# APPENDIX D

# DHSP Noise Study Report

## Prepared Kunzman Associates, Inc.

KUNZMAN ASSOCIATES, INC.

# DOWNTOWN HAWTHORNE SPECIFIC PLAN

# NOISE STUDY REPORT

**December 1, 2015**

Traffic Engineering | Transportation Planning | Parking | Noise/Vibration | Expert Witness
Air Quality | Global Climate Change | Health Risk Assessment

KUNZMAN ASSOCIATES, INC.

# DOWNTOWN HAWTHORNE SPECIFIC PLAN

# NOISE STUDY REPORT

## December 1, 2015


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# I. INTRODUCTION AND PROJECT LOCATION

## A. Introduction

This report provides a foundation for creating goals, policies, and programs for the Downtown Hawthorne Specific Plan Area (DHSP) in relation to noise. It includes a discussion of basic noise terminology, a discussion of existing land uses, noise sources, sensitive receptors, representative noise measurements and noise contours, and a discussion of the existing regulatory environment. Potential noise impacts associated with the proposed Specific Plan land uses and associated vehicle traffic are also evaluated in light of the City of Hawthorne General Plan Noise Element and applicable portions of the City's Municipal Code. Recommended measures to reduce impacts are also provided.

## B. Project Location

The City of Hawthorne is located in the South Bay region of Los Angeles County, approximately 10 miles southwest of downtown Los Angeles and two miles southeast of Los Angeles International Airport (LAX). The Downtown Hawthorne Specific Plan area is located primarily along the two-mile segment of Hawthorne Boulevard that runs from the northern borders of the City adjacent to the unincorporated community of Lennox at the I-105 Freeway to the southern border with the City of Lawndale near Rosecrans Avenue. Figure 1 illustrates the boundaries of the project area.

## C. Project Description

The DHSP area totals approximately 786 acres or 1.23 square miles. The area boundaries include the I-105 Freeway on the north, Freeman Avenue and Prairie Avenue on the east, the City limits on the south and Ramona Avenue and Inglewood Avenue on the west. The existing eight-acre Prestige Village Specific Plan area located at the former RFK Hospital site is not part of the DHSP area. In addition to the major north-south arterial Hawthorne Boulevard, the project area includes the east-west portions of Imperial Highway, 120th Street, El Segundo Boulevard and Rosecrans Avenue. The light rail Metro Green Line runs east-west in the median of I-105 with the Metro Hawthorne/Lennox Station located at Hawthorne Boulevard at the northern end of the Specific Plan area. A Union Pacific rail line bisects the DHSP area at Hawthorne Boulevard between 120th Street and El Segundo Boulevard.

The primary land uses in the DHSP area include residential, commercial and public facilities. Residential uses, both single and multiple-family units, are generally located behind the commercial uses that are along Hawthorne Boulevard and Imperial Highway. The existing residential uses represent more than one-half of the total DHSP area. Single-family detached residential uses total 186.8 acres (23.8% of the total DHSP area) and multi-family attached residential uses total 203.9 acres (25.9% of the total). Commercial office, retail and services and associated parking total 135.9 acres (17.3% of the total). The remaining developed land uses include public facilities at 24.7 acres (3.1%), transportation, communication and utilities at 4.3 acres (0.5%) and industrial at 3.9 acres (0.5%). Although

the DHSP area is highly urbanized, 75 parcels have been identified as vacant and total 17.7 acres or 2.3 percent of the DHSP area. There are four Transformative Projects in the DHSP that are identified as opportunity sites for new and catalytic development and investment. The Transformative Projects are intended to embody bold ideas and further support the DHSP's vision and objectives. The locations of the four Transformative Projects are illustrated on Figure 2. The DHSP presents a development concept for each site, which are summarized below:

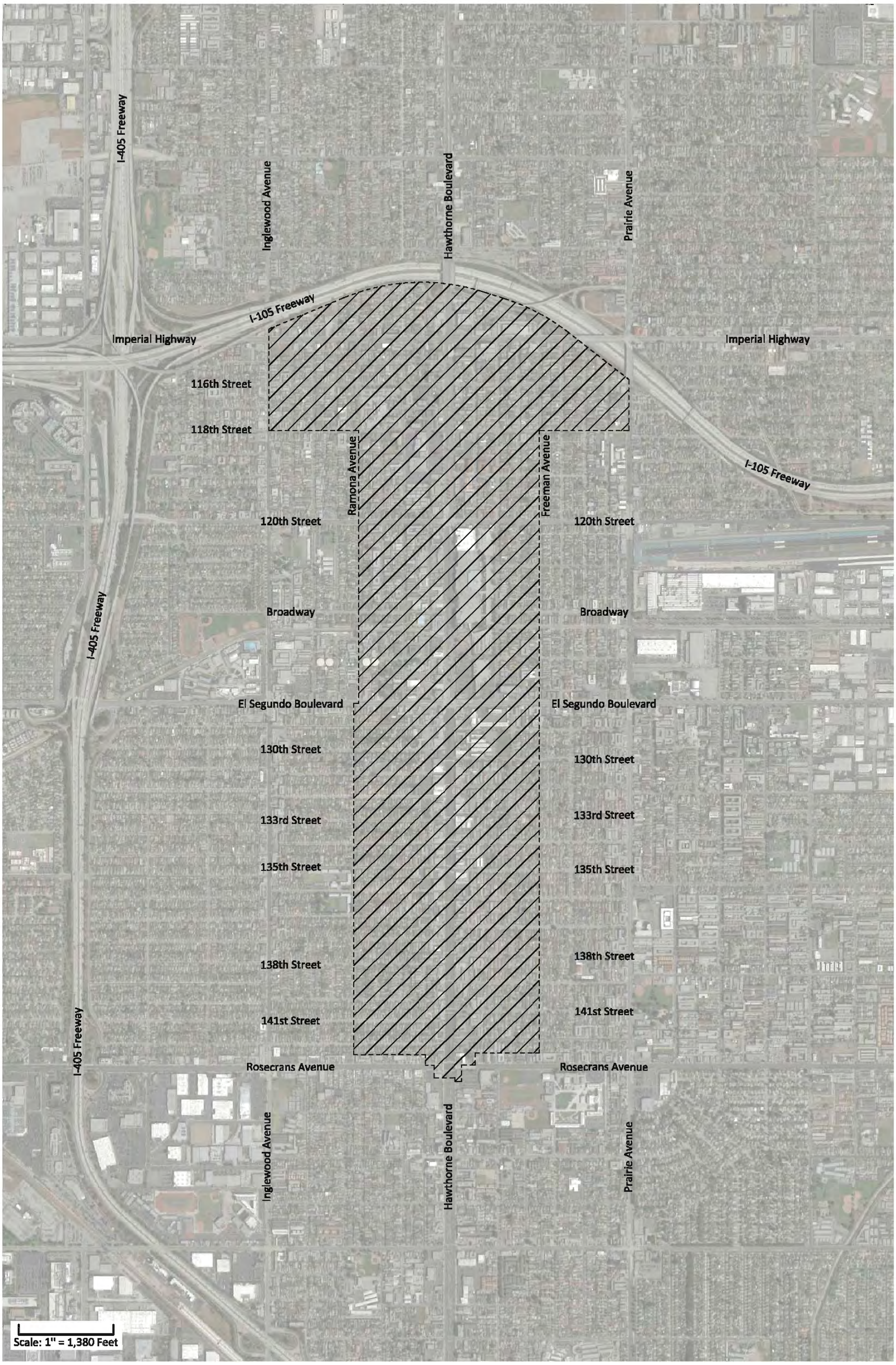
**T1** **Hawthorne Mall.** The Hawthorne Mall Transformative Project represents the anchor to the revitalization of the DHSP area. It fronts Hawthorne Boulevard and encompasses approximately 26 acres. The main portion of the Hawthorne Mall Transformative Project includes the large vacant Mall building and parking structure. The DHSP will allow mixed-use development that include residential, retail, retail flex-space, and office uses and associated parking. It will also create a pedestrian-oriented district that serves as a central retail and dining destination for Downtown Hawthorne.

**T2** **Civic Center.** The Civic Center Transformative Project encompasses approximately 12 acres and is the location of Hawthorne City Hall and municipal buildings. The DHSP land use strategy is to unite a disparate set of civic buildings into a cohesive and inviting civic center, with a 300 room hotel.

**T3** **South Bay Ford.** The South Bay Ford Transformative Project is located in the southern portion of the DHSP area along Hawthorne Boulevard. This site is approximately four acres and is the original site of South Bay Ford auto dealership. The DHSP promotes horizontal mixed-use allowing for a larger-format commercial center and medium and higher-density residential.

**T4** **St. Joseph's Plaza.** The land use strategy for this one-half acre site is to develop it as a landmark public neighborhood plaza or park that serves as a community focal point and helps frame the historic St. Joseph's Church and Chips restaurant.

## Figure 1
## Project Location Map

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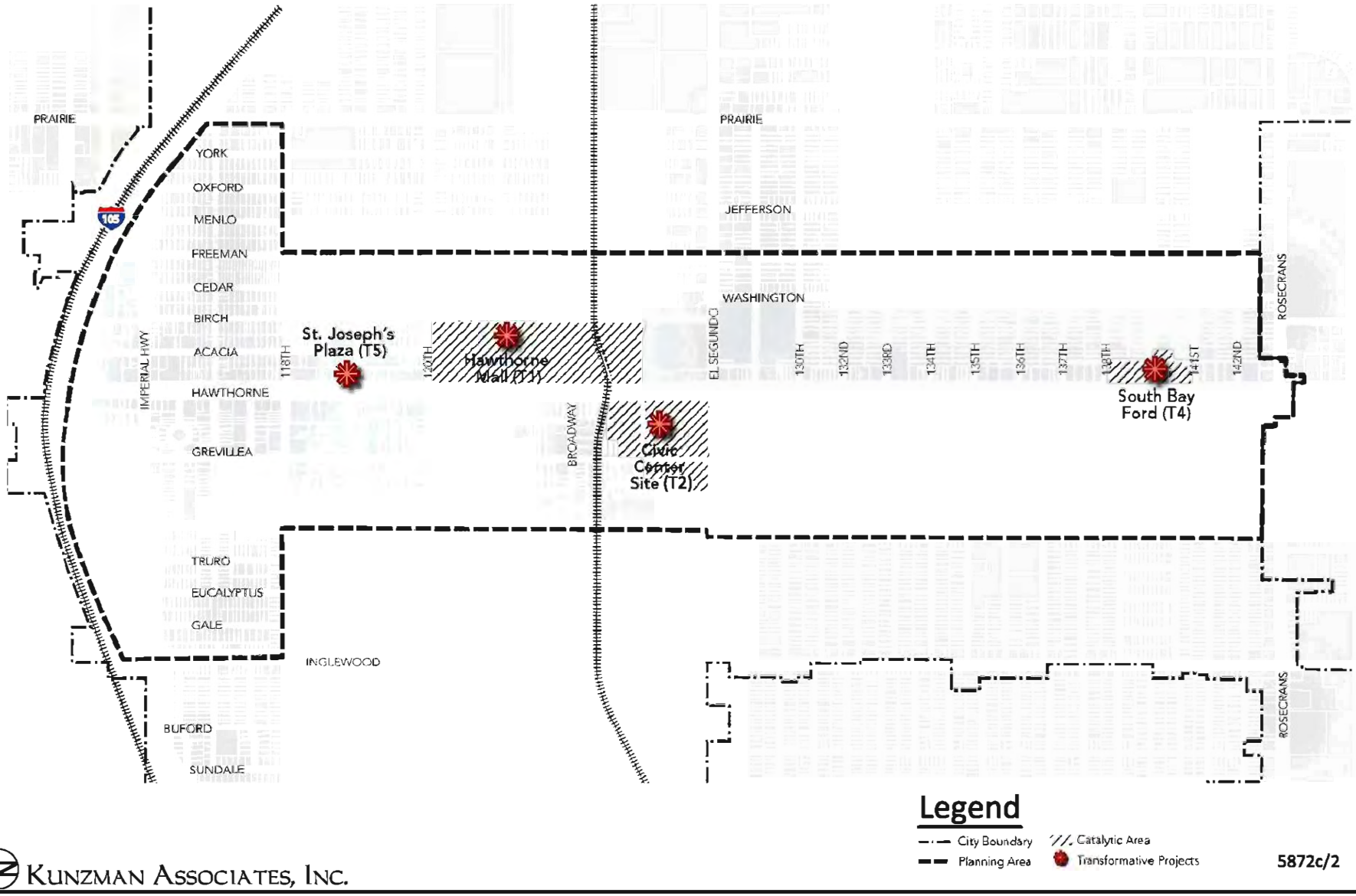
# Figure 2
## Proposed Transformative Projects

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# II. NOISE AND VIBRATION FUNDAMENTALS AND DEFINITION OF TERMS

## A. Noise Fundamentals

There are certain fundamental properties of sound and techniques for describing noise levels that are necessary for a complete understanding of existing conditions. Below is a simplified explanation of some of these properties and techniques. The discussion is structured to promote understanding by those with and without an existing understanding of noise. However, the use of some technical terms is unavoidable.

### 1. Sound Properties

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; and 20 dB higher four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud).

Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA. Figure 3 provides examples of various noises and their typical A-weighted noise level.

### 2. Noise Descriptors

There are several “descriptors” used to describe noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise are defined below. A more comprehensive list of acoustical terms and their definitions is included as Appendix A of this report.

**$L_{eq}$ (Equivalent Noise Level):** Average noise levels over a period of minutes or hours are usually expressed as dBA $L_{eq,}$ or the equivalent noise level for that period of time. For example, $L_{eq\ (3)}$ would represent a 3-hour average. When no period is specified, a one-hour average is assumed.

**$L_{max}$ (Maximum Noise Level):** The maximum instantaneous noise level during a specified period of time.”

**$L_{min}$ (Minimum Noise Level):** The minimum instantaneous noise level during a specified period of time.

**$L_n$ (Statistical Descriptor):** The noise level exceeded X% of a specific period of time. For example, $L_{50}$ is the median noise level, or level exceeded 50% of the time.

**CNEL/Ldn (Community Noise Equivalent Level/ Day-Night Average Noise Level):** CNEL is a 24-hour weighted average measure of community noise. It is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours. $L_{dn}$ is a very similar 24-hour average measure that weights only the nighttime hours.

3. Noise Propagation

Sound levels decrease as a function of distance from the source as a result of wave divergence, atmospheric absorption and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound power of the wave. Atmospheric absorption also influences the levels that are received by the observer. The greater the distance traveled, the greater the influence and the resultant fluctuations. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind also play a significant role in determining the degree of attenuation. Intervening topography or structures can also have a substantial effect on the effective perceived noise levels.

4. Noise and Health Effects

Noise has been defined as unwanted sound and it is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. This criteria is based on such known impacts of noise on people as hearing loss, speech interference, sleep interference, physiological responses and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narratives:

Hearing loss is not a concern in community noise situations of this type. The potential for noise induced hearing loss is more commonly associated with occupational noise exposures in heavy industry or very noisy work environments. Noise levels in neighborhoods, even in very noisy airport environs, are not sufficiently loud to cause hearing loss.

Speech interference is one of the primary concerns in environmental noise problems. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech.

Sleep disturbance is a major noise concern for traffic noise. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep

disturbance. Note that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep.

Physiological responses are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent is not known to which these physiological responses cause harm or are sign of harm.

Annoyance is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability.

## B. Vibration Fundamentals

### 1. Vibration Properties

Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of groundborne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may consist of the rattling of windows or dishes on shelves.

### 2. Vibration Descriptors

Peak particle velocity (PPV) or the root mean square (RMS) amplitude of the vibration velocity is used to quantify vibration amplitude in this report.

### 3. Vibration Perception

Typically, groundborne vibration is readily perceptible at 0.08 PPV. Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration.

### 4. Vibration Propagation

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform median, while groundborne vibrations travel through the earth, which may contain significant geological differences. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an

expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation. The rate of attenuation can vary greatly depending on the soil type.

5. Construction Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table 1 gives approximate vibration levels for particular construction activities. The data in Table 1 provides a reasonable estimate for a wide range of soil conditions.

## Table 1

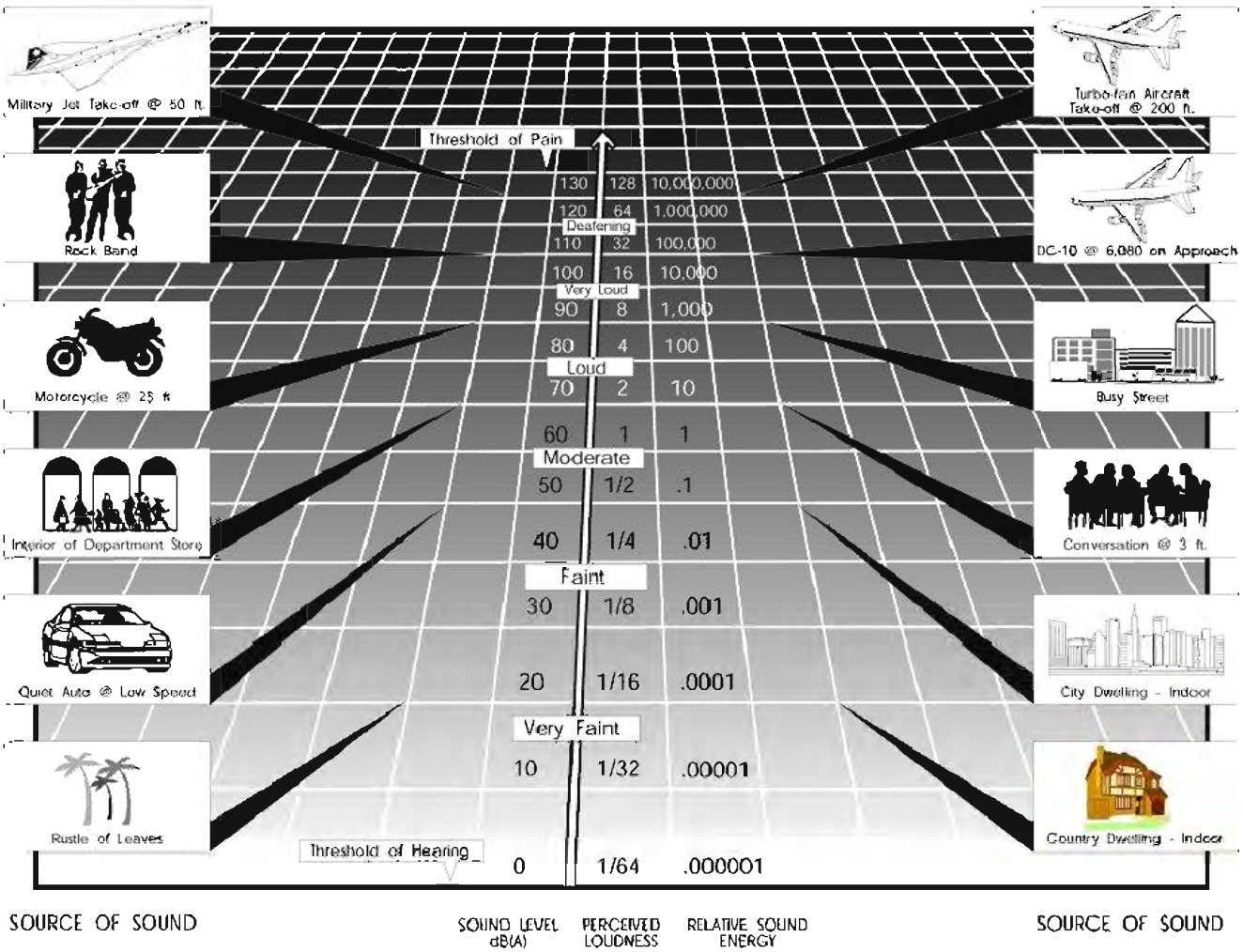
## Construction Equipment Vibration Source Levels[1]

| Equipment | Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB | | |
|---|---|---|---|
| | at 25 feet | at 50 feet | at 100 feet |
| Clam Shovel Drop (slurry wall) | **0.202** | 0.071 | 0.025 |
| Vibratory Roller | **0.210** | 0.074 | 0.026 |
| Hoe Ram | **0.089** | 0.031 | 0.011 |
| Large Bulldozer | **0.089** | 0.031 | 0.011 |
| Caisson Drilling | **0.089** | 0.031 | 0.011 |
| Loaded Trucks | 0.076 | 0.027 | 0.010 |
| Jackhammer | 0.035 | 0.012 | 0.004 |
| Small Bulldozer | 0.003 | 0.001 | 0.0004 |

[1] Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment, 2006.

[2] Bold values are considered annoying to people.

# Figure 3
## Common Noise Sources and Noise Levels

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# III. EXISTING NOISE ENVIRONMENT

## A. Ambient Noise Measurements

An American National Standards Institute (ANSI Section SI4 1979, Type 1) Larson Davis model LxT sound level meter was used to document existing ambient noise levels. Eight 10-minute representative noise measurements were taken between 11:37 AM and 2:18 PM on June 3, 2015. Measurement locations shown on Figure 4 were chosen to represent a variety of existing land uses and sensitive receptors near proposed specific plan transformative areas. As shown in Table 2, measured ambient noise levels ranged between 58.7 dBA $_{Leq}$ and 63.3 dBA $L_{eq}$. Measurement output data is included in Appendix B.

## B. Existing Land Uses and Sensitive Receptors

### 1. Existing Land Use

While land uses in the project area vary throughout the project area to include residential, commercial, and mixed use; church, school, medical offices, and public uses are also scattered throughout the project area.

### 2. Sensitive Receptors

Noise can become a problem when sources and noise sensitive land uses are located in adjacent areas. Residential uses are generally the most sensitive to noise. Other noise-sensitive land uses include schools, libraries, offices, hospitals, churches, hotels, motels, and outdoor recreational areas. Most noise impacts can be avoided when noise sources, sensitive land uses, and information about the future noise environment are considered in planning and development decisions.

## C. Existing Noise Sources

### 1. Transportation-Related Noise

**Motor Vehicles**

Existing traffic volumes were obtained from the traffic study prepared by Evans Brooks Associates, Inc. (2015). The volumes, along with speeds and traffic mixes that were used to calculate the noise levels associated with existing vehicle traffic are presented in Appendix C.

Vehicle noise associated with Hawthorne Boulevard and other major arterial roadways in the project area represents the major source of noise in the Specific Plan area. Existing traffic noise levels associated with road segments in the project area were modeled utilizing the Highway Noise Model published by the Federal Highway Administration ("FHWA Highway Traffic Noise Prediction Model," FHWA-RD-77-108, December, 1978). The FHWA Model uses traffic volume, vehicle mix, vehicle speed,

and roadway geometry to compute the "equivalent noise level." CNEL contours are found by iterating over many distances until the distances to the 60, 65, 70 CNEL contours are found (see Table 3). As shown on Figure 5, much of the DHSP is currently exposed to noise levels below 60 dBA CNEL.

**Aircraft Noise**

Hawthorne Municipal Airport, also known as Jack Northrop Field, is located approximately 1,360 feet east of the DHSP. The airport runway lies in an east/west direction and small aircraft flyovers are common in the DHSP area. The Hawthorne Municipal Airport is a FAA-designated general aviation reliever airport owned by the City of Hawthorne. The airport operates 24 hours a day seven days a week.

Although aircraft associated with the Hawthorne Municipal Airport do fly directly over the DHSP area (which was confirmed during noise measurements) it is not located within the Hawthorne Municipal Airport 65 dBA CNEL noise contour (see Figure 6).

The short duration of the flyovers, the large distance of the flying aircraft to the project site (e.g., the altitude of flying aircraft), and the low intensity of the noise energy emitted by most aircraft associated with the Hawthorne Municipal Airport result in noise impacts in the DHSP area that are only sufficient to make minor temporary alterations to the average ambient noise level. This likely may be due in some part to the adoption and implementation of the City of Hawthorne Municipal Airport VFR Noise Abatement Arrival, Departure, and Pattern Procedures; Hawthorne Municipal Airport VFR Touch and Go Landing Procedures; and Noise Abatement Procedures (see Appendix D) which include specific instructions for pilots to follow that result in less noise exposure to sensitive receptors.

