construction Noise: Provide guidelines to contractors for reducing potential noise impacts on surrounding land uses.

#### **City of Paramount**

##### ***City of Paramount Municipal Code***

##### *Construction*

The Paramount Municipal Code Section 45-7, Same – Sources of noise, states (City of Paramount 2004):

The provisions of this chapter shall apply to, but shall not be limited to, the control, use and operation of the following noise sources whose use, operation, work, employment or other action creates, maintains, permits or causes to be created or maintained, any excessive, unnecessary, unwanted or annoying noise, sound, cry or behavior which exceeds the noise standards as set forth in section 45-4, unless specifically exempted.

- (a) Construction equipment or work including but not limited to the operation, use or employment of pile drivers, hammers, saws, steam shovels, pneumatic hammers, drills, derricks, steam or electric hoists, motorized mechanical equipment or other similar construction equipment.
- (1) Exemption: Construction, repair or remodeling equipment and devices and other related construction noise sources shall be exempted from the provisions of this chapter provided a permit for such construction, repair or remodeling shall have been obtained for such construction, repair or remodeling from the building department of the city and the construction, repair or remodeling does not take place between the hours of 8:00 P.M. and 7:00 A.M.
  - (2) Exemption: Any construction, repair or remodeling necessary as defined as emergency work, machinery or vehicles. (Ord. No. 317)

### Operation

The Paramount Municipal Code 45-4, Noise Performance Standards, states (City of Paramount 2004):

The following noise standards, unless otherwise specifically indicated, shall apply to all property within their assigned noise zones and such standards shall constitute the maximum permissible noise level within the respective zones.

#### **NOISE STANDARD**

<b><u>Noise Zone</u></b>	<b><u>Day (maximum) 6:00 a.m. to 10:00 p.m.</u></b>	<b><u>Night (maximum) 10:00 p.m. to 6:00 a.m.</u></b>
Industrial and Commercial	82 decibels	77 decibels
R1 and R2	62	57
R3 and R4	67	62

#### **Sec. 45-7. Same--Sources of noise.**

The provisions of this chapter shall apply to, but shall not be limited to, the control, use and operation of the following noise sources whose use, operation, work, employment or other action creates, maintains, permits or causes to be created or maintained, any excessive, unnecessary, unwanted or annoying noise, sound, cry or behavior which exceeds the noise standards as set forth in section 45-4, unless specifically exempted.

- (a) Radios, televisions, musical instruments, drums or other percussion instruments, tape recorders, sound trucks or vehicles, whether mobile or stationary, public address systems, loudspeakers, bull horns, sound equipment or other devices or machines used for producing, reproduction or amplification of music, instructions, talks, speeches, addresses or lectures, or for attracting attention by persons selling merchandise, food or beverage or other similar purposes.
  - (1) No person shall operate a loudspeaker or sound amplifying equipment for the purpose of transmitting sound to any assemblage of persons in the city without first filing a registration statement and obtaining approval from the city manager, and as otherwise required by chapter 37 of this Code as related to sound and advertising vehicles....
- (c) Air conditioning units, refrigeration equipment, fans, blowers, pumps, engines, turbines, compressors, generators, saws, grinders, motors or other similar devices, equipment or apparatus.

### **City of Paramount General Plan**

The *Paramount General Plan* includes the City of Paramount's Noise and Land Use Compatibility Matrix (included below) (City of Paramount 2007).

**Table 5-1  
Noise and Land Use Compatibility Guidelines**

<b>Land Use</b>	<b>Maximum Desirable Noise Level</b>	<b>Maximum Acceptable Noise Level</b>
Low Density Residential	55 dBA	65 dBA
Medium Density Residential	60 dBA	65 dBA
High Density Residential	65 dBA	70 dBA
Schools	60 dBA	70 dBA
Office and Commercial	65 dBA	75 dBA
Industrial	70 dBA	75 dBA

## City of South Gate

### City of South Gate Municipal Code

#### Construction

The South Gate Municipal Code Section 11.34.110 states the following (City of South Gate 2020):

The owner or operator of a noise source that violates any of the provisions of this chapter may file a variance application, consistent with the procedures of Chapter 11.51, Permits and Procedures.

A variance application shall detail the approved method of achieving maximum compliance and a time schedule for its accomplishment. In its determinations, the NCO shall consider the following:

3. The magnitude of nuisance caused by the offensive noise.
4. The uses of property within the area of impingement by the noise.
5. The time factors related to study, design, financing, and construction of remedial work.

#### Operation

The South Gate Municipal Code Section 11.34.080 sets maximum sound levels by noise zone (City of South Gate 2020):

- A. Noise Zone Standards. Table 11.34-1, Noise Zone Standards, establishes noise-level standards and temporary maximum standards applicable to land use categories by noise zone. No person shall make, cause, or allow noise that exceeds the standards of Table 11.34-1, inclusive of ambient noise. These standards are inclusive of all noise sources, including ambient noise, animals, equipment, firearms, people gatherings or parties, tools, vehicles, or other noise source resulting in temporary or sustained noise levels in excess of the standards of Table 11.34-1 and 11.34-2, Permitted Temporary Noise Level Increase.

**Table 11.34-1  
Noise Zone Standards**

Noise Zone	Land Use Category	Noise Standard	
		Standard	Time Period
I	Noise-Sensitive Area	45 dBA	Anytime
II	Residential Properties (in any zone)	50 dBA	7 a.m. to 10 p.m.
		40 dBA	10 p.m. to 7 a.m.
III	Commercial Properties	55 dBA	Anytime
IV	Industrial Properties	65 dBA	Anytime

This table is consistent with Table N-5 of the South Gate general plan noise element.  
dBA = A-weighted decibel  $L_{eq}$  standard.

- B. Noise-Sensitive Zones. Creating or causing the creation of any noise disturbance within any noise-sensitive zone; provided, that conspicuous signs are displayed indicating the presence of the zone; shall be prohibited.
  1. Noise-sensitive zones shall be indicated by the display of conspicuous signs in at least three separate locations within six hundred feet of the institution or facility.
- C. Permitted Temporary Increase. Table 11.34-2 establishes the maximum temporary noise level increases permitted in any noise zone based on the duration of noise.

**Table 11.34-2  
City of South Gate Permitted Temporary Noise Level Increase**

<b>Permitted Maximum Increase</b>	<b>Noise Duration</b>
+ 5 dBA	30 mins. per hour
+ 10 dBA	15 mins. per hour
+ 12 dBA	10 mins. per hour
+ 15 dBA	5 mins. per hour
+ 20 dBA	2 mins. per hour

dBA = A-weighted decibel  $L_{eq}$  standard.

mins. = minutes.

- D. Measurement of Noise. All noise standards shall be based on the actual measured ambient noise level, as measured at the closest adjoining property line between habitable parcels or at the nearest public right-of-way.
- E. Unit of Measure. The unit of measure shall be designated as an A-weighted decibel (dBA), equivalent continuous sound level ( $L_{eq}$ ) standard. Noise shall be measured with a sound level meter that meets the standards of the American National Standards Institute (Section S1.4-1979, Type 1 or Type 2). A calibration check shall be made of the instrument at the time any noise measure is made.
- F. Location of Measure.
1. Exterior Noise. Noise levels shall be measured in decibels at the property line of the receptor property, and at least four feet above the ground and ten feet from the nearest structure or wall, where possible.
  2. Interior Noise. Interior noise shall be measured within the building or structure, and at least four feet from any wall, ceiling, or floor nearest the noise source.

The South Gate Municipal Code Section 11.34.090, Noise activity standards, identifies thresholds for vibration (City of South Gate 2020):

Noise generated by the following acts is considered to be in violation of the noise standards of this chapter.

- B. Vibration produced from the operation of any device or equipment shall not exceed a motion velocity of 0.01 inches per second over a range of one to one hundred Hertz.

***City of South Gate General Plan***

The *South Gate General Plan 2035* includes the City of South Gate's Noise and Land Use Compatibility Matrix and applicable noise standards by noise zone (included below), as well as Goals, Objectives, and Policies meant to reduce noise within the city (City of South Gate 2009).



**Table N-4: Noise and Land Use Compatibility Matrix**

<b>Land Use Category</b>	<b>Community Noise Exposure (Ldn or CNEL, dBA)</b>			
	<b>Normally Acceptable</b>	<b>Conditionally Acceptable</b>	<b>Normally Unacceptable</b>	<b>Clearly Unacceptable</b>
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50-60	55-70	70-75	75-85
Residential - Multiple Family	50-65	60-70	70-75	70-85
Transient Lodging - Motel, Hotels	50-65	60-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50-75	NA	70-85
Playgrounds, Neighborhood Parks	50-70	NA	67.5-75	72.5-85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	80-85
Office Buildings, Business Commercial and Professional	50-70	67.5-77.5	75-85	NA
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	75-85	NA

*NA: Not Applicable*

Source: Office of Planning and Research, California, General Plan Guidelines, October 2003.

Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable – New construction or development should generally not be undertaken.

**Table N-5: South Gate Noise Ordinance Standards**

Noise Zone	Noise Standards	
	Noise Level	Time Period
1 – Noise Sensitive Area	45 dBA	Anytime
2 – Residential Properties	50 dBA	7:00 a.m.–10:00 p.m.
	40 dBA	10:00 p.m.–7:00 a.m.
3 – Commercial Properties	55 dBA	Anytime
4 – Industrial Properties	65 dBA	Anytime

- **Goal N 1.** A reduction in noise levels created by construction and maintenance activities.
  - **Objective N 1.1:** Minimize noise levels from construction and maintenance equipment, vehicles, and activities.

*Policies*

- **P.1:** Construction activities will be prohibited between the hours of 7:00 pm to 8:00 am Monday through Saturday and on Sundays and Federal Holidays.
- **P.2:** Construction noise reduction methods will be employed to the maximum extent feasible. These measures may include, but not limited to, shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and use of electric air compressors and similar power tools, rather than diesel equipment.
- **P.3:** Prior to approval of project plans and specification by the City, project applicants and/or construction contractors will identify construction equipment and noise reducing measures, and the anticipated noise reduction.
- **Goal N 2.** An effective land use planning and development review process to ensure noise impacts are addressed.
  - **Objective N 2.1:** Ensure noise impacts are considered in land use planning decisions.
    - **P.1:** The City will adhere to the noise standards identified in Table N-4.
    - **P.6:** The City will require that all new non-residential development will demonstrate that ambient noise levels will not exceed an exterior noise level of 65 dBA CNEL.
    - **P.7:** New development projects will provide buffers and/or appropriate mitigation measures to reduce potential noise sources on noise sensitive land uses.
    - **P.9:** The City will work to ensure acceptable noise levels are maintained near residential areas, schools, hospitals, convalescent homes, churches, and other noise sensitive areas.
    - **P.11:** The City should work with adjacent jurisdictions to minimize noise impacts to South Gate from projects that occur outside of the City.

## Frame 4

### Unincorporated County

Applicable regulations are described above.

## City of Bell

### *City of Bell Municipal Code*

The Bell Municipal Code Section 8.28.020, Loud or unusual noise prohibited, states (City of Bell 2020):

Notwithstanding any other provisions of this chapter, it is unlawful for any person to make, cause or permit any loud or unusual noise to emanate from any activity taking place on real property owned or occupied by such person, which has the effect of disturbing the peace and quiet of the neighborhood, or which directly causes an unreasonable interference with the use, enjoyment and/or possession of any real property owned or occupied by any other person.

### *City of Bell General Plan*

The *City of Bell 2030 General Plan* includes policies meant to reduce noise within the city (City of Bell 2018).

- **Health and Safety Element Policy 18.** The City of Bell shall consider planning guidelines which include noise control for all new residential developments and condominium conversion projects. The City shall promote design measures that will be effective in reducing noise reduction in the review of new development projects.
- **Health and Safety Element Policy 19.** The City of Bell shall require that future development projects and existing land uses reduce unnecessary noise near noise-sensitive areas such as residences, parks, hospitals, libraries, convalescent homes, etc. The City shall enforce the existing noise control regulations such as those included in the Bell Municipal Code.
- **Health and Safety Element Policy 20.** The City of Bell shall encourage the reduction of noise throughout the City in the review of new development. New development projects will undergo review to ensure that noise impacts from such developments are reduced as much as possible.
- **Health and Safety Element Policy 21.** The City of Bell shall promote the development of a compatible noise environment throughout the City. The City shall consider noise and land use compatibility in the review of new development projects.

## City of Bell Gardens

### *City of Bell Gardens Municipal Code*

#### *Construction*

The Bell Gardens Municipal Code Section 16.24.120, Construction of buildings and projects – Restriction, states (City of Bell Gardens 2020):

Between the hours of 7:00 p.m. of one day and 8:00 a.m. of the next day, it is unlawful for any person within a residential zone, or within a radius of 500 feet therefrom, to operate equipment, or perform any outside construction or repair work on buildings, structures, or projects, or operate any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist, or other construction device in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance, unless beforehand a permit therefor has been duly obtained from the officer or body of the city having the function to issue permits of this kind. No permit shall be required to perform emergency work as defined in BGMC 16.24.020.

*Operations*

Section 16.24.110, Machinery, pumps, air conditioners, and similar mechanical devices – Restriction. states:

It is unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient noise level by more than five decibels based on a reference sound pressure of 0.0002 microbars as measured in any octave band center frequency, in cycles per second, as follows: 63, 125, 250, 500, 1,000, 2,000, 4,000, and 8,000, and for the combined frequency bands (“A” band). (Ord. 276, 1971; prior code § 5409).

**City of Bell Gardens General Plan**

The *City of Bell Gardens General Plan 2010* includes the City of Bell Gardens’ Noise and Land Use Compatibility Matrix (included below), as well as Policies meant to reduce noise within the city (City of Bell Gardens 1995).

- **Policy 1:** The City of Bell Gardens shall discourage the incompatible use of property along major transportation lines, and encourage noise reduction measures for existing uses.
- **Policy 2:** The City of Bell Gardens shall ensure that the noise cued by sources other than traffic (construction etc.) are at acceptable levels.

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L <sub>dn</sub> OR CNEL, dB					
	55	60	65	70	75	80
RESIDENTIAL-LOW DENSITY SINGLE FAMILY, DUPLEX MOBILE HOMES						
RESIDENTIAL- MULTI FAMILY						
TRANSIENT LODGING- MOTELS, HOTELS						
SCHOOLS, LIBRARIES CHURCHES, HOSPITALS, NURSING HOMES						
AUDITORIUMS, CONCERT HALLS, AMPITHEATRES						
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS						
PLAYGROUNDS, NEIGHBORHOOD PARKS						
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES						
OFFICE BUILDINGS, BUSINESS, COMMERCIAL AND PROFESSIONAL						
INDUSTRIAL, MANUFACTURING, UTILITIES, AGRICULTURE						

**LEGEND**

||||| **NORMALLY ACCEPTABLE**  
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

||||| **CONDITIONALLY ACCEPTABLE**  
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

||||| **NORMALLY UNACCEPTABLE**  
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

||||| **CLEARLY UNACCEPTABLE**  
New construction or development should generally not be undertaken.

**CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE**

**A. NORMALIZED NOISE EXPOSURE DESIRED**  
Where sufficient data exists, available land use suitability with respect to a "normalized" value of CNEL or L<sub>dn</sub>. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L<sub>dn</sub>.

**B. NOISE SOURCE CHARACTERISTICS**  
The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher angle noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same community noise exposure do not necessarily create the same noise environments. The State Aeronautics Act uses 65dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65dB CNEL criterion wherever possible and in order to facilitate the ability of airports to comply with the Act, residential use located in Community Noise Exposure Areas greater than 65dB should be discouraged and considered located within normally unacceptable areas.

**C. SUITABLE INTERIOR ENVIRONMENTS**  
One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL or L<sub>dn</sub>. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

**D. ACCEPTABLE OUTDOOR ENVIRONMENTS**  
Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

EXHIBIT 7-3  
NOISE COMPATIBILITY

## City of Commerce

### City of Commerce Municipal Code

#### Construction

The Commerce Municipal Code Section 19.19.160 subsection K states (City of Commerce 2000):

- K. The following acts, or the causing thereof, are declared to be in violation of this subsection:
3. No person or organization within any residential zone, or within a radius of five hundred feet of a residential zone, shall operate equipment or perform any outside construction or repair work on buildings, structures, or projects, or operate any pile driver, steam shovel, pneumatic hammer, derrick, steam, electric hoist, or other construction type device between the hours of ten p.m. and seven a.m., unless a permit has been obtained from the city.

Commerce Municipal Code Section 19.19.180 also states (City of Commerce 2000):

Vibration may disturb the conduct of certain activities and create discomfort for some individuals. To minimize the disturbance and inconvenience from vibrations, the following performance standards shall apply to all uses:

- A. No use shall cause or create ground vibration that is harmful or injurious to the use or development of surrounding properties.
- B. No person or use shall create, maintain, or cause ground vibration that is perceptible without instruments to a person of normal sensitivity at any point on a property that is adjacent to the property of the vibration source.

#### Operation

The Commerce Municipal Code Section 19.19.160 also sets noise standards based on zone as well as permissible exterior and interior increases in noise levels (City of Commerce 2000):

- E. No person shall, at any location within the city, create nor allow the creation of noise on property owned, leased, occupied, or otherwise controlled by such person, that causes the noise level when measured on any property to exceed the ambient noise level or the noise standards set forth in Table 19.19.160A, whichever is greater.
- F. Increases in permitted noise levels prescribed in Table 19.19.160A may be permitted in accordance with the standards outline in Table 19.19.160B.

**Table 19.19.160A  
Noise Standards**

Zone	Time	Allowable Noise Level - dBA
Residential	7 a.m.-7 p.m. (day)	55
Residential	7 p.m.-10 p.m. (evening)	50
Residential	10 p.m.-7 a.m. (night)	45
Commercial	7 a.m.-10 p.m. (day/evening)	65
Commercial	10 p.m.-7 a.m. (night)	55
Industrial	Anytime	70

**Table 19.19.160B  
Permitted Increases in Noise Levels**

<b>Permitted increase (dBA)</b>	<b>Duration of increase (cumulative minutes/hour)</b>
5	15
10	5
15	1
20	Less than one minute

- G. If the receptor property of a noise is located on the boundary between two different noise zones, the lower noise level standard applicable to the quieter zone shall apply.
- H. If a noise source is continuous and cannot be reasonably discontinued for sufficient time in which to determine the ambient noise level, the measured noise level obtained while the source is in operation shall be compared directly to the noise level standards in Table 19.19.160B.
- I. No person shall, at any location within the city, create any noise, nor shall any person allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person that causes the noise level when measured within any receptor dwelling unit to exceed the noise standards outlined in Table 19.19.160C.

**Table 19.19.160C  
Permitted Increases in Interior Noise Levels**

<b>Allowable (dbA)</b>	<b>Time (cumulative minutes per hour)</b>
45	Anytime
+5	1 minute
10	Less than one minute

### **City of Commerce General Plan**

The *City of Commerce 2020 General Plan* includes the City of Commerce's Noise and Land Use Compatibility Matrix (included below), as well as policies intended to reduce noise (City of Commerce 2008).

**Table 7-1  
Noise and Land use Compatibility Standards**

<b>Land Use</b>	<b>Desirable Maximum</b>	<b>Maximum Acceptable</b>
Low-Density Residential	55 dBA	65 dBA
Medium-Density Residential	60 dBA	65 dBA
High-Density Residential	65 dBA	70 dBA
Schools	60 dBA	70 dBA
Office Commercial	65 dBA	75 dBA
Industrial	70 dBA	75 dBA

### **7.3.6 Issue: Noise Control Measures**

Noise levels may be significantly reduced by employing relatively simple design measures, such as the use of sound walls, extra insulation, double-paned windows, etc. The following policies

underscore the city's continued efforts to control noise exposure through land use planning and building design.

- **Safety Policy 6.1.** The City of Commerce will ensure that residents are protected from harmful and irritating noise sources to the greatest extent possible.
- **Safety Policy 6.2.** The City of Commerce will work with businesses in the city and other public agencies to identify ways to reduce noise impacts throughout the city.
- **Safety Policy 6.3.** The City of Commerce will continue to enforce the existing city's noise control ordinance.
- **Safety Policy 6.4.** The City of Commerce will incorporate noise considerations into land use planning decisions.

## **City of Huntington Park**

### ***City of Huntington Park Municipal Code***

#### *Construction*

The Huntington Park Municipal Code Section 9-3.506, Exceptions to provisions, states (City of Huntington Park 2001):

The following activities shall be exempted from the provisions of this Article:

5. Noise sources associated with construction, repair, remodeling or grading of any real property, provided the activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or at any time on Sundays or Federal holidays;
6. Noise sources associated with the maintenance of real property, provided the activities do not take place between 8:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or earlier than 9:00 a.m. on Sundays and Federal holidays;

#### *Operations*

The Huntington Park Municipal Code Section 9-3.504, Excessive noise prohibited, regulates noise within the city (City of Huntington Park 2001):

It shall be unlawful for any person to willfully make or continue, or willfully cause to be made or continue, any loud, unnecessary or unusual noise that disturbs the peace or quiet of any neighborhood or constitutes a public nuisance.

### ***City of Huntington Park General Plan***

The *City of Huntington Park 2030 General Plan* includes the City of Huntington Park's goals and policies designed to reduce noise (City of Huntington Park 2017).

- **Health and Safety Element Policy 25.** The City of Huntington Park shall ensure acceptable noise levels near schools, hospitals, convalescent homes, and other noise-sensitive areas.
- **Health and Safety Element Policy 31.** The City of Huntington Park shall reduce noise generated by building activities by requiring sound attenuation devices on construction equipment.

## City of Maywood

### Construction

The Maywood Municipal Code Section 5-23.11, Exemptions, states (City of Maywood 2019):

The following activities shall be exempted from the provisions of this chapter:

- (c) Noise sources associated with the construction, repair, remodeling, or grading of any real property or during authorized seismic surveys provided such activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or at any time on Sunday or a Federal holiday, and provided the noise level created by such activities does not exceed the noise standard of seventy (70) dBA plus the limits specified in Section 5-23.08 of this chapter as measured on residential property and does not endanger the public health, welfare, and safety;
- (d) All mechanical devices, apparatus, and equipment associated with agricultural operations provided such operations do not take place between 8:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or at any time on Sunday or a Federal holiday;
- (e) Noise sources associated with the maintenance of real property provided such activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day, except Sunday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sundays;

### Operation

The Maywood Municipal Code Sections 5-23.06 through 5-23.08 also set noise standards based on zone as well as permissible exterior and interior increases in noise levels (City of Maywood 2019).

#### 5-23.06 - Designated noise zones.

The following described receptor properties are hereby assigned to the following noise zones:

- (a) Noise Zone I: Single-family, double-family, and multiple-family residential properties;
- (b) Noise Zone II: Commercial properties; and
- (c) Noise Zone III: Manufacturing and industrial properties.