The Los Angeles International Airport (LAX) is located just northwest of the interchange of the I-405 Freeway and I-105 Freeway approximately 3,600 feet northwest of the DHSP area. According to the most recent LAX Noise Contour Map (1Q 2015), the DHSP area is not within the 65 dBA CNEL noise contours. As shown on Figure 7, the LAX 65 noise contour does not fall south of the I-105 Freeway in the vicinity of the DHSP area.

**Rail Noise**

As shown on Figure 8, there is an existing Union Pacific Railroad Company rail line traversing the DHSP area in an east/west direction generally running between Broadway Avenue and 126th Street and is perpendicular to Hawthorne Boulevard. The line also bisects the Hawthorne Mall Transformative Project and is the northern boundaries of the Civic Center Transformative Project. According to the most recent Federal Railroad Administration Inventory Data sheets (see Appendix E), approximately 2 freight trains travel on this rail line per day. One freight train travels westbound on the rail line per day between the hours of 10:00 AM and 11:00 AM, and returns eastbound between the hours of 1:00 PM and 2:00 PM. Typical train speed ranges between 5 and 15 miles per hour.

Although train pass-by noise levels may reach up to 83 dBA (15 minute $L_{eq}$) and 104 dBA $L_{max}$ at a distance of 75 feet (Kunzman 2015), two train pass-bys per day do not substantially increase the CNEL in the project area. Train pass-by measurement data from an acoustically comparable location was utilized for this analysis[1].

2. Stationary Noise Sources

Stationary noise sources can include commercial and industrial activities, loudspeakers, car alarms, loud music, and noise generated from large gathering and typical residential neighborhood sounds such as lawnmowers, children at play, and barking dogs. In Hawthorne, the noise impacts from these sources are mostly outweighed by vehicle traffic-related noise.

[1] Kunzman Associates, Inc. noise measurement of freight train pass-by, conducted by staff near Mission Avenue in the City of Riverside approximately 75 feet from the rail line.

## Table 2

## Measured Existing Noise Levels[1]

| Name | Measurement Period | Duration of Measurement | Description | Existing Ambient Noise Levels (dBA) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | $L_{eq}$ | $L_{max}$ | $L_2$ | $L_8$ | $L_{25}$ | $L_{50}$ |
| NM1 | 11:37 AM -11:47 AM | 10 min | Vehicle traffic, distant helicopter flyover, cars, skateboarders, deliveries, pedestrian conversation | 60.9 | 81.6 | 67.3 | 63.0 | 60.2 | 57.9 |
| NM2 | 11:53 AM- 12:03 PM | 10 min | Vehicle traffic, HVAC, trucks idling, pedestrian conversations, vehicle pass-bys, distant light aircraft fly-over, church bells | 63.3 | 85.3 | 69.8 | 66.2 | 60.6 | 55.6 |
| NM3 | 12:15 PM - 12:25 PM | 10 min | Vehicle traffic, parking lot noise, dumpster noise, pedestrian conversations, school lunch break noise in distance. | 60.1 | 80.7 | 64.4 | 62.1 | 59.0 | 56.2 |
| NM4 | 12:35 PM - 12:45 PM | 10 min | Vehicle traffic, pedestrian conversations, light aircraft overflight, birds | 62.7 | 77.2 | 62.7 | 77.2 | 91.9 | 43.6 |
| NM5 | 1:00 PM - 1:10 PM | 10 min | Vehicle traffic, pedestrian conversation, light aircraft overflight | 62.5 | 75.8 | 71.3 | 67.3 | 62.4 | 55.9 |
| NM6 | 1:28 PM - 1:38 PM | 10 min | Vehicle traffic, pedestrians, nearby medium truck delivery | 61.5 | 73.0 | 69.5 | 66.0 | 62.3 | 57.4 |
| NM7 | 1:50 PM - 2:00 PM | 10 min | Vehicle traffic, cars starting and stopping, pedestrian conversation | 59.7 | 73.9 | 69.9 | 62.5 | 58.8 | 54.9 |
| NM8 | 2:08 PM - 2:18 PM | 10 min | Vehicle traffic, cars starting and stopping, pedestrian conversation | 58.7 | 59.2 | 59.2 | 59.1 | 59.0 | 58.8 |

[1] Source: Site Visit, Kunzman Associates, Inc. (June 3, 2015).

**Table 3**

**Modeled Existing Traffic Noise Levels (CNEL)**

| Roadway | Segment | Existing ADT[1] | Existing CNEL Contours (feet from Centerline) | | |
|---|---|---|---|---|---|
| | | | 70 dBA | 65 dBA | 60 dBA |
| I-405 NB/SB On-Off Ramps | North of El Segundo | 3,000 | 8 | 24 | 75 |
| | South of El Segundo | 15,000 | 37 | 119 | 375 |
| Inglewood Avenue | North of Imperial Highway | 16,400 | 8 | 25 | 81 |
| | Imperial Highway to 120th Street | 16,000 | 8 | 25 | 79 |
| | 120th Street to El Segundo Boulevard | 21,600 | 11 | 34 | 106 |
| | El Segundo Boulevard to Rosecrans Avenue | 24,300 | 12 | 38 | 120 |
| | South of Rosecrans Avenue | 22,300 | 11 | 35 | 110 |
| Hawthorne Boulevard | North of Lennox Boulevard | 30,000 | 15 | 47 | 148 |
| | Lennox Boulevard to I-105 WB Off-Ramp | 33,800 | 17 | 53 | 166 |
| | I-105 WB Off-Ramp to Imperial Highway | 25,400 | 13 | 39 | 125 |
| | Imperial Highway to 120th Street | 26,700 | 13 | 41 | 132 |
| | 120th Street to Broadway | 24,500 | 12 | 38 | 121 |
| | Broadway to El Segundo Boulevard | 25,100 | 12 | 39 | 124 |
| | El Segundo Boulevard to Rosecrans Avenue | 26,900 | 13 | 42 | 133 |
| | Rosecrans Avenue to Marine Avenue | 28,400 | 14 | 44 | 140 |
| | South of Marine Avenue | 30,500 | 15 | 48 | 150 |
| Praire Avenue | North of I-105 EB Off-Ramp | 28,500 | 14 | 44 | 197 |
| | I-105 EB Off-Ramp to Imperial Highway | 29,500 | 15 | 46 | 204 |
| | Imperial Highway to 120th Street | 24,600 | 12 | 38 | 170 |
| | South of 139th Street | 28,100 | 14 | 44 | 194 |
| I-105 WB Off-Ramp | East of Hawthorne Boulevard | 30,200 | 24 | 75 | 239 |
| Imperial Highway | West of Hawthorne Boulevard | 26,500 | 13 | 41 | 131 |
| | Hawthorne Boulevad to I-105 EB On-Ramp | 27,200 | 13 | 42 | 134 |
| | I-105 EB On-Ramp to Prairie Avenue | 29,600 | 15 | 46 | 146 |
| | East of Prairie Avenue | 28,400 | 14 | 44 | 140 |
| 120th Street | West of Inglewood Avenue | 15,700 | 10 | 32 | 102 |
| | Inglewood Avenue to Hawthorne Boulevard | 18,100 | 12 | 37 | 118 |
| | Hawthorne Boulevard to Birch Avenue | 21,000 | 14 | 43 | 137 |
| | Birch Avenue to Prairie Avenue | 18,100 | 12 | 37 | 118 |
| | East of Prairie Avenue | 22,000 | 14 | 45 | 143 |
| El Segundo Boulevard | West of I-405 NB On-Off-Ramp | 36,700 | 25 | 80 | 253 |
| | I-405 On-Off-Ramp to Inglewood Avenue | 31,000 | 21 | 68 | 214 |
| | Inglewood Avenue to Hawthorne Boulevard | 28,200 | 20 | 62 | 195 |
| | Hawthorne Boulevard to Birch Avenue | 26,700 | 19 | 58 | 185 |
| | East of Birch Avenue | 27,600 | 19 | 60 | 191 |
| 139th Street | East of Hawthorne Boulevard | 1,000 | 1 | 2 | 6 |
| Rosecrans Avenue | West of Inglewood Avenue | 25,800 | 18 | 56 | 178 |
| | Inglewood Avenue to Hawthorne Boulevard | 27,700 | 19 | 60 | 191 |
| | East of Hawthorne Boulevard | 25,800 | 18 | 56 | 178 |

[1] Evans Brooks Associates, Inc. 2015

## Figure 4
## Noise Measurement Locations

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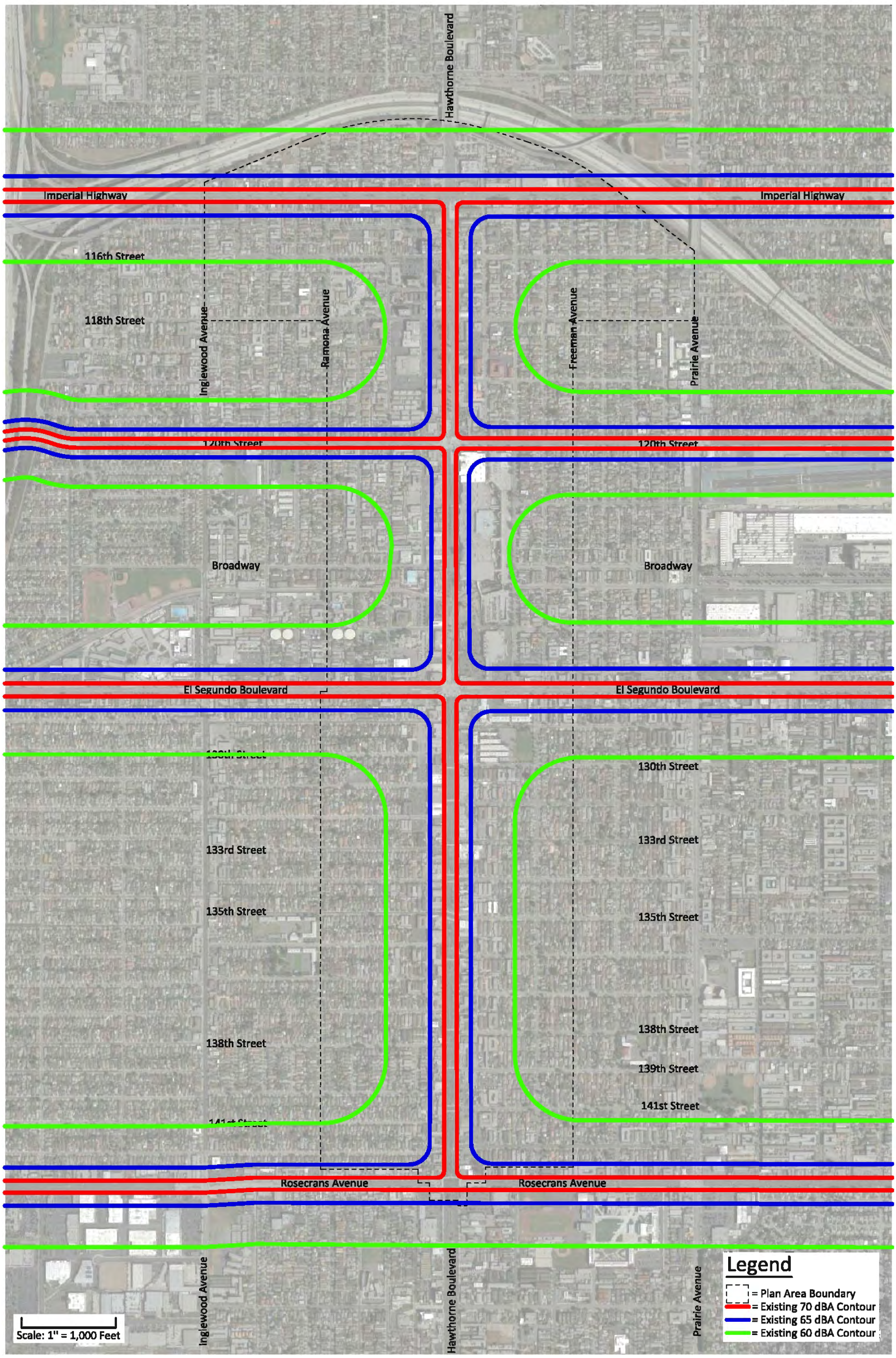
OVER 35 YEARS OF EXCELLENT SERVICE

## Figure 5
### Existing Roadway Noise Contours

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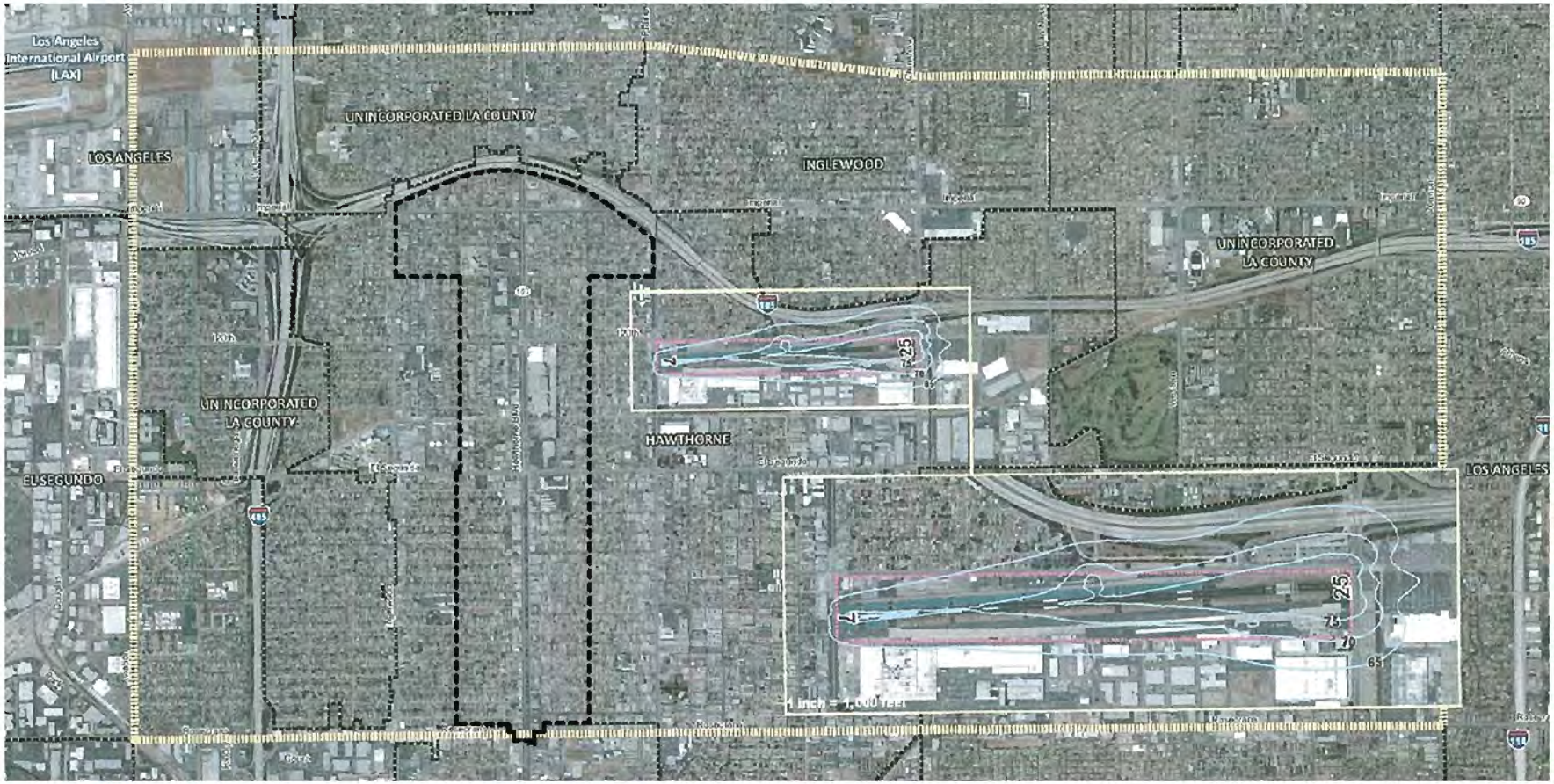
# Figure 6
## Hawthorne Airport Noise Contours




## Legend

- Jurisdictional Boundaries
- Detailed Study Area
- 2017 Noise Contour
- Streets
  - Interstates
  - Highways
  - Secondary Roads
- Airport Property Line

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Source: Coffman Associates Analysis

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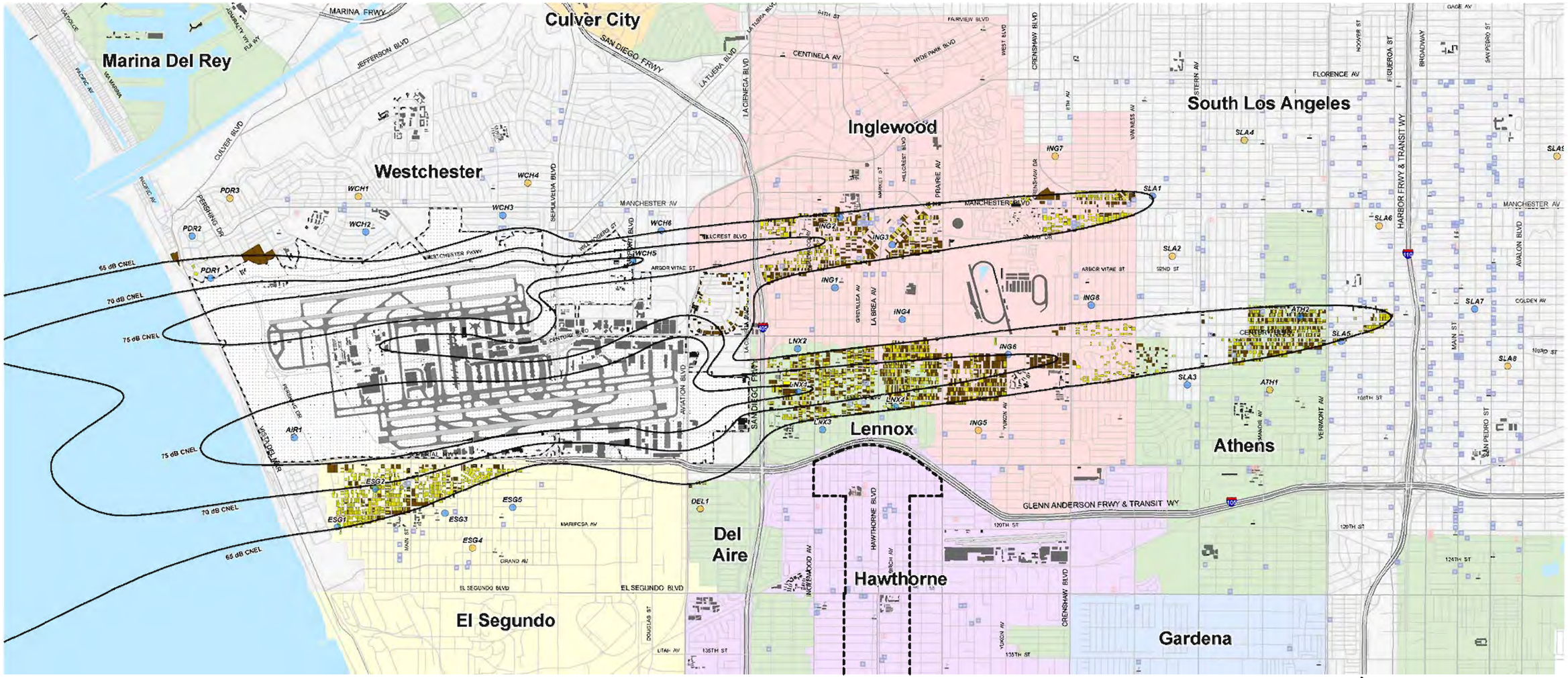
## Figure 7
### Los Angeles International Airport Noise Contours



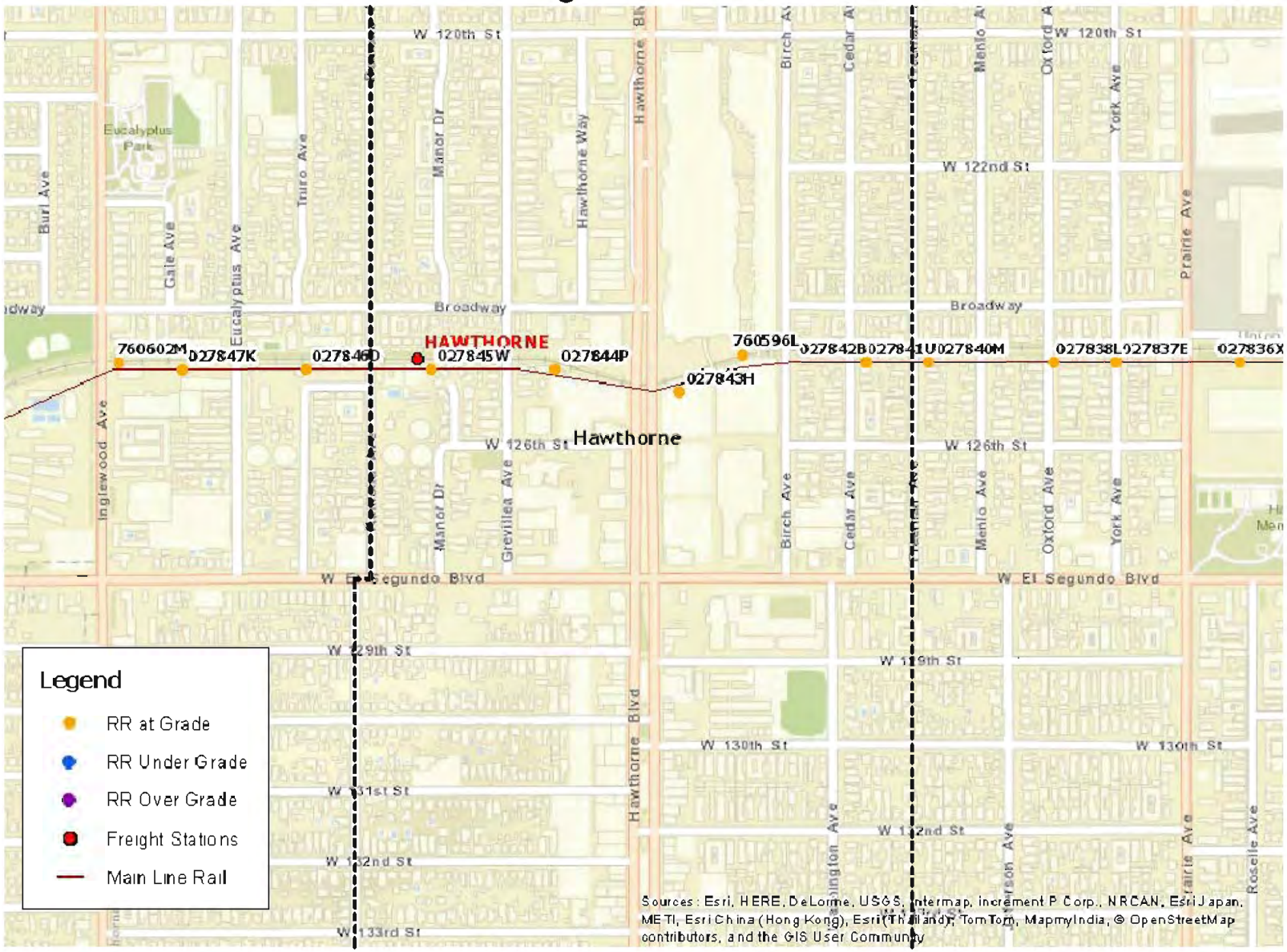

## Legend

- Residential - Single Family
- Residential - Multi-Family
- Residential - Mobile Home
- Airport Property
- Landmarks
- Noise Contours
- Streets
- Noise Monitor (Required for Title 21)
- Noise Monitor (Not required for Title 21)
- Places of Worship
- Hospitals
- Schools

5872c/6

Source: City of Los Angeles

# Figure 8
## Existing Rail in DHSP Area

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# IV. APPLICABLE STANDARDS

The following goals, policies, standards and regulations should be considered during the planning, implementation and operational phases of the proposed project in order to minimize potential noise impacts.

## A. Federal Regulations

### 1. Federal Noise Control Act of 1972

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In response, the EPA published Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Levels of Environmental Noise). The Levels of Environmental Noise recommended that the Ldn should not exceed 55 dBA outdoors or 45 dBA indoors to prevent significant activity interference and annoyance in noise-sensitive areas.

In addition, the Levels of Environmental Noise identified five dBA as an "adequate margin of safety" for a noise level increase relative to a baseline noise exposure level of 55 dBA Ldn (i.e., there would not be a noticeable increase in adverse community reaction with an increase of five dBA or less from this baseline level). The EPA did not promote these findings as universal standards or regulatory goals with mandatory applicability to all communities, but rather as advisory exposure levels below which there would be no risk to a community from any health or welfare effect of noise.

In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to State and local governments. However, noise control guidelines and regulations contained in EPA rulings in prior years remain in place by designated Federal agencies, allowing more individualized control for specific issues by designated Federal, State, and local government agencies.

## B. State Regulations

### 1. State of California Building Standards Code

The State of California has adopted noise standards in areas of regulation not preempted by the Federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. Title 24 of the California Code of Regulations, also known as the California Building Code, establishes building standards applicable to all occupancies

throughout the state. The code provides acoustical regulations for both exterior-to-interior sound insulation, as well as sound and impact isolation between adjacent spaces of various occupied units. Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dBA Ldn/CNEL, with windows closed, in any habitable room for multi-family residential uses.

California Building Code Section 1208A, Sound Transmission, of the Building Code requires acoustical evaluation and insulated building design and construction when exterior noise levels exceed 60 Ldn/CNEL. New residential construction must be acoustically designed and constructed to reduce the intrusion of transportation noise and local fixed noise sources. The California Building Code requires a minimum Sound Transmission Class of 50 (STC50) and Impact Isolation Class 50 (IIC50) for multiple family residential units located where exterior noise levels exceed 60 Ldn/CNEL.

The non-residential mandatory measures found in Title 24, Part 11, Section 5.507.4.1 of the California Code of Regulations requires the use of wall and roof-ceiling assemblies that make up the building envelope to have an STC of at least 50 and exterior windows must have minimum STC of 30 for any of the following building locations:

1. Within 1,000 ft (300 m) of right of ways of freeways.
2. Within 5 miles (8 km) of airports serving more than 10,000 commercial jets per year.
3. Where sound levels at the property line regularly exceed 65 decibels, other than occasional sound due to church bells, train horns, emergency vehicles and public warning systems.

Buildings with few or no occupants and where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings are exempt from this section of code.

2. <u>State of California General Plan Guidelines 2003</u>

Though not adopted by law, the State of California General Plan Guidelines 2003, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provide guidance for the compatibility of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of construction relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendations of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e., Ldn or CNEL) and in the upper limits for the Normally Acceptable outdoor exposure of noise-sensitive uses. The OPR Guidelines include a Noise and Land Use Compatibility Matrix which identifies acceptable and unacceptable community noise exposure limits for various land use categories. As discussed below, the City of Hawthorne has included their own version of this table in the Noise Element of their General Plan.

3. California Environmental Quality Act

The California Environmental Quality Act Guidelines (Appendix G) establishes thresholds for noise impact analysis. Two of these standards apply to what is referred to as a "substantial increase" in ambient noise levels. The City does not have a definition of a substantial increase, nor does CEQA establish a numerical value for this threshold. Noise generated by transportation sources propagates differently than noise generated by point sources. Therefore, for purposes of this analysis, the following two thresholds were utilized to evaluate the project's potential to result in substantial increases in ambient noise levels.

Traffic Noise

Roadway noise impacts would be considered significant if the project increases noise levels at a noise sensitive land use by 3 dBA CNEL and if: (1) the existing noise levels already exceed the residential land use compatibility standard for "normally acceptable" (65 dBA CNEL), or (2) the project increases noise levels from below the 65 dBA CNEL standard to above 65 dBA CNEL.

Stationary Noise

Project operations, including noise from car wash equipment and trucks, may produce an increase in noise levels which disturbs the peace and quiet of adjacent residential areas or cause discomfort/annoyance to area residents. Caltrans considers a 5 dBA increase to be "readily audible", which seems to correlate most closely to "substantial increase." For the purposes of this report, a substantial permanent increase in ambient noise levels due to stationary noise sources shall be considered 5 dBA $L_{eq}$.

## C. City of Hawthorne

1. General Plan Noise Element

**Land Use Compatibility**

The General Plan noise Element includes land use planning tools to reduce future noise related land use incompatibilities. These include criteria that specify acceptable limits of noise for various land uses throughout the City. These criteria are designed to integrate noise considerations into land use planning to prevent noise/land use conflicts. Table 4 presents criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the basis for the development of specific Noise Standards (see Table 5). These tables are the primary tools which allow the City to ensure integrated planning for compatibility between land uses and outdoor noise.

The City has also established goals, policies and objectives regarding noise within the community. It is recommended that the City review these goals and policies and either confirm that they are appropriate for the DHSP or if new policies should be developed specifically for the DHSP.

Goal 1. Provide for the reduction of noise where the noise environment is unacceptable.

Policy 1.1 Provide for measures to reduce noise impacts from transportation noise sources. These measurements include:

- Construct barriers to mitigate sound emissions where necessary or where feasible. Actively participate in the development of noise abatement plans for freeways and rapid transit.
- Ensure the inclusion of noise mitigation measures in the design of new roadway projects in Hawthorne.
- Reduce transportation noise through proper design and coordination of routing.
- Ensure the effective enforcement of City, State and Federal noise levels by all appropriate City divisions.
- Mitigate potential impacts for existing or proposed helicopter operations.
- Explore noise control programs as part of the Hawthorne Airport Master Plan to minimize noise levels from these operations.
- To help minimize noise impacts from Los Angeles International Airport, actively support the FAA Part 150 Noise Compatibility Program as described in the "Noise Control and Land Use Compatibility Study, Los Angeles International Airport" (March 1984).

Goal 2. Protect and maintain those areas having acceptable noise environments

Policy 2.1 Incorporate noise considerations into land use planning decisions. These measures will be achieved through the following programs:

- Establish acceptable limits of noise for various land uses throughout the community. Zoning changes should be consistent with the compatibility of the projected noise environment.
- Ensure acceptable noise levels near schools, hospitals, convalescent homes, and other noise sensitive areas.
- Establish standards for all types of noise not already governed by local ordinances or permitted by state or federal law.
- Encourage acoustical design in new construction.

Goal 3. Provide sufficient information concerning the community noise levels so that noise can be objectively considered in land use planning decisions.

Policy 3.1 The City shall develop measures to control non-transportation noise impacts.

Policy 3.2 The City shall establish a new Community Noise Ordinance to mitigate noise conflicts.

Policy 3.3 The City shall evaluate noise generated by construction activities.

Policy 3.4 Establish and maintain coordination among the City agencies involved in noise abatement.

2. Municipal Ordinance

The City has adopted several ordinances intended to control and enforce community noise. The following is a summary of ordinances that the City may want to consider while developing appropriate noise/land use policies for the DHSP. If any seem inappropriate or inadequate for the DHSP, policies can be incorporated in the DHSP to supersede existing City ordinances.

**9.34.020 Amplified sound.**
No person shall knowingly or wantonly use or operate, in or upon private property, any mechanical device, machine, apparatus or instrument for the intensification or amplification of the human voice or other sound in such manner as to disturb the peace, quiet and comfort of the neighboring inhabitants. (Prior code § 8-404.)

**9.35.010 Disturbances caused by loud, unnecessary and unusual noise.**
Notwithstanding any other provisions of this code 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 sensitivity residing in the area.

The standard which may be considered in determining whether a violation of the provisions of this section exists may include, without limitation, 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;
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.

**12.16.300 Noise, dust and debris.**
Each permittee shall conduct and carry out excavation work in such manner as to avoid unnecessary inconvenience and annoyance to the general public and occupants of neighboring property. The permittee shall take appropriate measure to reduce to the fullest extent practicable in the performance of the excavation work, noise, dust and unsightly debris and during the hours of 10:00 PM and 7:00 AM shall not use, except with the express written permission of the City engineer or in case of an emergency as herein otherwise provided, any tool, appliance or equipment producing noise of sufficient volume to disturb the sleep or repose of occupants of the neighboring property.

**17.20.270 Noise.**

As discussed below, Municipal Ordinance 17.20.270 sets forth development standards intended to minimize noise impacts.

A. Shock Mounting of Mechanical Equipment. All permanent mechanical equipment such as motors, compressors, pumps and compactors which, because of its rotation, reciprocation, expansion and/or contraction, turbulence, oscillation, pulsation, impaction or detonation, is determined by the director of building and safety to be a source of structural vibration or structure-borne noise shall be shock mounted with inertia blocks or bases and/or vibration isolators in a manner approved by the director of building and safety. Domestic appliances which are cabinet installed or built into the individual units, such as dishwashers, garbage disposals, trash compactors, clothes washers and dryers, exhaust fans or other appliances which are determined by the director of building and safety to be a source of structural vibration or structure-borne noise, shall be isolated from cabinets and the floor or ceiling by resilient gaskets and vibration mounts approved by the director of building and safety. The cabinets in which they are installed shall be offset from the back wall with strip gasketing of felt, cork or similar material approved by the director. Where such appliances utilize water, flexible connectors shall be installed on all waterlines. If provision is made with the units for the installation of nonpermanent appliances such as clothes washers and dryers then permanent rubber mounting bases and surface plates shall be installed in a manner approved by the director of building and safety.
B. Location of Plumbing Fixtures. No plumbing fixture shall be located on a common wall between two individual units.
C. Separation of Vents and Drain Lines. No common vents or drain lines shall be permitted for contiguous units until there is at least ten feet of pipe between the closest plumbing fixtures within the separate units.
D. Isolation and Insulation of Water and Drainage Lines.
    1. All water supply lines within the project shall be isolated from wood, metal and other framing with pipe isolators specifically manufactured for that purpose and approved for use by the director of building and safety.
    2. All vertical drainage lines within the project shall be isolated from touching wood, metal and other framing and all drainage pipes shall be surrounded by one inch of dense insulation board. Where vents and drain lines exist, the horizontal and vertical cavity shall be a minimum of six inches thick construction.
E. Attenuation of Noise.
    1. General. Wall and floor/ceiling assemblies separating units from each other or from public or quasi-public spaces such as interior corridors, laundry rooms, recreation rooms, parking areas, etc., shall provide airborne sound insulation for walls, and both airborne and impact sound insulation for floor/ceiling assemblies.
    2. Air-Borne Sound Insulation. All walls and floor/ceiling assemblies, except those directly over parking areas, shall be of a type of construction that has a minimum rating of 50 STC (sound transmission class) based on tests

performed by a recognized and approved testing laboratory; openings in the construction for piping, electrical outlets and devices, recess cabinets, bathtubs, soffits, heating and ventilation, and/or air conditioning in-take and exhaust ducts, and the like shall be sealed, lined, insulated or otherwise treated to maintain the required rating and such treatment shall be approved by the director of building and safety. Entrance doors to the unit shall be of solid construction and, together with perimeter seals, shall have a minimum rating of 33 STC. Such perimeter seals shall be maintained in effective operating condition.

3. Impact Sound Insulation. All separating floor/ceiling assemblies, except those directly over parking areas, shall be of a type of construction that has a minimum rating of 50 IIC (impact insulation class) based upon tests performed by a recognized and approved testing laboratory.

F. Special Noise Sources.

1. Radios, Television Sets and Similar Devices. It is unlawful for any person within any residential zone of the City to use or operate any radio receiving set, musical instrument, phonograph, television set or other machine or device for the producing or reproducing of sound, between the hours of ten p.m. of one day and seven a.m. of the following day, in such a manner as to disturb the peace, quiet, and comfort of neighboring residents or any reasonable person of normal sensitivity residing in the area. Any noise exceeding the ambient noise level at the property line of any property or, in the case of a condominium or apartment house unit, within any adjoining apartment, by more than five decibels shall be deemed to be prima facie evidence of a violation of the provisions of this section.
2. Machinery, Equipment, Fans and Air Conditioning. 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. This section shall not apply to the performance of emergency work.
3. For purposes of this section, the ambient noise level shall not be less than the following levels. If the measured ambient noise level exceeds these levels, then the level actually measured shall be used as the “ambient noise level.”

| Time | Decibels |
|---|---|
| 10:00 PM to 7:00 AM | 50 dbA |
| 7:00 AM to 10:00 PM | 60 dbA |

## Table 4

## City of Hawthorne Land Use Compatibility Matrix[1]

| Land Use Categories | | Community Noise Equivalent Level (CNEL) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Categories | Uses | <55 | 60 | 65 | 70 | 75 | 80> | |
| RESIDENTIAL | Single Family, Duplex, Multiple Family | A | A | B | B | C | D | D |
| RESIDENTIAL | Mobile Home | A | A | B | C | C | D | D |
| COMMERCIAL Regional District | Hotel, Motel, Transient Lodging | A | A | B | B | C | C | D |
| COMMERCIAL Regional, Village District, Special | Commercial Retail, Bank, Restaurant, Movie Theater | A | A | A | A | B | B | C |
| COMMERCIAL, INDUSTRIAL, INSTITUTIONAL | Office Building, Research and Development, Professional Offices, City Office Building | A | A | A | B | B | C | D |
| COMMERCIAL Recreation INSTITUTIONAL Civic Center | Amphitheater, Concert Hall, Auditorium, Meeting Hall | B | B | C | C | D | D | D |
| COMMERCIAL Recreation | Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club | A | A | A | B | B | D | D |
| COMMERCIAL General, Special INDUSTRIAL INSTITUTIONAL | Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities | A | A | A | A | B | B | B |
| INSTITUTIONAL General | Hospital, Church, Library, School Classroom | A | A | B | C | C | D | D |
| OPEN SPACE | Parks | A | A | A | B | C | D | D |
| OPEN SPACE | Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat | A | A | A | A | B | C | C |
| AGRICULTURE | Agriculture | A | A | A | A | A | A | A |

| | |
|---|---|
| Zone A Clearly Incompatible | Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements. |
| Zone B Normally Compatible | New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems of air conditioning, will normally suffice. |
| Zone 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. |
| Zone D Clearly Incompatible | New Construction or development should generally not be undertaken. |

[1] City of Hawthorne General Plan 1989

## Table 5

## City of Hawthorne Interior and Exterior Noise Standards [1]

| Land Use Categories | | CNEL (dBA) | |
|---|---|---|---|
| Categories | Uses | Interior[2] | Exterior[3] |
| Residential | Single and Multiple-Family, Duplex | 45[4] | 65 |
| | Mobile Homes | --- | 65[5] |
| Commercial | Hotel, Motel, Transient Housing | 45 | 65[6] |
| | Commercial Retail, Bank, Restaurant | 55 | --- |
| | Office Building, Research and Development, Professional Offices | 50 | --- |
| | Amphitheatre, Concert Hall, Auditorium, Meeting Hall | 45 | --- |
| | Gymnasium (Multipurpose) | 50 | --- |
| | Sports Club | 55 | --- |
| | Manufacturing, Warehousing, Wholesale, Utilities | 65 | --- |
| | Movie Theaters | 45 | --- |
| Institutional/ Public | Hospital, School Classrooms/Playgrounds | 45 | 65 |
| | Church, Library | 45 | --- |
| Open Space | Parks | --- | 65 |

[1] Source: City of Hawthorne General Plan 1989

[2] Indoor environment excluding: bathrooms, toilets, closets, corridors.

[3] Outdoor environment limited to:

- Private yard of single-family dwellings
- Multiple-family private patios or balcony which is served by a means of exist from inside
- Mobile home parks
- Hotel and motel recreation area
- Park picnic areas
- School playgrounds
- Hospital patios

[4] Noise level requirement with closed windows, mechanical ventilation or other means of natural ventilation shall be provided as per Chapter 12, Section 1205 of the Uniform Building Code.

[5] Exterior noise levels should be such that interior noise levels will not exceed 45 dBA CNEL.

[6] Except those areas affected by aircraft noise

# V. FUTURE NOISE ENVIRONMENT

Potential noise impacts are commonly divided into two groups; temporary and long term. Temporary impacts are usually associated with noise generated by construction activities. Long-term impacts are further divided into transportation related noise impacts and stationary noise impacts.

## A. Temporary Noise Impacts

### 1. Demolition and Construction Noise

Construction noise represents a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels. Demolition and grading activities will have similar noise levels.

Examples of construction noise at 50 feet are presented on Figure 7. The maximum noise level for most of the equipment that will be used during the construction is 70 to 95 dBA at a distance of 50 feet. Stationary noise typically attenuates by 6 dB for every doubling of distance from the receiver. At 100 feet maximum construction noise levels can be expected to range between 64 and 89 dBA $L_{max}$; and at 200 feet maximum construction noise levels range from 58 to 83 dBA $L_{max}$. Note that these noise levels are based upon worst-case conditions. Typical construction noise levels shown in Table 6 will be used as the basis for the estimates presented here and represent a worst-case estimate. Although construction activities may occur anywhere within the DHSP, the impacts associated with this analysis are focused on construction activities associated with development of the proposed Transformative Projects. A summary of potential construction noise impacts to each is presented below. It should be noted that Municipal Code 12.16.300 prohibits the use of any tool, appliance or equipment that produces noise of sufficient volume to disturb the sleep or repose of occupants of the neighboring property between the hours of 10:00 PM and 7:00 AM, except with the express written permission of the City engineer or in case of an emergency; requires that excavation work to be performed in such manner as to avoid unnecessary inconvenience and annoyance to the general public and occupants of neighboring property; and requires that appropriate measures are implemented to reduce to the fullest extent practicable in the performance of excavation work.

**Hawthorne Mall.** The purpose of the Hawthorn Mall project is to create a pedestrian-oriented district that serves as a central retail and dining destination for Downtown Hawthorne. It will front on Hawthorne Boulevard and encompass approximately 26 acres. Development of this project is expected to utilize the existing parking structure located along Birch Avenue south of the rail line, while all existing structures north of the rail line to 120th Street will be demolished. However, use of construction equipment associated with improvements may result in short-term construction noise impacts of up to 82 to 84 dBA Leq at the closest sensitive receptor from the

Hawthorne Mall property line (70 feet). Existing residential land uses located to the north and east of the Hawthorne Transformative Project area may be subjected to short-term construction noise impacts. Measures to reduce impacts are listed in Section VI of this report.

**Civic Center.** The Civic Center Transformative Project encompasses approximately 12 acres and is the location of Hawthorne City Hall and municipal buildings, including the City's Police Department headquarters. The site will continue in the future as the City's civic center, with additional general commercial uses, including a 300-room hotel. The existing eight apartment units will be removed to accommodate the new development. Existing land uses within this transformative may be subject to short-term construction noise impacts that could occur in very close proximity. As stated above, construction noise may range between 70 to 95 dBA at a distance of 50 feet. Specific noise levels that may result due to construction will depend on the type of equipment and the proximity of the equipment to the sensitive receptors. Measures to reduce impacts are listed in Section VI of this report.

**South Bay Ford.** The South Bay Ford Transformative Project is located in the southern portion of the DHSP area along Hawthorne Boulevard. This site is approximately four acres and is the original site of South Bay Ford auto dealership. The DHSP promotes horizontal mixed-use allowing for a larger-format commercial center and medium and higher-density residential. Adjacent existing single-family detached residential dwelling units may be impacted by short-term noise impacts associated with development of this area. As stated above, construction noise may range between 70 to 95 dBA at a distance of 50 feet. Specific noise levels that may result due to construction will depend on the type of equipment and the proximity of the equipment to the sensitive receptors. Measures to reduce impacts are listed in Section VI of this report.

**St. Joseph's Plaza.** The land use strategy for this one-half acre site is to develop it as a landmark public neighborhood plaza or park that serves as a community focal point and helps frame the historic St. Joseph's Church and Chips restaurant.

Nearby existing single-family detached residential dwelling units may be impacted by short-term noise impacts associated with development of this area. As stated above, construction noise may range between 70 to 95 dBA at a distance of 50 feet. Specific noise levels that may result due to construction will depend on the type of equipment and the proximity of the equipment to the sensitive receptors. Measures to reduce impacts are listed in Section VI of this report.

## B. Long-Term Noise Impacts

Increased traffic associated with buildout of the DHSP will result in increased traffic noise levels along the roadways in the vicinity of the project. This section examines noise impacts from the proposed project on the surrounding land uses. Specifically, traffic noise increases due to the project are examined.

1. Project Generated Traffic Noise Impacts

Table 7 shows the expected incremental traffic noise level increases on road segments in the project area with and without implementation of the project. These noise level increases were calculated using traffic volumes presented in the previously referenced traffic study prepared for the project by Evans Brooks Associates, Inc. (2015). The City of Hawthorne does not have published vehicle/truck mixes or Day/Evening/Night (D/E/N) splits published for use in acoustical studies. Vehicle/truck mixes and D/E/N splits for use in acoustical studies published by the Riverside County Department of Industrial Hygiene were utilized for noise modeling. FHWA traffic modeling output is presented in Appendix C.

As can been seen in the column entitled "Increase" in Table 7, project generated traffic noise will not result in noise increases of 3 dB or greater along road segments acoustically affected by project generated increases in ambient noise levels. Implementation of the DHSP will not result in substantial increases in ambient noise levels related to increases in vehicle traffic.

2. Future Traffic Noise Exposure to the Proposed Project

There are several busy arterial roadways in the DHSP that will accommodate most of the vehicle traffic in the DHSP. As discussed previously, the FHWA Noise Model was utilized to calculate future noise levels (Year 2020 and Year 2035) associated with vehicle traffic travelling on roads in the project area. The distances from the centerline to the 60, 65, and 70 CNEL contours for each of the acoustically significant roadways within the project area were calculated and are shown on Figures 9 and 10. Note that the contours do not include the shielding effects of buildings, topography, or sound barriers that would lower the noise levels from what is shown on Figures 9 and 10, and therefore represent a worst-case estimate. The distances from affected road segment centerlines to each noise contour are presented in Table 8. FHWA spreadsheets utilized to calculate the location of noise contours are included in this report as Appendix C.

As shown on Figures 9 and 10, future noise levels are expected to reach up to 65-70 dBA CNEL at the existing and proposed land uses along Hawthorne Boulevard, Imperial Highway, 120th Street, Broadway Avenue, El Segundo Boulevard, 139th Street and Rosecrans Avenue. The majority of affected land uses along Hawthorne Boulevard are and will be commercial land uses. As shown in Table 5, the City has not adopted exterior noise level limits for commercial land uses. Interior noise levels standards for commercial land uses range between 45-65 dBA CNEL depending on the type of commercial use. Residential land uses along the primary east/west roadways in the DHSP listed above, will be exposed to noise levels of up to 70 dBA CNEL and may exceed the exterior noise level limit for residential land uses or the 45 dBA CNEL interior noise level limit for interior noise levels depending on the distance of the receptor from the roadway. Outdoor use areas (i.e., backyards) should be shielded from vehicle noise whenever possible.

3. Operational Noise Impacts Associated with Proposed Land Uses

In addition to roadway traffic noise impacts discussed above, on-site activities associated with existing retail, commercial and public land uses and proposed Transformative Project areas have the potential to impact both on-site and off-site sensitive receptors. Specifically, the activities associated with retail, office and business park establishments such as parking lot noise, air conditioning units, delivery trucks, loading and unloading.