#### 5-23.07 - Exterior noise standards.

- (a) The following noise standards, unless otherwise specifically indicated, shall apply to all receptor properties within the designated noise zones:

Noise Zone	Type of Land Use (Receptor Property)	Time Interval	Allowable Exterior Noise Level
I	Single-family, double-family, or multiple-family residential	10:00 p.m.–7:00 a.m.	55 dBA
		7:00 a.m.–10:00 p.m.	60 dBA
II	Commercial	10:00 p.m.–7:00 a.m.	65 dBA
		7:00 a.m.–10:00 p.m.	70 dBA
III	Manufacturing or industrial	Any time	75 dBA

- (b) No person, in any location within the City, shall create any noise, or allow the creation of any noise, on property owned, leased, occupied, or otherwise controlled by such person (referred to in this chapter as "noise source") which causes the noise level when measured on any property (referred to in this chapter as "receptor property") to exceed:
  - (1) The applicable noise standard for a cumulative period of more than thirty (30) minutes in any hour; or



- (2) The applicable noise standard plus five (5) dBA for a cumulative period of more than fifteen (15) minutes in any hour; or
  - (3) The applicable noise standard plus ten (10) dBA for a cumulative period of more than five (5) minutes in any hour; or
  - (4) The applicable noise standard plus fifteen (15) dBA for a cumulative period of more than one minute in any hour; or
  - (5) The noise standard plus twenty (20) dBA for any period of time.
- (c) In the event the ambient noise level exceeds any of the noise limit categories set forth in subsections (1), (2), or (3) of subsection (b) of this section, the cumulative period applicable to such category shall be increased to reflect the ambient noise level. In the event the ambient noise level exceeds the third noise limit category, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.
- (d) If the receptor property is located on a boundary between two (2) different noise zones, the noise level standard applicable to the quieter noise zone shall apply.
- (e) If the noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined, the measured noise level obtained while the source is in operation shall be compared directly to the receptor property's designated land use and for the time of day the noise level is measured.

**5-23.08 - Interior noise standards.**

- (a) The following noise standard, unless otherwise specifically indicated, shall apply to all residential receptor property within all noise zones:

Noise Zone	Type of Land Use (Receptor Property)	Time Interval	Allowable Noise Level
All	Residential	Any time	45 dBA

The noise limit specified in this subsection shall be reduced by five (5) dBA for noise consisting of speech or music; provided, however, if the ambient noise level exceeds the resulting standard, the ambient shall be standard.

- (b) No person, at any location within the City, shall create any noise, or allow the creation of any noise, on property owned, leased, occupied, or otherwise controlled by such person which causes the noise level when measured within any receptor residential dwelling unit in any noise zone to exceed:)
- (1) The interior noise standard for a cumulative period of more than five (5) minutes in any hour; or
  - (2) The interior noise standard plus five (5) dBA for a cumulative period of more than one minute in any hour; or
  - (3) The interior noise standard plus ten (10) dBA for any period of time.
- (c) In the event the ambient noise level exceeds the noise limit categories set forth in subsections (1) or (2) of subsection (b) of this section, the cumulative period applicable to such category shall be increased to reflect the ambient noise level. In the event the ambient noise level exceeds the third noise limit category, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.
- (d) If the receptor property is located on a boundary between two (2) different noise zones, the noise level standard applicable to the quieter noise zone shall apply.

- (e) If the intruding noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined, the same procedure set forth in subsection (e) of Section 5-23.07 of this chapter shall be deemed proper to enforce the provisions of this section.

**City of Maywood General Plan**

The *City of Maywood General Plan* includes the City of Maywood’s Noise and Land Use Compatibility Matrix (included below), as well as goals and policies designed to reduce noise (City of Maywood 2020).

- **Goal 1.** Prohibit any unnecessary, excessive, offensive noises, or increase in noise levels over acceptable levels, which are detrimental to the public health and welfare.
  - **Policy 1.1:** Implement criteria and guidelines established in this noise element for use in setting standards for the control and abatement of noise emission, transmission, and exposure as set forth in the noise element.
  - **Policy 1.2:** Control any sounds which exceed community accepted levels at their source through enforcement.
  - **Policy 1.4:** Prevent any increase in acceptable ambient levels of sound in the residential areas of the community by implementing local noise standards.

**Exhibit 7-1. Noise Compatibility**

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L <sub>eq</sub> OR CNEL, dB					
	55	60	65	70	75	80
RESIDENTIAL - LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES						
RESIDENTIAL - MULTIFAMILY						
TRANSIENT LODGING - MOTELS, HOTELS						
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES						
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES						
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS						
PLAYGROUNDS, NEIGHBORHOOD PARKS						
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES						
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL						
INDUSTRIAL, MANUFACTURING UTILITIES, AGRICULTURE						

**LEGEND**

- NORMALLY ACCEPTABLE**  
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- CONDITIONALLY ACCEPTABLE**  
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
- NORMALLY UNACCEPTABLE**  
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- CLEARLY UNACCEPTABLE**  
New construction or development should generally not be undertaken.

**CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE**

**A. NORMALIZED NOISE EXPOSURE INFORMATION DESIRED**  
Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L<sub>eq</sub>. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L<sub>eq</sub>.

**B. NOISE SOURCE CHARACTERISTICS**  
The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65 dB CNEL criterion wherever possible, and in order to facilitate the ability of airports to comply with the Act, residential uses located in Community Noise Exposure Areas greater than 65 dB should be discouraged and considered located within normally unacceptable areas.

**C. SUITABLE INTERIOR ENVIRONMENTS**  
One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L<sub>eq</sub>. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

**D. ACCEPTABLE OUTDOOR ENVIRONMENTS**  
Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Source: California Department of Health, Guidelines for the Preparation and Content of Noise Elements of The General Plan, February, 1976

## City of Vernon

### Operation

The Vernon Municipal Code Section 26.4.1-7 Development and Performance Standards, subsection (b) (2) states (City of Vernon 2020):

- (i) The following noise standards, unless otherwise specifically indicated, shall apply to all Lots within the designated noise zones, measured cumulatively with existing noise from all businesses on the Lot.

**Table 26.4.1-7(b)(2)**

**Noise Standards**

Noise Zone	Time Interval	Allowable Exterior Noise
Lots located within one tenth (1/10) of a mile of any residence or school located in Vernon or abutting communities.	10:00 P.M. to 7:00 A.M.	60 dBA
	7:00 A.M. to 10:00 P.M.	65 dBA
All other Lots	Any time	75 dBA

- (ii) No Person, in any location within the City, shall create any noise, or allow the creation of noise, on any Lot owned, leased, occupied or otherwise controlled by such Person which causes the cumulative noise level when measured at any point along the Lot line of the Lot on which the source of the noise is located to exceed:
- (A) The applicable noise standard for a cumulative period of more than thirty (30) minutes in any hour; or
- (B) The applicable noise standard plus five (5) dBA for a cumulative period of more than fifteen (15) minutes in any one hour; or
- (C) The applicable noise standard plus ten (10) dBA for a cumulative period of more than five (5) minutes in any hour; or
- (D) The applicable noise standard plus fifteen (15) dBA for a cumulative period of more than one (1) minute in any hour; or
- (iii) In the event the ambient noise level exceeds any of the noise limit categories set forth in subsections (A), (B), or (C) of subsection 2(ii) of this Section, the cumulative period applicable to such category shall be increased to reflect the ambient noise level, plus 5 dBA.
- (iv) If a Lot is located on a boundary between two (2) different noise zones, the noise level standard applicable to the quieter noise zone shall apply.
- (v) If the noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined, the measured noise level obtained while the source is in operation shall be compared directly to the Lot's designated noise zone for the time of day the noise level is measured.
- (vi) Any noise source in excess of the standards set forth herein shall be permitted only with a Conditional Use Permit.

### City of Vernon General Plan

The *City of Vernon General Plan* includes the City of Vernon's Noise and Land Use Compatibility Matrix (included below), as well as goals and policies designed to reduce noise (City of Vernon 2015).

**Figure N-3: Community Noise Standards**

Land Use Category	CNEL, dB						
	50	55	60	65	70	75	80
Residential - Multi-family, Duplex	A	A	B	B	B	C	C
Schools, Churches	A	A	B	C	C	C	D
Office Building, Research & Development, Professional Offices, City Office Building	A	A	A	B	B	C	C
Commercial Retail, Banks, Restaurants	A	A	A	A	B	B	C
Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

**A**

**CLEARLY COMPATIBLE**

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

**B**

**NORMALLY COMPATIBLE**

New construction or development should be undertaken only after detailed analysis of the noise reduction requirements is made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

**C**

**NORMALLY INCOMPATIBLE**

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

**D**

**CLEARLY INCOMPATIBLE**

New construction or development should generally not be undertaken.

**Frame 5**

**City of Los Angeles**

Applicable regulations are described above.

**Frame 6**

**City of Los Angeles**

Applicable regulations are described above.

## City of Glendale

### Construction

The Glendale Municipal Code Section 8.36.080, Construction on Buildings, Structures and Projects, states (City of Glendale 1991):

It is unlawful for any person within a residential zone, or within a radius of five hundred feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects within the city between the hours of seven p.m. on one day and seven a.m. of the next day or from seven p.m. on Saturday to seven a.m. on Monday or from seven p.m. preceding a holiday, as designated in Chapter 3.08 of this code, to seven a.m. following such holiday unless beforehand a permit therefor has been duly obtained from the building official. No permit shall be required to perform emergency work as defined in this chapter.

### Operation

The Glendale Municipal Code Section 8.36.040, Presumed noise standards, and 8.36.050, Minimum and maximum ambient noise levels, state:

#### 8.36.040 Presumed noise standards.

- A. The following exterior noise standards, unless otherwise specifically indicated, shall apply to all property within a designated zone:

Zone	Decibels	Time
Cemetery and residential (single family and duplex)	45 dBA	Nighttime
Cemetery and residential (single family and duplex)	55 dBA	Daytime
Residential (multifamily, hotels, motels and transient lodgings)	60 dBA	Anytime
Central business district and commercial	65 dBA	Anytime
Industrial	70 dBA	Anytime

- B. The following interior noise standards, unless otherwise specially indicated, shall apply to all residential property within a designated zone:

Zone	Decibels	Time
Residential	45 dBA	Nighttime
Residential	55 dBA	All Other Times

- C. In any overlay zones, the underlying zone shall determine the presumed ambient noise level.

#### 8.36.050 Minimum and maximum ambient noise levels.

- A. Where the actual ambient is less than the presumed ambient, the actual ambient shall control and any noise in excess of the actual ambient, plus five dbA, shall be a violation.
- B. Where the actual ambient is equal to or more than the presumed ambient, the actual ambient shall control and any noise may not exceed the actual ambient by more than five dbA; however, in no event may the actual ambient exceed the presumed noise standards by five dbA.
- C. At the boundary line between two zones, the arithmetic average of the presumed ambient noise levels shall be used.

**City of Glendale General Plan**

The *City of Glendale General Plan* includes the City of Glendale’s Noise and Land Use Compatibility Matrix and interior/exterior noise standards (included below), as well as goals and policies included below (City of Glendale 2007).

**Table 1  
Noise/Land Use Compatibility Table**

Land Use Category	Community Noise Exposure <i>L<sub>dn</sub></i> or <i>CNEL</i> , dB					
	55	60	65	70	75	80
Residential - Low Density Single Family, duplex, Mobile Homes	Green		Yellow		Blue	Orange
Residential - Multi-Family	Green		Yellow		Blue	Orange
Transient Lodging - Motels, Hotels	Green		Yellow		Blue	Orange
Schools, Libraries, Churches, Hospitals, Nursing Homes	Green		Yellow		Blue	Orange
Auditoriums, Concert Halls, Amphiteaters	Yellow		Orange			
Sports Area, Outdoor Spectator Sports	Yellow		Orange			
Playgrounds, Neighborhood Parks	Green		Yellow		Orange	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Green		Yellow		Blue	Orange
Office Buildings, Business Commercial and Professional	Green		Yellow		Blue	Orange
Industrial, Manufacturing, Utilities, Agriculture	Green		Yellow		Blue	Orange

**INTERPRETATION**



**Normally Acceptable**  
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal, conventional construction, without any special noise insulation requirements.



**Conditionally Acceptable**  
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.



**Normally Unacceptable**  
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



Source: State of California, “General Plan Guidelines,” 1998.

**Table 2**  
**INTERIOR AND EXTERIOR NOISE STANDARDS**

Land Use Categories		Noise Standards	
Categories	Uses	Interior CNEL	Exterior CNEL
Residential	Single Family	45 (1)	65 (2)
	Multi-Family	45 (1)	65 (3)
	Residential within Mixed Use	45 (1)	--
Commercial	Hotel, Motel, Transient Lodging	45 (1)	--
Institutional	Hospital, School Classroom, Church, Library	45 (1)	--
Open Space	Parks (4)	--	65

**Notes:**

1. Applies to the indoor environment excluding bathrooms, toilets, closets and corridors.
2. Applies to the outdoor environment limited to the private yard of single family residences (normally the rear yard).
3. Applies to the patio area where there is an expectation of privacy (i.e., not a patio area which also serves as, or is adjacent to, the primary entrance to the unit).
4. Only applies to parks where peace and quiet are determined to be of prime importance, such as hillside open space areas open to the public. Generally, would not apply to urban parks or active- use parks.

**Goal 3:** Continue incorporating noise considerations into land use planning decisions

**Policy 3.1** Ensure that land uses comply with adopted standards.

Program 3.1 Use the criteria in Table 1 and standards in Table 2 to assess the compatibility of proposed land uses with the noise environment. New land uses, as described in the Land Uses column of Table 2, in a 60 CNEL or higher noise contour, as shown on the map of the 2030 Noise Contours, Exhibit 2, may be subject to potentially significant environmental impacts that must be addressed by a noise study. The study, prepared by a qualified consultant (to the satisfaction of the City), shall address the noise environment and propose appropriate conditions of approval or mitigation measures to comply with the interior and exterior noise standards as shown in Table 2. Interior tenant improvements, signs, and exterior remodeling will not normally be subject to review under this Program.

**Goal 4:** Enhance measures to control construction noise impacts

**Policy 4.1:** Amend the Noise Ordinance to address construction noise problems.

Program 4.1 Change the permitted hours of construction to Monday through Friday, 7 a.m. to 7 p.m. and on Saturday from 9 a.m. to 5 p.m. Maintain the ban on construction on Sundays and Holidays. Continue to allow emergency repair work, and work to correct safety hazards, at any time.

## Frame 7

### City of Los Angeles

Applicable regulations are described above.

### Unincorporated County

Applicable regulations are described above.

## City of Burbank

### Construction

The Burbank Municipal Code Section 9-1-1-105.10: Construction Hours states (City of Burbank 1990):

The following construction hours shall apply to all construction, alteration, movement, enlargement, replacement, repair, equipment, maintenance, removal and demolition work regulated by this code:

Construction Hours:

Monday - Friday 7:00 a.m. to 7:00 p.m.

Saturday 8:00 a.m. to 5:00 p.m.

Sunday and City Holidays None

EXCEPTIONS:

1. Single-family residential owner-builder permits when work is performed solely by the owner and family members:

Monday - Friday 7:00 a.m. to 7:00 p.m.

Saturday 8:00 a.m. to 5:00 p.m.

Sunday and City Holidays 8:00 a.m. to 5:00 p.m. for interior work only.

2. Where work must be performed in an emergency situation, as defined in Section 9-3-204 of the Burbank Municipal Code.
3. The Community Development Director may grant exceptions wherever there are practical difficulties involved in carrying out the provisions of this section or other specific onsite activity warrants unique consideration.
4. The Planning Board or City Council may grant exceptions pursuant to land use entitlements.

### Operation

The Burbank Municipal Code Section 9-3-208: Machinery, Equipment, Fans, and Air Conditioning, states (City of Burbank 1990):

- A. Decibel Limit: No person shall operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in such a manner as to cause the ambient noise level to be exceeded by more than five (5) decibels. In the case of leaf blowers, as defined by Section 9-3-214 of this article, the ambient noise level may not be exceeded by more than twenty (20) decibels.
- B. Ambient Noise Base Level: For the purposes of this section only, all ambient noise measurements shall commence at the following ambient noise base levels in the zones and during the times shown:

Base Levels	Time	Zone
45 dBA	Nighttime	Residential
55 dBA	Daytime	Residential
65 dBA	Anytime	Commercial
70 dBA	Anytime	All other zones



Accordingly, and by way of illustration, the ambient noise level in commercial zones shall be deemed to be sixty five (65) dBA notwithstanding a lower reading; provided, however, that when the ambient noise base level for the property on which the machinery, equipment, pump, fan, air conditioning apparatus or similar mechanical device is located is higher than the ambient noise base level for adjacent property, the ambient noise base level for the adjacent property shall apply. Properties separated by a street shall be deemed to be adjacent to one another.

- C. Exception For Home Air Conditioners: Air conditioning appliances and equipment installed on or before June 1, 1972, in residences in residential zones may be operated until January 1, 1974, between the hours of eight o'clock (8:00) A.M. and ten o'clock (10:00) P.M. without complying with the decibel limits prescribed in this section. [Formerly Numbered Section 21-31; Renumbered by Ord. No. 3058, eff. 2/21/87; 3122, 2383, 2361.]

The Burbank Municipal Code Section 9-3-223, Noise Sources Not Specifically Covered, states (City of Burbank 1990):

Notwithstanding any other provision of this article and in addition thereto, it shall be unlawful for any person to willfully make or continue any loud, unnecessary or unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standards which shall be considered in determining whether a violation of this section exists shall include, but not be limited to, the following:

- A. The sound pressure level of the noise;
- B. The octave band sound pressure level of the noise;
- C. Whether the nature of the noise is usual or unusual;
- D. Whether the origin of the noise is natural or unnatural;
- E. The sound pressure level and octave band sound pressure level of the background noise, if any;
- F. The proximity of the noise to residential sleeping facilities;
- G. The nature and zoning of the area within which the noise emanates;
- H. The density of the inhabitation of the area within which the noise emanates;
- I. The time of the day or night when the noise occurs;
- J. The duration of the noise;
- K. Whether the noise is recurrent, intermittent or constant; and
- L. Whether the noise is produced by a commercial or noncommercial activity. [Formerly Numbered Section 21-51; Renumbered by Ord. No. 3058, eff. 2/21/87; 2383.]

### ***City of Burbank General Plan***

The *Burbank 2035 General Plan* includes the City of Burbank's Noise and Land Use Compatibility Matrix and interior/exterior noise standards (included below), as well as goals and policies that are intended to reduce noise within the city (City of Burbank 2013).

**Table N-4  
Maximum Allowable Noise Exposure—Stationary Noise Sources**

<b>Noise Source</b>	<b>Noise Level Descriptor</b>	<b>Exterior Spaces<sup>2</sup>— Daytime (7 a.m. to 10 p.m.)</b>	<b>Exterior Spaces<sup>2</sup>— Nighttime (10 p.m. to 7 a.m.)</b>
Typical	Hourly dBA $L_{eq}$	55 <sup>1</sup>	45 <sup>1</sup>
Tonal, impulsive, repetitive, or consisting primarily of speech or music	Hourly dBA $L_{eq}$	50 <sup>1</sup>	40 <sup>1</sup>
Any	dBA $L_{max}$	75	65

## Notes:

- <sup>1</sup> The City may impose noise level standards that are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels.
- <sup>2</sup> Where the location of exterior spaces (i.e., outdoor activity areas) is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the exterior space.

- **Goal 1. Noise Compatible Land Uses**
  - **Policy 1.1:** Ensure the noise compatibility of land uses when making land use planning decisions.
  - **Policy 1.4:** Maintain acceptable noise levels at existing noise-sensitive land uses.
- **Goal 7. Construction Maintenance, and Nuisance Noise**
  - **Policy 7.2:** Require project applicants and contractors to minimize noise in construction activities and maintenance operations.
  - **Policy 7.3:** Limit the allowable hours of construction activities and maintenance operations located adjacent to noise-sensitive land uses.

## Frame 8

### City of Los Angeles

Applicable regulations are described above.

## Frame 9

### City of Los Angeles

Applicable regulations are described above.

## 3.12.3 Impact Analysis

### 3.12.3.1 Methods

This noise impact analysis evaluates the temporary noise and groundborne vibration associated with proposed construction activities, the changes in noise levels in the study area<sup>1</sup> that would occur as a result of the proposed Project (including onsite operations and project-generated traffic), and the effects of noise from operation and maintenance of the proposed Project. Impacts related to the Typical Projects, six kit of parts (KOP) categories, and the overall *2020 LA River Master Plan* are identified; as are the methods used to determine impacts and the thresholds used to conclude whether an impact would be significant. Where the two Typical Projects or the six KOP categories have similar impacts related to a specific criterion, the discussion is combined. Where differences between the Typical Projects or the KOP categories are identified, the impact analysis is presented separately. Mitigation measures to reduce or avoid identified significant impacts accompany each impact discussion, where necessary. Furthermore, construction and operations impacts are presented together where they largely overlap and it would not be meaningful to discuss them separately to address a specific criterion.

### Construction Noise

Construction-related noise was analyzed using data and modeling methodologies from the Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM), which predicts maximum noise levels at nearby receptors by analyzing the type of equipment and number of pieces of equipment scheduled during each construction phase, the distance from source to receptor, load factor, and the presence or absence of intervening shielding between source and receptor.<sup>2</sup>

Construction-related noise was analyzed based on the construction assumptions developed by the County for the Common Elements Typical Project and Multi-Use Trails and Access Gateways Typical Project. The construction equipment used to calculate construction noise was assumed to be a worst-case representation of construction equipment for each project type. Noise levels for each construction phase of each project type were calculated at a distance of 50 feet with no intervening shielding. The default load factor included within the RCNM model was used. The loudest phase with the noisiest combination of construction equipment was chosen to represent the worst-case noise levels within each project element. Table 3.12-9 and Table 3.12-10 provide the reference noise levels of construction equipment expected to be used by the proposed Project (broken down by phase and project type). Jurisdictions that included a maximum construction noise level standard ( $L_{max}$ ) were assessed against each municipality's municipal code standards (where applicable) within the respective frames. The County is an example of a jurisdiction that uses an  $L_{max}$  standard; for all other municipalities, the equivalent sound level ( $L_{eq}$ ) was used.<sup>3</sup>

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<sup>1</sup> The study area is generally defined as the location surrounding the LA River, where the Common Elements Typical Projects or the Multi-Use Trails and Access Gateways Typical Projects could occur for operations-related discussions and within the 1 mile radius shown in Figure 3.12-1 for construction-related discussions.

<sup>2</sup> As the location of the Common Elements Typical Projects, Multi-Use Trails and Access Gateways Typical Projects, or any of the KOP categories has not been identified, the presence or absence of intervening shielding cannot be determined. Therefore no intervening shielding has been included in the model assumptions.

<sup>3</sup> It should be noted that where projects are developed across multiple jurisdictions, all of those jurisdictions' standards, or the more stringent standard, may apply.