Instantaneous sound events generated by car door slamming, engine start-up, alarm activation and car pass-bys associated with parking lots will not be of sufficient volume to exceed community noise standards that are based on a time averaged scale such as the CNEL scale. Estimates of the maximum noise levels associated with some parking lot activities are presented in Table 9. These noise levels, which are based on measurements conducted at a distance of 50 feet from the source, and are the maximum noise level generated. A range is given to reflect the variability of noise generated by various automobile types and driving styles. Due to the unavailability of detailed plans, the exact locations of all parking lots within the boundaries of each property are not yet known. For the purposes of determining worst-case noise impacts to residences due to parking lot related activities, it will be assumed that a parking lot could be located anywhere within the confines of the property containing the parking lot.

Truck deliveries, loading dock activities and air conditioning noise are difficult to assess at this stage of the project. Loading dock noise includes the movement of the goods into the store and possibly forklift operations. Truck delivery noise is generated when a truck drives to or from the loading dock. Formerly, delivery truck drivers could also leave the truck idling during unloading operations. However, trucks are now prohibited from idling in any one location for more than 5 minutes per the South Coast Air Quality Management District regulations. The number of truck deliveries and the time of day that unloading would occur is not known. Nighttime operations can be particularly annoying to residences. However, noise levels could be loud enough that they would be disturbing to the residences.

Mechanical equipment noise associated with the heating, ventilation, and air conditioning system (HVAC) is often present with several of the land use types being proposed as part of the project. HVAC equipment is sometimes located on the ground and sometimes located on the roof of the buildings. The type, size and number of mechanical equipment are not known at this time. If the equipment is located on the roof, often parapet walls are used to control the noise from the equipment. Similarly, sound walls can be located around HVAC equipment that is located on the ground.

## C. Short-Term Vibration Impacts

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the

vicinity of future construction activities could respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. It is highly unlikely, however, that damage would occur. Table 1 gives approximate vibration levels for particular construction activities. This data provides a reasonable estimate for a wide range of soil conditions.

Vibratory equipment including loaded trucks, large bulldozers and a hoe-ram would be utilized during demolition activities that would include the tearing up of concrete and asphalt and the tearing down existing structures. A vibratory roller, loaded trucks, a hoe ram and jackhammers would be utilized to demolish, renovate and to build new structures. The vibratory roller would primarily be used during the laying of asphalt and a jackhammer may be utilized during utility relocation or installation. As shown in Table 1, a vibratory roller could produce up to a PPV of up to 0.21 inch per second at 25 feet. Use of vibratory equipment within 70 feet of a sensitive receptor could be perceptible but is expected to be short-term. Damage to buildings of normal construction is possible if vibratory equipment is utilized within 25 feet of a sensitive receptor.

In addition to adherence with allowed hours for construction, implementation of Mitigation Measure N-7, N-8 and N9 will minimize potential impacts related to demolition and construction activities.

**D. <u>Long-Term Vibration Impacts</u>**

Medium and heavy delivery trucks can be expected to visit the project site on a regular basis. Heavy trucks would not be anticipated to exceed 0.10 in/sec peak particle velocity (ppv) at 10 feet (Caltrans 2002). Predicted operational related vibration levels at the nearest off-site structures, which are located in excess of 25 feet from the traveled roadway segments, would not be anticipated to exceed even the most conservative threshold of 0.2 inch/second ppv. No mitigation is necessary.

## Table 6

## Typical Construction Equipment Noise Levels[1]

| Type of Equipment | Sound Levels Measured (dBA at 50 ft.) | Suggested Maximum Sound Levels for Analysis (dBA at 50 ft.) |
|---|---|---|
| Rock Drills | 83-99 | 96 |
| Jack Hammers | 75-85 | 82 |
| Pneumatic Tools | 78-88 | 85 |
| Pumps | 74-84 | 80 |
| Dozers | 77-90 | 85 |
| Scrapers | 83-91 | 87 |
| Haul Trucks | 83-94 | 88 |
| Cranes | 79-86 | 82 |
| Portable Generators | 71-87 | 80 |
| Rollers | 75-82 | 80 |
| Tractors | 77-82 | 80 |
| Front-End Loaders | 77-90 | 86 |
| Hydraulic Backhoe | 81-90 | 86 |
| Hydraulic Excavators | 81-90 | 86 |
| Graders | 79-89 | 86 |
| Air Compressors | 76-89 | 86 |
| Trucks | 81-87 | 86 |

[1] Source: Bolt, Beranek & Newman; Noise Control for Buildings and Manufacturing Plants, 1987.

**Table 7**

**Comparison of Existing and Existing Plus Project Traffic Noise Levels**

| Roadway | Segment | Distance from roadway centerline to receiver (feet) | Modeled Noise Levels (dBA CNEL) | | | | |
|---|---|---|---|---|---|---|---|
| | | | Existing | Existing Plus Project | Increase | | Substantial Increase |
| I-405 NB/SB On-Off Ramps | North of El Segundo Boulevard | 50 | 61.76 | 62.67 | + | 0.91 | NO |
| | South of El Segundo Boulevard | 50 | 66.72 | 67.04 | + | 0.32 | NO |
| Inglewood Avenue | North of Imperial Hwy | 50 | 62.09 | 62.38 | + | 0.29 | NO |
| | Imperial Hwy to 120th Street | 50 | 61.98 | 62.28 | + | 0.30 | NO |
| | 120th to El Segundo Boulevard | 50 | 63.29 | 64.16 | + | 0.87 | NO |
| | El Segundo Boulevard to Rosecrans Avenue | 50 | 63.8 | 64.26 | + | 0.46 | NO |
| | South of Rosecrans Avenue | 50 | 63.42 | 63.64 | + | 0.22 | NO |
| Hawthorne Boulevard | North of Lennox Boulevard | 50 | 64.71 | 64.84 | + | 0.13 | NO |
| | Lennox Boulevard to I-105 WB Off-Ramp | 50 | 65.23 | 65.37 | + | 0.14 | NO |
| | I-105 WB Off-Ramp to Imperial Hwy | 50 | 63.99 | 64.32 | + | 0.33 | NO |
| | Imperial Hwy to 120th Street | 50 | 64.21 | 64.90 | + | 0.69 | NO |
| | 120th Street to Broadway | 50 | 63.83 | 64.96 | + | 1.13 | NO |
| | Broadway to El Segundo Boulevard | 50 | 63.94 | 65.37 | + | 1.43 | NO |
| | El Segundo Boulevard to Rosecrans Avenue | 50 | 64.24 | 65.04 | + | 0.80 | NO |
| | Rosecrans Avenue to Marine Avenue | 50 | 64.47 | 65.10 | + | 0.63 | NO |
| | South of Marine Avenue | 50 | 64.78 | 65.11 | + | 0.33 | NO |
| Prairie Avenue | North of I-105 EB Off-Ramp | 50 | 65.95 | 66.13 | + | 0.18 | NO |
| | I-105 EB Off-Ramp to Imperial Hwy | 50 | 66.10 | 66.40 | + | 0.30 | NO |
| | Imperial Hwy to 120th Street | 50 | 65.31 | 65.52 | + | 0.21 | NO |
| | South of 139th Street | 50 | 65.89 | 66.06 | + | 0.17 | NO |
| I-105 WB off-ramp | East of Hawthorne Boulevard | 50 | 71.79 | 71.89 | + | 0.10 | NO |
| Imperial Hwy | West of Hawthorne Boulevard | 50 | 64.29 | 64.43 | + | 0.14 | NO |
| | Hawthorne Boulevard to I-105 EB On-Ramp | 50 | 64.29 | 64.56 | + | 0.27 | NO |
| | I-105 EB On-Ramp to Prairie Avenue | 50 | 64.65 | 64.81 | + | 0.16 | NO |
| | East of Prairie Avenue | 50 | 64.47 | 64.51 | + | 0.04 | NO |
| 120th Street | West of Inglewood Avenue | 50 | 63.11 | 63.45 | + | 0.34 | NO |
| | Inglewood Avenue to Hawthorne Boulevard | 50 | 63.73 | 64.37 | + | 0.64 | NO |
| | Hawthorne Boulevard to Birch Avenue | 50 | 64.37 | 64.77 | + | 0.40 | NO |
| | Birch Avenue to Prairie Avenue | 50 | 63.73 | 64.31 | + | 0.58 | NO |
| | East of Prairie Avenue | 50 | 64.57 | 64.82 | + | 0.25 | NO |
| El Segundo Boulevard | West of I-405 NB On-Off-Ramp | 50 | 67.05 | 67.46 | + | 0.41 | NO |
| | I-405 NB On-Off-Ramp to Inglewood Avenue | 50 | 66.32 | 66.95 | + | 0.63 | NO |
| | Inglewood Avenue to Hawthorne Boulevard | 50 | 65.91 | 66.42 | + | 0.51 | NO |
| | Hawthorne Boulevard to Birch Avenue | 50 | 65.67 | 66.30 | + | 0.63 | NO |
| | East of Birch Avenue | 50 | 65.81 | 66.37 | + | 0.56 | NO |
| 139th Street | East of Hawthorne Boulevard | 50 | 49.49 | 51.53 | + | 2.04 | NO |
| Rosecrans Avenue | West of Inglewood Avenue | 50 | 65.52 | 65.72 | + | 0.20 | NO |
| | Inglewood Avenue to Hawthorne Boulevard | 50 | 65.83 | 66.11 | + | 0.28 | NO |
| | East of Hawthorne Boulevard | 50 | 65.52 | 65.83 | + | 0.31 | NO |

**Table 8**

**Modeled Future Traffic Noise Levels (CNEL)**

| Roadway | Segment | Year 2020 ADT[1] | Year 2020 CNEL Contours (feet from Centerline) | | | 2035 ADT[1] | Year 2035 CNEL Contours (feet from Centerline) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 70 dBA | 65 dBA | 60 dBA | | 70 dBA | 65 dBA | 60 dBA |
| I-405 NB/SB On-Off Ramps | North of El Segundo | 9,900 | 25 | 78 | 247 | 4,300 | 11 | 34 | 107 |
| | South of El Segundo | 15,800 | 39 | 125 | 395 | 19,200 | 48 | 152 | 480 |
| Inglewood Avenue | North of Imperial Hwy | 18,000 | 9 | 28 | 89 | 21,700 | 11 | 34 | 107 |
| | Imperial Highway to 120th Street | 18,200 | 9 | 28 | 90 | 21,700 | 11 | 34 | 107 |
| | 120th Street to El Segundo Boulevard | 27,400 | 14 | 43 | 135 | 32,800 | 16 | 51 | 161 |
| | El Segundo Boulevard to Rosecrans Avenue | 27,000 | 13 | 42 | 133 | 32,300 | 16 | 50 | 159 |
| | South of Rosecrans Avenue | 23,900 | 12 | 37 | 118 | 29,000 | 14 | 45 | 143 |
| Hawthorne Boulevard | North of Lennox Boulevard | 31,700 | 16 | 49 | 156 | 38,500 | 18 | 60 | 190 |
| | Lennox Boulevard to I-105 WB Off-Ramp | 35,600 | 17 | 55 | 175 | 43,300 | 21 | 67 | 213 |
| | I-105 WB Off-Ramp to Imperial Highway | 32,600 | 16 | 51 | 161 | 39,500 | 20 | 61 | 195 |
| | Imperial Highway to 120th Street | 32,400 | 16 | 50 | 160 | 38,500 | 19 | 60 | 190 |
| | 120th Street to Broadway Avenue | 33,100 | 16 | 51 | 163 | 36,900 | 18 | 57 | 182 |
| | Broadway Avenue to El Segundo Boulevard | 36,000 | 18 | 56 | 177 | 41,600 | 20 | 65 | 205 |
| | El Segundo Boulevard to Rosecrans Avenue | 35,900 | 18 | 56 | 177 | 42,000 | 20 | 65 | 207 |
| | Rosecrans Avenue to Marine Avenue | 31,500 | 15 | 49 | 155 | 37,800 | 19 | 59 | 186 |
| | South of Marine Avenue | 33,500 | 16 | 52 | 165 | 40,500 | 20 | 63 | 200 |
| Prairie Avenue | North of I-105 EB Off-Ramp | 30,200 | 15 | 47 | 208 | 36,600 | 18 | 57 | 253 |
| | I-105 EB Off-Ramp to Imperial Hwy | 32,200 | 16 | 50 | 222 | 38,900 | 19 | 61 | 269 |
| | Imperial Highway to 120th Street | 26,200 | 13 | 41 | 180 | 31,800 | 16 | 49 | 219 |
| | South of 139th Street | 30,400 | 15 | 47 | 210 | 35,900 | 18 | 56 | 248 |
| I-105 WB Off-Ramp | East of Hawthorne Boulevard | 9,400 | 23 | 74 | 235 | 11,400 | 28 | 90 | 285 |
| Imperial Highway | West of Hawthorne Boulevard | 27,600 | 14 | 43 | 134 | 33,700 | 17 | 52 | 166 |
| | Hawthorne Boulevard to I-105 EB On-Ramp | 29,500 | 15 | 46 | 145 | 35,700 | 18 | 56 | 176 |
| | I-105 EB On-Ramp to Prairie Avenue | 31,200 | 15 | 49 | 154 | 37,900 | 19 | 59 | 187 |
| | East of Prairie Avenue | 29,000 | 14 | 45 | 143 | 35,500 | 17 | 55 | 175 |
| 120th Street | West of Inglewood Avenue | 17,700 | 12 | 36 | 115 | 21,300 | 14 | 44 | 139 |
| | Inglewood Avenue to Hawthorne Boulevard | 21,400 | 14 | 44 | 139 | 25,600 | 17 | 53 | 167 |
| | Hawthorne Boulevard to Birch Avenue | 23,200 | 15 | 48 | 151 | 28,000 | 18 | 58 | 182 |
| | Birch Avenue to Prairie Avenue | 20,900 | 14 | 43 | 136 | 25,000 | 16 | 51 | 163 |
| | East of Prairie Avenue | 23,600 | 15 | 49 | 153 | 28,600 | 19 | 59 | 186 |
| El Segundo Boulevard | West of I-405 NB On-Off-Ramp | 38,100 | 26 | 83 | 263 | 48,100 | 33 | 105 | 332 |
| | I-405 NB On-Off-Ramp to Inglewood Avenue | 36,400 | 25 | 79 | 251 | 43,700 | 30 | 95 | 302 |
| | Inglewood Avenue to Hawthorne Boulevard | 31,800 | 22 | 69 | 219 | 38,200 | 26 | 83 | 264 |
| | Hawthorne Boulevard to Birch Avenue | 31,700 | 22 | 69 | 219 | 37,800 | 26 | 82 | 261 |
| | East of Birch Avenue | 32,100 | 22 | 70 | 222 | 38,300 | 26 | 82 | 264 |
| 139th Street | East of Hawthorne Boulevard | 1,600 | 1 | 3 | 10 | 1,900 | 1 | 4 | 12 |
| Rosecrans Avenue | West of Inglewood Avenue | 27,500 | 19 | 60 | 190 | 33,400 | 23 | 73 | 231 |
| | Inglewood Avenue to Hawthorne Boulevard | 3,000 | 21 | 65 | 207 | 36,300 | 25 | 79 | 251 |
| | East of Hawthorne Boulevard | 28,200 | 19 | 61 | 195 | 34,100 | 24 | 74 | 235 |

## Table 9

## Parking Lot Noise Sources[1,2]

| Source | Level (dBA) | |
|---|---|---|
| | 50 feet | 100 feet |
| Autos at 14 mph | 50 | 44 |
| Sweepers | 72 | 66 |
| Car Alarm Signal | 69 | 63 |
| Car Alarm Chirp | 54 | 48 |
| Car Horns | 69 | 63 |
| Door Slams | 64 | 58 |
| Talking | 36 | 30 |
| Radios | 64 | 58 |
| Tire Squeals | 66 | 60 |

[1] Adapted from: Gordon Bricken & Associates, 1996. (as Cited in Trancas Canyon Community Park EIR, 2007).

[2] Estimates are based on actual noise measurements taken at various parking lots as measured by Kunzman Associates, Inc

Figure 9
Year 2020 Specific Plan Traffic Noise Contours

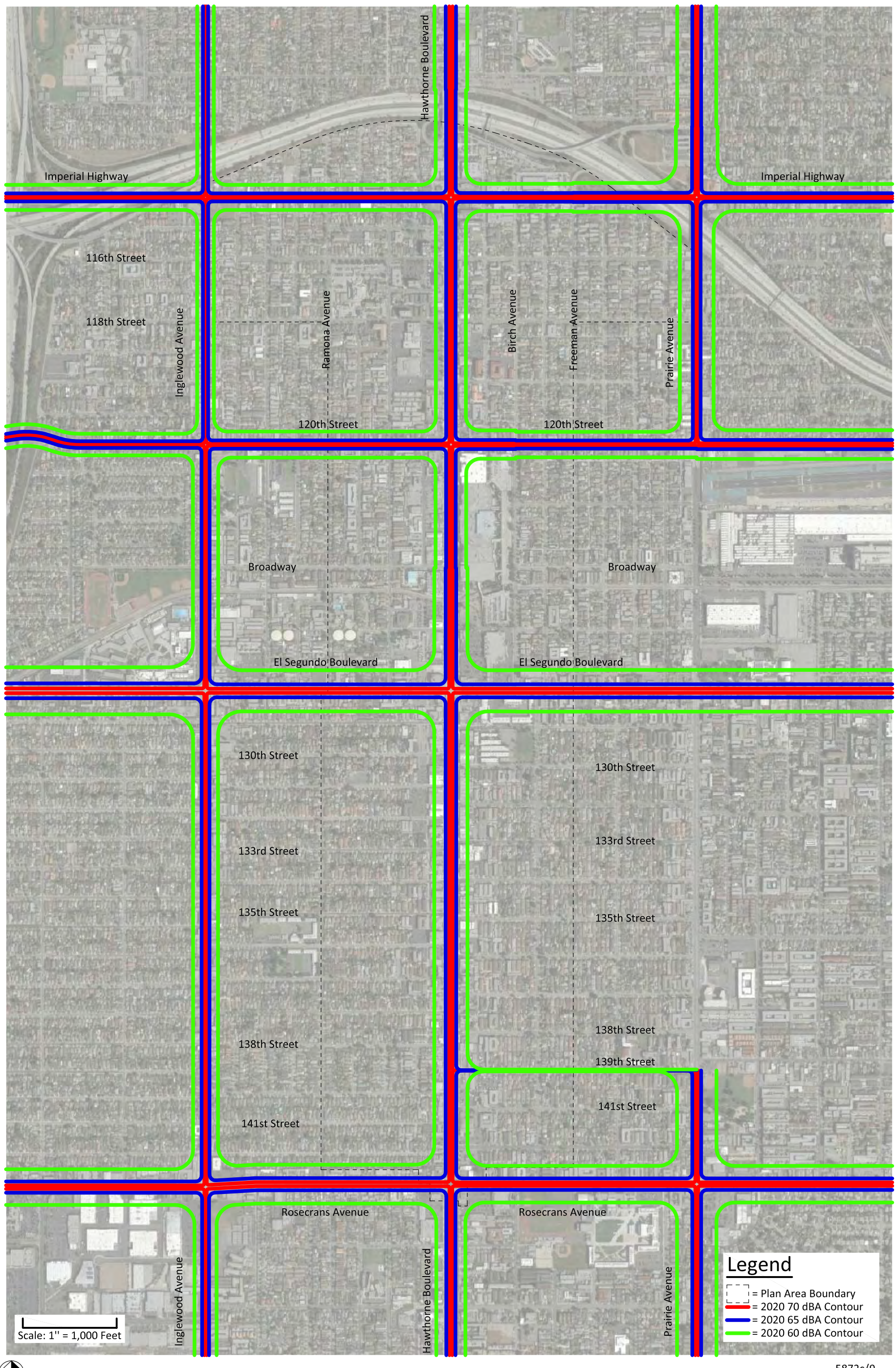


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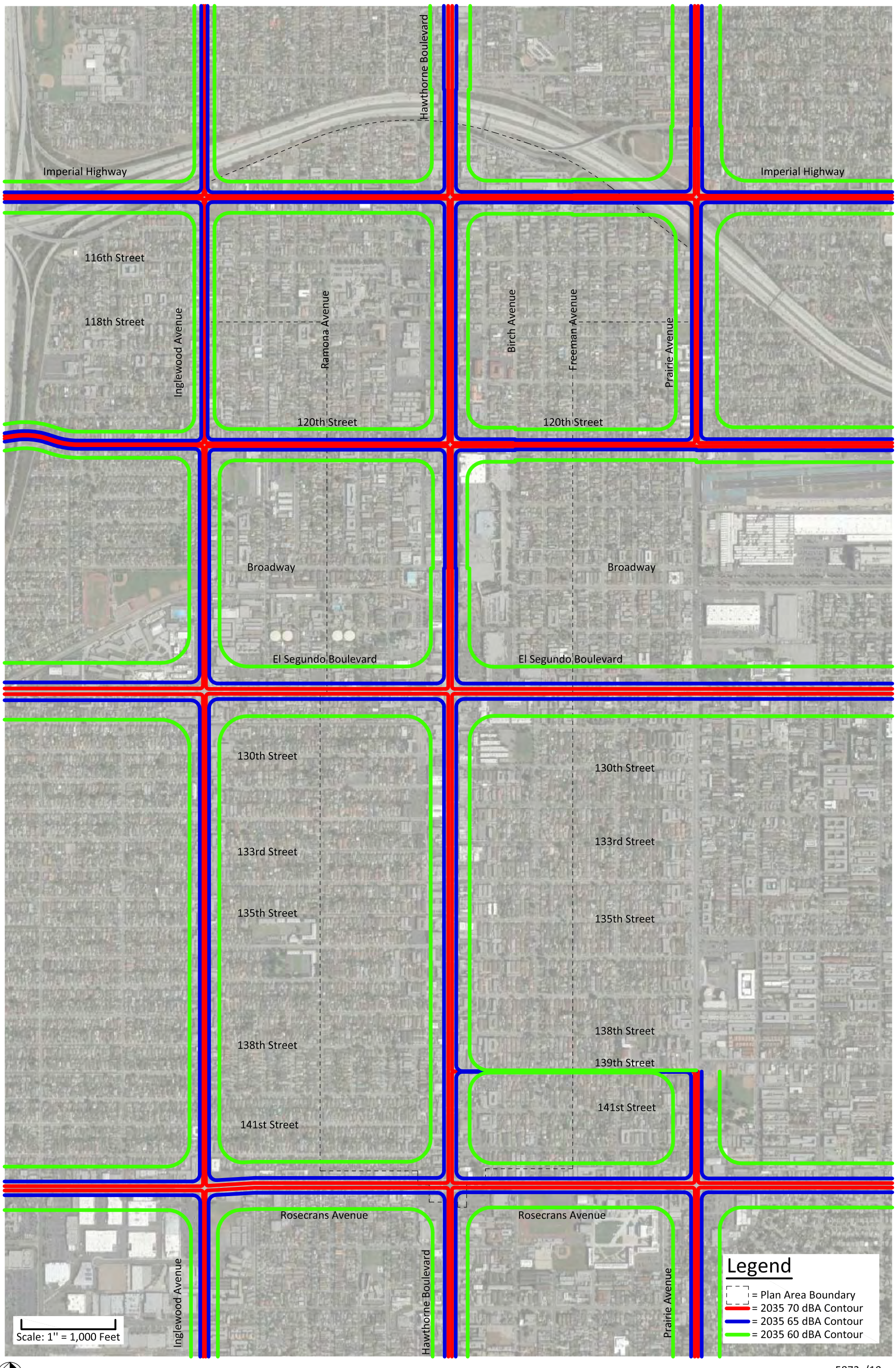
Figure 10
Year 2035 Specific Plan Traffic Noise Contours

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# VI. RECOMMENDED NOISE REDUCTION MEASURES

## A. Temporary Noise Impacts

### 1. Demolition and Construction Noise

The analysis presented in Section 2.2.1 shows that project demolition and construction noise could result in significant impacts to nearby residences if uncontrolled. The most effective method of controlling construction noise is through limiting construction hours. In addition to adherence to allowed construction hours outlined in Municipal Ordinance 12.16.300, the following mitigation measures should be implemented.

Mitigation Measure N-1:
The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (7:00 AM and 10:00 PM Monday through Saturday).

Mitigation Measure N-2:
To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings and should avoid using alleyways adjacent to said uses.

Mitigation Measure N-3:
The project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices.

Mitigation Measure N-4:
During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.

Mitigation Measure N-5:
The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction.

Mitigation Measure N-6:
The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.

Mitigation Measure N-7:

The use of vibratory equipment shall be avoided or minimized within 25 feet of existing vibration-sensitive land uses.

Mitigation Measure N-9:

If vibratory equipment must be used within 25 feet of an existing structure vibration monitoring shall be conducted and work shall be halted and re-evaluated if vibratory levels near 0.20 PPV which is the standard established to protect structures.

Mitigation Measure N-10:

In order to minimize impacts to adjacent residential land uses adjacent to the Hawthorne Mall, a demolition and construction noise study and mitigation and monitoring plan shall be prepared. The noise study shall include acoustical modeling utilizing forthcoming details regarding the type, location and duration of use of each piece of equipment; truck trips and routes and staging areas. In addition to the above listed mitigation measures temporary noise walls will likely be necessary.

**B. Long Term Noise Impacts**

1. Project Generated Traffic Noise Impacts

No significant impacts related to the increase in ambient noise levels due to project traffic were identified. No mitigation is necessary.

2. Traffic Noise Impacts to Proposed Land Uses

Mitigation Measure N-10:
New non-residential development shall be constructed with roof-ceiling assemblies that make up the building envelope to have an STC of at least 50 and exterior windows must have minimum STC of 30 where sound levels at the property line regularly exceed 65 decibels. This measure would reduce interior noise levels to acceptable levels and mitigate any impact to less than significant.

Buildings with few or no occupants and where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings are exempt from this measure.

Mitigation Measure N-11:
Prior to issuance of building permits for residential land uses located within a 65 dBA CNEL noise contour as shown on Figure 10, a detailed noise assessment shall be prepared to show that noise levels in those areas will not exceed the 65 CNEL outdoor noise criteria and the 45 CNEL indoor noise standard. The noise assessment shall be prepared by a qualified acoustical consultant and shall document the sources of noise impacting the areas and describe any measures required to meet the standard. These measures will be incorporated into the project plans. The report shall be completed and approved by the City prior to issuance of building permits.

stadiums, storage, enclosed parking structures and utility buildings are exempt from this measure.

Mitigation Measure N-11:

Prior to issuance of building permits for residential land uses located within a 65 dBA CNEL noise contour as shown on Figure 10, a detailed noise assessment shall be prepared to show that noise levels in those areas will not exceed the 65 CNEL outdoor noise criteria and the 45 CNEL indoor noise standard. The noise assessment shall be prepared by a qualified acoustical consultant and shall document the sources of noise impacting the areas and describe any measures required to meet the standard. These measures will be incorporated into the project plans. The report shall be completed and approved by the City prior to issuance of building permits.

# VII. REFERENCES


**Bolt, Beranek & Newman**

1987 Noise Control for Buildings and Manufacturing Plants

**California, State of**

2012 California Environmental Quality Act (CEQA) (Public Resources Code 21000–21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387) available from http://leginfo.ca.gov as of January 1, 2012.

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1995 Use of California Vehicle Noise Reference Energy Mean Emission Levels

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**Environmental Protection Agency**

1974 "Information on Levels of Environmental Noise Requisite to Protect Public Health And Welfare with an Adequate Margin of Safety," EPA/ONAC 550/9-74-004, March, 1974.

**Evan Brooks Associates, Inc.**

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**Harris, Cyril M.**

1991 Handbook of Acoustical Measurement and Noise Control." *Acoustical Society of America.* Woodbury, N.Y.

**Hawthorne, City of**

1989 City of Hawthorne General Plan. March.

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Not Dated City of Hawthorne Municipal Airport VFR Noise Abatement Arrival, Departure, and Pattern Procedures; Hawthorne Municipal Airport VFR Touch and Go Landing Procedures; and Noise Abatement Procedures

**Jones & Stokes**

2004 Transportation and Construction Induced Vibration Guidance Manual, prepared for the California Department of Transportation - Noise, Vibration, and Hazardous Waste Management Office

## APPENDICES

**Appendix A –List of Acoustical Terms**

**Appendix B –Noise Measurement Data Sheets**

**Appendix C – FHWA Traffic Noise Prediction Model - FHWA-RD-77-108 Output**

**Appendix D – City of Hawthorne Municipal Airport VFR Noise Abatement Arrival, Departure, and Pattern Procedures; Hawthorne Municipal Airport VFR Touch and Go Landing Procedures; and Noise Abatement Procedures**

**Appendix E – Federal Rail Administration Inventory Sheets**

# APPENDIX A

## List of Acoustical Terms

## Definitions of Acoustical Terms[1]

| Term | Definition |
|---|---|
| CNEL | CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 PM and 7:00 AM, and a 5-dB penalty applied to the A-weighted sound levels occurring during evening hours between 7:00 PM and 10:00 PM. |
| Decibel, dB | A logarithmic unit of noise level measurement that relates the energy of a noise source to that of a constant reference level; the number of decibels is 10 times the logarithm (to the base 10) of this ratio. |
| Frequency, Hertz | In a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., the number of cycles per second). |
| A-Weighted Sound Level, dBA | The sound level obtained by use of A-weighting. 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. |
| Root Mean Square (RMS) | A measure of the magnitude of a varying noise source quantity. The name derives from the calculation of the square root of the mean of the squares of the values. It can be calculated from either a series of lone values or a continuous varying function. |
| Fast/Slow Meter Response | The fast and slow meter responses are different settings on a sound level meter. The fast response setting takes a measurement every 100 milliseconds, while a slow setting takes one every second. |
| $L_{02}$, $L_{08}$, $L_{50}$, $L_{90}$ | The A-weighted noise levels that are equaled or exceeded by a fluctuating sound level, 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period, respectively. |
| Equivalent Continuous Noise Level, $L_{eq}$ | A level of steady state sound that in a stated time period, and a stated location, has the same A-weighted sound energy as the time-varying sound. |
| $L_{max}$, $L_{min}$ | $L_{max}$ is the RMS (root mean squared) maximum level of a noise source or environment measured on a sound level meter, during a designated time interval, using fast meter response. $L_{min}$ is the minimum level. |
| Ambient Noise Level | The all-encompassing noise environment associated with a given environment, at a specified time, usually a composite of sound from many sources, at many directions, near and far, in which usually no particular sound is dominant. |
| Offensive/ Offending/ Intrusive Noise | The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of sound depends on its amplitude, duration, frequency, and time of occurrence, and tonal information content as well as the prevailing ambient noise level. |

[1] Adapted from: Cyril M. Harris; Handbook of Acoustical Measurement and Noise Control, 1991.

# APPENDIX B

## Noise Measurement Data Sheets and Field Notes

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.095 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 11:37:51 |
| Stop Time | Wednesday, 2015 June 03 11:47:51 |
| Duration | 00:10:00.0 |
| Run Time | 00:10:00.0 |
| Pause | 00:00:00.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:06 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 60.9 | dB |
| LASmax | 2015 Jun 03 11:43:19 | 81.6 | dB |
| LApeak (max) | 2015 Jun 03 11:43:19 | 101.7 | dB |
| LASmin | 2015 Jun 03 11:47:16 | 52.7 | dB |
| LCSeq | | 71.9 | dB |
| LASeq | | 60.9 | dB |
| LCSeq - LASeq | | 10.9 | dB |
| LAIeq | | 67.9 | dB |
| LAeq | | 60.9 | dB |
| LAIeq - LAeq | | 6.9 | dB |
| LASE | | 88.7 | dB |
| EAS | | 82.86 | µPa²h |
| EAS8 | | 3.977 | mPa²h |
| EAS40 | | 19.89 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | |
|---|---|---|
| LAS2.00 | 67.3 | dBA |
| LAS8.00 | 63.0 | dBA |
| LAS25.00 | 60.2 | dBA |
| LAS50.00 | 57.9 | dBA |
| LAS75.00 | 56.0 | dBA |
| LAS90.00 | 54.4 | dBA |

| | | |
|---|---|---|
| LAS > 85.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.03 | % |
| Projected Dose | 1.46 | % |
| TWA (Projected) | 59.5 | dBA |
| TWA (t) | 31.6 | dBA |
| Lep (t) | 44.1 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 65.8 | 64.1 | 69.8 | 68.2 | 63.9 | 60.4 | 56.7 | 54.7 | 53.7 | 50.7 | 47.3 | 39.7 |
| LZSmax | 79.7 | 73.6 | 75.1 | 80.9 | 80.6 | 78.3 | 72.9 | 71.4 | 76.4 | 74.8 | 72.6 | 66.0 |
| LZSmin | 52.9 | 57.9 | 64.5 | 62.8 | 57.0 | 53.0 | 48.9 | 46.7 | 44.0 | 37.2 | 27.8 | 22.7 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 62.5 | 60.9 | 58.6 | 58.4 | 60.0 | 59.5 | 62.2 | 61.6 | 68.4 | 64.9 | 61.3 | 61.3 |
| LZSmax | 76.1 | 73.5 | 72.7 | 70.9 | 68.9 | 69.2 | 69.5 | 72.2 | 73.2 | 72.4 | 75.6 | 77.7 |
| LZSmin | 41.5 | 46.0 | 47.5 | 47.3 | 52.8 | 53.5 | 56.2 | 54.7 | 62.5 | 58.0 | 52.5 | 52.5 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 59.3 | 58.7 | 59.2 | 56.5 | 55.4 | 54.8 | 52.9 | 51.6 | 51.0 | 50.3 | 49.9 | 49.6 |
| LZSmax | 74.8 | 75.1 | 78.9 | 75.5 | 74.3 | 73.3 | 66.7 | 68.1 | 70.0 | 65.5 | 68.1 | 64.8 |
| LZSmin | 52.0 | 51.0 | 48.6 | 48.1 | 48.1 | 47.0 | 44.6 | 44.1 | 43.0 | 41.8 | 41.3 | 41.5 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 48.4 | 48.3 | 49.8 | 47.6 | 45.5 | 44.6 | 44.4 | 42.4 | 38.5 | 34.8 | 37.7 | 26.8 |
| LZSmax | 66.1 | 69.7 | 74.7 | 71.7 | 70.1 | 68.9 | 69.9 | 67.3 | 63.5 | 60.1 | 64.6 | 50.5 |
| LZSmin | 39.9 | 38.9 | 37.1 | 34.4 | 31.5 | 29.5 | 25.4 | 22.2 | 18.0 | 17.0 | 17.5 | 18.9 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.096 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 11:53:57 |
| Stop Time | Wednesday, 2015 June 03 12:03:57 |
| Duration | 00:10:00.0 |
| Run Time | 00:10:00.0 |
| Pause | 00:00:00.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:04 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 63.3 | dB |
| LASmax | 2015 Jun 03 11:56:47 | 85.3 | dB |
| LApeak (max) | 2015 Jun 03 11:56:47 | 100.6 | dB |
| LASmin | 2015 Jun 03 12:01:36 | 49.7 | dB |
| LCSeq | | 72.2 | dB |
| LASeq | | 63.3 | dB |
| LCSeq - LASeq | | 8.9 | dB |
| LAIeq | | 67.1 | dB |
| LAeq | | 63.3 | dB |
| LAIeq - LAeq | | 3.8 | dB |
| LASE | | 91.1 | dB |
| EAS | | 142.4 | µPa²h |
| EAS8 | | 6.833 | mPa²h |
| EAS40 | | 34.17 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | | |
|---|---|---|---|
| LAS2.00 | | 69.8 | dBA |
| LAS8.00 | | 66.2 | dBA |
| LAS25.00 | | 60.6 | dBA |
| LAS50.00 | | 55.6 | dBA |
| LAS75.00 | | 52.8 | dBA |
| LAS90.00 | | 51.4 | dBA |
| LAS > 85.0 dB (Exceedence Counts / Duration) | 1 / | 1.1 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / | 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / | 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / | 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / | 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.03 | % |
| Projected Dose | 1.60 | % |
| TWA (Projected) | 60.2 | dBA |
| TWA (t) | 32.2 | dBA |
| Lep (t) | 46.5 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 66.2 | 61.9 | 63.8 | 66.9 | 64.1 | 67.8 | 59.6 | 58.1 | 54.0 | 49.0 | 44.5 | 35.7 |
| LZSmax | 80.1 | 75.1 | 78.3 | 86.6 | 79.8 | 92.6 | 83.1 | 76.1 | 73.3 | 72.5 | 69.2 | 60.6 |
| LZSmin | 49.1 | 54.5 | 57.7 | 58.3 | 53.9 | 50.1 | 45.6 | 44.7 | 38.6 | 32.2 | 25.8 | 22.6 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 63.0 | 61.2 | 59.5 | 57.8 | 57.3 | 56.2 | 57.5 | 59.0 | 60.4 | 59.9 | 64.2 | 60.9 |
| LZSmax | 77.2 | 74.0 | 74.6 | 72.9 | 71.1 | 66.7 | 67.2 | 73.6 | 77.3 | 73.7 | 86.5 | 74.0 |
| LZSmin | 40.1 | 42.6 | 44.7 | 45.6 | 49.1 | 49.7 | 51.3 | 51.3 | 52.3 | 52.3 | 51.8 | 50.7 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 58.0 | 60.0 | 59.1 | 67.9 | 55.4 | 53.7 | 57.2 | 52.9 | 53.5 | 53.2 | 53.6 | 53.1 |
| LZSmax | 71.1 | 75.5 | 77.2 | 93.0 | 73.9 | 75.3 | 82.0 | 73.3 | 75.8 | 71.1 | 70.3 | 72.7 |
| LZSmin | 47.6 | 50.8 | 45.3 | 42.7 | 46.8 | 43.2 | 40.8 | 41.1 | 40.1 | 40.3 | 39.7 | 37.6 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 51.7 | 48.1 | 46.3 | 45.4 | 43.8 | 43.6 | 41.9 | 39.1 | 36.6 | 33.7 | 29.8 | 24.9 |
| LZSmax | 70.8 | 66.2 | 67.2 | 68.3 | 67.3 | 68.1 | 66.6 | 63.6 | 61.2 | 58.6 | 55.1 | 49.6 |
| LZSmin | 35.7 | 33.6 | 30.4 | 29.3 | 27.1 | 25.0 | 22.8 | 20.6 | 17.7 | 17.0 | 17.2 | 18.9 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.097 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 12:15:23 |
| Stop Time | Wednesday, 2015 June 03 12:25:23 |
| Duration | 00:10:00.0 |
| Run Time | 00:10:00.0 |
| Pause | 00:00:00.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:04 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 60.1 | dB |
| LASmax | 2015 Jun 03 12:21:24 | 80.7 | dB |
| LApeak (max) | 2015 Jun 03 12:21:24 | 92.8 | dB |
| LASmin | 2015 Jun 03 12:17:52 | 50.8 | dB |
| LCSeq | | 71.9 | dB |
| LASeq | | 60.1 | dB |
| LCSeq - LASeq | | 11.7 | dB |
| LAIeq | | 63.3 | dB |
| LAeq | | 60.1 | dB |
| LAIeq - LAeq | | 3.2 | dB |
| LASE | | 87.9 | dB |
| EAS | | 68.70 | µPa²h |
| EAS8 | | 3.297 | mPa²h |
| EAS40 | | 16.49 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | |
|---|---|---|
| LAS2.00 | 64.4 | dBA |
| LAS8.00 | 62.1 | dBA |
| LAS25.00 | 59.0 | dBA |
| LAS50.00 | 56.2 | dBA |
| LAS75.00 | 53.9 | dBA |
| LAS90.00 | 52.5 | dBA |

| | | |
|---|---|---|
| LAS > 85.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.03 | % |
| Projected Dose | 1.21 | % |
| TWA (Projected) | 58.2 | dBA |
| TWA (t) | 30.3 | dBA |
| Lep (t) | 43.3 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 63.1 | 62.7 | 69.3 | 68.3 | 65.7 | 57.7 | 54.1 | 57.2 | 50.1 | 48.0 | 39.2 | 30.6 |
| LZSmax | 83.3 | 76.4 | 82.0 | 81.7 | 82.0 | 66.9 | 62.0 | 78.9 | 72.0 | 72.2 | 59.5 | 51.5 |
| LZSmin | 48.4 | 55.0 | 60.0 | 58.9 | 55.2 | 48.8 | 47.9 | 45.3 | 38.6 | 33.3 | 23.1 | 22.5 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 59.3 | 58.2 | 57.6 | 55.9 | 57.7 | 59.5 | 64.0 | 64.7 | 64.9 | 65.1 | 63.1 | 61.6 |
| LZSmax | 78.3 | 78.6 | 78.8 | 72.2 | 72.1 | 72.4 | 74.1 | 78.5 | 80.5 | 82.0 | 76.7 | 72.8 |
| LZSmin | 36.5 | 42.5 | 44.7 | 45.5 | 48.0 | 51.1 | 53.5 | 53.0 | 53.1 | 53.9 | 52.9 | 51.9 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 63.7 | 60.4 | 56.6 | 55.1 | 52.7 | 49.8 | 49.3 | 49.7 | 49.0 | 51.5 | 54.3 | 50.7 |
| LZSmax | 78.5 | 81.9 | 68.0 | 64.7 | 61.3 | 59.2 | 60.3 | 58.1 | 56.7 | 72.0 | 78.5 | 71.4 |
| LZSmin | 51.5 | 49.4 | 47.5 | 44.6 | 43.7 | 43.7 | 42.3 | 42.1 | 41.5 | 41.3 | 38.8 | 37.7 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 44.8 | 43.1 | 47.0 | 46.8 | 40.8 | 36.7 | 38.2 | 32.4 | 27.2 | 29.9 | 21.7 | 19.7 |
| LZSmax | 60.6 | 61.3 | 71.7 | 72.2 | 58.5 | 54.4 | 59.5 | 51.8 | 47.7 | 51.8 | 39.7 | 30.5 |
| LZSmin | 35.8 | 33.2 | 30.4 | 30.4 | 28.0 | 24.3 | 20.1 | 17.4 | 16.5 | 16.7 | 17.3 | 18.9 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.098 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 12:35:40 |
| Stop Time | Wednesday, 2015 June 03 12:45:40 |
| Duration | 00:10:00.0 |
| Run Time | 00:10:00.0 |
| Pause | 00:00:00.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:04 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 62.7 | dB |
| LASmax | 2015 Jun 03 12:37:57 | 77.2 | dB |
| LApeak (max) | 2015 Jun 03 12:37:56 | 91.9 | dB |
| LASmin | 2015 Jun 03 12:41:02 | 43.6 | dB |
| LCSeq | | 73.0 | dB |
| LASeq | | 62.7 | dB |
| LCSeq - LASeq | | 10.3 | dB |
| LAIeq | | 63.8 | dB |
| LAeq | | 62.7 | dB |
| LAIeq - LAeq | | 1.1 | dB |
| LASE | | 90.5 | dB |
| EAS | | 124.1 | µPa²h |
| EAS8 | | 5.959 | mPa²h |
| EAS40 | | 29.79 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | |
|---|---|---|
| LAS2.00 | 71.9 | dBA |
| LAS8.00 | 66.8 | dBA |
| LAS25.00 | 62.5 | dBA |
| LAS50.00 | 57.3 | dBA |
| LAS75.00 | 52.9 | dBA |
| LAS90.00 | 47.5 | dBA |

| | | |
|---|---|---|
| LAS > 85.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.04 | % |
| Projected Dose | 1.71 | % |
| TWA (Projected) | 60.6 | dBA |
| TWA (t) | 32.7 | dBA |
| Lep (t) | 45.9 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 59.3 | 60.4 | 62.5 | 71.1 | 67.2 | 61.9 | 58.4 | 58.7 | 54.0 | 48.4 | 40.4 | 29.4 |
| LZSmax | 72.4 | 77.5 | 75.8 | 90.5 | 85.8 | 78.5 | 73.7 | 73.0 | 68.9 | 62.2 | 54.7 | 45.9 |
| LZSmin | 52.1 | 49.7 | 52.2 | 51.5 | 46.6 | 39.4 | 38.3 | 36.5 | 30.9 | 28.9 | 22.3 | 22.6 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 54.8 | 53.6 | 55.1 | 57.2 | 55.9 | 52.7 | 56.5 | 57.9 | 58.5 | 58.2 | 57.2 | 70.8 |
| LZSmax | 68.9 | 69.0 | 64.8 | 74.7 | 75.3 | 70.4 | 74.3 | 75.4 | 70.3 | 73.4 | 77.1 | 90.8 |
| LZSmin | 38.0 | 43.2 | 49.9 | 43.0 | 41.8 | 42.3 | 45.1 | 46.0 | 45.0 | 46.1 | 44.6 | 45.0 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 63.7 | 56.5 | 61.5 | 58.3 | 57.7 | 54.6 | 53.8 | 52.8 | 53.9 | 54.4 | 54.3 | 53.1 |
| LZSmax | 81.1 | 73.6 | 79.1 | 79.0 | 74.7 | 71.7 | 70.7 | 68.2 | 65.9 | 69.8 | 68.4 | 67.3 |
| LZSmin | 42.8 | 40.4 | 37.7 | 35.1 | 34.2 | 33.3 | 33.4 | 32.3 | 32.1 | 32.1 | 32.1 | 30.5 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 51.0 | 48.8 | 46.9 | 45.1 | 43.2 | 42.2 | 38.9 | 33.4 | 29.3 | 25.5 | 22.8 | 25.0 |
| LZSmax | 65.3 | 64.2 | 62.6 | 59.1 | 57.0 | 57.8 | 53.3 | 46.9 | 41.8 | 39.4 | 40.6 | 46.1 |
| LZSmin | 27.4 | 24.7 | 24.2 | 25.0 | 23.5 | 21.8 | 18.6 | 16.0 | 16.3 | 16.7 | 17.3 | 19.0 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.099 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 13:00:43 |
| Stop Time | Wednesday, 2015 June 03 13:10:43 |
| Duration | 00:10:00.0 |
| Run Time | 00:10:00.0 |
| Pause | 00:00:00.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:04 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 62.5 | dB |
| LASmax | 2015 Jun 03 13:06:06 | 75.8 | dB |
| LApeak (max) | 2015 Jun 03 13:06:06 | 90.3 | dB |
| LASmin | 2015 Jun 03 13:04:27 | 45.1 | dB |
| LCSeq | | 71.3 | dB |
| LASeq | | 62.5 | dB |
| LCSeq - LASeq | | 8.8 | dB |
| LAIeq | | 64.2 | dB |
| LAeq | | 62.4 | dB |
| LAIeq - LAeq | | 1.8 | dB |
| LASE | | 90.3 | dB |
| EAS | | 119.4 | µPa²h |
| EAS8 | | 5.730 | mPa²h |
| EAS40 | | 28.65 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | |
|---|---|---|
| LAS2.00 | 71.3 | dBA |
| LAS8.00 | 67.3 | dBA |
| LAS25.00 | 62.4 | dBA |
| LAS50.00 | 55.9 | dBA |
| LAS75.00 | 51.0 | dBA |
| LAS90.00 | 48.3 | dBA |