**Table 3.12-9. Construction Equipment Reference Noise Levels for the Common Elements Typical Project**

<b>Phases</b>	<b>Equipment Type</b>	<b>Number of Pieces of Equipment</b>	<b>Noise Level at 50 Feet (dBA Leq)</b>	<b>Absolute Noise Level by Phase at 50 Feet (dBA Leq)<sup>3</sup></b>	<b>Maximum Noise Level at 50 Feet (dBA L<sub>max</sub>)<sup>4</sup></b>
Demolition	Excavator	1	81		
	Water truck <sup>1</sup>	1	82		
	Dump truck <sup>2</sup>	2	75.5		
	Backhoe <sup>2</sup>	2	76.6		
	Front-end loader <sup>2</sup>	2	78.1		
	Utility trucks <sup>2</sup>	2	73.3		
					86.6
Site Preparation	Haul trucks/dump trucks <sup>2</sup>	2	75.5		
	Water truck	1	82		
	Backhoe <sup>2</sup>	2	76.6		
	Front-end loader <sup>2</sup>	2	78.1		
					85.7
Grading	Excavator	1	76.7		
	Water truck	1	82		
	Dump trucks	1	72.5		
	Backhoe <sup>2</sup>	2	76.6		
	Loaders	1	75.1		
	Grader <sup>2</sup>	2	84		
					87.4
Building Construction	Flatbed truck	1	70.3		
	Water truck	1	82		
	Backhoe	1	73.6		
	Small crane/man lifts <sup>2</sup>	2	70.7		

<b>Phases</b>	<b>Equipment Type</b>	<b>Number of Pieces of Equipment</b>	<b>Noise Level at 50 Feet (dBA Leq)</b>	<b>Absolute Noise Level by Phase at 50 Feet (dBA Leq)<sup>3</sup></b>	<b>Maximum Noise Level at 50 Feet (dBA L<sub>max</sub>)<sup>4</sup></b>
	Utility trucks <sup>2</sup>	3	75.7		
				83.7	85.0
Paving	Paving machine	1	74.2		
	Water truck	1	82		
	Backhoe	1	73.6		
	Skip loaders <sup>2</sup>	2	85		
	Super-10s <sup>2</sup>	2	83.1		
					87.4
Architectural Coating	Water truck	1	82		
	Utility trucks <sup>2</sup>	3	75.1		
				82.5	85.0

<sup>1</sup> All other equipment > 5 horsepower (HP) used in lieu of specific equipment.

<sup>2</sup> Number of pieces of equipment have been added logarithmically.

<sup>3</sup> Represents the logarithmic total of all pieces of equipment.

<sup>4</sup> Maximum noise level from loudest piece of equipment.

**Table 3.12-10. Construction Equipment Reference Noise Levels for the Multi-Use Trails and Access Gateways Typical Project**

<b>Phases</b>	<b>Equipment Type</b>	<b>Number of Pieces of Equipment</b>	<b>Noise Level at 50 Feet (dBA Leq)</b>	<b>Absolute Noise Level by Phase at 50 Feet (dBA Leq)<sup>2</sup></b>	<b>Maximum Noise Level at 50 Feet (dBA L<sub>max</sub>)<sup>3</sup></b>
Demolition	Excavator	1	76.7		
	Dump truck <sup>1</sup>	2	75.5		
	Backhoe <sup>1</sup>	2	76.6		
	Hydraulic impact hammer	1	94.3		
	Concrete saw	1	82.6		
	Hoe ram	1	80		
	Jack hammer	1	81.9		
				95.1	101.3
Site Preparation	Skip loader	1	82		
	Backhoe	1	82		
	Water truck	1	73.6		
	Wheel loader	1	75.1		
					87.0
Grading	Motor grader	1	81		
	Skip loader	1	82		
	Water truck	1	82		
	Vibratory roller	1	73		
					86.7
Building Construction	Backhoe	1	73.6		
	Telescopic lift	1	67.7		
	Fork lift	1	82		
					82.7
AC Paving	Paving machine	1	74.2		
	Oil truck	1	82		

<b>Phases</b>	<b>Equipment Type</b>	<b>Number of Pieces of Equipment</b>	<b>Noise Level at 50 Feet (dBA Leq)</b>	<b>Absolute Noise Level by Phase at 50 Feet (dBA Leq)<sup>2</sup></b>	<b>Maximum Noise Level at 50 Feet (dBA L<sub>max</sub>)<sup>3</sup></b>
	Vibratory roller	1	73		
	Skip loader	1	82		
	Skid Steer	1	82		
				87.2	85.0
Landscaping	Wheel loader	1	75.1		
	Skip loader	1	75.1		
	Truck for mounted crane	1	82		
	Water truck	1	82		
				85.8	85.0

<sup>1</sup> Number of pieces of equipment have been added logarithmically.

<sup>2</sup> Represents the logarithmic total of all pieces of equipment.

<sup>3</sup> Maximum noise level from loudest piece of equipment.

## Vibration

Construction-related vibration was analyzed using data and modeling methodologies provided by Caltrans' *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013b) and FTA's *Transit Noise and Vibration Impact Assessment Manual* (2018). These guidance manuals provide typical vibration source levels for various types of construction equipment, as well as methods for estimating the propagation of groundborne vibration over distance. Potential vibration impacts are assessed based on peak levels, rather than long-term average level. As the location of the Typical Projects are not known at the time of this analysis, the source-to-receptor distances have been calculated to identify the thresholds for damage and annoyance included in Table 3.12-12 and Table 3.12-13.<sup>4</sup>

As the subsequent projects under the six KOP categories have not been defined, a qualitative analysis is included in this PEIR.

**Table 3.12-11. Construction Equipment Reference Vibration Levels**

Equipment Item	Reference PPV at 25 Feet (in/s)
Vibratory roller	0.210 <sup>1</sup>
Large bulldozer <sup>3</sup>	0.089 <sup>2</sup>
Hoe ram	0.089 <sup>2</sup>
Jack hammer	0.035 <sup>2</sup>
Loaded trucks <sup>2</sup>	0.089 <sup>2</sup>
Small bulldozer <sup>2</sup>	0.003 <sup>2</sup>

<sup>1</sup> Caltrans 2013b.

<sup>2</sup> FTA 2018.

<sup>3</sup> Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.

**Table 3.12-12. Guidelines Vibration Damage Potential Threshold Criteria**

	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2013b

<sup>4</sup> Most municipalities have not promulgated thresholds for vibration; therefore, the Caltrans standards will be used in lieu of these thresholds. The Caltrans standards are well documented standards for vibration damage potential and annoyance. These standards are generally related to construction source vibration.



**Table 3.12-13. Guidelines Vibration Annoyance Potential Criteria**

	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans 2013b.

The following equations from the guidance manuals were used to estimate the change in PPV levels over distance. For pile driving, the equation is:

$$PPV_{rec} = PPV_{ref} \times (25/D)^n \times (E_{equip}/E_{ref})^{0.5}$$

where  $PPV_{rec}$  is the PPV at a receiver;  $PPV_{ref}$  is the reference PPV at 25 feet from the pile driver (0.65 in/s);  $D$  is the distance from the pile driver to the receiver, in feet;  $n$  is a value related to the vibration attenuation rate through ground (the default recommended value for  $n$  is 1.1);  $E_{equip}$  is the rated energy of the actual impact pile driver in foot-pounds; and  $E_{ref}$  is 36,000 foot-pounds (rated energy of reference pile driver). (For the purposes of the analysis, it is assumed that the pile driver would be very similar to the reference pile driver and there would, therefore, be no adjustment for  $E_{equip}$ .)

For other equipment, including heavy earthmoving equipment (such as excavators, graders, and backhoes) and vibratory rollers, the equation is:

$$PPV_{rec} = PPV_{ref} \times (25/D)^n$$

where  $PPV_{rec}$  is the PPV at a receptor;  $PPV_{ref}$  is the reference PPV at 25 feet from the equipment;  $D$  is the distance from the equipment to the receiver, in feet; and  $n$  is a value related to the vibration attenuation rate through ground (the default recommended value for  $n$  is 1.1).

## Operations

### Traffic

#### **Common Elements Typical Project**

The anticipated average daily patronage at the Common Elements Typical Project is up to 500 visitors. As such these visitations are assumed to be dispersed equally throughout the day (7:00 a.m. through 10:00 p.m.), which would result in 33 visitors per hour. A conservative assumption is that all 33 hourly visitors would drive vehicles to the site of the Common Elements Typical Project, resulting in an increase of 66 vehicle trips per hour (33 to and 33 away from the site).

#### **Multi-Use Trails and Access Gateways Typical Project**

Similar to the Common Elements Typical Project the visitation of a Multi-Use Trails and Access Gateways Typical Project would be up to 1,000 visitors in any 1 hour. These Multi-Use Trails and Access Gateways Typical Projects could be located anywhere along the 51-mile LA River. As discussed in Chapter 2, *Project Description*, a Multi-Use Trails and Access Gateways Typical Project

would be no more than 5 miles in total size; therefore, these visitations are assumed to be dispersed equally throughout these 5 miles. This would result in no more than 67 visitors per hour. Conservatively assuming that all 67 visitors drive in individual vehicles, this would result in a total of 134 trips per hour.

## Onsite Operations

### *Common Elements Typical Project*

The various project components will introduce a mix of new or expanded noise sources. The Common Elements Typical Project would generally encompass no more than 3 acres and could include several different types of development. A complete list of Common Element components is included in Chapter 2. The anticipated average daily patronage at the Common Elements Typical Project is up to 500 visitors. The primary noise source associated with the Common Elements Typical Project would be visitors speaking. To simplify the quantification of visitors' speech, it was assumed that 50 percent of visitors would be male and 50 percent would be female and all would be speaking with raised voices. A raised male voice at a distance of 1 meter (3.28 feet) would be 65 dBA, while a raised female voice at the same distance would be 62 dBA (Harris 1998; U.S. EPA 1977) (Table 3.12-14). To calculate the average hourly  $L_{eq}$  associated with visitors attending the developments associated with the Common Elements, it was assumed that the visitors would be dispersed equally throughout the day (7:00 a.m. through 10:00 p.m.) for a total of 33 visitors per hour. Finally, it was assumed that half the visitors (17 visitors) would be talking at the same time.

**Table 3.12-14. Operational Noise Level – Common Elements**

Source	$L_{eq}$ at 3.28 Feet (dBA)	Number of Sources	Estimated Noise Level at 3.23 feet (dBA)	Combined $L_{eq}$ at 50 Feet (dBA)
Male raised voice	65	9	75	53
Female raised voice	62	8	72	

Sources: Harris 1998; U.S. EPA 1977

Other noise sources that could be associated with the Common Elements Typical Project would be Heating, Ventilating, and Air Conditioning (HVAC) systems. At this point the location and size of these systems are not known; therefore, these are discussed qualitatively.

### *Multi-Use Trails and Access Gateways Typical Project*

Multi-Use Trails and Access Gateways Typical Projects typically would include a continuous path for uses such as bike trails, equestrian trails, and easy to find and welcoming access gateways. It is expected that a Multi-Use Trails and Access Gateways Typical Project could attract up to 1,000 visitors within any day. It was assumed that 1,000 visitors would be equally dispersed over their approximate 5-mile area, which would equal 67 visitors during any 1 hour within a 5-mile stretch of the river. As such, this would equate to, at most, one visitor per minute at any given location.

### 3.12.3.2 Criteria for Determining Significance

#### Thresholds of Significance

For the purposes of the analysis in this PEIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed Project would have a significant impact on the environment if it would:

- 3.12(a) Result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. This impact will occur if:
  - b) Any project construction activity would take place outside the codified hours of construction specified by any city or County government codes.
  - c) Any project construction activity generates maximum noise levels that exceed 75 dBA at any offsite residential receptor (based on the City of Los Angeles Municipal Code). The 1-hour  $L_{eq}$  from project construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use (based on the L.A. CEQA Thresholds Guide).
  - d) Any project operations activity would generate noise related to the Project that would exceed the limits specified in any jurisdiction's municipal code.
- 3.12(b) Generate excessive groundborne vibration or groundborne noise levels.
- 3.12(c) Be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.

### 3.12.3.3 Impacts and Mitigation Measures

The following sections address construction and operational impacts from potential noise and vibration impacts. Because thresholds depend on the specific jurisdiction, the analysis is broken down by frames and addresses specific jurisdictional requirements germane to construction and operations. In many cases different jurisdictions overlap throughout different frames. When jurisdictions overlap different frames, the analysis will be referenced to the first frame where the jurisdiction appears unless otherwise stated.

Typical Projects, as described in Chapter 2, *Project Description*, have been identified for detailed analysis in this PEIR based on the availability of potential design concepts in the *2020 LA River Master Plan*. As discussed above, the location of Typical Projects could occur along any portion of the 51-mile river and would be based on safety, comfort, and wayfinding.

#### **Impact 3.12(a): Would the proposed Project result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Table 3.12-30 summarizes impacts related to construction of the Common Elements Typical Project. A more detailed discussion is provided below.

## Typical Projects

### Common Elements

#### **Construction**

##### *Frame 1—City of Long Beach*

Section 8.80.202 of the Long Beach Municipal Code regulates construction activities where a building or other related permit is required that may annoy or disturb a reasonable person of normal sensitivity between 7 p.m. and 7 a.m. the following day on weekdays and 7 p.m. on Friday and 9 a.m. on Saturday and after 6 p.m. on Saturday.

Three ambient field measurements were conducted within Frame 1 within the City of Long Beach. Ambient noise levels ranged from 51 to 61 dBA  $L_{eq}$ . Table 3.12-9 indicates that construction noise levels associated with the Common Element Typical Projects would be 87  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of this magnitude would likely dominate the noise environment if construction is within 50 feet and would not attenuate to ambient levels within 3,200 feet (in a free field environment with no intervening shielding). Intervening structures and anomalous and atmospheric spreading would likely reduce construction noise to below the ambient noise levels well before 3,200 feet. However, construction noise levels could still dominate the noise environment surrounding the project site.

Projects and construction associated with the proposed Project would generally occur during the prescribed hours outlined in the Long Beach Municipal Code. If, during development of the final construction schedule, it is deemed necessary to work outside of the permitted hours, the implementing agency will follow the necessary procedures to obtain an appropriate variance. Additionally, the *City of Long Beach General Plan Policy N 12-5* requires best business practices to be incorporated into construction activities. As such, the implementing agency will incorporate the following guidance as project design features for any construction projects within the City of Long Beach's jurisdiction:

- The construction contractor should schedule high noise- and vibration-producing activities to a shorter window of time during the day outside early morning hours to minimize disruption to sensitive uses.
- Grading and construction contractors should use equipment that generates lower noise and vibration levels, such as rubber-tired equipment rather than metal-tracked equipment.
- Construction haul truck and materials delivery traffic should avoid residential areas whenever feasible.
- The construction contractor should place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible.
- The construction contractor should use onsite electrical sources to power equipment rather than diesel generators, where feasible.
- All residential units within 500 feet of a construction site should be sent a notice regarding the construction schedule. A sign legible at a distance of 50 feet should also be posted at the construction site. All notices and the signs should indicate the dates and durations of

construction activities, as well as provide a telephone number for a “noise disturbance coordinator.”

- A “noise disturbance coordinator” should be established by the project developer. The disturbance coordinator should be responsible for responding to any local complaints about construction noise. The disturbance coordinator should determine the cause of the noise complaint (e.g., starting too early, bad muffler) and should be required to implement reasonable measures to reduce noise levels.

With consideration of the anticipated timing of construction being conducted within the time of day not regulated by the Long Beach Municipal Code (i.e., between 7 p.m. and 7 a.m. the following day on weekdays and the hours of 7 p.m. on Friday and 9 a.m. on Saturday and after 6 p.m. on Saturday and at no time on Sunday), and the inclusion of the project design features laid out in the *City of Long Beach General Plan*, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 1—City of Los Angeles*

Land uses located within the City of Los Angeles are all industrial in nature and located approximately 5,000 feet of the LA River within Frame 1. Therefore, the City of Los Angeles impacts are discussed in Frame 6.

#### *Frame 2—City of Long Beach*

Land uses within the study area in the City of Long Beach in this frame are generally of the same nature as those discussed in Frame 1. Please refer to the detailed analysis of construction included in Frame 1.

#### *Frame 2—City of Carson*

Section 5502 of the City of Carson’s Municipal Code restricts construction operations of 20 days or less to 75 dBA  $L_{max}$  between 7:00 a.m. and 8:00 p.m. and 60 dBA  $L_{max}$  daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays at single-family residences and 65 dBA  $L_{max}$  between 7:00 a.m. to 8:00 p.m. and 55 dBA  $L_{max}$  daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays for construction operations of 21 days or more.

Noise-sensitive land uses within Frame 2 in the City of Carson are generally no closer than 2,000 feet from the LA River. General make-up of land uses that would be considered noise sensitive within the City of Carson’s jurisdiction comprise single-family residences, parks, and Rancho Dominguez Preparatory School. The closest ambient field measurement conducted within Frame 2 is ST17 along the LA River within the City of Long Beach, which is representative of the existing ambient noise environment within the City of Carson. Ambient noise levels at this location measured 59 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Elements Typical Project would be 85  $L_{max}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 85 dBA  $L_{max}$  would generally dominate the noise environment if construction occurs within 50 feet; however, as the closest noise-sensitive receptors (single-family residences) within the City of Carson are over 2,000 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 32 dB, not accounting for intervening structures or anomalous and atmospheric spreading. As such noise from construction would be reduced to 53 dBA  $L_{max}$ , which would be under the thresholds outlined in the Carson Municipal Code. As such, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 2—Unincorporated County*

##### Los Angeles County Code

Land uses within the County in Frame 2 are industrial in nature and, as such, do not meet the criteria outlined in the County's code. Therefore, no impact would occur. A more detailed analysis of construction within the County is included in Frame 3.

##### *Frame 2—City of Compton*

The Compton Municipal Code regulates construction that would take place within the city. The municipal code restricts construction unless the noise caused thereby is confined within a building at any time other than between 7:00 a.m. and 7:00 p.m. on Monday through Saturday.

Land uses within the city in the Frame 2 are generally institutional in nature, consisting of two schools. However, these two land uses are approximately 3,300 feet away from the LA River. Therefore, no impact would occur. A more detailed analysis of construction within the City of Compton is included in Frame 3.

##### *Frame 3—City of Compton*

Section 7-12.22 of the Compton Municipal Code regulates construction that would take place within the city. The municipal code restricts construction unless the noise caused thereby is confined within a building at any time other than between 7:00 a.m. and 7:00 p.m. on Monday through Saturday. Additionally, the City of Compton's general plan Noise Policy 2.1 requires "noise studies for new development projects and expansion of existing developments that will result in construction activities in excess of 30 days or projects that are 5,000 square feet or more of building or structure area or fifteen units or more. To measure and propose mitigation measures for noise impacts on the nearby community, especially on existing noise-sensitive land uses." The Common

Elements Typical Project would generally be on the order of 10,000 square feet of construction, which would exceed the City of Compton's 5,000-square-foot threshold for new developments.

Noise-sensitive land uses within Frame 3 in the City of Compton are generally residential in nature with two schools (Carson Elementary and Dominguez High School). Residential land uses are within 1,000 feet of the LA River with I-710 between the land uses and the river. The Carson Elementary and Dominguez High School are within 400 feet of the river. The closest ambient field measurement conducted within Frame 3 is ST14 along the LA River within the City of Paramount, which is representative of the land uses within the City of Compton's jurisdiction. Ambient noise levels at this location measured at 60 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Element projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 87 dBA  $L_{eq}$  would generally dominate the noise environment if construction occurs within 50 feet; however, as the noise-sensitive receptors (single-family residences) within the City of Compton are over 1,000 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 26 dB, not accounting for intervening structures or anomalous and atmospheric spreading. At the school, noise from project construction, would attenuate approximately 18 dB. Therefore, noise levels from construction would attenuate to approximately 59 dBA and 67 dBA  $L_{eq}$ , respectively (not accounting for intervening structures or anomalous and atmospheric spreading).

Projects and construction associated with the proposed Project would occur during the prescribed hours outlined in the City of Compton's Municipal Code. Additionally, with consideration to the type of construction associated with the Common Elements Typical Project and the distance between any noise-sensitive receptors, noise levels associated with construction would be audible at the school closer to the river, but would not dominate the environment. Noise levels of 59 dBA at the residential land uses would likely be subsumed by noise from I-710.

The City of Compton's general plan Noise Policy 3.1 requires sound attenuation on construction equipment. As such, the proposed Project's implementing agency will incorporate the following guidance as a project design feature for any construction projects within the City of Compton's jurisdiction:

- All construction equipment will be required to keep properly functioning mufflers on all internal combustion and vehicle engines used in construction.

With consideration of the anticipated timing of construction occurring within the time of day considered acceptable by the Compton Municipal Code (i.e., 7:00 a.m. to 7:00 p.m. Monday through Saturday), and the inclusion of the above City of Compton's general plan policy as a project design feature, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Paramount*

Section 45-7 of the Paramount Municipal Code regulates construction that would take place within the city. The municipal code exempts “construction, repair or remodeling equipment and devices and other related construction noise sources shall be exempted from the provisions of this chapter provided a permit for such construction, repair or remodeling shall have been obtained for such construction, repair or remodeling from the building department of the city and the construction, repair or remodeling does not take place between the hours of 8:00 P.M. and 7:00 A.M.”

Therefore, with consideration of the anticipated timing of construction occurring within the time of day exempted by the Paramount Municipal Code (i.e., 7:00 a.m. to 8:00 p.m.), and the anticipation that the implementing agency would obtain a construction permit, impacts associated with construction would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—Unincorporated County*

The Los Angeles County Code, as discussed in Frame 2, regulates construction that would take place within the jurisdiction of the County.

Noise-sensitive land uses within Frame 3 in the unincorporated County area are generally residential in nature. Residential land uses are within 500 feet of the LA River with I-710 between the land uses and the river. The closest ambient field measurement conducted within Frame 3 is ST22 to the west of the proposed Project separated by I-710. Ambient noise levels at this location measured at 65 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Elements Typical Project would be 85 dBA  $L_{max}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 85 dBA  $L_{max}$  would generally dominate the noise environment if construction occurs within 50 feet of a receptor; however as the noise-sensitive receptors (single-family residences) within unincorporated County areas are over 500 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 20 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 65 dBA  $L_{max}$ . Additionally, there is an approximately 12-foot soundwall that provides noise reduction associated with I-710, which would shield noise-sensitive land uses.



Projects and construction associated with the proposed Project would occur during the prescribed hours outlined in the LA County Code. Additionally, considering the types of construction associated with the Common Elements Typical Project and the distance between any noise-sensitive receptors, noise levels associated with construction may be audible, but would generally be similar to the existing noise environment in the vicinity of I-710.

The County's requirement for limiting noise between 8:00 p.m. and 7:00 a.m. would not be applicable as project construction would not occur between these times. However, as project construction for the Common Elements would exceed the 10-day threshold for construction, the  $L_{max}$  value of 60 dBA would apply. Nevertheless, existing noise levels at the residences would be approximately 65 dBA  $L_{eq}$  and would represent the baseline noise environment. As such the noise levels associated with the proposed Project would not be discernable from the existing noise environment. Impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Lynwood*

Section 3-12.13 of the Lynwood Municipal Code regulates construction that would take place within the city. The municipal code regulates construction noise: "within a residential zone, or within a radius of five hundred feet (500') therefrom... between the hours of ten o'clock (10:00) P.M. of one day and seven o'clock (7:00) A.M. of the next day in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit therefor has been duly obtained from the director of development services or his or her designee."