| | | |
|---|---|---|
| LAS > 85.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.03 | % |
| Projected Dose | 1.65 | % |
| TWA (Projected) | 60.4 | dBA |
| TWA (t) | 32.5 | dBA |
| Lep (t) | 45.7 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 58.8 | 60.4 | 63.9 | 68.8 | 64.5 | 61.3 | 58.0 | 58.9 | 54.2 | 47.9 | 39.6 | 30.3 |
| LZSmax | 78.5 | 75.5 | 76.2 | 86.5 | 79.0 | 80.4 | 73.1 | 72.2 | 69.0 | 62.7 | 52.9 | 50.8 |
| LZSmin | 49.6 | 52.3 | 56.1 | 52.6 | 44.9 | 40.4 | 38.5 | 39.9 | 34.3 | 31.8 | 23.0 | 22.5 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 53.9 | 53.1 | 55.0 | 54.5 | 55.7 | 56.5 | 59.0 | 59.6 | 58.6 | 58.3 | 59.4 | 67.8 |
| LZSmax | 73.6 | 72.8 | 72.8 | 71.5 | 72.3 | 70.6 | 71.7 | 75.4 | 71.0 | 75.6 | 79.8 | 86.5 |
| LZSmin | 35.8 | 41.6 | 44.7 | 43.6 | 45.5 | 48.2 | 49.8 | 49.3 | 50.5 | 48.0 | 47.7 | 42.1 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 60.5 | 53.6 | 60.8 | 54.0 | 58.9 | 54.7 | 53.2 | 52.7 | 53.5 | 54.5 | 54.8 | 53.0 |
| LZSmax | 79.5 | 69.4 | 76.2 | 70.5 | 79.4 | 73.2 | 70.9 | 65.9 | 65.2 | 67.5 | 68.3 | 68.1 |
| LZSmin | 41.1 | 41.0 | 36.9 | 36.3 | 35.3 | 34.2 | 33.1 | 34.1 | 33.1 | 34.3 | 34.8 | 34.5 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 51.2 | 49.1 | 47.0 | 44.8 | 42.7 | 41.1 | 37.4 | 33.9 | 30.1 | 28.5 | 24.9 | 20.1 |
| LZSmax | 65.6 | 63.9 | 62.6 | 59.8 | 57.6 | 55.8 | 51.8 | 46.4 | 41.2 | 51.7 | 48.7 | 30.0 |
| LZSmin | 31.8 | 28.6 | 26.4 | 27.4 | 27.0 | 23.3 | 19.8 | 17.2 | 16.5 | 16.7 | 17.4 | 19.0 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.100 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 13:28:36 |
| Stop Time | Wednesday, 2015 June 03 13:38:36 |
| Duration | 00:10:00.0 |
| Run Time | 00:10:00.0 |
| Pause | 00:00:00.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:04 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 61.5 | dB |
| LASmax | 2015 Jun 03 13:31:48 | 73.0 | dB |
| LApeak (max) | 2015 Jun 03 13:33:12 | 92.2 | dB |
| LASmin | 2015 Jun 03 13:34:10 | 49.1 | dB |
| LCSeq | | 70.5 | dB |
| LASeq | | 61.5 | dB |
| LCSeq - LASeq | | 9.0 | dB |
| LAIeq | | 63.3 | dB |
| LAeq | | 61.4 | dB |
| LAIeq - LAeq | | 1.8 | dB |
| LASE | | 89.2 | dB |
| EAS | | 93.19 | µPa²h |
| EAS8 | | 4.473 | mPa²h |
| EAS40 | | 22.37 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | |
|---|---|---|
| LAS2.00 | 69.5 | dBA |
| LAS8.00 | 66.0 | dBA |
| LAS25.00 | 62.3 | dBA |
| LAS50.00 | 57.4 | dBA |
| LAS75.00 | 53.2 | dBA |
| LAS90.00 | 51.5 | dBA |

| | | |
|---|---|---|
| LAS > 85.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.03 | % |
| Projected Dose | 1.59 | % |
| TWA (Projected) | 60.1 | dBA |
| TWA (t) | 32.2 | dBA |
| Lep (t) | 44.6 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 66.9 | 64.0 | 65.3 | 66.5 | 65.1 | 59.2 | 57.1 | 57.7 | 53.3 | 47.3 | 42.1 | 34.3 |
| LZSmax | 80.9 | 80.0 | 78.2 | 82.4 | 82.0 | 75.5 | 72.1 | 67.8 | 64.4 | 59.0 | 57.2 | 52.3 |
| LZSmin | 51.1 | 55.4 | 57.8 | 56.9 | 51.9 | 49.0 | 44.5 | 43.9 | 37.5 | 32.3 | 25.2 | 23.1 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 63.5 | 62.0 | 60.6 | 60.2 | 59.2 | 58.2 | 60.2 | 60.6 | 60.8 | 61.1 | 60.9 | 62.8 |
| LZSmax | 77.9 | 76.9 | 76.2 | 76.2 | 77.9 | 70.7 | 75.6 | 72.3 | 77.3 | 78.9 | 76.8 | 82.3 |
| LZSmin | 41.3 | 42.5 | 45.9 | 47.9 | 47.4 | 50.6 | 52.2 | 52.7 | 51.8 | 51.1 | 52.2 | 51.4 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 60.6 | 62.2 | 56.5 | 54.9 | 55.1 | 53.1 | 52.3 | 52.2 | 52.7 | 53.4 | 53.3 | 52.1 |
| LZSmax | 80.1 | 81.4 | 72.2 | 72.2 | 71.0 | 72.1 | 69.5 | 66.9 | 66.9 | 66.0 | 64.0 | 62.4 |
| LZSmin | 46.8 | 46.9 | 46.0 | 44.6 | 43.8 | 41.9 | 40.1 | 39.1 | 39.2 | 39.6 | 39.5 | 37.2 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 50.9 | 47.7 | 45.3 | 44.3 | 42.4 | 39.8 | 38.7 | 37.3 | 35.5 | 32.3 | 28.4 | 22.9 |
| LZSmax | 62.8 | 60.6 | 57.0 | 55.0 | 54.5 | 55.8 | 54.7 | 53.9 | 52.5 | 51.5 | 46.0 | 41.7 |
| LZSmin | 34.7 | 31.9 | 29.6 | 29.3 | 26.9 | 23.7 | 21.8 | 20.3 | 18.8 | 18.1 | 17.7 | 19.1 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.101 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 13:50:03 |
| Stop Time | Wednesday, 2015 June 03 14:00:03 |
| Duration | 00:10:00.0 |
| Run Time | 00:10:00.0 |
| Pause | 00:00:00.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:04 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 59.7 | dB |
| LASmax | 2015 Jun 03 13:50:27 | 73.9 | dB |
| LApeak (max) | 2015 Jun 03 13:58:11 | 88.9 | dB |
| LASmin | 2015 Jun 03 13:51:53 | 45.4 | dB |
| LCSeq | | 72.5 | dB |
| LASeq | | 59.7 | dB |
| LCSeq - LASeq | | 12.9 | dB |
| LAIeq | | 62.1 | dB |
| LAeq | | 59.6 | dB |
| LAIeq - LAeq | | 2.4 | dB |
| LASE | | 87.4 | dB |
| EAS | | 61.54 | µPa²h |
| EAS8 | | 2.954 | mPa²h |
| EAS40 | | 14.77 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | |
|---|---|---|
| LAS2.00 | 69.9 | dBA |
| LAS8.00 | 62.5 | dBA |
| LAS25.00 | 58.8 | dBA |
| LAS50.00 | 54.9 | dBA |
| LAS75.00 | 51.6 | dBA |
| LAS90.00 | 49.7 | dBA |

| | | |
|---|---|---|
| LAS > 85.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.02 | % |
| Projected Dose | 1.15 | % |
| TWA (Projected) | 57.8 | dBA |
| TWA (t) | 29.9 | dBA |
| Lep (t) | 42.8 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 66.9 | 62.6 | 67.2 | 70.6 | 65.5 | 59.8 | 55.3 | 54.9 | 51.1 | 46.3 | 42.0 | 36.1 |
| LZSmax | 80.9 | 73.4 | 83.8 | 87.1 | 81.7 | 75.1 | 69.0 | 68.8 | 67.4 | 60.7 | 57.9 | 57.7 |
| LZSmin | 47.8 | 52.3 | 55.2 | 55.4 | 49.2 | 44.7 | 40.3 | 40.8 | 35.0 | 31.4 | 30.0 | 24.4 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 63.9 | 62.3 | 59.5 | 57.6 | 57.9 | 58.0 | 60.1 | 61.5 | 64.4 | 65.1 | 64.6 | 67.4 |
| LZSmax | 77.8 | 77.0 | 71.7 | 69.5 | 70.4 | 70.4 | 73.3 | 81.1 | 78.9 | 80.2 | 82.3 | 87.2 |
| LZSmin | 42.0 | 42.7 | 42.9 | 42.9 | 47.2 | 48.1 | 49.8 | 49.4 | 48.8 | 51.5 | 49.9 | 48.7 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 63.4 | 60.1 | 54.3 | 56.2 | 55.7 | 52.4 | 50.7 | 50.2 | 50.6 | 50.5 | 50.3 | 49.6 |
| LZSmax | 81.1 | 80.1 | 68.3 | 73.9 | 72.6 | 66.9 | 64.5 | 63.8 | 65.7 | 65.6 | 65.0 | 65.3 |
| LZSmin | 46.3 | 45.1 | 41.1 | 40.7 | 39.7 | 36.3 | 35.3 | 34.8 | 35.8 | 37.1 | 35.6 | 34.4 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 47.3 | 46.1 | 45.1 | 42.7 | 41.7 | 39.9 | 39.0 | 36.2 | 35.5 | 35.3 | 27.5 | 21.2 |
| LZSmax | 63.2 | 62.6 | 62.9 | 57.4 | 55.8 | 54.3 | 54.8 | 52.4 | 54.8 | 57.8 | 50.7 | 40.6 |
| LZSmin | 31.7 | 29.0 | 27.5 | 27.2 | 26.5 | 26.3 | 26.2 | 25.7 | 23.0 | 20.5 | 18.9 | 19.1 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

## General Information

| | |
|---|---|
| Serial Number | 03099 |
| Model | SoundTrack LxT® |
| Firmware Version | 2.206 |
| Filename | LxT_Data.102 |
| User | |
| Job Description | |
| Location | |

| | |
|---|---|
| Measurement Description | |
| Start Time | Wednesday, 2015 June 03 14:08:14 |
| Stop Time | Wednesday, 2015 June 03 14:18:14 |
| Duration | 00:10:00.0 |
| Run Time | 00:00:01.0 |
| Pause | 00:09:59.0 |
| Pre Calibration | Wednesday, 2015 June 03 11:34:04 |
| Post Calibration | None |
| Calibration Deviation | --- |

## Note

## Overall Data

| | | | |
|---|---|---|---|
| LASeq | | 58.7 | dB |
| LASmax | 2015 Jun 03 14:08:15 | 59.2 | dB |
| LApeak (max) | 2015 Jun 03 14:08:14 | 70.6 | dB |
| LASmin | 2015 Jun 03 14:08:14 | 58.1 | dB |
| LCSeq | | 75.7 | dB |
| LASeq | | 58.7 | dB |
| LCSeq - LASeq | | 17.1 | dB |
| LAIeq | | 61.0 | dB |
| LAeq | | 59.5 | dB |
| LAIeq - LAeq | | 1.5 | dB |
| LASE | | 58.7 | dB |
| EAS | | 0.0816 | µPa²h |
| EAS8 | | 2.351 | mPa²h |
| EAS40 | | 11.76 | mPa²h |
| # Overloads | | 0 | |
| Overload Duration | | 0.0 | s |
| # OBA Overloads | | 0 | |
| OBA Overload Duration | | 0.0 | s |

## Statistics

| | | |
|---|---|---|
| LAS2.00 | 59.2 | dBA |
| LAS8.00 | 59.1 | dBA |
| LAS25.00 | 59.0 | dBA |
| LAS50.00 | 58.8 | dBA |
| LAS75.00 | 58.2 | dBA |
| LAS90.00 | 58.1 | dBA |

| | | |
|---|---|---|
| LAS > 85.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LAS > 115.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 135.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 137.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |
| LApeak > 140.0 dB (Exceedence Counts / Duration) | 0 / 0.0 | s |

## Dose

| | | |
|---|---|---|
| Name | OSHA-1 | |
| Dose | 0.00 | % |
| Projected Dose | 1.30 | % |
| TWA (Projected) | 58.7 | dBA |
| TWA (t) | -15.4 | dBA |
| Lep (t) | 14.1 | dBA |

## Settings

| | | |
|---|---|---|
| Exchange Rate | 5 | dB |
| Threshold | -99.9 | dBA |
| Criterion Level | 90.0 | dBA |
| Criterion Duration | 8.0 | h |
| | | |
| RMS Weight | A Weighting | |
| Peak Weight | A Weighting | |
| Detector | Slow | |
| Preamp | PRMLxT1L | |
| Microphone Correction | Off | |
| Integration Method | Exponential | |
| OBA Range | Normal | |
| OBA Bandwidth | 1/1 and 1/3 | |
| OBA Freq. Weighting | Z Weighting | |
| OBA Max Spectrum | Bin Max | |
| | | |
| Under Range Limit | 26.3 | dB |
| Under Range Peak | 78.5 | dB |
| Noise Floor | 16.4 | dB |
| Overload | 122.2 | dB |

## 1/1 Spectra

| Freq. (Hz): | 8.0 | 16.0 | 31.5 | 63.0 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | 16k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 55.9 | 56.9 | 69.3 | 72.1 | 71.0 | 61.4 | 53.4 | 49.5 | 44.4 | 40.6 | 34.2 | 27.8 |
| LZSmax | 56.3 | 57.6 | 71.9 | 72.8 | 71.8 | 61.6 | 54.2 | 49.9 | 44.7 | 41.1 | 35.3 | 29.2 |
| LZSmin | 55.4 | 56.4 | 67.1 | 71.5 | 70.5 | 61.0 | 52.8 | 49.4 | 44.2 | 40.0 | 33.1 | 26.5 |

## 1/3 Spectra

| Freq. (Hz): | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 | 20.0 | 25.0 | 31.5 | 40.0 | 50.0 | 63.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 53.5 | 54.4 | 47.1 | 49.9 | 53.5 | 52.3 | 64.6 | 60.4 | 64.8 | 69.5 | 65.3 | 67.6 |
| LZSmax | 55.2 | 55.7 | 48.5 | 50.7 | 54.8 | 52.8 | 65.1 | 63.3 | 68.8 | 70.0 | 66.5 | 69.3 |
| LZSmin | 51.8 | 52.0 | 45.9 | 48.9 | 52.6 | 51.9 | 64.3 | 57.8 | 62.8 | 69.1 | 64.0 | 67.0 |

| Freq. (Hz): | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1k | 1.25k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 68.3 | 67.4 | 59.8 | 60.0 | 53.7 | 51.9 | 50.1 | 48.7 | 46.0 | 46.3 | 44.5 | 43.5 |
| LZSmax | 69.8 | 68.7 | 61.8 | 60.4 | 54.2 | 52.2 | 51.4 | 49.6 | 46.2 | 46.9 | 44.7 | 43.6 |
| LZSmin | 66.9 | 66.2 | 56.9 | 59.1 | 53.0 | 51.6 | 49.7 | 47.7 | 45.9 | 45.8 | 44.3 | 43.3 |

| Freq. (Hz): | 1.6k | 2k | 2.5k | 3.15k | 4k | 5k | 6.3k | 8k | 10k | 12.5k | 16k | 20k |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LZSeq | 40.8 | 39.9 | 38.1 | 37.3 | 36.0 | 33.1 | 30.9 | 29.1 | 27.4 | 25.4 | 21.4 | 20.0 |
| LZSmax | 41.1 | 40.0 | 38.4 | 38.0 | 36.7 | 33.5 | 31.6 | 30.4 | 28.9 | 27.0 | 22.6 | 20.4 |
| LZSmin | 40.6 | 39.7 | 37.7 | 36.4 | 35.3 | 32.5 | 30.1 | 27.8 | 25.8 | 23.8 | 20.2 | 19.7 |

## Calibration History

| Preamp | Date | dB re. 1V/Pa |
|---|---|---|
| Direct | 01 Jan 2007 00:21:41 | -24.8 |
| PRMLxT1L | 03 Jun 2015 11:34:04 | -28.6 |
| PRMLxT1L | 27 May 2015 14:48:23 | -28.7 |
| PRMLxT1L | 27 May 2015 14:24:26 | -28.6 |
| PRMLxT1L | 27 May 2015 14:10:22 | -29.4 |
| PRMLxT1L | 27 May 2015 13:46:08 | -28.8 |
| PRMLxT1L | 27 May 2015 13:45:53 | -28.8 |
| PRMLxT1L | 27 May 2015 12:48:06 | -28.4 |
| PRMLxT1L | 26 May 2015 18:01:09 | -28.6 |
| PRMLxT1L | 26 May 2015 18:00:55 | -28.6 |
| PRMLxT1L | 26 May 2015 17:21:31 | -28.4 |
| PRMLxT1L | 07 May 2015 13:31:13 | -28.6 |

# APPENDIX C

## FHWA Traffic Noise Prediction Model
## - FHWA-RD-77-108 Output

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **I-405**
Segment: **North of El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 3000.00 |
| | | | | | | | | | | SPEED | | 65.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 83.75 | 0.04 | 0.05 | 15.54 | 0.00 | 0.00 | 11.57 | 0.04 | 0.05 | % A | | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 10.79 | -22.66 | -21.90 | 3.48 | -36.46 | -35.70 | 2.20 | -22.48 | -21.73 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 61.76 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 61.30 |
| LEQ | 61.27 | 33.98 | 38.24 | 53.95 | 20.18 | 24.43 | 52.67 | 34.16 | 38.41 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 61.30 | | EVENING LEQ | 53.96 | | NIGHT LEQ | 52.89 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 61.76 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **I-405**
Segment: **North of El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 3699.86 |
| | | | | | | | | | | SPEED | | 65.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 103.49 | 0.05 | 0.05 | 19.21 | 0.00 | 0.00 | 14.30 | 0.05 | 0.05 | % A | | 96.59 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.05 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | | 1.36 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 11.71 | -21.85 | -21.43 | 4.40 | -35.65 | -35.23 | 3.12 | -21.67 | -21.25 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 62.67 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 62.21 |
| LEQ | 62.19 | 34.79 | 38.71 | 54.87 | 20.99 | 24.91 | 53.59 | 34.97 | 38.89 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 62.21 | | EVENING LEQ | 54.88 | | NIGHT LEQ | 53.79 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 62.67 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **I-405**
Segment: **South of El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 262.41 | 0.12 | 0.14 | 48.71 | 0.00 | 0.01 | 36.25 | 0.12 | 0.15 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 15.75 | -17.70 | -16.94 | 8.44 | -31.50 | -30.74 | 7.16 | -17.52 | -16.77 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 66.72 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 66.26 |
| LEQ | 66.23 | 38.94 | 43.20 | 58.91 | 25.14 | 29.39 | 57.63 | 39.12 | 43.37 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 66.26 | | EVENING LEQ | 58.92 | | NIGHT LEQ | 57.85 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 66.72 | | | | | | | | |

| | |
|---|---|
| ADT | 9400.00 |
| SPEED | 65.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **I-405**
Segment: **South of El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 10099.86 |
| Vehicles per hour | 282.15 | 0.13 | 0.15 | 52.37 | 0.01 | 0.01 | 38.97 | 0.13 | 0.15 | SPEED | | 65.00 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | DISTANCE | | 50.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | | 96.47 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | | 2.08 |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | | 1.45 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 16.07 | -17.43 | -16.79 | 8.76 | -31.23 | -30.59 | 7.47 | -17.25 | -16.61 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 67.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 66.57 |
| LEQ | 66.54 | 39.22 | 43.35 | 59.23 | 25.41 | 29.55 | 57.94 | 39.39 | 43.53 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 66.57 | | EVENING LEQ | 59.23 | | NIGHT LEQ | 58.16 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 67.04 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 436.92 | 0.30 | 0.82 | 81.10 | 0.01 | 0.03 | 60.35 | 0.31 | 0.85 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 20.66 | -11.05 | -6.61 | 13.34 | -24.85 | -20.41 | 12.06 | -10.87 | -6.43 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 62.09 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 60.97 |
| LEQ | 60.70 | 38.71 | 48.37 | 53.38 | 24.91 | 34.57 | 52.10 | 38.89 | 48.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 60.97 | | EVENING LEQ | 53.45 | | NIGHT LEQ | 53.83 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 62.09 | | | | | | | | |

| | |
|---|---|
| ADT | 16400.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 17699.74 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 473.59 | 0.31 | 0.83 | 87.90 | 0.01 | 0.03 | 65.42 | 0.32 | 0.86 | % A | | 92.40 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.91 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.69 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 21.01 | -10.84 | -6.56 | 13.69 | -24.64 | -20.36 | 12.41 | -10.66 | -6.38 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 62.38 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 61.30 |
| LEQ | 61.05 | 38.92 | 48.42 | 53.73 | 25.12 | 34.62 | 52.45 | 39.10 | 48.60 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 61.30 | | EVENING LEQ | 53.79 | | NIGHT LEQ | 54.09 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 62.38 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 426.27 | 0.29 | 0.80 | 79.12 | 0.01 | 0.03 | 58.88 | 0.30 | 0.83 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 20.55 | -11.15 | -6.72 | 13.24 | -24.95 | -20.52 | 11.95 | -10.98 | -6.54 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 61.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 60.86 |
| LEQ | 60.59 | 38.61 | 48.26 | 53.28 | 24.80 | 34.46 | 51.99 | 38.78 | 48.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 60.86 | | EVENING LEQ | 53.34 | | NIGHT LEQ | 53.72 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 61.98 | | | | | | | | |

| | |
|---|---|
| ADT | 16000.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 17299.74 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 462.93 | 0.30 | 0.81 | 85.93 | 0.01 | 0.03 | 63.94 | 0.31 | 0.84 | % A | | 92.41 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.91 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.68 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 20.91 | -10.94 | -6.66 | 13.59 | -24.74 | -20.47 | 12.31 | -10.76 | -6.49 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 62.28 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 61.20 |
| LEQ | 60.95 | 38.82 | 48.31 | 53.63 | 25.01 | 34.51 | 52.35 | 38.99 | 48.49 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 61.20 | | EVENING LEQ | 53.69 | | NIGHT LEQ | 53.99 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 62.28 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **120th Street to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 575.46 | 0.39 | 1.08 | 106.81 | 0.02 | 0.05 | 79.49 | 0.41 | 1.13 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.85 | -9.85 | -5.41 | 14.54 | -23.65 | -19.21 | 13.26 | -9.67 | -5.23 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 63.29 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 62.17 |
| LEQ | 61.89 | 39.91 | 49.56 | 54.58 | 26.11 | 35.76 | 53.30 | 40.09 | 49.74 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 62.17 | | EVENING LEQ | 54.64 | | NIGHT LEQ | 55.02 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 63.29 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **120th Street to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 27098.90 |
| Vehicles per hour | 730.59 | 0.45 | 1.12 | 135.61 | 0.02 | 0.05 | 100.92 | 0.47 | 1.17 | SPEED | | 35.00 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | DISTANCE | | 50.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | | 93.10 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % MT | | 2.76 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.89 | -9.22 | -5.25 | 15.58 | -23.02 | -19.05 | 14.29 | -9.04 | -5.07 | % HT | | 4.14 |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | | | |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LEFT | | -90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | CNEL | | 64.16 |
| | | | | | | | | | | DAY LEQ | | 63.16 |
| LEQ | 62.93 | 40.54 | 49.72 | 55.62 | 26.74 | 35.92 | 54.33 | 40.72 | 49.90 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.16 | | EVENING LEQ | 55.67 | | NIGHT LEQ | 55.81 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.16 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 24300.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 647.39 | 0.44 | 1.22 | 120.16 | 0.02 | 0.05 | 89.42 | 0.46 | 1.27 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.37 | -9.34 | -4.90 | 15.05 | -23.14 | -18.70 | 13.77 | -9.16 | -4.72 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 63.80 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 62.68 |
| LEQ | 62.40 | 40.42 | 50.08 | 55.09 | 26.62 | 36.27 | 53.81 | 40.60 | 50.25 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 62.68 | | EVENING LEQ | 55.15 | | NIGHT LEQ | 55.54 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 63.80 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 27399.38 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 734.83 | 0.47 | 1.24 | 136.39 | 0.02 | 0.05 | 101.50 | 0.49 | 1.29 | % A | | 92.61 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.87 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.52 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.92 | -9.01 | -4.82 | 15.60 | -22.81 | -18.62 | 14.32 | -8.83 | -4.64 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.26 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.20 |
| LEQ | 62.96 | 40.75 | 50.16 | 55.64 | 26.95 | 36.35 | 54.36 | 40.92 | 50.33 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.20 | | EVENING LEQ | 55.70 | | NIGHT LEQ | 55.95 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.26 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 594.11 | 0.40 | 1.12 | 110.27 | 0.02 | 0.05 | 82.06 | 0.42 | 1.16 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.99 | -9.71 | -5.27 | 14.68 | -23.51 | -19.08 | 13.40 | -9.53 | -5.10 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 63.42 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 62.30 |
| LEQ | 62.03 | 40.05 | 49.70 | 54.72 | 26.25 | 35.90 | 53.43 | 40.22 | 49.88 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 62.30 | | EVENING LEQ | 54.78 | | NIGHT LEQ | 55.16 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 63.42 | | | | | | | | |