Noise-sensitive land uses within Frame 3 in the City of Lynwood are residential and are within 500 feet but are separated from the LA River by I-710 and commercial land uses. The closest ambient field measurement conducted within Frame 3 is ST23 along the LA River within the City of Lynwood. Ambient noise levels at this location measured 65 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Element Typical Projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 87 dBA  $L_{eq}$  would generally dominate the noise environment if construction is within 50 feet; however, as the noise-sensitive receptors (single-family residences) within the City of Lynwood are approximately 500 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 20 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 67 dBA  $L_{eq}$ . Noise levels of this nature would be similar to the existing baseline.

With consideration of the anticipated timing of construction occurring within the time of day considered acceptable by the Lynwood Municipal Code (i.e., 7 a.m. to 10 p.m.), impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of South Gate*

Section 3-12.13 of the South Gate Municipal Code regulates construction that would take place within the city. The municipal code applies a variance process for construction noise, which requires the applicant to “detail the approved method of achieving maximum compliance and a time schedule for its accomplishment.” Additionally, the City of South Gate’s general plan outlines the hours from 7:00 p.m. through 8:00 a.m., Monday through Saturday, and on Sundays and federal holidays as times when construction is prohibited. The City of South Gate also includes policies in its general plan that will be incorporated as project design features.

Noise-sensitive land uses within Frame 3 in the City of South Gate are residential land uses along the boundary of the LA River (50 feet from the property line). The closest ambient field measurement conducted within Frame 3 is ST13 along the LA River within the City of Paramount, which is representative of the land uses within the City of South Gate’s jurisdiction. Ambient noise levels at this location measured 54 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Element projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels would be 87 dBA  $L_{eq}$  at the noise-sensitive receptors that border the LA River, which would likely dominate the noise environment.

Projects and construction associated with the proposed Project would generally occur during the prescribed hours outlined in the City of South Gate’s general plan. Additionally, the City of South Gate’s general plan Objective N1.1 and Policies 1 through 3, which require adherence to the prohibited hours of construction and methods to reduce construction noise, would be incorporated by the implementing agency for any construction projects within the City of South Gate’s jurisdiction. These project design features could include but not limited to:

- Construction noise reduction methods will be employed to the maximum extent feasible. These measures may include, but not be limited to,
  - shutting off idling equipment,
  - installing temporary acoustic barriers around stationary construction noise sources,
  - maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and

- use of electric air compressors and similar power tools, rather than diesel equipment.
- Prior to approval of project plans and specification by the City, project applicants and/or construction contractors will identify construction equipment and noise reducing measures, and the anticipated noise reduction.

With consideration of the anticipated timing of construction being conducted within the time of day not regulated by the City of South Gate's general plan (i.e., 7 p.m. and 7 a.m., or at any time on Sundays or holidays), and the inclusion of the project design features identified in the City of South Gate's general plan, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Cudahy*

The City of Cudahy generally does not regulate construction with the exception of policies in the City of Cudahy's general plan, which state that the city will:

- Limit hours of operation at all noise generation sources adjacent to noise sensitive areas or uses.
- Require all exterior noise sources (construction, operations, air compressors, pumps, fans, and leaf blowers) to use available noise suppression techniques and devices to lower exterior noise to acceptable levels which are compatible with adjacent land uses.
- Implement appropriate standard construction noise controls for all construction projects.

Noise-sensitive land uses within Frame 3 in the City of Cudahy are residential land uses along the boundary of the LA River (50 feet from the property line). The closest ambient field measurement conducted is within Frame 4, at ST12 along the LA River within the City of Bell, which is representative of the land uses within the City of Cudahy's jurisdiction. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Element projects would be 85 dBA  $L_{max}$  during the noisiest phase of construction. Construction noise levels would be 85 dBA  $L_{max}$  at the noise-sensitive receptors that border the LA River, which would likely dominate the noise environment.

The City of Cudahy does not specifically identify hours of operation for construction; therefore, the implementing agency would designate hours for construction as appropriate. Construction associated with the proposed Project would generally occur during the hours prescribed by the implementing agency. General plan policies NE 1.2 and 2.6, which require noise suppression techniques and application of appropriate standard construction noise controls for all construction projects, would be incorporated by the implementing agency for any construction projects within the City of Cudahy's jurisdiction. The City of Cudahy does not outline what standard noise control

measures could be; however, noise control measures such as those outlined by the City of Long Beach, but not limited to those measures, could be included as project design features.

With consideration of the anticipated timing of construction being conducted within the time of day designated by the implementing agency and the inclusion of the project design features laid out in the City of Cudahy's general plan (such as but not limited to the use of available noise suppression techniques and devices to lower exterior noise and those listed in the *City of Long Beach General Plan*), impacts associated with construction would be less than significant

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Downey*

Section 4606.5 of the Downey Municipal Code regulates construction that would take place within the city. The municipal code exempts construction noise from the requirements of the municipal code "provided a valid permit for such construction, repair, or remodeling shall have been obtained from the City. In any circumstance other than emergency work, no repair or remodeling shall take place between the hours of 9:00 p.m. of one day and 7:00 a.m. of the following day, and no repair or remodeling shall exceed eighty-five (85) db(A) across any property boundary at any time during the course of a twenty-four (24) hour day."

Noise-sensitive land uses within Frame 3 in the City of Downey are residential land uses approximately 3,400 feet from the boundary of the LA River. The closest ambient field measurement conducted within Frame 3 is ST13 along the LA River within the City of Paramount, which is representative of the land uses within the City of Downey jurisdiction. Ambient noise levels at this location measured at 54 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Element Typical Projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 37 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 50 dBA at noise-sensitive receptors within the City of Downey. Noise levels of this magnitude would not be discernable from the existing ambient levels.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Bell Gardens*

Section 16.24.120 of the Bell Gardens Municipal Code regulates construction that would take place within the city. The municipal code regulates construction “within a residential zone, or within a radius of 500 feet, between the hours of 7:00 p.m. of one day and 8:00 a.m. of the next day.”

Noise-sensitive land uses within Frame 4 in the City of Bell Gardens are residential land uses along the boundary of the LA River (300 feet from the property line). The closest ambient field measurement conducted is within Frame 4, at ST12 along the LA River within the City of Bell. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ . However, the I-710 alignment is between the LA River and the noise-sensitive land uses within the City of Bell Gardens. Therefore, noise levels within these land uses would likely be more akin to those at ST22 (65 dBA  $L_{eq}$ ).

Table 3.12-9 indicates that construction noise levels associated with the Common Elements Typical Projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 87 dBA  $L_{eq}$  would generally dominate the noise environment if construction is within 50 feet; however, as the noise-sensitive receptors (single-family residences) within the City of Bell Gardens are approximately 300 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 16 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 67  $L_{eq}$ .

As the City of Bell Gardens Municipal Code regulates construction “within a residential zone, or within a radius of 500 feet, between the hours of 7:00 p.m. of one day and 8:00 a.m. of the next day,” the Common Elements Typical Project would comply with the City of Bell Gardens’ thresholds for construction. Therefore, with consideration of the anticipated timing of construction being conducted within the time of day not regulated by the City of Bell Gardens’ general plan (i.e., between 7:00 p.m. and 8:00 a.m. the following day), impacts associated with construction would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Bell*

Section 16.24.120 of the Bell Municipal Code generally regulates noise and, therefore, construction noise. However, the City of Bell does not regulate time specifically for construction that would take place within the city. The municipal code regulates construction that would “emanate from any activity taking place on real property owned or occupied by such person, which has the effect of

disturbing the peace and quiet of the neighborhood, or which directly causes an unreasonable interference with the use, enjoyment and/or possession of any real property owned or occupied by any other person.”

Noise-sensitive land uses within Frame 4 in the City of Bell are residential land uses along the boundary (within 50 feet) of the LA River. The closest ambient field measurement conducted is within Frame 4, at ST12 along the LA River within the City of Bell. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Elements Typical Project would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. As noise-sensitive land uses within the City of Bell are within 50 feet, construction noise levels of 87 dBA  $L_{eq}$  would generally dominate the noise environment.

The City of Bell’s municipal code or general plan do not necessarily regulate construction or allow a specific time frame in which construction can occur. Therefore, the implementing agency will designate hours for construction to include as part of any potential project. Construction associated with the Common Elements Typical Project would generally occur during the prescribed hours outlined by the implementing agency in lieu of specific direction supplied by the City of Bell. Therefore, with consideration of the anticipated timing of construction, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Maywood*

Section 5.23.11 of the Maywood Municipal Code regulates construction that would take place within the city. The municipal code exempts construction noise from the requirements of the municipal code: “Noise sources associated with the construction, repair, remodeling, or grading of any real property or during authorized seismic surveys provided such activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or at any time on Sunday or a Federal holiday, and provided the noise level created by such activities does not exceed the noise standard of seventy (70) dBA plus the limits specified in Section 5-23.08 of this chapter as measured on residential property and does not endanger the public health, welfare, and safety.”

Noise-sensitive land uses within Frame 4 in the City of Maywood are residential land uses approximately 200 feet from the boundary of the LA River. The closest ambient field measurement conducted within Frame 4 is ST12 along the LA River within the City of Bell, which is representative of the land uses within the City of Maywood. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Elements Typical Project would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 12 dB, not accounting for intervening

structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 75 dBA at noise-sensitive receptors within the City of Maywood. Noise levels of this magnitude would be plainly audible. As construction noise would exceed the City of Maywood's 70 dBA standard, impacts would be potentially significant without mitigation.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

##### **Mitigation Measure NOI-1: Prepare Construction Noise Work and Mitigation Monitoring Plan.**

During final design the implementing agency will prepare a focused noise analysis for any project within the city, which identifies nearby noise sensitive receptors that could be affected, predicts anticipated construction-related noise levels, and identifies measures that will be implemented by the construction contractor in order to comply with the city's standard. Measures that could be implemented include, but are not limited to, the following:

- Using equipment that generates lower noise levels than those outlined in Table 3.12-9
- Locating construction equipment far enough from noise-sensitive land uses such that noise attenuates to below the city's standard
- Designing and installing temporary sound barriers, which would provide attenuation below the city's dBA standard

The implementing agency will also require noise monitoring during all phases of construction to confirm that the mitigation measures identified by the construction noise work plan and implemented by the construction contractor reduce construction noise to below the city's threshold.

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frame 4—City of Commerce*

Section 19.19.160 of the Commerce Municipal Code regulates construction that would take place within the city. The municipal code exempts construction noise from the requirements of the municipal code provided construction does not occur "within any residential zone, or within a radius of five hundred feet of a residential zone or between the hours of ten p.m. and seven a.m., unless a permit has been obtained from the city."

No noise-sensitive land uses are within 500 feet of the LA River within the City of Commerce. Land uses within the area of influence in the City of Commerce are completely commercial/industrial in nature. Therefore, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Huntington Park*

Section 9-3.506 of the Huntington Park Municipal Code regulates construction that would take place within the city. The municipal code exempts construction noise from the requirements of the municipal code provided construction does not take place “between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or at any time on Sundays or Federal holidays.”

Noise-sensitive land uses within Frame 4 in the City of Huntington Park are residential land uses approximately 4,200 feet from the boundary of the LA River. No field measurement was conducted that would represent the land uses within the City of Huntington Park due to the jurisdiction’s proximity to the LA River.

Table 3.12-9 indicates that construction noise levels associated with the Common Element Typical Projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 39 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 48 dBA at noise-sensitive receptors within the City of Huntington Park. Noise levels of this magnitude would not likely be discernable from the existing ambient.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Vernon*

The Vernon Municipal Code generally regulates construction through its operational guidance, which restricts noise between 7:00 a.m. and 10:00 p.m. to 65 dBA within one-tenth of a mile of any residence or school.

Most land uses within the City of Vernon’s jurisdiction along the LA River within one-tenth of a mile are commercial/industrial; however, some residential land uses are within this area. The closest ambient field measurement conducted within Frame 4 is ST11, within the City of Vernon, located along the LA River. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Elements Typical Project would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 19 dB, not accounting for intervening



structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 68 dBA at noise-sensitive receptors within the City of Vernon. Noise levels of this magnitude would be similar to the existing ambient level, but nonetheless would exceed the City of Vernon's 65 dBA threshold. The Vernon Municipal Code prescribes that any noise level from a project that would exceed the City of Vernon's 65 dBA standard would be required to obtain a conditional use permit that would allow noise sources in excess of the standard.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

##### **Mitigation Measure NOI-1: Prepare Construction Noise Work and Mitigation Monitoring Plan.**

In addition, apply the following mitigation measure.

##### **Mitigation Measure NOI-2: Obtain Conditional Use Permit and Implement its Requirements during Construction Activities.**

Prior to any construction within the City of Vernon, the implementing agency will apply for and obtain a conditional use permit, which will allow the Project to exceed the City of Vernon's noise standard of 65 dBA.

#### Significance after Required Mitigation

Impacts would be significant and unavoidable.

##### *Frame 4—Unincorporated County*

Land uses located within the unincorporated County areas in Frame 4 are generally not noise sensitive along the LA River. Refer to impacts as discussed in Frame 3.

##### *Frame 5—City of Los Angeles*

Land uses located within the City of Los Angeles are generally industrial and commercial in nature within Frame 5 and therefore are not considered noise sensitive. Impacts related to the Project are discussed in Frame 6 below.

##### *Frame 6—City of Los Angeles*

The Los Angeles Municipal Code regulates construction that would take place within the jurisdiction of the City of Los Angeles. Section 41.40 of the Los Angeles's Municipal Code restricts construction "between the hours of 9:00 P.M. and 7:00 A.M. of the following day." Additionally, the City of Los Angeles's CEQA Threshold Guide provides guidance for analysis of construction noise by setting a general screening criteria:

- Would construction activities occur within 500 feet of a noise sensitive use?

- For projects located within the City of Los Angeles, would construction occur between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday?

Noise-sensitive land uses within Frame 6 in the City of Los Angeles are varied but include residential land uses that front the LA River. Residential land uses are generally within 50 feet of the LA River right-of-way. The closest ambient field measurement conducted within Frame 6 is ST8 within the City of Los Angeles. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Element Typical Projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of 87 dBA  $L_{eq}$  would generally dominate the noise environment if construction is within 50 feet.

Construction associated with the Common Elements Typical Project would occur during the prescribed hours outlined in the City of Los Angeles's municipal code and CEQA guidelines. However, the City of Los Angeles's CEQA guidelines state that a significant impact may occur if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use; or
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.

As shown in Table 3.12-9 noise levels could be as high as 87 dBA  $L_{eq}$ , which would exceed the existing ambient level by more than 20 dB. Therefore, impacts could be significant without mitigation incorporated.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

##### **Mitigation Measure NOI-3: Require Noise-Reducing Practices Be Incorporated into Construction Activities.**

Prior to any construction within the City of Los Angeles, the implementing agency will require the contractor to include the following noise-reducing practices:

- Use noise control devices, such as equipment mufflers, enclosures, and barriers. Natural and artificial barriers such as ground elevation changes and existing buildings can shield construction noise. Stage construction operations as far from noise-sensitive uses as possible.
- Avoid residential areas when planning haul truck routes.
- Maintain all sound-reducing devices and restrictions throughout the construction period.
- Replace noisy equipment with quieter equipment (for example, use a vibratory pile driver instead of a conventional pile driver and rubber-tired equipment rather than track equipment).
- Change the timing and/or sequence of the noisiest construction operations to avoid sensitive times of the day.

### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frame 6—City of Glendale*

The Glendale Municipal Code regulates construction that would take place within the jurisdiction of the City of Glendale. Section 8.36.080 of the Glendale Municipal Code restricts construction “within a residential zone, or within a radius of five hundred feet therefrom between the hours of seven p.m. on one day and seven a.m. of the next day or from seven p.m. on Saturday to seven a.m. on Monday or from seven p.m. preceding a holiday.” The City of Glendale’s general plan includes a policy to “[c]hange the permitted hours of construction to Monday through Friday, 7 a.m. to 7 p.m. and on Saturday from 9 a.m. to 5 p.m. Maintain the ban on construction on Sundays and Holidays.”

Most land uses within the City of Glendale’s jurisdiction along the LA River are industrial in nature; however, some residences are along the LA River. The closest ambient field measurement conducted within Frame 6 is ST7 within the City of Los Angeles, which is representative of the land uses within the City of Glendale. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Element Typical Projects would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 11 dB, at a distance of 180 feet, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 76 dBA at noise-sensitive receptors within the City of Glendale. Noise levels of this magnitude would exceed the existing ambient.

The City of Glendale’s general plan policy regulates construction “Monday through Friday, 7 a.m. to 7 p.m. and on Saturday from 9 a.m. to 5 p.m. and maintains the ban on construction on Sundays and Holidays.” The Common Elements Typical Project would comply with the City of Glendale’s thresholds of construction. Therefore, with consideration of the anticipated timing of construction being conducted within the time of day not regulated by the City of Glendale’s general plan, impacts associated with construction would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 7—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 7 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

### *Frame 7—Unincorporated County*

Based on review of the study area, land uses located within the unincorporated County areas in Frame 7 are generally not noise sensitive along the LA River. However, for any noise-sensitive land use located within this area not identified, refer to impacts as discussed in Frame 3.

### *Frame 7—City of Burbank*

The City of Burbank's municipal code and general plan regulate construction that would take place within the jurisdiction of the City of Burbank. The general plan and municipal code state that, "construction noise that occurs between the hours of 7 a.m. and 7 p.m. Monday through Friday and 8 a.m. to 5 p.m. on Saturday is exempt from applicable noise standards."

Noise-sensitive land uses within Frame 7 in the City of Burbank include residential land uses that are along the LA River within 50 feet of potential construction. The closest ambient field measurement conducted within Frame 7 is ST6 within the City of Los Angeles. Ambient noise levels at this location measured 54 dBA  $L_{eq}$ .

Table 3.12-9 indicates that construction noise levels associated with the Common Elements Typical Project would be 87 dBA  $L_{eq}$  during the noisiest phase of construction. As noise-sensitive land uses are located along the LA River, construction noise levels could be as high as 87 dBA  $L_{eq}$ . Noise levels of this magnitude would likely dominate the existing ambient environment.

The City of Burbank's general plan and municipal code exempt construction provided it occur "between the hours of 7 a.m. and 7 p.m. Monday through Friday and 8 a.m. to 5 p.m. on Saturday." Therefore, with consideration of the anticipated timing of construction being conducted within the time of day permitted by the City of Burbank's general plan, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

### *Frame 8—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 8 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

### *Frame 9—City of Los Angeles*

Land uses within the City of Los Angeles in Frame 9 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

### ***Operations (Traffic)***

Operational traffic associated with the Common Elements Typical Project would occur and generally be relegated to the project location. Traffic could be located anywhere along the river, and as such this discussion would be applicable to all frames and jurisdictions. As discussed above, the typical number of visitors attending the Common Elements Typical Project would be no more than 500 per day. This would result in no more than 33 visitors per hour or 66 total trips per hour. The typical arterial roadways average daily traffic (ADT) could range from 2,000 vehicles per day up to 70,000 or more per day, with a typical average around 28,000 (OCTA 2019). Assuming an average typical arterial roadway volume, 28,000 vehicles per day, the hourly number of vehicles along this type of example roadway would be 1,167 vehicles (28,000 vehicles/24 hours). A single automobile at a speed of 45 miles per hour (mph) at distance of 50 feet (as calculated by FHWA's Traffic Noise Model [TNM] 2.5) will produce a sound pressure level of 36.4 dBA  $L_{eq}$ . Therefore, 1,167 and 1,233 vehicles (traffic along an arterial roadway without and with the Common Elements Typical Project) would produce sound pressure levels of 67.1 and 67.3 dBA  $L_{eq}$ , respectively, a difference of 0.2 dB. Changes in traffic noise of this magnitude would be negligible. Based on the low range of the ADT volumes, (i.e., 2,000 vehicles) an average hourly traffic volume would be 83 vehicles (2,000 vehicles/24 hours). Therefore, 83 and 149 trips (traffic along an arterial roadway without and with the Common Elements Typical Project) would produce sound pressure levels of 55.6 and 58.1 dBA  $L_{eq}$ , respectively, a difference of 2.5 dB. The generally agreed upon criterion for perception is a change in noise of 3 dB. As such, an increase of this magnitude would be approaching that criterion. However, overall noise levels associated with hourly traffic (i.e., 58 dBA  $L_{eq}$ ) would not meet or exceed any codified threshold. Therefore, impacts associated with operational traffic would be less than significant.

### ***Operations (Onsite)***

#### *Frame 1—City of Long Beach*

The Common Elements Typical Project would generally encompass no more than 3 acres and typically could include a variety of development types. A complete list of Common Element components is included in Chapter 2, *Project Description*. The anticipated average daily patronage at the Common Elements Typical Project is up to 500 visitors per day, or 33 visitors per hour (based on the typical 7:00 a.m. through 10:00 p.m.  $L_{dn}$  daytime frame). The average raised male and female voice at 1 meter (3.28 feet) is 65 and 62 dBA, respectively. Therefore, if 50 percent of visitors were speaking at one time (equally split amongst men and women) the noise from visitors speaking would be approximately 53 dBA  $L_{eq}$  at a distance of 50 feet.

Section 8.80.150 of the Long Beach Municipal Code regulates noise that could adversely affect citizens by setting day and nighttime noise thresholds at noise-sensitive land uses. Specifically, the City of Long Beach regulates predominantly residential land use by applying a daytime noise level of 50 dBA  $L_{eq}$  between 7:00 a.m. and 10:00 p.m. and 45 dBA between 10:00 p.m. and 7:00 a.m.

The ambient environment based on field measurements conducted within Frame 1 within the City of Long Beach ranged from 51 to 61 dBA  $L_{eq}$ . The municipal code states in 8.80.150 subsection C: "If the measured ambient level exceeds that permissible within any of the first four (4) noise limit categories in Subsection B of this Section, the allowable noise exposure standard shall be increased in five (5) decibels increments in each category as appropriate to encompass or reflect the ambient noise level."

**Table 3.12-15. Operational Noise Level – Common Elements (City of Long Beach)**

Field Measurement Location	1-hour $L_{eq}$ , dBA				Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Daytime (Unadjusted) Baseline Sound Level Limit	Adjusted Sound Level Limit <sup>1</sup>	Unadjusted	Adjusted	
ST16	53	51	50	55	Yes	No	No
ST17		59	50	60	Yes	No	No
ST18		61	50	65	Yes	No	No
ST19		60	50	65	Yes	No	No
ST20		52	50	55	Yes	No	No

Table 3.12-15 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would exceed the unadjusted baseline sound level limit set forth in the municipal code by no more than 2 dB. However, the existing ambient measured ambient exceeds the baseline sound level limit in the municipal code. Therefore, the baseline sound level limits are adjusted by 5 dB to account for the existing ambient. As such the adjusted baseline would be no less than 55 dBA. The noise contribution from the Common Elements Typical Project would not exceed the adjusted baseline.

Other operational components associated with the Common Elements Typical Project would be HVAC systems. The locations of HVAC systems are not known; however, noise from HVAC systems could be as loud as 77 dBA at a distance of 1 foot. At a distance of 50 feet (assuming a 6 dB reduction for doubling of distance), HVAC system noise would reduce to 44 dBA. Noise from HVAC systems would likely exceed both the daytime unadjusted and adjusted sound level limits in the City of Long Beach. Therefore, impacts associated with the Common Elements Typical Project could be significant and would require mitigation.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

##### **Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

During final design of the Common Elements Typical Project, the implementing agency will design HVAC systems to comply with the applicable city's municipal code standards. This could include but would not be limited to actions such as:

- Prepare a focused noise study to analyze HVAC noise, which will identify a location for HVAC systems at appropriate distances so as to not exceed a 30-minute noise level (within any 1 hour) of 50 dBA at the closest noise sensitive land use.

- Design housings or shielding for HVAC systems that would reduce HVAC noise so as to not exceed a 30-minute noise level (within any 1 hour) of 50 dBA at the closest noise sensitive land use.

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 1—City of Los Angeles*

Land uses located within the City of Los Angeles are all industrial in nature and located approximately 5,000 feet of the LA River within Frame 1. As such noise would not be expected to impact land uses within the City of Los Angeles as they are not noise sensitive. Therefore, the City of Los Angeles impacts are discussed in Frame 6.

*Frame 2—City of Long Beach*

Land uses within the area of the LA River are generally of the same nature as those discussed in Frame 1. Please refer to the detailed analysis of operations included in Frame 1.

*Frame 2—City of Carson*

The City of Carson has adopted the Los Angeles County Code and amended the guidance as discussed in the regulatory section. The City of Carson has regulated residential land use by applying a daytime noise level of 50 dBA  $L_{eq}$  between 7:00 a.m. and 10:00 p.m. and 45 dBA between 10:00 p.m. and 7:00 a.m., unless otherwise noted.

The ambient environment based on field measurements conducted within Frame 2 within the City of Carson when measured was 53  $L_{eq}$  (ST21), which represents the baseline noise level by which to judge the Common Elements Typical Project.

**Table 3.12-16. Operational Noise Level – Common Elements Typical Project (City of Carson)**

Field Measurement Location	1-hour $L_{eq}$ , dBA				Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Daytime (Unadjusted) Baseline Sound Level Limit	Adjusted Sound Level Limit	Unadjusted	Adjusted	
ST21	53	53	50	53	Yes	No	No

Table 3.12-16 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would exceed the unadjusted baseline sound level limit set forth in the municipal code by no more than 3 dB. However, the existing ambient level exceeds the baseline sound level limit in the municipal code. Therefore, the baseline sound level limits are adjusted by 3 dB to account for the existing ambient levels. The noise contribution from the Common Elements Typical Project would not exceed the adjusted baseline.

As discussed above, the locations of HVAC systems are not known. Noise from HVAC systems would likely exceed both the daytime unadjusted and adjusted sound level limits in the City of Carson. Therefore, impacts associated with the Common Elements Typical Project could be significant and would require mitigation.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 2—Unincorporated County*

Unincorporated County regulations are discussed in Frame 3.

*Frame 3—City of Compton*

Section 7-12.4 of the City of Compton’s municipal code sets baseline noise for land uses within the city and restricts machinery that could “create any noise which would cause the noise level at the property line of any property to exceed the ambient noise level by more than five (5) decibels.”

The ambient environment based on field measurements conducted within Frame 3 within the City of Compton is represented by measurement location ST22, which was north of the City of Compton’s jurisdiction in the unincorporated County areas. Noise measured at the time of the measurement was 65 dBA  $L_{eq}$ . This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project would develop.

**Table 3.12-17. Operational Noise Level – Common Elements (City of Compton)**

Field Measurement Location	1-hour $L_{eq}$ , dBA		Exceeds Sound Level Limits?	Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Ambient	
ST22	53	65	No	No

Table 3.12-17 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would be well below the measured daytime noise level. The noise contribution from the Common Elements Typical Project would negligible and would not be noticeable. Therefore, impacts would be less than significant.



As discussed above, the locations of HVAC systems are not known. Noise from HVAC systems would be similar to the daytime noise levels in the City of Compton. Therefore, impacts associated with the Common Elements Typical Project would likely be less than significant. However, based on the uncertainty of the location of the Common Elements Typical Project, the County would incorporate the mitigation measure below to make sure that impacts would be less than significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 3—City of Paramount*

Section 45-4 of the Paramount Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the maximum allowable noise level of 62 dBA  $L_{eq}$  at residential land uses within the city between 6:00 a.m. and 10:00 p.m. The code also applies to both speech and HVAC systems.

The ambient environment based on field measurements conducted within Frame 3 in the City of Paramount is represented by measurement location ST14. Noise at the time of the measurement was 51 dBA  $L_{eq}$ . This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-18 indicates that operational noise of the common elements would not exceed the maximum daytime sound level limit. As discussed, the existing measured baseline would be 51 dBA  $L_{eq}$ , which would result in a 2 dB increase over the measured level. A 2 dB increase would not be considered perceptible. Therefore, impacts would be less than significant.

**Table 3.12-18. Operational Noise Level – Common Elements (City of Paramount)**

Field Measurement Location	1-hour $L_{eq}$ , dBA		Exceeds Sound Level Limits?	Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Daytime Baseline Sound Level Limit	Daytime Baseline Sound Limit	
ST14	53	62	No	Yes

As discussed above, the locations of HVAC systems are not known. Noise from HVAC systems would be similar to the daytime noise levels in the City of Paramount. Therefore, impacts associated with the Common Elements Typical Project would likely be less than significant. However, based on the

uncertainty of the location of the Common Elements Typical Project, the implementing agency will incorporate mitigation measures below to make sure that impacts would be less than significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 3—Unincorporated County*

The Los Angeles County Code regulates operational noise that would take place within the County. The County Code regulates the maximum allowable noise level of 50 dBA  $L_{eq}$  at residential land uses within the County between 7:00 a.m. and 10:00 p.m.

The ambient environment based on field measurements conducted within Frame 3 within the County is represented by measurement location ST22. Noise at the time of the measurement was 65 dBA  $L_{eq}$ . The County, however, uses a 50 dBA  $L_{eq}$  operational metric in lieu of an ambient measurement. If an ambient measurement that exceeds the baseline of 50 dBA  $L_{eq}$  was conducted based on Section 12.08.390 subsection B, the ambient  $L_{50}$  will become the baseline. The measured  $L_{50}$  measured at ST22 (included in Appendix H) was 64 dBA  $L_{50}$ . This noise level would be representative of the noise environment within the unincorporated County area in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-19 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ . As  $L_{eq}$  is a logarithmic average of the overall noise level and  $L_{50}$  is the median noise level,  $L_{eq}$  is a more conservative metric. Therefore, as operational  $L_{eq}$  would be well below the measured  $L_{50}$ , operational noise of the Common Elements would not exceed the measured daytime ambient sound level limit. Therefore, impacts would be less than significant.

**Table 3.12-19. Operational Noise Level – Common Elements (County of Los Angeles)**

Field Measurement Location	1-hour $L_{eq}$ , dBA	Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient ( $L_{50}$ )	Measured	
ST22	53	64	No	No

As discussed above, the locations of HVAC systems are not known. Noise from HVAC systems would be similar to the daytime noise levels in the unincorporated County areas. Therefore, impacts associated with the Common Elements Typical Project would likely be less than significant. However, based on the uncertainty of the location of the Common Elements Typical Project, the

County would incorporate the mitigation measure below to make sure that impacts would be less than significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 3—City of Lynwood*

The Lynwood Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the maximum allowable noise level of 60 dBA  $L_{eq}$  at residential land uses between 7:00 a.m. and 10:00 p.m.

The ambient environment based on field measurements conducted within Frame 3 within the City of Lynwood is represented by measurement location ST23. Noise at the time of the measurement was 65 dBA  $L_{eq}$ . This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-20 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime or baseline sound level. Additionally, land uses in the City of Lynwood are separated by I-710 from the LA River. Therefore, impacts would not likely be noticeable at land uses within the City of Lynwood’s jurisdiction and would be less than significant.

**Table 3.12-20. Operational Noise Level – Common Elements (City of Lynwood)**

Field Measurement Location	1-hour $L_{eq}$ , dBA			Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Daytime Baseline Sound Level Limit	Measured	Daytime Baseline Sound Limit	
ST14	53	65	60	No	No	No

Other operational components associated with the Common Elements Typical Project would be HVAC systems. The locations of HVAC systems are not known; however, noise from HVAC systems could be as loud as 77 dBA at a distance of 1 foot. At a distance of 50 feet (assuming a 6 dB reduction for doubling of distance), HVAC system noise would reduce to 44 dBA. Similar to operational noise levels associated with visitors, noise would not likely be noticeable at surrounding land uses within the City of Lynwood. Impacts would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

*Frame 3—City of South Gate*

The South Gate Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the maximum allowable noise level of 50 dBA  $L_{eq}$  at residential land uses between 7:00 a.m. and 10:00 p.m.

The ambient environment based on field measurements conducted within Frame 3 in the City of South Gate is represented by measurement location ST13. Noise at the time of the measurement was 54 dBA  $L_{eq}$ . This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-21 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime sound level. However, the operational noise would exceed the daytime baseline set forth in the City of South Gate’s municipal code. Therefore, impacts would be potentially significant and would require mitigation.

Other operational components associated with the Common Elements Typical Project would be HVAC systems. The locations of HVAC systems are not known; however, noise from HVAC systems could be as loud as 77 dBA at a distance of 1 foot. At a distance of 50 feet (assuming a 6 dB reduction for doubling of distance), HVAC system noise would reduce to 44 dBA. However, based on the uncertainty of the location of the Common Elements Typical Project, the County would incorporate mitigation measures below to make sure that impacts would be less than significant.

**Table 3.12-21. Operational Noise Level – Common Elements (City of South Gate)**

Field Measurement Location	1-hour $L_{eq}$ , dBA			Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Daytime Baseline Sound Level Limit	Measured	Daytime Baseline Sound Limit	
ST13	53	54	50	No	Yes	Yes

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

In addition, apply the following mitigation measure.

**Mitigation Measure NOI-5: Prepare Focused Noise Study and Implement Findings**

During final design of the Common Elements Typical Project, the implementing agency will prepare a focused noise study to determine the existing ambient baseline noise level by which to compare the operational noise level of the Common Elements Typical Project. The focused noise study will analyze the existing baseline noise level against operational noise, and, if it is determined that operational noise levels from the Common Elements would exceed the sound level limit, the implementing agency will provide measures or engineering best management practices to reduce exterior noise below the limit. These measures or best management practices could include, but are not limited to, the following:

- Locating the Common Elements Typical Project away from noise-sensitive receptors to reduce operational noise to below the existing baseline
- Designing the Common Elements Typical Project to shield noise-sensitive receptors from noise-producing elements
- Including sound-attenuating features such as soundwalls

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 3—City of Cudahy*

The Cudahy Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the maximum allowable noise level of 65 dBA  $L_{eq}$  at residential land uses between 7:00 a.m. and 10:00 p.m.

The ambient environment is based on field measurements at location ST12 conducted within the City of Bell, north of the City of Cudahy. Noise at the time of the measurement was 58 dBA  $L_{eq}$ . This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-22 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime or the Cudahy Municipal Code’s baseline sound level.

**Table 3.12-22. Operational Noise Level – Common Elements (City of Cudahy)**

Field Measurement Location	1-hour $L_{eq}$ , dBA			Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Daytime Baseline Sound Level Limit	Measured	Daytime Baseline Sound Limit	
ST12	53	58	65	No	No	No

As discussed above, the locations of HVAC systems are not known; however, noise from HVAC systems could be as loud as 77 dBA at a distance of 1 foot. At 50 feet (assuming a 6 dB reduction for doubling of distance), HVAC system noise would reduce to 44 dBA. However, based on the uncertainty of the location of the Common Elements Typical Project, the County would incorporate the mitigation measure below to make sure that impacts would be less than significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frame 3—City of Downey*

The Downey Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the maximum allowable noise level of 55 dBA  $L_{eq}$  at residential land uses between 7:00 a.m. and 10:00 p.m.

Noise-sensitive land uses within Frame 3 in the City of Downey are residential land uses approximately 3,400 feet from the boundary of the LA River. As such, noise from the Common Elements Typical Project along the LA River would not be noticeable within the jurisdiction of the City of Downey. Therefore, impacts would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Bell Gardens*

The Bell Garden Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the noise that would cause the noise level at the property line of any property to exceed the ambient noise level by more than 5 dB. This regulation applies specifically to machinery such as air conditioners; however, for the purposes of this analysis it has been extended to all operation noise associated with the Common Elements Typical Project.

The ambient environment is based on field measurements conducted at location ST12 within the City of Bell. Noise at the time of the measurement was 58 dBA  $L_{eq}$ . It should also be noted that noise-

sensitive land uses within the City of Bell Gardens are separated from the LA River by I-710. Therefore, noise from I-710 would likely dominate and increase the ambient noise level above what is represented by measurement location ST12. This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-23 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime sound level.

**Table 3.12-23. Operational Noise Level – Common Elements (City of Bell Gardens)**

Field Measurement Location	1-hour $L_{eq}$ , dBA		Exceeds Sound Level Limits?	Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Measured	
ST12	53	58	No	No

As discussed above, the locations of HVAC systems are not known. Noise-sensitive land uses within the City of Bell Gardens are separated from the LA River by I-710. As such, noise from the HVAC systems associated with the Common Elements Typical Project would not be noticeable, and impacts would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Bell*

The Bell Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the noise that would “emanate from any activity taking place on real property owned or occupied by such person, which has the effect of disturbing the peace and quiet of the neighborhood, or which directly causes an unreasonable interference with the use, enjoyment and/or possession of any real property owned or occupied by any other person.” As this regulation does not specify a codified level at which an impact would occur, it is assumed that exceedance of the ambient noise environment would constitute a violation.

The ambient environment is based on field measurements conducted at location ST12 within the City of Bell. Noise at the time of the measurement was 58 dBA  $L_{eq}$ . This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-24 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime sound level. Therefore, impacts would be less than significant.

**Table 3.12-24. Operational Noise Level – Common Elements (City of Bell)**

Field Measurement Location	1-hour $L_{eq}$ , dBA		Exceeds Sound Level Limits?	Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Measured	
ST12	53	58	No	No

As discussed above, noise from HVAC systems could affect nearby noise-sensitive receptors within the City of Bell. Based on the uncertainty of the location of the Common Elements Typical Project, specifically the HVAC systems, the County would incorporate the mitigation measure below to make sure that impacts would be less than significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 4—City of Maywood*

The Maywood Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the maximum allowable noise level of 60 dBA  $L_{eq}$  at residential land uses between 7:00 a.m. and 10:00 p.m.

The ambient environment is based on field measurements conducted at location ST12 within the City of Bell. Noise at the time of the measurement was 58 dBA  $L_{eq}$ . This noise level would be representative of the noise environment within the city in proximity to locations along the LA River where the Common Elements Typical Project could be developed.

Table 3.12-25 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime or baseline sound level. Therefore, impacts would be less than significant.

**Table 3.12-25. Operational Noise Level – Common Elements (City of Maywood)**

Field Measurement Location	1-hour $L_{eq}$ , dBA			Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Daytime Baseline Sound Level Limit	Measured	Daytime Baseline Sound Limit	
ST12	53	58	60	No	No	No



As discussed above, noise from HVAC systems could affect nearby noise-sensitive receptors within the City of Maywood. Based on the uncertainty of the location of the Common Elements Typical Project, the County would incorporate the mitigation measure below to make sure that impacts would be less than significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frame 4—City of Commerce*

Section 19.19.160 of the Commerce Municipal Code regulates operational noise that would take place within the city. The municipal code regulates the maximum allowable noise level of 55 dBA  $L_{eq}$  at residential land uses during daytime hours (7:00 a.m. and 7:00 p.m.) and 50 dBA  $L_{eq}$  at residential land uses during evening hours (7:00 p.m. and 10:00 p.m.).

No noise-sensitive land uses are within 500 feet of the LA River within the City of Commerce. All land uses within the area of influence in the City of Commerce are completely commercial/industrial in nature.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Vernon*

The Vernon Municipal Code generally regulates operations, restricting noise between 7:00 a.m. and 10:00 p.m. to 65 dBA within one-tenth of a mile of any residence or school.

Most land uses within the City of Vernon's jurisdiction along the LA River within one-tenth of a mile are commercial/industrial; however, some residential land uses are within this area. The closest ambient field measurement was conducted at ST11 along the LA River (in the City of Vernon).

Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-26 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime or baseline sound level. Therefore, impacts would be less than significant.

**Table 3.12-26. Operational Noise Level – Common Elements (City of Vernon)**

Field Measurement Location	1-hour $L_{eq}$ , dBA			Exceeds Sound Level Limits?		Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Daytime Baseline Sound Level Limit	Measured	Daytime Baseline Sound Limit	
ST11	53	64	65	No	No	No

As discussed above, noise from HVAC systems could affect nearby noise-sensitive receptors within the City of Vernon. Based on the uncertainty of the location of the Common Elements Typical Project, the implementing party would incorporate the mitigation measure below to make sure that impacts would be less than significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frame 4—Unincorporated County*

Based on review of the study area, land uses located within the unincorporated County areas in Frame 4 are generally not noise sensitive along the LA River. However, for any noise sensitive land use located within this area not identified, refer to impacts as discussed in Frame 3.

#### *Frame 5—City of Los Angeles*

Land uses located within the City of Los Angeles are generally industrial commercial in nature within Frame 5. The discussion of impacts related to the proposed Project is discussed in Frame 6 below.

#### *Frame 6—City of Los Angeles*

The Los Angeles Municipal Code regulates operational noise that would take place within the jurisdiction of the City of Los Angeles. The municipal code regulates stationary noise sources that would “create any noise which would cause the noise level on the premises of any other occupied property or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, to exceed the ambient noise level by more than five (5) decibels,” and that “disturbs the peace

or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area” based on the character of the offending noise.

Additionally, the City of Los Angeles’s CEQA guidelines describe operational screening criteria designed to aid in the determination of significant. The screening criteria identify that additional analysis may be necessary if a project would:

- Introduce a stationary noise source likely to be audible beyond the property line of the project site?
- Include 75 or more dwelling units, 100,000 square feet (sf) or greater of nonresidential development or have the potential to generate 1,000 or more average daily vehicle trips?

Noise-sensitive land uses within Frame 6 in the City of Los Angeles include residential land uses that front onto the LA River. The closest ambient field measurement conducted within Frame 6 is ST8. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

The Common Elements Typical Project would not exceed 100,000 square feet or include more than 1,000 average daily trips, but these projects may include more stationary noise sources that are audible across the property line of a noise-sensitive land use. Table 3.12-27 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime sound level. Therefore, impacts would be less than significant.

**Table 3.12-27. Operational Noise Level – Common Elements (City of Los Angeles)**

Field Measurement Location	1-hour $L_{eq}$ , dBA		Exceeds Sound Level Limits?	Significant Impact?
	Common Elements Predicted Noise Level at 50 Feet	Measured Average Daytime Ambient	Measured	
ST8	53	64	No	No

As discussed above, noise from HVAC systems could affect nearby noise-sensitive receptors within the City of Los Angeles. Based on the uncertainty of the location of the Common Elements Typical Project, the implementing party would incorporate the mitigation measure below to make sure that impacts would be less than significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 6—City of Glendale*

The Glendale Municipal Code generally regulates operations, restricting noise between 7:00 a.m. and 10:00 p.m. to 55 dBA at residences.

Most land uses within the City of Glendale’s jurisdiction along the LA River are industrial in nature; however, some residences are along the LA River. The closest ambient field measurement conducted within Frame 6 is ST7 along the LA River in the City of Los Angeles. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-28 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime or baseline sound level. Additionally, the municipal code uses an adjusted average daytime ambient level that is no more than 5 dB over the baseline. The predicted noise level for the Common Elements Typical Project would not exceed the adjusted daytime ambient. Therefore, impacts would be less than significant.

**Table 3.12-28. Operational Noise Level – Common Elements (City of Glendale)**

Field Measurement Location	Common Elements Predicted Noise Level at 50 Feet	1-hour $L_{eq}$ , dBA			Exceeds Sound Level Limits?			Significant Impact?
		Measured Average Daytime Ambient	Adjusted Average Daytime Ambient	Daytime Baseline Sound Level Limit	Measured	Adjusted Average Daytime Ambient	Daytime Baseline Sound Limit	
ST7	53	64	60	55	No	No	No	No

As discussed above, noise from HVAC systems could affect nearby noise-sensitive receptors within the City of Glendale. Based on the uncertainty of the location of the Common Elements Typical Project, the implementing agency would incorporate the mitigation measure below to make sure that impacts would be less than significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 7—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 7 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

*Frame 7—Unincorporated County*

Based on review of the study area, land uses located within the unincorporated County areas in Frame 7 are generally not noise sensitive along the LA River. However, for any noise sensitive land use located within this area not identified refer to impacts as discussed in Frame 3.

*Frame 7—City of Burbank*

The Burbank Municipal Code generally regulates operations, restricting noise between 7:00 a.m. and 10:00 p.m. to 55 dBA at residences.

Noise-sensitive land uses within the City of Burbank’s jurisdiction along the LA River are residential in nature. The closest ambient field measurement conducted within Frame 7 is ST6 along the LA River in the City of Los Angeles. Ambient noise levels at this location measured 54 dBA  $L_{eq}$ .

Table 3.12-29 indicates that operational noise from visitors would be as loud as 53 dBA  $L_{eq}$ , which would not exceed the measured daytime or baseline sound level. The predicted noise level for the Common Elements Typical Project would not exceed the adjusted daytime ambient. Therefore, impacts would be less than significant.

**Table 3.12-29. Operational Noise Level – Common Elements (City of Burbank)**

Field Measurement Location	Common Elements Predicted Noise Level at 50 Feet	1-hour $L_{eq}$ , dBA		Exceeds Sound Level Limits?		Significant Impact?
		Measured Average Daytime Ambient	Daytime Baseline Sound Level Limit	Measured	Daytime Baseline Sound Limit	
ST7	53	54	55	No	No	No

As discussed above, noise from HVAC systems could affect nearby noise-sensitive receptors within the City of Burbank. Based on the uncertainty of the location of the Common Elements Typical Project, the implementing agency would incorporate the mitigation measure below to make sure that impacts would be less than significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

### *Frame 8—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 8 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

### *Frame 9—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 9 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

## **Multi-Use Trails and Access Gateways**

### ***Construction***

The representative municipal codes and ambient field noise measurements for each jurisdiction within each frame discussed below is described above under the *Typical Projects/Common Elements/ Construction* analysis.