| | |
|---|---|
| ADT | 22300.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Inglewood Avenue**
Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| | | | | | | | | | | ADT | | 23599.74 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 630.78 | 0.42 | 1.12 | 117.08 | 0.02 | 0.05 | 87.13 | 0.43 | 1.17 | % A | | 92.30 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.94 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.77 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.25 | -9.56 | -5.24 | 14.94 | -23.36 | -19.04 | 13.66 | -9.38 | -5.06 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 63.64 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 62.55 |
| LEQ | 62.29 | 40.20 | 49.74 | 54.98 | 26.40 | 35.94 | 53.69 | 40.38 | 49.92 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 62.55 | | EVENING LEQ | 55.04 | | NIGHT LEQ | 55.35 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 63.64 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **North of Lennox Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 30000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 799.25 | 0.54 | 1.50 | 148.35 | 0.02 | 0.06 | 110.40 | 0.56 | 1.56 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.28 | -8.42 | -3.99 | 15.97 | -22.22 | -17.79 | 14.68 | -8.25 | -3.81 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.71 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.59 |
| LEQ | 63.32 | 41.34 | 50.99 | 56.01 | 27.53 | 37.19 | 54.72 | 41.51 | 51.17 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.59 | | EVENING LEQ | 56.07 | | NIGHT LEQ | 56.45 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.71 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **North of Lennox Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| | | | | | | | | | | ADT | | 30999.80 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 827.46 | 0.55 | 1.51 | 153.59 | 0.02 | 0.06 | 114.30 | 0.57 | 1.57 | % A | | 92.17 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.96 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.86 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.43 | -8.33 | -3.96 | 16.12 | -22.14 | -17.77 | 14.83 | -8.16 | -3.79 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.84 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.74 |
| LEQ | 63.47 | 41.42 | 51.01 | 56.16 | 27.62 | 37.21 | 54.87 | 41.60 | 51.19 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.74 | | EVENING LEQ | 56.22 | | NIGHT LEQ | 56.56 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.84 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Lennox Boulevard to I-405 WB off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 900.49 | 0.61 | 1.69 | 167.14 | 0.03 | 0.07 | 124.38 | 0.63 | 1.76 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.80 | -7.90 | -3.47 | 16.48 | -21.71 | -17.27 | 15.20 | -7.73 | -3.29 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.23 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.11 |
| LEQ | 63.84 | 41.85 | 51.51 | 56.52 | 28.05 | 37.71 | 55.24 | 42.03 | 51.69 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.11 | | EVENING LEQ | 56.59 | | NIGHT LEQ | 56.97 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.23 | | | | | | | | |

| | |
|---|---|
| ADT | 33800.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Lennox Boulevard to I-405 WB off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 35099.74 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 937.16 | 0.62 | 1.70 | 173.95 | 0.03 | 0.07 | 129.45 | 0.65 | 1.77 | % A | | 92.20 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.96 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.84 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.97 | -7.80 | -3.44 | 16.66 | -21.61 | -17.25 | 15.37 | -7.63 | -3.27 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.37 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.28 |
| LEQ | 64.01 | 41.95 | 51.53 | 56.70 | 28.15 | 37.73 | 55.41 | 42.13 | 51.71 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.28 | | EVENING LEQ | 56.76 | | NIGHT LEQ | 57.10 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.37 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **I-405 WB off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 25400.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 676.70 | 0.46 | 1.27 | 125.60 | 0.02 | 0.05 | 93.47 | 0.48 | 1.32 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.56 | -9.15 | -4.71 | 15.24 | -22.95 | -18.51 | 13.96 | -8.97 | -4.53 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 63.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 62.87 |
| LEQ | 62.60 | 40.61 | 50.27 | 55.28 | 26.81 | 36.47 | 54.00 | 40.79 | 50.44 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 62.87 | | EVENING LEQ | 55.35 | | NIGHT LEQ | 55.73 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 63.99 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **I-405 WB off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 27699.54 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 741.57 | 0.48 | 1.29 | 137.64 | 0.02 | 0.05 | 102.43 | 0.50 | 1.34 | % A | | 92.45 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.90 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.65 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.96 | -8.91 | -4.65 | 15.64 | -22.71 | -18.45 | 14.36 | -8.73 | -4.47 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.32 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.25 |
| LEQ | 62.99 | 40.85 | 50.33 | 55.68 | 27.05 | 36.52 | 54.40 | 41.02 | 50.50 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.25 | | EVENING LEQ | 55.74 | | NIGHT LEQ | 56.02 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.32 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 26700.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 711.33 | 0.48 | 1.34 | 132.03 | 0.02 | 0.06 | 98.26 | 0.50 | 1.39 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.77 | -8.93 | -4.49 | 15.46 | -22.73 | -18.29 | 14.18 | -8.75 | -4.31 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.21 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.09 |
| LEQ | 62.81 | 40.83 | 50.48 | 55.50 | 27.03 | 36.68 | 54.22 | 41.01 | 50.66 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.09 | | EVENING LEQ | 55.56 | | NIGHT LEQ | 55.95 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.21 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 31998.94 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 860.82 | 0.54 | 1.37 | 159.78 | 0.02 | 0.06 | 118.90 | 0.56 | 1.43 | % A | | 92.90 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.81 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.29 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.60 | -8.43 | -4.37 | 16.29 | -22.23 | -18.17 | 15.01 | -8.25 | -4.19 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.90 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.88 |
| LEQ | 63.64 | 41.33 | 50.61 | 56.33 | 27.53 | 36.81 | 55.05 | 41.51 | 50.79 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.88 | | EVENING LEQ | 56.38 | | NIGHT LEQ | 56.57 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.90 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 652.72 | 0.44 | 1.23 | 121.15 | 0.02 | 0.05 | 90.16 | 0.46 | 1.28 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.40 | -9.30 | -4.87 | 15.09 | -23.10 | -18.67 | 13.80 | -9.12 | -4.69 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 63.83 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 62.71 |
| LEQ | 62.44 | 40.46 | 50.11 | 55.13 | 26.65 | 36.31 | 53.84 | 40.63 | 50.29 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 62.71 | | EVENING LEQ | 55.19 | | NIGHT LEQ | 55.57 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 63.83 | | | | | | | | |

| | |
|---|---|
| ADT | 24500.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 32798.34 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 886.83 | 0.53 | 1.29 | 164.61 | 0.02 | 0.05 | 122.50 | 0.55 | 1.34 | % A | | 93.37 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.71 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 3.92 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.73 | -8.48 | -4.65 | 16.42 | -22.28 | -18.45 | 15.13 | -8.30 | -4.48 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.96 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.99 |
| LEQ | 63.77 | 41.28 | 50.32 | 56.46 | 27.47 | 36.52 | 55.17 | 41.45 | 50.50 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.99 | | EVENING LEQ | 56.51 | | NIGHT LEQ | 56.58 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.96 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Broadway to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 25100.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 668.71 | 0.45 | 1.26 | 124.12 | 0.02 | 0.05 | 92.37 | 0.47 | 1.31 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.51 | -9.20 | -4.76 | 15.19 | -23.00 | -18.56 | 13.91 | -9.02 | -4.58 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 63.94 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 62.82 |
| LEQ | 62.55 | 40.56 | 50.22 | 55.23 | 26.76 | 36.41 | 53.95 | 40.74 | 50.39 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 62.82 | | EVENING LEQ | 55.29 | | NIGHT LEQ | 55.68 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 63.94 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Broadway to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 36297.76 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 984.61 | 0.58 | 1.34 | 182.75 | 0.02 | 0.06 | 136.00 | 0.60 | 1.39 | % A | | 93.67 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.64 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 3.69 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 24.19 | -8.15 | -4.48 | 16.87 | -21.95 | -18.28 | 15.59 | -7.97 | -4.31 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.37 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.43 |
| LEQ | 64.23 | 41.61 | 50.49 | 56.91 | 27.81 | 36.69 | 55.63 | 41.79 | 50.67 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.43 | | EVENING LEQ | 56.96 | | NIGHT LEQ | 56.97 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.37 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 26900.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 716.66 | 0.48 | 1.35 | 133.02 | 0.02 | 0.06 | 98.99 | 0.50 | 1.40 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.81 | -8.90 | -4.46 | 15.49 | -22.70 | -18.26 | 14.21 | -8.72 | -4.28 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.24 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.12 |
| LEQ | 62.85 | 40.86 | 50.52 | 55.53 | 27.06 | 36.71 | 54.25 | 41.04 | 50.69 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.12 | | EVENING LEQ | 55.60 | | NIGHT LEQ | 55.98 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.24 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33098.76 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 891.53 | 0.55 | 1.39 | 165.48 | 0.02 | 0.06 | 123.15 | 0.58 | 1.45 | % A | 93.01 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.78 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 4.20 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.75 | -8.32 | -4.31 | 16.44 | -22.12 | -18.12 | 15.16 | -8.14 | -4.14 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.02 |
| LEQ | 63.79 | 41.44 | 50.66 | 56.48 | 27.63 | 36.86 | 55.20 | 41.61 | 50.84 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.02 | | EVENING LEQ | 56.53 | | NIGHT LEQ | 56.69 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 756.62 | 0.51 | 1.42 | 140.44 | 0.02 | 0.06 | 104.51 | 0.53 | 1.48 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.04 | -8.66 | -4.22 | 15.73 | -22.46 | -18.03 | 14.45 | -8.48 | -4.05 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.47 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.35 |
| LEQ | 63.08 | 41.10 | 50.75 | 55.77 | 27.30 | 36.95 | 54.48 | 41.27 | 50.93 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.35 | | EVENING LEQ | 55.83 | | NIGHT LEQ | 56.21 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.47 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 33399.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 897.65 | 0.57 | 1.46 | 166.61 | 0.02 | 0.06 | 123.99 | 0.59 | 1.52 | % A | | 92.81 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.83 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.36 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.78 | -8.22 | -4.11 | 16.47 | -22.02 | -17.91 | 15.19 | -8.04 | -3.93 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.10 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.06 |
| LEQ | 63.82 | 41.54 | 50.86 | 56.51 | 27.74 | 37.06 | 55.23 | 41.72 | 51.04 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.06 | | EVENING LEQ | 56.57 | | NIGHT LEQ | 56.77 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.10 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 812.57 | 0.55 | 1.53 | 150.82 | 0.02 | 0.06 | 112.24 | 0.57 | 1.59 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.35 | -8.35 | -3.91 | 16.04 | -22.15 | -17.72 | 14.75 | -8.17 | -3.74 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.78 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.66 |
| LEQ | 63.39 | 41.41 | 51.06 | 56.08 | 27.61 | 37.26 | 54.79 | 41.58 | 51.24 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.66 | | EVENING LEQ | 56.14 | | NIGHT LEQ | 56.52 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.78 | | | | | | | | |

| | |
|---|---|
| ADT | 30500.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Hawthorne Boulevard**
Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 33199.46 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 888.73 | 0.58 | 1.54 | 164.96 | 0.02 | 0.06 | 122.76 | 0.60 | 1.61 | % A | | 92.44 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.91 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.65 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.74 | -8.12 | -3.86 | 16.43 | -21.92 | -17.66 | 15.14 | -7.94 | -3.68 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.04 |
| LEQ | 63.78 | 41.64 | 51.12 | 56.47 | 27.83 | 37.32 | 55.18 | 41.81 | 51.30 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.04 | | EVENING LEQ | 56.53 | | NIGHT LEQ | 56.81 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.11 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 28500.00 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 759.29 | 0.51 | 1.43 | 140.93 | 0.02 | 0.06 | 104.88 | 0.53 | 1.48 | % A | | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.48 | -9.23 | -4.79 | 15.16 | -23.03 | -18.59 | 13.88 | -9.05 | -4.61 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.95 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.98 |
| LEQ | 64.77 | 42.02 | 51.30 | 57.45 | 28.22 | 37.50 | 56.17 | 42.19 | 51.48 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.98 | | EVENING LEQ | 57.50 | | NIGHT LEQ | 57.57 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.95 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 29799.74 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 795.95 | 0.53 | 1.43 | 147.74 | 0.02 | 0.06 | 109.94 | 0.55 | 1.49 | % A | | 92.24 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.95 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.81 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.68 | -9.11 | -4.76 | 15.37 | -22.91 | -18.56 | 14.09 | -8.93 | -4.58 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 66.13 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 65.18 |
| LEQ | 64.97 | 42.14 | 51.33 | 57.66 | 28.34 | 37.53 | 56.38 | 42.31 | 51.51 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 65.18 | | EVENING LEQ | 57.71 | | NIGHT LEQ | 57.73 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 66.13 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 29500.00 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 785.93 | 0.53 | 1.48 | 145.88 | 0.02 | 0.06 | 108.56 | 0.55 | 1.54 | % A | | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.63 | -9.08 | -4.64 | 15.31 | -22.88 | -18.44 | 14.03 | -8.90 | -4.46 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 66.10 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 65.13 |
| LEQ | 64.92 | 42.17 | 51.45 | 57.60 | 28.37 | 37.65 | 56.32 | 42.34 | 51.63 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 65.13 | | EVENING LEQ | 57.65 | | NIGHT LEQ | 57.72 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 66.10 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 31799.54 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 850.80 | 0.56 | 1.49 | 157.92 | 0.02 | 0.06 | 117.52 | 0.58 | 1.55 | % A | | 92.39 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.92 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.69 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.97 | -8.87 | -4.59 | 15.66 | -22.67 | -18.39 | 14.37 | -8.70 | -4.41 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 66.40 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 65.46 |
| LEQ | 65.26 | 42.37 | 51.50 | 57.95 | 28.57 | 37.70 | 56.66 | 42.55 | 51.68 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 65.46 | | EVENING LEQ | 57.99 | | NIGHT LEQ | 57.99 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 66.40 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 655.39 | 0.44 | 1.23 | 121.65 | 0.02 | 0.05 | 90.53 | 0.46 | 1.28 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.84 | -9.86 | -5.43 | 14.52 | -23.67 | -19.23 | 13.24 | -9.69 | -5.25 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.31 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.34 |
| LEQ | 64.13 | 41.38 | 50.66 | 56.81 | 27.58 | 36.86 | 55.53 | 41.56 | 50.84 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.34 | | EVENING LEQ | 56.86 | | NIGHT LEQ | 56.93 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.31 | | | | | | | | |

| | |
|---|---|
| ADT | 24600.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 25899.74 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 692.05 | 0.46 | 1.24 | 128.45 | 0.02 | 0.05 | 95.59 | 0.48 | 1.29 | % A | | 92.27 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.94 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.79 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.07 | -9.73 | -5.39 | 14.76 | -23.53 | -19.20 | 13.48 | -9.55 | -5.22 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.52 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.57 |
| LEQ | 64.36 | 41.52 | 50.70 | 57.05 | 27.71 | 36.89 | 55.77 | 41.69 | 50.87 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.57 | | EVENING LEQ | 57.10 | | NIGHT LEQ | 57.11 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.52 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **South of 139th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 28100.00 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 748.63 | 0.51 | 1.41 | 138.95 | 0.02 | 0.06 | 103.41 | 0.53 | 1.46 | % A | | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.42 | -9.29 | -4.85 | 15.10 | -23.09 | -18.65 | 13.82 | -9.11 | -4.67 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.89 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.92 |
| LEQ | 64.71 | 41.96 | 51.24 | 57.39 | 28.15 | 37.44 | 56.11 | 42.13 | 51.42 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.92 | | EVENING LEQ | 57.44 | | NIGHT LEQ | 57.51 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.89 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Prairie Avenue**
Segment: **South of 139th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 29299.76 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 782.48 | 0.52 | 1.41 | 145.24 | 0.02 | 0.06 | 108.08 | 0.54 | 1.47 | % A | | 92.22 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.95 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.83 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.61 | -9.17 | -4.82 | 15.29 | -22.98 | -18.62 | 14.01 | -9.00 | -4.65 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 66.06 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 65.10 |
| LEQ | 64.90 | 42.07 | 51.27 | 57.58 | 28.27 | 37.47 | 56.30 | 42.25 | 51.44 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 65.10 | | EVENING LEQ | 57.63 | | NIGHT LEQ | 57.66 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 66.06 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **I-105**
Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 843.06 | 0.38 | 0.45 | 156.48 | 0.02 | 0.02 | 116.45 | 0.40 | 0.47 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 20.82 | -12.63 | -11.87 | 13.51 | -26.43 | -25.68 | 12.23 | -12.45 | -11.70 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 71.79 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 71.32 |
| LEQ | 71.29 | 44.01 | 48.26 | 63.98 | 30.21 | 34.46 | 62.70 | 44.19 | 48.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 71.32 | | EVENING LEQ | 63.99 | | NIGHT LEQ | 62.92 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 71.79 | | | | | | | | |

| | |
|---|---|
| ADT | 30200.00 |
| SPEED | 65.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **I-105**
Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 30899.86 |
| | | | | | | | | | | SPEED | | 65.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 862.80 | 0.39 | 0.46 | 160.15 | 0.02 | 0.02 | 119.18 | 0.40 | 0.48 | % A | | 96.42 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.09 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | | 1.48 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 20.92 | -12.54 | -11.82 | 13.61 | -26.35 | -25.63 | 12.33 | -12.37 | -11.65 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 71.89 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 71.42 |
| LEQ | 71.40 | 44.10 | 48.31 | 64.08 | 30.29 | 34.51 | 62.80 | 44.27 | 48.49 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 71.42 | | EVENING LEQ | 64.09 | | NIGHT LEQ | 63.01 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 71.89 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 27200.00 |
| Vehicles per hour | 724.65 | 0.49 | 1.36 | 134.50 | 0.02 | 0.06 | 100.10 | 0.51 | 1.42 | SPEED | | 35.00 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | DISTANCE | | 50.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | | 92 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % MT | | 3 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.85 | -8.85 | -4.41 | 15.54 | -22.65 | -18.21 | 14.26 | -8.67 | -4.23 | % HT | | 5 |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.29 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.17 |
| LEQ | 62.89 | 40.91 | 50.56 | 55.58 | 27.11 | 36.76 | 54.30 | 41.09 | 50.74 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.17 | | EVENING LEQ | 55.64 | | NIGHT LEQ | 56.03 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.29 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 28199.80 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 752.86 | 0.50 | 1.37 | 139.74 | 0.02 | 0.06 | 103.99 | 0.52 | 1.42 | % A | | 92.19 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.96 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.85 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.02 | -8.75 | -4.39 | 15.71 | -22.55 | -18.19 | 14.42 | -8.57 | -4.21 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.43 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.33 |
| LEQ | 63.06 | 41.01 | 50.59 | 55.75 | 27.20 | 36.79 | 54.46 | 41.18 | 50.77 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.33 | | EVENING LEQ | 55.81 | | NIGHT LEQ | 56.15 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.43 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 27200.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 724.65 | 0.49 | 1.36 | 134.50 | 0.02 | 0.06 | 100.10 | 0.51 | 1.42 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.85 | -8.85 | -4.41 | 15.54 | -22.65 | -18.21 | 14.26 | -8.67 | -4.23 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.29 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.17 |
| LEQ | 62.89 | 40.91 | 50.56 | 55.58 | 27.11 | 36.76 | 54.30 | 41.09 | 50.74 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.17 | | EVENING LEQ | 55.64 | | NIGHT LEQ | 56.03 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.29 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29199.60 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 781.06 | 0.51 | 1.37 | 144.97 | 0.02 | 0.06 | 107.89 | 0.53 | 1.43 | % A | 92.37 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.92 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 4.71 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.18 | -8.66 | -4.36 | 15.87 | -22.46 | -18.17 | 14.58 | -8.48 | -4.19 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.56 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.48 |
| LEQ | 63.22 | 41.10 | 50.61 | 55.91 | 27.30 | 36.81 | 54.62 | 41.28 | 50.79 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.48 | | EVENING LEQ | 55.97 | | NIGHT LEQ | 56.27 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.56 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 29600.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 788.59 | 0.53 | 1.48 | 146.37 | 0.02 | 0.06 | 108.93 | 0.56 | 1.54 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.22 | -8.48 | -4.04 | 15.91 | -22.28 | -17.85 | 14.62 | -8.30 | -3.87 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.65 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.53 |
| LEQ | 63.26 | 41.28 | 50.93 | 55.95 | 27.48 | 37.13 | 54.66 | 41.45 | 51.11 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.53 | | EVENING LEQ | 56.01 | | NIGHT LEQ | 56.39 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.65 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 30799.76 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 822.44 | 0.55 | 1.49 | 152.65 | 0.02 | 0.06 | 113.60 | 0.57 | 1.55 | % A | | 92.21 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.95 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 4.83 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.40 | -8.37 | -4.02 | 16.09 | -22.18 | -17.82 | 14.81 | -8.20 | -3.84 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.81 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.71 |
| LEQ | 63.44 | 41.38 | 50.96 | 56.13 | 27.58 | 37.16 | 54.85 | 41.56 | 51.14 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.71 | | EVENING LEQ | 56.19 | | NIGHT LEQ | 56.53 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.81 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 756.62 | 0.51 | 1.42 | 140.44 | 0.02 | 0.06 | 104.51 | 0.53 | 1.48 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.04 | -8.66 | -4.22 | 15.73 | -22.46 | -18.03 | 14.45 | -8.48 | -4.05 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.47 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.35 |
| LEQ | 63.08 | 41.10 | 50.75 | 55.77 | 27.30 | 36.95 | 54.48 | 41.27 | 50.93 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.35 | | EVENING LEQ | 55.83 | | NIGHT LEQ | 56.21 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.47 | | | | | | | | |