### *Frame 1—City of Long Beach*

As discussed above, ambient noise levels in the City of Long Beach ranged from 51 to 61 dBA  $L_{eq}$ . Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of this magnitude would likely dominate the noise environment if construction occurs within 50 feet and would not attenuate to ambient levels within 3,200 feet (in a free field environment with no intervening shielding). Intervening structures and anomalous and atmospheric spreading would likely reduce construction noise to below the ambient noise levels well before 3,200 feet. However, construction noise levels could still dominate the noise environment surrounding a project site.

Construction associated with a Multi-Use Trails and Access Gateways Typical Project would generally occur during the prescribed hours outlined in the City of Long Beach's municipal code. If, during development of the final construction schedule, it is deemed necessary to work outside of the permitted hours, the County would follow the necessary procedures to obtain an appropriate variance. Additionally, as discussed above, the *City of Long Beach General Plan* Policy N 12-5 requires best business practices to be incorporated into construction activities. Therefore, the County would incorporate the City of Long Beach's guidance as project design features, as discussed above.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

*Frame 1—City of Los Angeles*

Land uses located within the City of Los Angeles are all industrial in nature and located approximately 5,000 feet of the LA River within Frame 1. Therefore, the City of Los Angeles impacts are discussed in Frame 6.

*Frame 2—City of Long Beach*

Land uses within the study area are generally of the same nature as those discussed in Frame 1. Please refer to the detailed analysis of construction is included in Frame 1.

*Frame 2—City of Carson*

Noise-sensitive land uses within Frame 2 in the City of Carson are generally no closer than 2,000 feet from the LA River. The general make-up of land uses that would be considered noise sensitive within the City of Carson's jurisdiction comprises single-family residences, parks, and Rancho Dominguez Preparatory School. The closest ambient field measurement conducted within Frame 2 is ST17 along the LA River within the City of Long Beach. Ambient noise levels at this location measured 59 dBA  $L_{eq}$ . Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{max}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 95 dBA  $L_{max}$  would generally dominate the noise environment if construction occurs within 50 feet; however, as the closest noise-sensitive receptors (single-family residences) within the City of Carson are over 2,000 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 32 dB, not accounting for intervening structures or anomalous and atmospheric spreading. As such, noise from construction would be reduced to 63 dBA  $L_{max}$ , which would be under the thresholds outlined in Section 5502 of the City of Carson's Municipal Code. As such, impacts associated with construction would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

*Frame 2—Unincorporated County*

Land uses within the unincorporated County areas in Frame 2 are industrial in nature and as such do not meet the criteria outlined in the Los Angeles County Code. Therefore, no impact would occur. A more detailed analysis of construction within the unincorporated County areas is included in Frame 3.

*Frame 2—City of Compton*

Land uses within the City of Compton in Frame 2 are generally institutional in nature, consisting of two schools. However, these two land uses are approximately 3,300 feet away from the LA River.

Therefore, no impact would occur. A more detailed analysis of construction within the City of Compton is included in Frame 3.

#### *Frame 3—City of Compton*

Noise-sensitive land uses within Frame 3 in the City of Compton are generally residential in nature with two schools (Carson Elementary and Dominguez High School). Residential land uses are within 1,000 feet of the LA River with I-710 between the land uses and the river. Carson Elementary School and Dominguez High School are within 400 feet of the LA River. The closest ambient field measurement conducted within Frame 3 is ST14 along the LA River within the City of Paramount (north of the City of Compton's jurisdiction). Ambient noise levels at this location measured 60 dBA  $L_{eq}$ . Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 95 dBA  $L_{eq}$  would generally dominate the noise environment if construction occurs within 50 feet; however, as the noise-sensitive receptors (single-family residences) within the City of Compton are over 1,000 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 26 dB, not accounting for intervening structures or anomalous and atmospheric spreading. At the school, noise from construction would attenuate approximately 18 dB. Therefore, noise levels from construction would attenuate to approximately 69 dBA and 77 dBA  $L_{eq}$ , respectively (not accounting for intervening structures or anomalous and atmospheric spreading).

Construction associated with a Multi-Use Trails and Access Gateways Typical Project would occur during the prescribed hours outlined in the City of Compton's municipal code. Additionally, given the types of construction expected with a Multi-Use Trails and Access Gateways Typical Project and the distance from any noise-sensitive receptors, construction noise would be audible at the school closer to the river, but would not dominate the environment. Noise levels of 59 dBA at the residential land uses would likely be dominated by noise from I-710.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Paramount*

Section 45-7 of the Paramount Municipal Code regulates construction that would take place within the city. The municipal code exempts "construction, repair or remodeling equipment and devices and other related construction noise sources shall be exempted from the provisions of this chapter provided a permit for such construction, repair or remodeling shall have been obtained for such construction, repair or remodeling from the building department of the city and the construction, repair or remodeling does not take place between the hours of 8:00 P.M. and 7:00 A.M."



Therefore, with consideration of the anticipated timing of construction occurring within the time of day exempted by the Paramount Municipal Code (i.e., 7:00 a.m. to 8:00 p.m.), and the anticipation that the implementing agency would obtain a construction permit, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—Unincorporated County*

Noise-sensitive land uses within Frame 3 in the unincorporated County areas are generally residential in nature. Residential land uses are within 500 feet of the LA River, with I-710 between the land uses and the River. The closest ambient field measurement conducted within Frame 3 is ST22. Ambient noise levels at this location measured 65 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 95 dBA  $L_{eq}$  would generally dominate the noise environment if construction occurs within 50 feet; however, as the noise-sensitive receptors (single-family residences) within the unincorporated County areas are over 500 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 20 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 75 dBA  $L_{max}$ . Additionally, there is an approximately 12-foot soundwall that provides noise reduction associated with I-710, which would shield noise-sensitive land uses.

Construction associated with the Multi-Use Trails and Access Gateways Typical Projects would occur during the prescribed hours outlined in the Los Angeles County Code. Additionally, given the types of construction associated with a Multi-Use Trails and Access Gateways Typical Project and the distance from any noise-sensitive receptors, construction noise may be audible, but would generally be similar to the existing noise environment with the I-710 facility.

As discussed above, construction of a Multi-Use Trails and Access Gateways Typical Project would not occur between 8:00 p.m. and 7:00 a.m. and would comply with the  $L_{max}$  value of 60 dBA. Existing noise levels at the residences would be approximately 65 dBA. As such, the noise levels associated with the proposed Project would not be discernable from the existing noise environment.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Lynwood*

Noise-sensitive land uses within Frame 3 in the City of Lynwood are residential and are within 500 feet of the LA River, but separated from the river by I-710 and commercial land uses. The closest ambient field measurement conducted within Frame 3 is ST23 along the LA River within the City of Lynwood. Ambient noise levels at this location measured 65 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 95 dBA  $L_{eq}$  would generally dominate the noise environment if construction occurs within 50 feet; however, as the noise-sensitive receptors (single-family residences) within the City of Lynwood are approximately 500 feet away from any construction that would occur along the LA River. Noise would be expected to attenuate by approximately 20 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 75  $L_{eq}$ .

As discussed above, the implementing agency would comply with the time requirements laid out by the Lynwood Municipal Code (i.e., 7 a.m. to 10 p.m.), and impacts associated with construction would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of South Gate*

Noise-sensitive land uses within Frame 3 in the City of South Gate are residential land uses along the boundary of the LA River (50 feet from the property line). The closest ambient field measurement conducted within Frame 3 is ST13 along the LA River within the City of Paramount (which is representative of the land uses within the City of South Gate's jurisdiction). Ambient noise levels at this location measured 54 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Thus, construction noise levels would be 95 dBA  $L_{eq}$  at the noise-sensitive receptors that border the LA River, which would likely dominate the noise environment.

Construction associated with the Multi-Use Trails and Access Gateways Typical Projects would generally occur during the prescribed hours outlined in the City of South Gate's general plan. Additionally, the city's general plan Objective N1.1 and Policies 1 through 3, which require adherence to the prohibited hours of construction and methods to reduce construction noise, will be

incorporated by the County, as discussed above. Impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Cudahy*

Noise-sensitive land uses within Frame 3 in the City of Cudahy are residential land uses along the boundary of the LA River (50 feet from the property line). The closest ambient field measurement conducted within Frame 3 is ST12 along the LA River within the City of Bell, which is representative of the land uses within the City of Cudahy's jurisdiction. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Thus, construction noise levels would be 95 dBA  $L_{eq}$  at the noise-sensitive receptors that border the LA River, which would likely dominate the noise environment.

As discussed above, the City of Cudahy does not specifically identify hours of operation for construction; therefore, the implementing agency would designate hours for construction as appropriate. Construction associated with the Multi-Use Trails and Access Gateways Typical Projects would generally occur during the hours prescribed by the implementing agency. Additionally, the *Cudahy 2040 General Plan* Policies NE 1.2 and 2.6, which require noise suppression techniques and application of appropriate standard construction noise controls for all construction projects, would be applicable, as discussed above. Impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 3—City of Downey*

As discussed above, noise-sensitive land uses within Frame 3 in the City of Downey are residential land uses approximately 3,400 feet from the boundary of the LA River. The closest ambient field measurement conducted within Frame 3 is ST13 along the LA River within the City of Paramount

(north of the City of Compton's jurisdiction). Ambient noise levels at this location measured 54 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 37 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 58 dBA  $L_{eq}$  at noise-sensitive receptors within the City of Downey. Noise levels of this magnitude would not be discernable from the existing ambient conditions.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Bell Gardens*

Noise-sensitive land uses within Frame 4 in the City of Bell are residential land uses along the boundary of the LA River (300 feet from the property line). The closest ambient field measurement conducted within Frame 4 is ST12 along the LA River within the City of Bell. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ . However, the I-710 alignment is between the LA River and the noise-sensitive land uses within the City of Bell Gardens. Therefore, noise levels within these land uses will likely be more akin to those at ST22 (65 dBA  $L_{eq}$ ).

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Noise attenuates at a rate of 6 dB per doubling of distance for a single source (point source) such as construction. Construction noise levels of 95 dBA  $L_{eq}$  would generally dominate the noise environment if construction occurs within 50 feet; however, as the noise-sensitive receptors (single-family residences) within the City of Bell Gardens are approximately 300 feet away from any construction that would occur along the LA River, noise would be expected to attenuate by approximately 16 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 79 dBA  $L_{eq}$ .

As discussed above, the implementing agency would comply with the requirements in the Bell Gardens Municipal Code. Impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Bell*

Noise-sensitive land uses within Frame 4 in the City of Bell are residential land uses along the boundary of the LA River. The closest ambient field measurement conducted is within Frame 4 at ST12 along the LA River within the City of Bell. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. As noise-sensitive land uses within the City of Bell share a property line with the LA River alignment, construction noise levels of 95 dBA  $L_{eq}$  would generally dominate the noise environment as construction would occur within 50 feet of noise-sensitive receptors (single-family residences).

The City of Bell's municipal code and general plan do not specifically regulate construction or allow a specific time frame in which construction can occur. Therefore, the implementing agency would designate hours for construction to include as part of any potential project. Construction associated with the Multi-Use Trails and Access Gateways Typical Projects would generally occur during the prescribed hours outlined by the implementing agency in lieu of specific direction supplied by the City of Bell. Therefore, construction impacts would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 4—City of Maywood*

Noise-sensitive land uses within Frame 4 in the City of Maywood are residential land uses approximately 200 feet from the boundary of the LA River. The closest ambient field measurement conducted within Frame 4 is ST12 along the LA River within the City of Bell, which is representative of the land uses within the City of Maywood. Ambient noise levels at this location measured 58 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 12 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 83 dBA  $L_{eq}$  at noise-sensitive receptors within the City of Maywood. Noise levels of this magnitude would be plainly audible. As construction noise would exceed the City of Maywood's 70 dBA standard, impacts would be potentially significant without mitigation.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-1: Prepare Construction Noise Work and Mitigation Monitoring Plan.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 4—City of Commerce*

No noise-sensitive land uses are within 500 feet of the LA River within the City of Commerce. Land uses within the area of influence in the City of Commerce are completely commercial/industrial in nature.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

*Frame 4—City of Huntington Park*

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 39 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 56 dBA  $L_{eq}$  at noise-sensitive receptors within the City of Huntington Park. Noise levels of this magnitude would not likely be discernable from the existing ambient conditions.

Impact Determination

Impacts would be less than significant

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

*Frame 4—City of Vernon*

Most land uses within the City of Vernon’s jurisdiction within one-tenth of a mile of the LA River are commercial/industrial; however, there are some residential land uses within this area. The closest ambient field measurement conducted within Frame 4 is ST11 along the LA River, within the City of Vernon. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 19 dB, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 76 dBA at noise-sensitive receptors within the City of Vernon. Noise levels of this magnitude would be similar to the existing ambient condition, but nonetheless would exceed the City of Vernon’s 65 dBA threshold.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-2: Obtain Conditional Use Permit and Implement its Requirements during Construction Activities.**

Significance after Required Mitigation

Impacts would be significant and unavoidable.

*Frame 4—Unincorporated County*

Based on review of the study area, land uses located within the unincorporated County areas in Frame 4 are generally not noise sensitive along the LA River. However, for any noise sensitive land use located within this area not identified, refer to impacts as discussed in Frame 3.

*Frame 5—City of Los Angeles*

Land uses located within the City of Los Angeles are generally industrial/commercial in nature within Frame 5. The discussion of impacts related to Multi-Use Trails and Access Gateways Typical Projects is discussed in Frame 6 below.

*Frame 6—City of Los Angeles*

As discussed above, noise-sensitive land uses within Frame 6 in the City of Los Angeles are varied but include residential land uses that front onto the LA River. Residential land uses are generally within 50 feet of the LA River right-of-way. The closest ambient field measurement conducted within Frame 6 is ST8 within the City of Los Angeles. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of 95 dBA  $L_{eq}$  would generally dominate the noise environment if construction occurs within 50 feet.

Construction associated with the Multi-Use Trails and Access Gateways Typical Projects would occur during the prescribed hours outlined in the City of Los Angeles's municipal code and CEQA guidelines. However, the guidelines state that a significant impact may occur if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use; or
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.

As shown in Table 3.12-10 noise levels could be as high as 95 dBA  $L_{eq}$ , which would exceed the existing ambient condition by more than 30 dB. Therefore, impacts could be significant without mitigation incorporated.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-3: Require Noise-Reducing Practices Be Incorporated into Construction Activities.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frame 6—City of Glendale*

Noise-sensitive land uses within Frame 6 in the City of Glendale include residential land uses that are within 180 feet of the LA River. The closest ambient field measurement conducted within Frame 6 is ST7 located within the City of Los Angeles. Ambient noise levels at this location measured 64 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. Construction noise levels of this nature would be expected to attenuate by approximately 11 dB at a distance of 180 feet, not accounting for intervening structures or anomalous and atmospheric spreading. Therefore, noise levels from construction would attenuate to approximately 84 dBA at noise-sensitive receptors within the City of Glendale. Noise levels of this magnitude would exceed the existing ambient conditions.

As the implementing agency would comply with the City of Glendale's general plan policy as discussed above, impacts associated with construction would be less than significant.

#### Impact Determination

Impacts would be less than significant.



### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 7—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 7 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

#### *Frame 7—Unincorporated County*

Based on review of the study area, land uses located within the unincorporated County areas in Frame 7 are generally not noise sensitive along the LA River. However, for any noise sensitive land use located within this area not identified, refer to impacts as discussed in Frame 3.

#### *Frame 7—City of Burbank*

Noise-sensitive land uses within Frame 7 in the City of Burbank include residential land uses that are within 50 feet of the LA River. The closest ambient field measurement conducted within Frame 6 is ST6 within the City of Los Angeles. Ambient noise levels at this location measured 54 dBA  $L_{eq}$ .

Table 3.12-10 indicates that construction noise levels associated with the Multi-Use Trails and Access Gateways Typical Projects would be 95 dBA  $L_{eq}$  during the noisiest phase of construction. As noise-sensitive land uses are located along the LA River, construction noise levels could be as high as 95 dBA  $L_{eq}$ . Noise levels of this magnitude would likely dominate the existing ambient environment.

As the implementing agency would comply with the City of Burbank's general plan and municipal code, as discussed above, impacts associated with construction would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

#### *Frame 8—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 8 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

#### *Frame 9—City of Los Angeles*

Land uses located within the City of Los Angeles in Frame 9 are generally noise sensitive and located along the LA River. Refer to impacts as discussed in Frame 6.

## **Operations**

### *Frame 1 through 9*

Operational traffic associated with a Multi-Use Trails and Access Gateways Typical Project would generally occur wherever access gateways would be located, which could be anywhere within the 51-mile study area. Multi-Use Trails and Access Gateways Typical Projects could extend over an approximate 5-mile stretch; as such, traffic could be located anywhere along that stretch, and the analysis would be applicable to all frames and jurisdictions. As discussed above, the typical number of visitors would be no more than 1,000 per day, resulting in no more than 67 per hour or 134 total trips per hour. The typical arterial roadways carry from 10,000 up to 70,000 vehicles or more per day, with a typical average around 28,000 (OCTA 2019). Assuming an average typical arterial roadway volume, 28,000 vehicles per day, the hourly number of vehicles would be 1,167 (28,000 vehicles/24 hours). A single automobile at a speed of 45 mph at a distance of 50 feet (as calculated by the FHWA TNM 2.5 model) will produce a sound pressure level of 36.4 dBA  $L_{eq}$ . Therefore, 1,167 and 1,301 vehicles (traffic along an arterial roadway without and with the Multi-Use trails and Access Gateways) would produce sound pressure levels of 67.1 and 67.6 dBA  $L_{eq}$ , respectively, a difference of 0.5 dB. Changes in traffic volumes of this magnitude would be negligible. Based on the low range of the spread of ADT (i.e., 2,000 vehicles) the average hourly traffic volume would be 83 vehicles (2,000 vehicles per hour/24 hours). Therefore, 83 and 217 vehicles (traffic along an arterial roadway without and with the Multi-Use trails and Access Gateways) would produce sound pressure levels of 55.6 and 59.8 dBA  $L_{eq}$ , respectively, a difference of 4.2 dB. The generally agreed upon threshold of perception is for a change in noise is 3 dB while a 5 dB increase is clearly audible. As such, an increase of this magnitude would be slightly above this threshold and therefore may be audible. However overall noise levels associated with hourly traffic (i.e., 59.8 dBA  $L_{eq}$ ) would not meet or exceed any codified threshold. Therefore, impacts associated with operational traffic would be less than significant.

Multi-Use Trails and Access Gateways Typical Projects involve uses such as bike trails, equestrian trails, and easy to find and welcoming access gateways. It is expected that a Multi-Use Trails and Access Gateways Typical Project could attract up to 1,000 visitors on any given day. Based on the length of the river, this would represent an average of 67 visitors dispersed equally within the 5-mile stretch of the river where a Multi-Use Trails and Access Gateways Typical Project would be located. As such, this would equate to, at the most, one visitor per minute at any given location within any given frame and in any given jurisdiction. The primary operational noise associated with a Multi-Use Trails and Access Gateways Typical Project would be visitors talking. Assuming one visitor at any one location and only one visitor talking at any given point in time, the average raised voice would be 40 dBA  $L_{eq}$  at a distance of 50 feet. Given the measured noise levels presented in Table 3.12-2 and the threshold set out in each jurisdiction's municipal code, noise levels of this magnitude would not exceed any of the thresholds or ambient noise levels presented in this section. Impacts would be less than significant.

## **Summary**

Table 3.12-30 summarizes impacts related to construction of the Common Elements and Multi-Use Trails and Access Gateways Typical Projects.

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**Table 3.12-30. Summary of Common Elements Typical Project and Multi-Use Trails and Access Gateways Typical Project Construction-Related Impacts**

Frame	Jurisdiction	Regulatory Guidance	Project Design Features	Mitigation Measures (MM)
Frame 1	City of Long Beach	<p>Section 8.80.202 of the Long Beach Municipal Code regulates construction activities where a building or other related permit is required that may annoy or disturb a reasonable person of normal sensitivity between the hours of 7 p.m. and 7 a.m. the following day on weekdays and the hours of 7 p.m. on Friday and 9 a.m. on Saturday and after 6 p.m. on Saturday.</p> <p><i>City of Long Beach General Plan</i> Policy N 12-5 requires best business practices to be incorporated into construction activities.</p>	<p>The Project Design Features from the City of Long Beach’s general plan include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Scheduling high-noise and vibration-producing activities to a shorter window of time during the day outside early morning hours to minimize disruption to sensitive uses.</li> <li>• Grading and construction contractors should use equipment that generates lower noise and vibration levels, such as rubber-tired equipment rather than metal-tracked equipment.</li> <li>• Construction haul truck and materials delivery traffic should avoid residential areas whenever feasible. The construction contractor should place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible.</li> <li>• The construction contractor should use on-site electrical sources to power equipment rather than diesel generators, where feasible.</li> <li>• All residential units located within 500 feet of a construction site should be sent a notice regarding the construction schedule. A sign legible at a distance of 50 feet should also be posted at the construction site. All notices and the signs should indicate the dates and durations of construction activities, as well as provide a telephone number for a “noise disturbance coordinator.”</li> <li>• A “noise disturbance coordinator” should be established by the project developer. The disturbance coordinator should be responsible for responding to any local complaints about construction noise. The disturbance coordinator should determine the cause of the noise complaint (e.g., starting too early, bad muffler) and should be required to implement reasonable measures to reduce noise levels.</li> </ul>	No mitigation is necessary.
Frame 2	City of Carson	<p>Section 5502 of the Carson Municipal Code restricts construction operations of 20 days or less to 75 dBA <math>L_{max}</math> from 7:00 a.m. to 8:00 p.m., to 60 dBA <math>L_{max}</math> daily, from 8:00 p.m. to 7:00 a.m., and all day Sunday and legal holidays at single-family residences; and to 65 dBA <math>L_{max}</math> from 7:00 a.m. to 8:00 p.m., to 55 dBA <math>L_{max}</math> daily, 8:00 p.m. to 7:00 a.m., and all day Sunday and legal holidays for construction operations of 21 days or more.</p>	No Project Design Features are necessary.	No mitigation is necessary.
Frame 3	City of Compton	<p>Section 7-12.22 of the Compton Municipal Code regulates construction that would take place within the city. The municipal code restricts construction unless the noise caused thereby is confined within a building other than between the hours of 7:00 a.m. and 7:00 p.m. on Monday through Saturday.</p> <p>The City of Compton’s general plan Noise Policy 2.1 requires “noise studies for new development projects and expansion of existing developments that will result in construction activities in excess of 30 days or projects that are 5,000 square feet or more of building or structure area or fifteen units or more to measure and propose mitigation measures for noise impacts on the nearby community, especially on existing noise-sensitive land uses.”</p> <p>The City of Compton’s general plan Noise Policy 3.1 requires sound attenuation on construction equipment.</p>	<p>The Project Design Features from the City of Compton’s general plan will include:</p> <ul style="list-style-type: none"> <li>• All construction equipment will be required to keep properly functioning mufflers on all internal combustion and vehicle engines used in construction.</li> </ul>	No mitigation is necessary.

Frame	Jurisdiction	Regulatory Guidance	Project Design Features	Mitigation Measures (MM)
	City of Paramount	Section 45-7 of the Paramount Municipal Code exempts “construction, repair or remodeling equipment and devices and other related construction noise sources shall be exempted from the provisions of this chapter provided a permit for such construction, repair or remodeling shall have been obtained for such construction, repair or remodeling from the building department of the city and the construction, repair or remodeling does not take place between the hours of 8:00 P.M. and 7:00 A.M.”	No Project Design Features are necessary.	No mitigation is necessary.
	Los Angeles County	<p>Section 12.08.440 of the Los Angeles County Code restricts construction that would cause a noise disturbance across a residential or commercial property line between 7:00 p.m. and 7:00 a.m. or at any time on Sundays or holidays. The County Code further restricts construction noise that would last less than 10 days at affected structures to a maximum noise level (<math>L_{max}</math>) of:</p> <ul style="list-style-type: none"> <li>• 75 dBA <math>L_{max}</math> between the hours of 7:00 a.m. and 8:00 p.m. and 60 dBA <math>L_{max}</math> between the hours of 8:00 p.m. and 7:00 a.m. at single-family residences,</li> <li>• 80 dBA <math>L_{max}</math> between the hours of 7:00 a.m. and 8:00 p.m. and 64 dBA <math>L_{max}</math> between the hours of 8:00 p.m. and 7:00 a.m. at multi-family residences, and</li> <li>• 85 dBA <math>L_{max}</math> between the hours of 7:00 a.m. and 8:00 p.m. and 70 dBA <math>L_{max}</math> between the hours of 8:00 p.m. and 7:00 a.m. at semi-residential/commercial uses.</li> </ul> <p>It also restricts construction noise that would last 10 or more days at affected structures to a maximum noise level (<math>L_{max}</math>) of:</p> <ul style="list-style-type: none"> <li>• 60 dBA <math>L_{max}</math> between the hours of 7:00 a.m. and 8:00 p.m. and 50 dBA <math>L_{max}</math> between the hours of 8:00 p.m. and 7:00 a.m. at single-family residences,</li> <li>• 65 dBA <math>L_{max}</math> between the hours of 7:00 a.m. and 8:00 p.m. and 55 dBA <math>L_{max}</math> between the hours of 8:00 p.m. and 7:00 a.m. at multi-family residences, and</li> <li>• 70 dBA <math>L_{max}</math> between the hours of 7:00 a.m. and 8:00 p.m. and 60 dBA <math>L_{max}</math> between the hours of 8:00 p.m. and 7:00 a.m. at semi-residential/commercial uses.</li> </ul>	No Design Features are necessary.	No mitigation is necessary.
	City of Lynwood	Section 3-12.13 of the Lynwood Municipal Code regulates construction noise: “within a residential zone, or within a radius of five hundred feet (500’) therefrom... between the hours of ten o’clock (10:00) P.M. of one day and seven o’clock (7:00) a.m. of the next day in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit therefor has been duly obtained from the director of development services or his or her designee.”	No Project Design Features are necessary.	No mitigation is necessary.
	City of South Gate	<p>Section 3-12.13 of the South Gate Municipal Code applies a variance process for construction noise that requires the applicant to “detail the approved method of achieving maximum compliance and a time schedule for its accomplishment.”</p> <p>City of South Gate general plan Objective N1.1 and Policies 1 through 3 require adherence to the prohibited hours of construction (from 7:00 p.m. through 8:00 a.m. Monday through Saturday, and on Sundays and federal holidays) and methods to reduce construction noise.</p>	<p>The Project Design Features from the City of South Gate’s general plan include, but are limited to, the following:</p> <ul style="list-style-type: none"> <li>• Construction noise reduction methods will be employed to the maximum extent feasible. These measures may include, but not limited to: <ul style="list-style-type: none"> <li>○ shutting off idling equipment,</li> <li>○ installing temporary acoustic barriers around stationary construction noise sources,</li> <li>○ maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and</li> <li>○ using electric air compressors and similar power tools, rather than diesel equipment.</li> </ul> </li> <li>• Prior to approval of project plans and specification by the City of South Gate, project applicants and/or construction contractors will identify construction equipment and noise reducing measures, and the anticipated noise reduction.</li> </ul>	No mitigation is necessary.

Frame	Jurisdiction	Regulatory Guidance	Project Design Features	Mitigation Measures (MM)
	City of Cudahy	<p>The City of Cudahy general plan states that the City of Cudahy will:</p> <ul style="list-style-type: none"> <li>• Limit hours of operation at all noise generation sources adjacent to noise sensitive areas or uses.</li> <li>• Require all exterior noise sources (construction, operations, air compressors, pumps, fans, and leaf blowers) to use available noise suppression techniques and devices to lower exterior noise to acceptable levels which are compatible with adjacent land uses.</li> <li>• Implement appropriate standard construction noise controls for all construction projects.</li> </ul>	<p>The Project Design Features from the City of Cudahy general plan include but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Scheduling high-noise and vibration-producing activities to a shorter window of time during the day outside early morning hours to minimize disruption to sensitive uses.</li> <li>• Grading and construction contractors should use equipment that generates lower noise and vibration levels, such as rubber-tired equipment rather than metal-tracked equipment.</li> <li>• Construction haul truck and materials delivery traffic should avoid residential areas whenever feasible. The construction contractor should place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible.</li> <li>• The construction contractor should use on-site electrical sources to power equipment rather than diesel generators, where feasible.</li> <li>• All residential units located within 500 feet of a construction site should be sent a notice regarding the construction schedule. A sign legible at a distance of 50 feet should also be posted at the construction site. All notices and the signs should indicate the dates and durations of construction activities, as well as provide a telephone number for a “noise disturbance coordinator.”</li> <li>• A “noise disturbance coordinator” should be established by the project developer. The disturbance coordinator should be responsible for responding to any local complaints about construction noise. The disturbance coordinator should determine the cause of the noise complaint (e.g., starting too early, bad muffler) and should be required to implement reasonable measures to reduce noise levels.</li> </ul>	No mitigation is necessary.
	City of Downey	<p>Section 4606.5 of the Downey Municipal Code exempts construction noise from the requirements of the municipal code “provided a valid permit for such construction, repair, or remodeling shall have been obtained from the City. In any circumstance other than emergency work, no repair or remodeling shall take place between the hours of 9:00 p.m. of one day and 7:00 a.m. of the following day, and no repair or remodeling shall exceed eighty-five (85) db(A) across any property boundary at any time during the course of a twenty-four (24) hour day.”</p>	No Project Design Features are necessary.	No mitigation is necessary.
Frame 4	City of Bell Gardens	<p>Section 16.24.120 of the Bell Gardens Municipal Code regulates construction “within a residential zone, or within a radius of 500 feet, between the hours of 7:00 p.m. of one day and 8:00 a.m. of the next day”</p>	No Project Design Features are necessary.	No mitigation is necessary.
	City of Bell	<p>Section 16.24.120 of the Bell Municipal Code generally regulates noise and therefore, construction noise. The municipal code regulates construction that would “emanate from any activity taking place on real property owned or occupied by such person, which has the effect of disturbing the peace and quiet of the neighborhood, or which directly causes an unreasonable interference with the use, enjoyment and/or possession of any real property owned or occupied by any other person.”</p>	No Project Design Features are necessary.	No mitigation is necessary.
	City of Maywood	<p>Section 5.23.11 of the Maywood Municipal Code exempts construction noise from the requirements of the municipal code “Noise sources associated with the construction, repair, remodeling, or grading of any real property or during authorized seismic surveys provided such activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on</p>		<p><b>Mitigation Measure NOI-1. Prepare Construction Noise Work and Mitigation Monitoring Plan.</b> During final design the implementing agency will prepare a focused</p>

Frame	Jurisdiction	Regulatory Guidance	Project Design Features	Mitigation Measures (MM)
		weekdays, including Saturdays, or at any time on Sunday or a Federal holiday, and provided the noise level created by such activities does not exceed the noise standard of seventy (70) dBA plus the limits specified in Section 5-23.08 of this chapter as measured on residential property and does not endanger the public health, welfare, and safety.”		<p>noise analysis for any project within the city, which identifies nearby noise sensitive receptors that could be affected, predicts anticipated construction-related noise levels, and identifies measures that will be implemented by the construction contractor in order to comply with the city’s standard. Measures that could be implemented include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Using equipment that generates lower noise levels than those outlined in Table 3.12-9,</li> <li>• Locating construction equipment far enough from noise-sensitive land uses such that noise attenuates to below the city’s standard, and/or</li> <li>• Designing and installing temporary sound barriers, which would provide attenuation below the city’s dBA standard.</li> </ul> <p>The implementing agency will also require noise monitoring during all phases of construction to confirm that the mitigation measures identified by the construction noise work plan and implemented by the construction contractor reduce construction noise to below the city’s threshold.</p>
	City of Commerce	Section 19.19.160 of the Commerce Municipal Code exempts construction noise from the requirements of the municipal code provided construction does not occur “within any residential zone, or within a radius of five hundred feet of a residential zone or between the hours of ten p.m. and seven a.m., unless a permit has been obtained from the city.”	No Project Design Features are necessary.	No mitigation is necessary.
	City of Huntington Park	Section 9-3.506 of the Huntington Park Municipal Code exempts construction noise from the requirements of the municipal code provided construction does not take place “between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or at any time on Sundays or Federal holidays.”	No Project Design Features are necessary.	No mitigation is necessary.
	City of Vernon	The Vernon Municipal Code generally regulates construction through its operational guidance, which restricts noise between the hours of 7:00 a.m. and 10:00 p.m. to 65 dBA within one-tenth of a mile of any residence or school.		<p><b>Mitigation Measure NOI-2: Obtain Conditional Use Permit and Implement its Requirements during Construction Activities.</b> Prior to any construction within the City of Vernon, the implementing agency will apply for and obtain a conditional use permit, which would allow the Project to exceed the City of Vernon’s noise standard of 65 dBA.</p>
Frame 6	City of Los Angeles	<p>The Los Angeles Municipal Code Section 41.40 restricts construction “between the hours of 9:00 P.M. and 7:00 A.M. of the following day.” Additionally the City of Los Angeles’ CEQA Threshold Guide provides guidance for analysis of construction noise, by setting a general screening criteria:</p> <ul style="list-style-type: none"> <li>• Would construction activities occur within 500 feet of a noise sensitive use?</li> </ul>		<p><b>Mitigation Measure NOI-3: Require Noise-Reducing Practices Be Incorporated into Construction Activities.</b> Prior to any construction within the City of Los Angeles, the implementing agency will require the contractor to include noise-reducing practices:</p>

Frame	Jurisdiction	Regulatory Guidance	Project Design Features	Mitigation Measures (MM)
		<ul style="list-style-type: none"> <li>For projects located within the City of Los Angeles, would construction occur between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday?</li> </ul>		<ul style="list-style-type: none"> <li>Use noise control devices, such as equipment mufflers, enclosures, and barriers. Natural and artificial barriers such as ground elevation changes and existing buildings can shield construction noise. Stage construction operations as far from noise-sensitive uses as possible.</li> <li>Avoid residential areas when planning haul truck routes.</li> <li>Maintain all sound-reducing devices and restrictions throughout the construction period.</li> <li>Replace noisy equipment with quieter equipment (for example, a vibratory pile driver instead of a conventional pile driver and rubber-tired equipment rather than track equipment).</li> <li>Change the timing and/or sequence of the noisiest construction operations to avoid sensitive times of the day.</li> </ul>
	City of Glendale	<p>The Glendale Municipal Code Section 8.36.080 restricts construction “within a residential zone, or within a radius of five hundred feet therefrom between the hours of seven p.m. on one day and seven a.m. of the next day or from seven p.m. on Saturday to seven a.m. on Monday or from seven p.m. preceding a holiday.”</p> <p>The City of Glendale’s general plan includes a policy to “Change the permitted hours of construction to Monday through Friday, 7 a.m. to 7 p.m. and on Saturday from 9 a.m. to 5 p.m. Maintain the ban on construction on Sundays and Holidays.”</p>	No Project Design Features are necessary.	No mitigation is necessary.
Frame 7	City of Burbank	<p>The City of Burbank’s municipal code and general plan regulate construction that would take place within the jurisdiction of the City. The general plan and municipal code state that, “construction noise that occurs between the hours of 7 a.m. and 7 p.m. Monday through Friday and 8 a.m. to 5 p.m. on Saturday is exempt from applicable noise standards.”</p>	No Project Design Features are necessary.	



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## 2020 LA River Master Plan Kit of Parts

### **Construction**

#### *KOP Categories 1 through 5*

As most of the KOP categories would have similar construction components, they are discussed herein together, with the exception of KOP Category 6, because its location would be anywhere within the 1-mile project boundary on each side of the LA River. Thus, KOP Category 6 is discussed individually below.

The specific location (in-channel or off-channel) and design for these design components have not been determined yet and would depend on numerous factors, including project proponent and availability of funding. Considering the various development components that could be included in each individual KOP, construction impacts cannot be directly quantified until the specific locations (in-channel vs off-channel) are known. It is anticipated that construction noise could be similar to that described above related to Multi-Use Trails and Access Gateways Typical Projects. Therefore, based on the jurisdiction these projects occur in, construction would result in potentially significant impacts.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measures, which are described above.

**Mitigation Measure NOI-1: Prepare Construction Noise Work and Mitigation Monitoring Plan.**

**Mitigation Measure NOI-2: Obtain Conditional Use Permit and Implement its Requirements during Construction Activities.**

**Mitigation Measure NOI-3: Require Noise-Reducing Practices Be Incorporated into Construction Activities.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *KOP Category 6*

The specific location and design for the Off-Channel Land Assets design components have not been determined yet and would depend on numerous factors, including location of the improvements, complement of construction equipment, project proponent, and availability of funding. Considering this KOP includes a variety of construction activities construction impacts of KOP Category 6 cannot be directly quantified as the specific design details, sizes, and locations are not known. Construction noise associated with these projects cannot be associated comparatively with any construction element listed herein due to the uncertainty with these types of projects. Therefore, depending on

the jurisdiction in which the KOP Category 6 project occurs, construction would result in potentially significant impacts.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measures, which are described above.

#### **Mitigation Measure NOI-1: Prepare Construction Noise Work and Mitigation Monitoring Plan.**

#### **Mitigation Measure NOI-2: Obtain Conditional Use Permit and Implement its Requirements during Construction Activities.**

#### **Mitigation Measure NOI-3: Require Noise-Reducing Practices Be Incorporated into Construction Activities.**

#### Significance after Required Mitigation

Impacts would be significant and unavoidable.

#### ***Operations***

##### *KOP Category 1*

Potential impacts from operations of the design components under the Trails and Access Gateways KOP would vary depending on the specific design component and its intended function, as discussed in Chapter 2, *Project Description*. Generally, operational components associated with habitat improvements that are used to increase biodiversity or species connectivity do not have noise components that would be discernable. Additionally, stationary improvements such as water and light towers would not produce significant amounts of noise. Operational components such as boardwalks, lookout points, and in-channel trails would include noise components; however, these types of improvements would be similar in nature to the Multi-Use Trails and Access Gateways Typical Projects discussed above. However, components such as equestrian facilities, under- and overpasses, and other operation components may have a larger noise profile. With consideration of the type of uses associated with the ecological, and some recreational, uses (as discussed above) operational analysis may not be necessary as these projects would not include an operation noise source. Considering the uncertainty associated with the location, surrounding potential land uses, and general activity for some other recreational projects that could occur as they relate to noise, quantification of these types of impacts is not possible at this time. Therefore, impacts would be potentially significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

#### **Mitigation Measure NOI-6: Prepare a Noise Study.**

The implementing agency will prepare a focused noise study that analyzes the operational noise impacts of subsequent projects under the six KOP categories that include noise-producing

components, such as, but not limited to, equestrian facilities and under- and overpasses or any other KOP-related project component. The focused noise study will include the quantification of noise-producing activities located on and originating from the subsequent project site. The focused noise study will determine the extent of impacts and whether these impacts would exceed any codified thresholds or guidance associated with the relevant jurisdiction. Should impacts be identified, the implementing agency will provide mitigation to reduce impacts to less-than-significant levels. Mitigation could include, but is not limited to, the following:

- Project design that would isolate noise producing features away from noise-sensitive receptors
- Inclusion of noise-attenuating features such as sound walls, berms, acoustical shielding, etc., which would block the line of sight and provide noise reduction to surrounding noise-sensitive land uses

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *KOP Category 2*

Potential impacts from operation of the design components under the Channel Modifications KOP would vary depending on the specific design component and its intended function, as well as on the specific location, including in-channel or off-channel. The specific location (in-channel or off-channel) and design for these design components has not been determined yet and would depend on numerous factors, as discussed in Chapter 2, *Project Description*. Considering the uncertainty associated with the location, surrounding potential land uses, and general activity for some other recreational projects that could occur as they relate to noise, quantification of these types of impacts is not possible at this time. Therefore, impacts would be potentially significant.

#### Impact Determination

Impacts would be significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-6: Prepare a Noise Study.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *KOP Category 3*

Potential impacts from operation of the design components under the Crossings and Platforms KOP would vary depending on the specific design component and its intended function, as well as on the specific location. The specific location and design for these design components has not been determined yet and would depend on numerous factors as discussed in Chapter 2, *Project*

*Description.* With consideration of the type of uses associated with the ecological, and some recreational, components operational analysis may not be necessary as these projects would not include an operation noise source. Considering the uncertainty associated with the location, surrounding potential land uses, and general activity for some other recreational projects that could occur as they relate to noise, quantification of these types of impacts is not possible at this time. Therefore, impacts would be potentially significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-6: Prepare a Noise Study.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *KOP Category 4*

Potential impacts from operation of the design components under the Diversions KOP would vary depending on the specific design component and its intended function, as well as on the specific location. The specific location and design for the design components has not been determined yet and would depend on numerous factors, including project proponent and availability of funding, as described in Chapter 2, *Project Description*. Considering the uncertainty associated with the location, surrounding potential land uses, and general activity for some other design components that could occur as they relate to noise, quantification of these types of impacts is not possible at this time. Therefore, impacts would be potentially significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-6: Prepare a Noise Study.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *KOP Category 5*

Potential impacts from operation of the design components under the Flood Reclamation KOP would vary depending on the specific design component and its intended function, as well as on the specific location. The specific location and design for the design components has not been determined yet and would depend on numerous factors, including project proponent and

availability of funding, as described in Chapter 2, *Project Description*. With consideration of the type of uses associated with the ecological, and some recreational, components operational analysis may not be necessary as these projects would not include an operation noise source. The one caveat to this is any of these design components that would require the use of any sort of pump or system of pumps. Additionally, uses such as the inclusion of a farmers' market could result in impacts on surrounding noise-sensitive land uses. Considering the uncertainty associated with the location, surrounding potential land uses, and general activity that could occur at these locations as they relate to noise, quantification of these types of impacts is not possible at this time. Therefore, impacts would be potentially significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-6: Prepare a Noise Study.**

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *KOP Category 6*

Potential impacts from operation of the design components under the Off-Channel Land Assets KOP would vary depending on the specific design component and its intended function, as well as on the specific location. The specific location and design for these design components has not been determined yet and would depend on numerous factors, including project proponent and availability of funding. As described in Chapter 2, *Project Description*, this KOP could include land assets such as affordable housing, cultural centers, urban agriculture/composting, water storage, water treatment facilities, dry wells, spreading grounds, purple pipe connections, storm drain daylighting, injection wells, solar panels, fields, and parks. Considering the uncertainty associated with the location, surrounding potential land uses, and general activity that could occur at these locations as they relate to noise, quantification of these types of impacts is not possible at this time. Therefore, impacts would be potentially significant.

#### Impact Determination

Impacts would be significant.

#### Mitigation Measures

Apply the following mitigation measure, which is described above.

#### **Mitigation Measure NOI-6: Prepare a Noise Study.**

#### Significance after Required Mitigation

Impacts would be significant and unavoidable.

## Overall 2020 LA River Master Plan Implementation

As described in the *2020 LA River Master Plan*, it is anticipated that approximately 107 projects ranging in size from extra-small (less than 1 acre) to extra-large (150+ acres/10+ miles) would be implemented under the *2020 LA River Master Plan* over the 25-year period to meet the *2020 LA River Master Plan's* nine objectives. These would include the Typical Projects that would be implemented along the river and subsequent projects composed of the KOP categories' multi-benefit design components. These elements together compose the entirety of the *2020 LA River Master Plan*. As described in detail above, the Typical Projects and six KOP categories under the *2020 LA River Master Plan* would comply with jurisdictional thresholds and requirements for both construction and operations incumbent within the municipal codes, general plans, and planning documents as it relates to noise. Inclusion of mitigation measures and preparation of a focused noise study would help reduce impacts and compliance with the jurisdictional thresholds and requirements. However, with the uncertainty as to the location and extent of projects associated with the overall *2020 LA River Master Plan*, it is possible that impacts could be reduced to less-than-significant levels. As such, impacts would be significant and unavoidable.

### Impact Determination

Impacts would be potentially significant.

### Mitigation Measures

Apply the following mitigation measures, which are described above.

**Mitigation Measure NOI-1: Prepare Construction Noise Work and Mitigation Monitoring Plan.**

**Mitigation Measure NOI-2: Obtain Conditional Use Permit and Implement its Requirements during Construction Activities.**

**Mitigation Measure NOI-3: Require Noise-Reducing Practices Be Incorporated into Construction Activities.**

**Mitigation Measure NOI-4: Prepare Focused Noise Study and Implement Findings to Reduce HVAC Noise.**

**Mitigation Measure NOI-5: Prepare Focused Noise Study and Implement Findings.**

**Mitigation Measure NOI-6: Prepare a Noise Study.**

### Significance after Required Mitigation

Impacts would be significant and unavoidable.

## Impact 3.12(b): Would the proposed Project generate excessive groundborne vibration or groundborne noise levels?

### Typical Projects

#### Common Elements

##### *Construction*

##### *Frames 1 through 9*

Construction-related vibration associated with the Common Elements Typical Project would occur and generally be associated with the location of the individual projects throughout the entire 51-mile study area. Because many jurisdictions do not include a codified threshold for vibration, the County's perception threshold (0.01 inch per second [in/sec]) is used herein unless otherwise noted. For jurisdictions where codified vibration thresholds are present, those thresholds are discussed within their respective frames below.

Table 3.12-9 shows the construction equipment that would be used for the Common Elements Typical Project. Equipment such as loaded trucks and small bulldozers would be the most vibratory-intensive construction equipment used. Based on Table 3.12-11, each one of these pieces of equipment produce vibration on the levels of 0.089 and 0.003 PPV, respectively. Vibration for earth-moving equipment attenuates at a rate of  $PPV_{ref} \times (25/D)^n$ . Table 3.12-31 shows the distance to the County's 0.01 PPV threshold. Based on Caltrans' Guidelines Vibration Annoyance Potential Criteria (Caltrans 2013b), transient construction vibration levels of 0.01 would fall between the levels of Barely perceptible and Distinctly perceptible. The 0.01 threshold is well below any damage potential criteria and, therefore, does not represent any damage potential with respect to vibration.

**Table 3.12-31. Common Elements Typical Project Distance to the County's Threshold**

Equipment	Reference at 25 feet (PPV)	Distance to the County's 0.01 Threshold (feet)
Loaded Trucks	0.089	200
Small Bulldozers	0.003	--

As discussed above, vibration levels from construction equipment would attenuate to below the level of perception at a distance of 200 feet from the source. Based on the locations of the land uses throughout the study area, vibration-sensitive land uses could be as close as 50 feet from construction sites. As such, vibration levels could exceed the County's threshold of 0.01 PPV.

#### Impact Determination

Impacts would be potentially significant.



### Mitigation Measures

#### **Mitigation Measure NOI-7: Locate Project 200 Feet or More from Occupied Structures or Prepare Vibration Study and Implement Findings.**

The implementing agency will locate any development of the Common Elements Typical Project outside of a distance of 200 feet from any occupied structure. If for some reason this is not possible, then during final design the implementing agency will prepare a focused vibration study that analyzes construction vibration sources and predicts vibration levels at nearby vibration sensitive land uses. If vibration levels are predicted to exceed the County's 0.01 PPV threshold or any applicable city's standards, the implementing agency will prescribe measures to reduce vibration to the greatest extent practical. Measures could include but are not limited to:

- Using less vibration-intensive construction equipment
- Timing construction so that structures would not be occupied when high levels of vibration are expected
- Informing residents of the timing of construction and that vibration may be noticeable during these times

### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frames 1 and 2*

### City of Long Beach

The City of Long Beach includes codified threshold for vibration, enumerated in Table 3.12-9. As many of the land uses within the City of Long Beach's jurisdiction in the study area are residential and would be considered non-engineered timber and masonry construction, thresholds would be 0.2 PPV. Table 3.12-9 shows the construction equipment that would be used to construct the Common Elements Typical Project. Equipment such as loaded trucks and small bulldozers would be the most vibratory intensive construction equipment used during construction. Based on Table 3.12-11 each one of these pieces of equipment produce vibration on the levels of 0.089 and 0.003 PPV, respectively. Vibration levels would be below the 0.2 PPV threshold set by the City of Long Beach; therefore, impacts would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

*Frame 3*City of South Gate

The City of South Gate includes a codified threshold for vibration. As many of the land uses within the City of South Gate's jurisdiction along the LA River are residential and would be considered non-engineered timber and masonry construction, thresholds would be 0.01 PPV. Table 3.12-9 shows the construction equipment that would be used to construct the Common Elements Typical Projects. Equipment such as loaded trucks and small bulldozers would be the most vibratory intensive construction equipment used during construction. Based on Table 3.12-11 each one of these pieces of equipment produce vibration on the levels of 0.089 and 0.003 PPV, respectively. Vibration for earth-moving equipment attenuates at a rate of  $PPV_{ref} \times (25/D)^n$ . Table 3.12-32 shows the distance to the City of South Gate's 0.01 PPV threshold. Based on the Caltrans' Guidelines Vibration Annoyance Potential Criteria (Caltrans 2013b), transient construction vibration levels of 0.01 would fall between the levels of Barely perceptible and Distinctly perceptible. The 0.01 threshold is well below any damage potential criteria and, therefore, does not represent any damage potential with respect to vibration.

**Table 3.12-32. Common Elements Typical Project Distance to the City of South Gate's Threshold**

<b>Equipment</b>	<b>Reference at 25 feet (PPV)</b>	<b>Distance to the City of South Gate's 0.01 Threshold (feet)</b>
Loaded Trucks	0.089	200
Small Bulldozers	0.003	--

As discussed above, vibration levels from construction equipment would attenuate to below the level of perception at 200 feet from the source. Based on the locations of the land uses throughout the study area, vibration sensitive land uses could be as close as 50 feet from construction sites. As such, vibration levels could exceed the City of South Gate's threshold of 0.01 PPV.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-7: Locate Project 200 Feet or More from Occupied Structures or Prepare Vibration Study and Implement Findings.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 4*City of Commerce

The City of Commerce includes a codified threshold for vibration that states that no person shall “cause ground vibration that is perceptible without instruments to a person of normal sensitivity at any point on a property that is adjacent to the property of the vibration source.” Land uses within the City of Commerce’s jurisdiction along the study area are all industrial in nature and therefore would not be considered vibration sensitive. Therefore, impacts would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

**Operations**

Common Elements Typical Projects would generally include operational uses such as drinking fountains, waste disposal, pavilions, restrooms, bike racks, and picnic areas. Uses of these types would not result in noticeable levels of vibration. Therefore, impacts would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

**Multi-Use Trails and Access Gateways****Construction***Frames 1 through 9*

Similar to the Common Elements, because many jurisdictions do not include a codified threshold for vibration, the County’s perception threshold (0.01 in/sec) is used unless otherwise noted. For jurisdictions where codified vibration thresholds are present, those thresholds are discussed within their respective frames below. Table 3.12-9 shows the construction equipment that would be used for a Multi-Use Trails and Access Gateways Typical Project. Equipment such as vibratory rollers, hoe rams, jack hammers, and loaded trucks would be the most vibratory intensive construction equipment used during construction. Based on Table 3.12-11 each one of these pieces of equipment produce vibration on the levels of 0.035 and 0.210 PPV. Vibration for earth-moving equipment attenuates at a rate of  $PPV_{ref} \times (25/D)^n$ . Table 3.12-33 shows the distance to the County’s 0.01 PPV

threshold. Based on Caltrans' Guidelines Vibration Annoyance Potential Criteria (Caltrans 2013b), transient construction vibration levels of 0.01 would fall between the levels of Barely perceptible and Distinctly perceptible. The 0.01 threshold is well below any damage potential criteria and, therefore, does not represent any damage potential with respect to vibration.

**Table 3.12-33. Multi-Use Trails and Access Gateways Typical Project Distance to the County's Threshold**

<b>Equipment</b>	<b>Reference at 25 feet (PPV)</b>	<b>Distance to the County's 0.01 Threshold (feet)</b>
Vibratory Roller	0.210	400
Loaded Trucks	0.089	200
Hoe Ram	0.089	200
Jack Hammer	0.035	75

As discussed above, vibration levels from construction equipment would attenuate to below the level of perception at a distance of 400 feet from the source. Based on the locations of the land uses throughout the study area, vibration sensitive land uses could be as close as 50 feet from construction sites. As such, vibration levels could exceed the County's threshold of 0.01 PPV, and impacts would be significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

##### **Mitigation Measure NOI-8: Locate Project 400 Feet or More from Occupied Structures or Prepare Vibration Study and Implement Findings.**

The implementing agency will locate any development of a Multi-Use Trails and Access Gateways Project outside of a distance of 400 feet from any occupied structure (dependent on phase and construction equipment used). If for some reason this is not possible, during final design the implementing agency will prepare a focused vibration study that analyzes construction vibration sources and predicts vibration levels at nearby vibration sensitive land uses. If vibration levels would exceed the County's 0.01 PPV threshold or any applicable city's standards, the implementing agency will prescribe measures to reduce vibration to the greatest extent practical. Measures could include but are not limited to:

- Using less vibration-intensive construction equipment
- Timing construction so that structures would not be occupied when high levels of vibration are expected
- Informing residents of the timing of construction and that vibration may be noticeable during these times

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### *Frames 1 and 2*

#### City of Long Beach

The City of Long Beach includes a codified threshold for vibration, enumerated in Table N-1. As many of the land uses within the City of Long Beach's jurisdiction along the study area are residential and would be considered non-engineered timber and masonry construction, thresholds would be 0.2 PPV. Table 3.12-9 shows the construction equipment that would be used to construct a Multi-Use Trails and Access Gateways Typical Project. Equipment such as vibratory rollers, hoe rams, jack hammers, and loaded trucks would be the most vibratory intensive construction equipment used during construction. Based on Table 3.12-11 each one of these pieces of equipment produce vibration on the levels of 0.035 and 0.210 PPV. Vibration for earth-moving equipment attenuates at a rate of  $PPV_{ref} \times (25/D)^n$ . Table 3.12-34 shows the distance to the City of Long Beach's 0.2 PPV threshold.

**Table 3.12-34. Multi-Use Trails and Access Gateways Project Distance to the City of Long Beach's Threshold**

<b>Equipment</b>	<b>Reference at 25 feet (PPV)</b>	<b>Distance to the City of Long Beach's 0.2 Threshold (feet)</b>
Vibratory Roller	0.210	30
Loaded Trucks	0.089	--
Hoe Ram	0.089	--
Jack Hammer	0.035	--

As discussed above, vibration levels from construction equipment would attenuate to below the City of Long Beach's threshold at 30 feet from the source. Based on the locations of the land uses throughout the study area, vibration sensitive land uses could be as close as 50 feet from construction sites. As such, vibration levels would not likely exceed the City of Long Beach's threshold of 0.2 PPV.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.

#### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

*Frame 3*City of South Gate

The City of South Gate includes a codified threshold for vibration. As many of the land uses within the City of South Gate’s jurisdiction along the study area are residential and would be considered non-engineered timber and masonry construction, thresholds would be 0.02 PPV.

Table 3.12-9 shows the construction equipment that would be used to construct the Multi-Use Trails and Access Gateways Project. Equipment such as vibratory rollers, hoe rams, jack hammers, and loaded trucks would be the most vibratory intensive construction equipment used during construction. Based on Table 3.12-11 each one of these pieces of equipment produce vibration on the levels of 0.035 and 0.210 PPV. Vibration for earth-moving equipment attenuates at a rate of  $PPV_{ref} \times (25/D)^n$ . Table 3.12-35 shows the distance to the City of South Gate’s 0.01 PPV threshold. Based on Caltrans’ Guidelines Vibration Annoyance Potential Criteria (Caltrans 2013b), transient construction vibration levels of 0.01 would fall between the levels of Barely perceptible and Distinctly perceptible. The 0.01 threshold is well below any damage potential criteria and, therefore, does not represent any damage potential with respect to vibration.

**Table 3.12-35. Multi-Use Trails and Access Gateways Projects Distance to the City of South Gate’s Threshold**

<b>Equipment</b>	<b>Reference at 25 feet (PPV)</b>	<b>Distance to the City of South Gate’s 0.01 Threshold (feet)</b>
Vibratory Roller	0.210	400
Loaded Trucks	0.089	200
Hoe Ram	0.089	200
Jack Hammer	0.035	75

As discussed above, vibration levels from construction equipment would attenuate to below the level of perception at 400 feet from the source. Based on the locations of the land uses throughout the LA River, vibration sensitive land uses could be as close as 50 feet from construction sites. As such, vibration levels could exceed the City of South Gate’s threshold of 0.01 PPV. Therefore, impacts associated with vibration would be potentially significant.

Impact Determination

Impacts would be potentially significant.

Mitigation Measures

Apply the following mitigation measure, which is described above.

**Mitigation Measure NOI-8: Locate Project 400 Feet or More from Occupied Structures or Prepare Vibration Study and Implement Findings.**

Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

*Frame 4*City of Commerce

The City of Commerce includes a codified threshold for vibration that states that no person shall “cause ground vibration that is perceptible without instruments to a person of normal sensitivity at any point on a property that is adjacent to the property of the vibration source.” Land uses within the City of Commerce’s jurisdiction along the study area are all industrial in nature and therefore would not be considered vibration sensitive. Therefore, impacts would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

***Operations****Frame 1 through 9*

Multi-Use Trails and Access Gateways Typical Projects would generally include operational uses such as pedestrian trails, equestrian trails, bike trails, multi-use trails, vegetated buffers, and river gateways. Uses of these types would not result in noticeable levels of vibration. Therefore, impacts would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

**2020 LA River Master Plan Kit of Parts****KOP Categories 1 through 5*****Construction***

The specific locations (in-channel or off-channel) and designs for the KOP Categories 1 through 5 design components have not been determined yet and would depend on numerous factors, including project proponent and availability of funding. Considering the KOP categories include a variety of construction activities ranging from trail modifications to diversion pipe/tunnel/channel, overflow weirs, underground gallery, side channel, storm drain interceptors, and wetlands, constructed anywhere in the study area, construction of the KOP categories could result in potentially significant

impacts associated with vibration, as the construction equipment is not known. In-channel construction would likely locate potential high-impact, vibration-intensive construction equipment away from sensitive receptors; however, based on the discussion above, quantifying vibration impacts without knowing where construction would take place or the specific project is not possible at this time. Therefore, impacts associated with vibration would be potentially significant.

#### Impact Determination

Impacts would be potentially significant.

#### Mitigation Measures

##### **Mitigation Measure NOI-9: Prepare Vibration Study and Implement Findings.**

The implementing agency will, during final design, prepare a focused vibration study that analyzes construction vibration sources and predicts vibration levels at nearby vibration sensitive land uses. If vibration levels would exceed the County's 0.01 PPV threshold or any other codified threshold, the implementing agency will prescribe measures to reduce vibration to the greatest extent practical. Measures could include, but are not limited to, the following:

- Using less vibration-intensive construction equipment
- Timing construction so that structures would not be occupied when high levels of vibration are expected
- Informing residents of the timing of construction and that vibration may be noticeable during these times

#### Significance after Required Mitigation

Impacts would be less than significant for later activities when carried out by the County.

Impacts would be significant and unavoidable for later activities when not carried out by the County.

#### ***Operations***

KOP Categories 1 through 5 would include operational design components ranging from trails and access gateways to flood reclamation improvements such as naturalized banks and braided channels. Each project under the respective KOP would vary depending on the specific design component and its intended function, as well as on the specific location. The specific location and design has not been determined yet and would depend on numerous factors, including project proponent and availability of funding. As described in Chapter 2, *Project Description*, the KOP improvements do not include operational components that would be vibration intensive. Any vibration source associated with the operation of the KOP categories would include events such as vehicles accessing local roadways, which do not produce noticeable amounts of vibration. Therefore, impacts would be less than significant.

#### Impact Determination

Impacts would be less than significant.

#### Mitigation Measures

No mitigation is required.



### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

## **KOP Category 6**

### ***Construction***

The specific location and design for the Off-Channel Land Assets design components have not been determined yet and would depend on numerous factors, including location of the improvements, complement of construction equipment, project proponent, and availability of funding. Considering this KOP includes a variety of construction activities, including but not limited to affordable housing, recreation fields, urban agriculture/composting, and arts and culture facilities, construction impacts of KOP Category 6 cannot be directly quantified as the specific locations are not known. Construction vibration associated with these projects cannot be quantified as to the effects on any surrounding land uses. Therefore, depending on the jurisdiction in which the KOP Category 6 project occurs, construction would result in potentially significant impacts.

### Impact Determination

Impacts would be potentially significant.

### Mitigation Measures

Apply the following mitigation measure, which is described above.

### **Mitigation Measure NOI-9: Prepare Vibration Study and Implement Findings.**

### Significance after Required Mitigation

Impacts would be significant and unavoidable.

### ***Operations***

Potential impacts from operation of the design components under the Off-Channel Land Assets KOP would vary depending on the specific design component and its intended function, as well as on the specific location. The specific location and design for these design components has not been determined yet and would depend on numerous factors, including project proponent and availability of funding. As described in Chapter 2, *Project Description*, this KOP could include land assets such as affordable housing, cultural centers, urban agriculture/composting, water storage, water treatment facilities, dry wells, spreading grounds, purple pipe connections, storm drain daylighting, injection wells, solar panels, fields, and parks. Generally, operational components associated with KOP Category 6 would not include land uses with substantial vibration sources. Therefore, impacts would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

## **Overall 2020 LA River Master Plan Implementation**

As described in the *2020 LA River Master Plan*, it is anticipated that approximately 107 projects ranging in size from extra-small (less than 1 acre) to extra-large (150+ acres/10+ miles) would be implemented under the *2020 LA River Master Plan* over the 25-year period to meet the *2020 LA River Master Plan's* nine objectives. These would include the Typical Projects that would be implemented along the river and subsequent projects composed of the KOP categories' multi-benefit design components. These elements together compose the entirety of the *2020 LA River Master Plan*.

The *2020 LA River Master Plan* would comply with jurisdictional thresholds and requirements incumbent within the municipal codes, general plans, and planning documents as it relates to vibration. Because details about the *2020 LA River Master Plan* construction and operation scenario are unknown, vibrational impacts associated with the entirety of the *2020 LA River Master Plan* have not been quantified. Because development of the *2020 LA River Master Plan* represents all of the Typical Projects and KOP categories combined, the vibrational impacts considered together could also potentially result in significant impacts by exceeding thresholds established by the jurisdictions.

Although Mitigation Measures NOI-7, NOI-8, and NOI-9 would be implemented for all projects developed under the *2020 LA River Master Plan* to ensure that impacts are minimized to the extent feasible, in the absence of specific project design details (e.g., scale of project design, construction equipment, construction duration, nearby sensitive receptors and land uses), it cannot be stated with certainty that vibration impacts could be reduced to levels below the thresholds set by the jurisdictions. As such, impacts would be significant and unavoidable.

### Impact Determination

Impacts would be potentially significant.

### Mitigation Measures

Apply the following mitigation measures, which are described above.

**Mitigation Measure NOI-7: Locate Project 200 Feet or more from Occupied Structures or Prepare Vibration Study and Implement Findings.**

**Mitigation Measure NOI-8: Locate Project 400 Feet or more from Occupied Structures or Prepare Vibration Study and Implement Findings.**

**Mitigation Measure NOI-9: Prepare Vibration Study and Implement Findings.**

### Significance after Required Mitigation

Impacts would be significant and unavoidable.

**Impact 3.12(c) : Would the proposed Project be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?**

**Typical Projects**

Several airports are within general proximity of the study area. These include Long Beach, Compton, Van Nuys, and Bob Hope Airports. Compton Airport is the closest at approximately 2.8 miles from the study area. However, the Typical Projects are not within an airport land use plan, nor would the Typical Projects expose people living or working to excessive noise. Therefore, impacts from construction and operation would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

**2020 LA River Master Plan Kit of Parts**

**KOP Categories 1 through 5**

For the same reasons described above for the Typical Projects, KOP Categories 1 through 5 would not be within an airport land use plan, nor would KOP Categories 1 through 5 expose people living or working to excessive noise impacts from airports during construction and operations. Therefore, impacts from construction and operation would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

**KOP Category 6**

The locations of Off-Channel Land Assets are unknown at this point; however, it is assumed that they could be anywhere within the 2-mile-wide, 51-mile-long study area. Compton and Long Beach Airports are approximately 2 miles from the study area. Even though the off-channel assets could include land uses such as affordable housing, similar to the Typical Projects and the other KOP categories, this KOP is outside of any airport land use plan and would be more than 2 miles from any airport. Therefore, impacts from construction and operation would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

## **Overall 2020 LA River Master Plan Implementation**

As described in the *2020 LA River Master Plan*, it is anticipated that approximately 107 projects ranging in size from extra-small (less than 1 acre) to extra-large (150+ acres/10+ miles) would be implemented under the *2020 LA River Master Plan* over the 25-year period to meet the *2020 LA River Master Plan's* nine objectives. These would include the Typical Projects that would be implemented along the river and subsequent projects composed of the KOP categories' multi-benefit design components. These elements together compose the entirety of the *2020 LA River Master Plan*.

As described above for the Typical Projects and KOP categories, the *2020 LA River Master Plan* study area is not within an airport land use plan and is not located within 2 miles of an airport. Therefore, impacts from the implementation of the anticipated 107 projects under the 2020 LA River Master Plan would be less than significant.

### Impact Determination

Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance after Required Mitigation

Impacts would be less than significant. No mitigation is required.

## **Cumulative Impacts**

The geographic context for an analysis of cumulative noise impacts is confined to 0.5 mile from the study area boundary (or 1.5 miles from the river on each side). Noise diminishes 6 dB with a doubling of distance from the source, and would, therefore, not be readily perceptible or a disturbance outside that radius. Buildout of the *Los Angeles County General Plan* would encompass future development within the study area plus 0.5-mile radius for cumulative development. A description of the regulatory setting and approach to cumulative impacts analysis is provided in Section 3.0.2.

### **Criteria for Determining Significance of Cumulative Impacts**

The proposed Project would have the potential to result in a cumulatively considerable impact on noise, if, in combination with other projects within the defined geographic context, it would result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable

standards of other agencies. This impact would occur if: any project construction activity would take place outside the codified hours of construction specified by any city or County government codes; any project construction activity generates maximum noise levels that exceed 75 dBA at any offsite residential receptor (based on the City of Los Angeles Municipal Code); the 1-hour Leq from project construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use (based on the L.A. CEQA Thresholds Guide); any project operations activity would generate noise related to the Project that would exceed the limits specified in any jurisdiction's municipal code; the Project would generate excessive groundborne vibration or groundborne noise levels; or the Project would be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.

### **Cumulative Condition**

The greater Los Angeles region is a developed, urban area. The study area and its surroundings are subject to existing high levels of ambient noise. Development of new residential, commercial, or industrial structures as well as transportation projects could increase both stationary and mobile sources of noise from heating, ventilation, and air-conditioning and other equipment, as well as vehicles. Construction activities could also generate significant cumulative noise and vibration effects if in proximity to one another or in combination with operational or vehicular noise. Cumulative projects would be required to comply with applicable land use compatibility classifications and noise ordinances. However, buildout of the *County of Los Angeles General Plan* would also result in substantial noise level increases throughout the County. Implementation of general plan policies would reduce impacts to the extent feasible. However, impacts related to noise land use compatibility are considered significant because of the anticipated level of buildout of the *Los Angeles County General Plan*.

Additionally, vibration generated by construction equipment has the potential to be substantial and exceed the FTA criteria for human annoyance and structural damage, which would be significant. Implementation of the applicable general plans in the study area, when taken into consideration with all other infrastructure and development projects that may occur in the region between 2016 and 2040, would result in significant cumulative impacts from the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Both construction and operation activities would expose people to excessive groundborne vibration or groundborne noise levels, constituting a significant impact. Therefore, there is a cumulative condition related to noise and vibration.

### **Contribution of the Project to Cumulative Impacts**

The *2020 LA River Master Plan* would comply with jurisdictional thresholds and requirements for both construction and operations incumbent within the municipal codes, general plans, and planning documents as it relates to noise. Inclusion of mitigation measures would help reduce impacts. The cumulative noise and vibration impacts would be localized to the area where construction activities would take place. Noise and vibration effects diminish substantially as distance between the source and receptors widens. Noise generated by a stationary noise source, or "point source," decreases by approximately 6 dBA over hard surfaces (e.g., reflective surfaces, such as parking lots or smooth bodies of water) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces, such as soft dirt, grass, or scattered bushes and trees) for each doubling of the distance.

Implementation of Mitigation Measures NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, NOI-6, NOI-7, NOI-8, and NOI-9 would further help reduce potential project impacts. Therefore, the Project would not make a cumulatively considerable contribution to cumulative noise and vibration impacts.