| | |
|---|---|
| ADT | 28400.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Imperial Highway**
Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28699.94 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 765.08 | 0.51 | 1.42 | 142.01 | 0.02 | 0.06 | 105.68 | 0.54 | 1.48 | % A | 92.06 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.99 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 4.96 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.09 | -8.63 | -4.22 | 15.78 | -22.43 | -18.02 | 14.49 | -8.46 | -4.04 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.51 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.40 |
| LEQ | 63.13 | 41.13 | 50.76 | 55.82 | 27.32 | 36.96 | 54.53 | 41.30 | 50.94 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.40 | | EVENING LEQ | 55.88 | | NIGHT LEQ | 56.25 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.51 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 15700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 468.95 | 0.11 | 0.02 | 86.65 | 0.00 | 0.00 | 65.12 | 0.11 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 20.38 | -15.98 | -24.04 | 13.05 | -29.50 | -33.46 | 11.81 | -15.98 | -24.04 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 63.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 62.69 |
| LEQ | 62.67 | 35.26 | 32.05 | 55.34 | 21.74 | 22.63 | 54.10 | 35.26 | 32.05 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 62.69 | | EVENING LEQ | 55.35 | | NIGHT LEQ | 54.18 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 63.11 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 16999.74 |
| Vehicles per hour | 507.78 | 0.12 | 0.02 | 93.83 | 0.01 | 0.00 | 70.51 | 0.12 | 0.02 | SPEED | | 40.00 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | DISTANCE | | 50.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | | 97.40 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % MT | | 1.84 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 20.73 | -15.63 | -23.69 | 13.40 | -29.16 | -33.11 | 12.16 | -15.63 | -23.69 | % HT | | 0.74 |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 63.45 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.03 |
| LEQ | 63.02 | 35.61 | 32.40 | 55.69 | 22.09 | 22.98 | 54.45 | 35.61 | 32.40 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.03 | | EVENING LEQ | 55.69 | | NIGHT LEQ | 54.53 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 63.45 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 540.63 | 0.12 | 0.02 | 99.90 | 0.01 | 0.00 | 75.07 | 0.12 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.00 | -15.36 | -23.42 | 13.67 | -28.88 | -32.84 | 12.43 | -15.36 | -23.42 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 63.73 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.30 |
| LEQ | 63.29 | 35.88 | 32.67 | 55.96 | 22.36 | 23.25 | 54.72 | 35.88 | 32.67 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.30 | | EVENING LEQ | 55.96 | | NIGHT LEQ | 54.80 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 63.73 | | | | | | | | |

| | |
|---|---|
| ADT | 18100.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 20999.42 |
| Vehicles per hour | 627.26 | 0.14 | 0.02 | 115.91 | 0.01 | 0.00 | 87.10 | 0.14 | 0.02 | SPEED | | 40.00 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | DISTANCE | | 50.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | | 97.40 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % MT | | 1.84 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 21.65 | -14.72 | -22.77 | 14.31 | -28.24 | -32.19 | 13.07 | -14.72 | -22.77 | % HT | | 0.74 |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | | | |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LEFT | | -90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | CNEL | | 64.37 |
| | | | | | | | | | | DAY LEQ | | 63.95 |
| LEQ | 63.94 | 36.53 | 33.32 | 56.60 | 23.01 | 23.90 | 55.36 | 36.53 | 33.32 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.95 | | EVENING LEQ | 56.61 | | NIGHT LEQ | 55.45 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.37 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 627.26 | 0.14 | 0.02 | 115.91 | 0.01 | 0.00 | 87.10 | 0.14 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.65 | -14.72 | -22.77 | 14.31 | -28.24 | -32.19 | 13.07 | -14.72 | -22.77 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.37 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.95 |
| LEQ | 63.94 | 36.53 | 33.32 | 56.60 | 23.01 | 23.90 | 55.36 | 36.53 | 33.32 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.95 | | EVENING LEQ | 56.61 | | NIGHT LEQ | 55.45 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.37 | | | | | | | | |

| | |
|---|---|
| ADT | 21000.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| | | | | | | | | | | ADT | | 22999.60 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 686.99 | 0.16 | 0.02 | 126.94 | 0.01 | 0.00 | 95.40 | 0.16 | 0.02 | % A | | 97.40 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.04 | -14.32 | -22.38 | 14.71 | -27.84 | -31.80 | 13.47 | -14.32 | -22.38 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.77 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.34 |
| LEQ | 64.33 | 36.92 | 33.71 | 57.00 | 23.40 | 24.29 | 55.76 | 36.92 | 33.71 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.34 | | EVENING LEQ | 57.00 | | NIGHT LEQ | 55.84 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.77 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 540.63 | 0.12 | 0.02 | 99.90 | 0.01 | 0.00 | 75.07 | 0.12 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.00 | -15.36 | -23.42 | 13.67 | -28.88 | -32.84 | 12.43 | -15.36 | -23.42 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 63.73 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.30 |
| LEQ | 63.29 | 35.88 | 32.67 | 55.96 | 22.36 | 23.25 | 54.72 | 35.88 | 32.67 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.30 | | EVENING LEQ | 55.96 | | NIGHT LEQ | 54.80 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 63.73 | | | | | | | | |

| | |
|---|---|
| ADT | 18100.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 20699.48 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 618.30 | 0.14 | 0.02 | 114.25 | 0.01 | 0.00 | 85.86 | 0.14 | 0.02 | % A | | 97.40 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 21.59 | -14.78 | -22.84 | 14.25 | -28.30 | -32.26 | 13.01 | -14.78 | -22.84 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.31 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.89 |
| LEQ | 63.88 | 36.46 | 33.25 | 56.54 | 22.94 | 23.83 | 55.30 | 36.46 | 33.25 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.55 | | NIGHT LEQ | 55.38 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.31 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 657.13 | 0.15 | 0.02 | 121.43 | 0.01 | 0.00 | 91.25 | 0.15 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.85 | -14.51 | -22.57 | 14.52 | -28.04 | -31.99 | 13.28 | -14.51 | -22.57 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.57 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.15 |
| LEQ | 64.14 | 36.73 | 33.52 | 56.81 | 23.21 | 24.10 | 55.57 | 36.73 | 33.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.15 | | EVENING LEQ | 56.81 | | NIGHT LEQ | 55.65 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.57 | | | | | | | | |

| | |
|---|---|
| ADT | 22000.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **120th Street**
Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 23299.74 |
| Vehicles per hour | 695.96 | 0.16 | 0.03 | 128.60 | 0.01 | 0.00 | 96.64 | 0.16 | 0.03 | SPEED | | 40.00 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | DISTANCE | | 50.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | | 97.40 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % MT | | 1.84 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.10 | -14.26 | -22.32 | 14.77 | -27.79 | -31.74 | 13.53 | -14.26 | -22.32 | % HT | | 0.74 |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 64.82 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.40 |
| LEQ | 64.39 | 36.98 | 33.77 | 57.06 | 23.46 | 24.35 | 55.81 | 36.98 | 33.77 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.40 | | EVENING LEQ | 57.06 | | NIGHT LEQ | 55.90 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 64.82 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **West of I-105 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 36700.00 |
| Vehicles per hour | 977.75 | 0.66 | 1.84 | 181.48 | 0.03 | 0.08 | 135.06 | 0.69 | 1.91 | SPEED | | 40.00 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | DISTANCE | | 50.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | | 92 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | | 3 |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.58 | -8.13 | -3.69 | 16.26 | -21.93 | -17.49 | 14.98 | -7.95 | -3.51 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 67.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 66.08 |
| LEQ | 65.87 | 43.12 | 52.40 | 58.55 | 29.31 | 38.60 | 57.27 | 43.29 | 52.58 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 66.08 | | EVENING LEQ | 58.60 | | NIGHT LEQ | 58.67 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 67.05 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **West of I-105 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 40699.20 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 1090.57 | 0.70 | 1.86 | 202.42 | 0.03 | 0.08 | 150.64 | 0.73 | 1.94 | % A | | 92.53 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.89 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.58 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 24.05 | -7.85 | -3.62 | 16.74 | -21.65 | -17.42 | 15.45 | -7.67 | -3.44 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 67.46 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 66.54 |
| LEQ | 66.34 | 43.40 | 52.47 | 59.03 | 29.59 | 38.67 | 57.74 | 43.57 | 52.65 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 66.54 | | EVENING LEQ | 59.07 | | NIGHT LEQ | 59.04 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 67.46 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **I-105 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 825.89 | 0.56 | 1.55 | 153.30 | 0.02 | 0.06 | 114.08 | 0.58 | 1.61 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.84 | -8.86 | -4.42 | 15.53 | -22.66 | -18.23 | 14.25 | -8.68 | -4.25 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 66.32 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 65.35 |
| LEQ | 65.13 | 42.38 | 51.67 | 57.82 | 28.58 | 37.86 | 56.54 | 42.56 | 51.84 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 65.35 | | EVENING LEQ | 57.87 | | NIGHT LEQ | 57.93 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 66.32 | | | | | | | | |

| | |
|---|---|
| ADT | 31000.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **I-105 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 36298.94 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 975.38 | 0.62 | 1.59 | 181.04 | 0.03 | 0.07 | 134.73 | 0.64 | 1.66 | % A | | 92.79 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.83 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.38 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.57 | -8.43 | -4.31 | 16.25 | -22.23 | -18.12 | 14.97 | -8.25 | -4.14 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 66.95 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 66.04 |
| LEQ | 65.86 | 42.82 | 51.77 | 58.54 | 29.01 | 37.97 | 57.26 | 42.99 | 51.95 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 66.04 | | EVENING LEQ | 58.58 | | NIGHT LEQ | 58.50 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 66.95 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 751.30 | 0.51 | 1.41 | 139.45 | 0.02 | 0.06 | 103.78 | 0.53 | 1.47 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.43 | -9.27 | -4.83 | 15.12 | -23.07 | -18.64 | 13.83 | -9.09 | -4.66 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.91 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.93 |
| LEQ | 64.72 | 41.97 | 51.26 | 57.41 | 28.17 | 37.45 | 56.12 | 42.15 | 51.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.93 | | EVENING LEQ | 57.46 | | NIGHT LEQ | 57.52 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.91 | | | | | | | | |

| | |
|---|---|
| ADT | 28200.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 32099.22 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 861.30 | 0.55 | 1.44 | 159.87 | 0.02 | 0.06 | 118.97 | 0.57 | 1.50 | % A | | 92.66 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.86 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.48 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 23.03 | -8.92 | -4.75 | 15.71 | -22.72 | -18.55 | 14.43 | -8.74 | -4.57 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 66.42 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 65.51 |
| LEQ | 65.31 | 42.33 | 51.34 | 58.00 | 28.52 | 37.54 | 56.72 | 42.50 | 51.52 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 65.51 | | EVENING LEQ | 58.04 | | NIGHT LEQ | 57.99 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 66.42 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 26700.00 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 711.33 | 0.48 | 1.34 | 132.03 | 0.02 | 0.06 | 98.26 | 0.50 | 1.39 | % A | | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.19 | -9.51 | -5.07 | 14.88 | -23.31 | -18.87 | 13.60 | -9.33 | -4.89 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.67 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.70 |
| LEQ | 64.48 | 41.73 | 51.02 | 57.17 | 27.93 | 37.22 | 55.89 | 41.91 | 51.20 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.70 | | EVENING LEQ | 57.22 | | NIGHT LEQ | 57.28 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.67 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31299.08 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 841.08 | 0.53 | 1.37 | 156.11 | 0.02 | 0.06 | 116.18 | 0.55 | 1.43 | % A | 92.80 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.83 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 4.37 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.92 | -9.07 | -4.96 | 15.61 | -22.87 | -18.76 | 14.32 | -8.90 | -4.78 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 66.30 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 65.40 |
| LEQ | 65.21 | 42.17 | 51.13 | 57.90 | 28.37 | 37.33 | 56.61 | 42.35 | 51.30 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 65.40 | | EVENING LEQ | 57.94 | | NIGHT LEQ | 57.86 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 66.30 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | | 27600.00 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| Vehicles per hour | 735.31 | 0.50 | 1.38 | 136.48 | 0.02 | 0.06 | 101.57 | 0.52 | 1.44 | % A | | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.34 | -9.36 | -4.93 | 15.02 | -23.17 | -18.73 | 13.74 | -9.19 | -4.75 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.81 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.84 |
| LEQ | 64.63 | 41.88 | 51.16 | 57.31 | 28.08 | 37.36 | 56.03 | 42.06 | 51.34 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.84 | | EVENING LEQ | 57.36 | | NIGHT LEQ | 57.43 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.81 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **El Segundo Boulevard**
Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31699.18 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 850.95 | 0.54 | 1.41 | 157.95 | 0.02 | 0.06 | 117.54 | 0.56 | 1.47 | % A | 92.70 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.85 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 4.45 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.97 | -8.99 | -4.83 | 15.66 | -22.79 | -18.64 | 14.38 | -8.81 | -4.66 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 66.37 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 65.45 |
| LEQ | 65.26 | 42.26 | 51.26 | 57.95 | 28.45 | 37.45 | 56.67 | 42.43 | 51.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 65.45 | | EVENING LEQ | 57.99 | | NIGHT LEQ | 57.93 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 66.37 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **139th Street**
Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 29.87 | 0.01 | 0.00 | 5.52 | 0.00 | 0.00 | 4.15 | 0.01 | 0.00 | % A | 97.4 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 9.01 | -27.36 | -35.42 | 1.67 | -40.88 | -44.84 | 0.43 | -27.36 | -35.42 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 49.49 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 49.06 |
| LEQ | 49.05 | 22.40 | 19.56 | 41.71 | 8.88 | 10.14 | 40.47 | 22.40 | 19.56 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 49.06 | | EVENING LEQ | 41.72 | | NIGHT LEQ | 40.57 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 49.49 | | | | | | | | |

| | |
|---|---|
| ADT | 1000.00 |
| SPEED | 35.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **139th Street**
Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 1599.88 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 47.79 | 0.01 | 0.00 | 8.83 | 0.00 | 0.00 | 6.64 | 0.01 | 0.00 | % A | | 97.41 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 11.05 | -25.32 | -33.37 | 3.71 | -38.84 | -42.79 | 2.47 | -25.32 | -33.37 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 51.53 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 51.10 |
| LEQ | 51.09 | 24.44 | 21.60 | 43.75 | 10.92 | 12.18 | 42.51 | 24.44 | 21.60 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 51.10 | | EVENING LEQ | 43.76 | | NIGHT LEQ | 42.61 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 51.53 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Rosecrans Avenue**
Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 687.36 | 0.46 | 1.29 | 127.58 | 0.02 | 0.05 | 94.94 | 0.48 | 1.34 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.05 | -9.66 | -5.22 | 14.73 | -23.46 | -19.02 | 13.45 | -9.48 | -5.04 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.52 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.55 |
| LEQ | 64.34 | 41.59 | 50.87 | 57.02 | 27.78 | 37.07 | 55.74 | 41.76 | 51.05 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.55 | | EVENING LEQ | 57.07 | | NIGHT LEQ | 57.14 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.52 | | | | | | | | |

| | |
|---|---|
| ADT | 25800.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Rosecrans Avenue**
Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 27099.74 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 724.02 | 0.48 | 1.30 | 134.39 | 0.02 | 0.05 | 100.01 | 0.50 | 1.35 | % A | | 92.26 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.94 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.80 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.27 | -9.53 | -5.19 | 14.96 | -23.33 | -18.99 | 13.67 | -9.35 | -5.01 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.72 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 64.77 |
| LEQ | 64.56 | 41.72 | 50.90 | 57.25 | 27.92 | 37.10 | 55.96 | 41.89 | 51.08 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 64.77 | | EVENING LEQ | 57.29 | | NIGHT LEQ | 57.31 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.72 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Rosecrans Avenue**
Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 737.97 | 0.50 | 1.39 | 136.98 | 0.02 | 0.06 | 101.94 | 0.52 | 1.44 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.35 | -9.35 | -4.91 | 15.04 | -23.15 | -18.71 | 13.76 | -9.17 | -4.73 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.83 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.86 |
| LEQ | 64.64 | 41.89 | 51.18 | 57.33 | 28.09 | 37.38 | 56.05 | 42.07 | 51.35 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.86 | | EVENING LEQ | 57.38 | | NIGHT LEQ | 57.44 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.83 | | | | | | | | |

| | |
|---|---|
| ADT | 27700.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Rosecrans Avenue**
Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 29699.60 |
| | | | | | | | | | | SPEED | | 40.00 |
| | | | | | | | | | | DISTANCE | | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 794.39 | 0.52 | 1.40 | 147.45 | 0.02 | 0.06 | 109.73 | 0.54 | 1.46 | % A | | 92.36 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 2.92 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | | 4.71 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 22.67 | -9.16 | -4.87 | 15.36 | -22.96 | -18.67 | 14.08 | -8.98 | -4.69 | | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 66.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 65.16 |
| LEQ | 64.96 | 42.08 | 51.22 | 57.65 | 28.28 | 37.42 | 56.37 | 42.26 | 51.40 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 65.16 | | EVENING LEQ | 57.70 | | NIGHT LEQ | 57.69 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 66.11 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Existing Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Rosecrans Avenue**
Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 687.36 | 0.46 | 1.29 | 127.58 | 0.02 | 0.05 | 94.94 | 0.48 | 1.34 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.05 | -9.66 | -5.22 | 14.73 | -23.46 | -19.02 | 13.45 | -9.48 | -5.04 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.52 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.55 |
| LEQ | 64.34 | 41.59 | 50.87 | 57.02 | 27.78 | 37.07 | 55.74 | 41.76 | 51.05 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.55 | | EVENING LEQ | 57.07 | | NIGHT LEQ | 57.14 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.52 | | | | | | | | |

| | |
|---|---|
| ADT | 25800.00 |
| SPEED | 40.00 |
| DISTANCE | 50.00 |

FHWA Sound32 Spreadsheet

**Existing Plus Project Traffic Noise**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **Rosecrans Avenue**
Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27899.58 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 746.59 | 0.49 | 1.31 | 138.58 | 0.02 | 0.05 | 103.13 | 0.51 | 1.36 | % A | 92.41 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.91 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 4.68 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.40 | -9.45 | -5.17 | 15.09 | -23.25 | -18.97 | 13.81 | -9.27 | -4.99 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.83 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.89 |
| LEQ | 64.69 | 41.80 | 50.92 | 57.38 | 27.99 | 37.12 | 56.10 | 41.97 | 51.10 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.89 | | EVENING LEQ | 57.43 | | NIGHT LEQ | 57.42 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.83 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 9900.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 247.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 276.37 | 0.12 | 0.15 | 51.30 | 0.01 | 0.01 | 38.17 | 0.13 | 0.15 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 15.98 | -17.47 | -16.72 | 8.67 | -31.28 | -30.52 | 7.38 | -17.30 | -16.54 | | |
| Distance | -7.01 | -7.01 | -7.01 | -7.01 | -7.01 | -7.01 | -7.01 | -7.01 | -7.01 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.54 |
| LEQ | 59.51 | 32.23 | 36.48 | 52.20 | 18.43 | 22.68 | 50.92 | 32.41 | 36.66 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.54 | | EVENING LEQ | 52.21 | | NIGHT LEQ | 51.14 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 9900.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 78.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 276.37 | 0.12 | 0.15 | 51.30 | 0.01 | 0.01 | 38.17 | 0.13 | 0.15 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 15.98 | -17.47 | -16.72 | 8.67 | -31.28 | -30.52 | 7.38 | -17.30 | -16.54 | | |
| Distance | -2.00 | -2.00 | -2.00 | -2.00 | -2.00 | -2.00 | -2.00 | -2.00 | -2.00 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.55 |
| LEQ | 64.52 | 37.23 | 41.49 | 57.21 | 23.43 | 27.69 | 55.92 | 37.41 | 41.67 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.55 | | EVENING LEQ | 57.21 | | NIGHT LEQ | 56.14 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 9900.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 25.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 276.37 | 0.12 | 0.15 | 51.30 | 0.01 | 0.01 | 38.17 | 0.13 | 0.15 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 15.98 | -17.47 | -16.72 | 8.67 | -31.28 | -30.52 | 7.38 | -17.30 | -16.54 | | |
| Distance | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.96 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.49 |
| LEQ | 69.46 | 42.18 | 46.43 | 62.15 | 28.37 | 32.63 | 60.86 | 42.35 | 46.61 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.49 | | EVENING LEQ | 62.15 | | NIGHT LEQ | 61.08 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.96 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 15800.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 395.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 441.07 | 0.20 | 0.24 | 81.87 | 0.01 | 0.01 | 60.92 | 0.21 | 0.25 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 18.01 | -15.44 | -14.69 | 10.70 | -29.25 | -28.49 | 9.41 | -15.27 | -14.51 | | |
| Distance | -9.05 | -9.05 | -9.05 | -9.05 | -9.05 | -9.05 | -9.05 | -9.05 | -9.05 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.53 |
| LEQ | 59.50 | 32.22 | 36.47 | 52.19 | 18.42 | 22.67 | 50.91 | 32.40 | 36.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.53 | | EVENING LEQ | 52.20 | | NIGHT LEQ | 51.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 15800.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 125.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 441.07 | 0.20 | 0.24 | 81.87 | 0.01 | 0.01 | 60.92 | 0.21 | 0.25 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 18.01 | -15.44 | -14.69 | 10.70 | -29.25 | -28.49 | 9.41 | -15.27 | -14.51 | | |
| Distance | -4.05 | -4.05 | -4.05 | -4.05 | -4.05 | -4.05 | -4.05 | -4.05 | -4.05 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.53 |
| LEQ | 64.50 | 37.22 | 41.47 | 57.19 | 23.41 | 27.67 | 55.90 | 37.39 | 41.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.53 | | EVENING LEQ | 57.19 | | NIGHT LEQ | 56.12 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **South of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 15800.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 39.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 441.07 | 0.20 | 0.24 | 81.87 | 0.01 | 0.01 | 60.92 | 0.21 | 0.25 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 18.01 | -15.44 | -14.69 | 10.70 | -29.25 | -28.49 | 9.41 | -15.27 | -14.51 | | |
| Distance | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.06 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.59 |
| LEQ | 69.56 | 42.27 | 46.53 | 62.25 | 28.47 | 32.73 | 60.96 | 42.45 | 46.71 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.59 | | EVENING LEQ | 62.25 | | NIGHT LEQ | 61.18 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.06 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 18000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 89.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 479.55 | 0.32 | 0.90 | 89.01 | 0.01 | 0.04 | 66.24 | 0.34 | 0.94 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.06 | -10.64 | -6.20 | 13.75 | -24.44 | -20.01 | 12.46 | -10.46 | -6.03 | | |
| Distance | -2.57 | -2.57 | -2.57 | -2.57 | -2.57 | -2.57 | -2.57 | -2.57 | -2.57 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 59.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.87 |
| LEQ | 58.60 | 36.61 | 46.27 | 51.28 | 22.81 | 32.47 | 50.00 | 36.79 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.87 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 59.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 18000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 28.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 479.55 | 0.32 | 0.90 | 89.01 | 0.01 | 0.04 | 66.24 | 0.34 | 0.94 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.06 | -10.64 | -6.20 | 13.75 | -24.44 | -20.01 | 12.46 | -10.46 | -6.03 | | |
| Distance | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.64 | 51.29 | 56.31 | 27.83 | 37.49 | 55.02 | 41.81 | 51.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 18000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 9.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 479.55 | 0.32 | 0.90 | 89.01 | 0.01 | 0.04 | 66.24 | 0.34 | 0.94 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.06 | -10.64 | -6.20 | 13.75 | -24.44 | -20.01 | 12.46 | -10.46 | -6.03 | | |
| Distance | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.94 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.82 |
| LEQ | 68.55 | 46.56 | 56.22 | 61.23 | 32.76 | 42.42 | 59.95 | 46.74 | 56.40 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.82 | | EVENING LEQ | 61.30 | | NIGHT LEQ | 61.68 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.94 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 18200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 90.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 484.88 | 0.33 | 0.91 | 90.00 | 0.01 | 0.04 | 66.98 | 0.34 | 0.95 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.11 | -10.59 | -6.16 | 13.80 | -24.40 | -19.96 | 12.51 | -10.42 | -5.98 | | |
| Distance | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 59.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.87 |
| LEQ | 58.60 | 36.61 | 46.27 | 51.28 | 22.81 | 32.47 | 50.00 | 36.79 | 46.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.87 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 59.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | | 18200.00 |
| | | | | | | | | | | SPEED | | 35.00 |
| | | | | | | | | | | DISTANCE | | 28.00 |
| INPUT PARAMETERS | | | | | | | | | | | | |
| Vehicles per hour | 484.88 | 0.33 | 0.91 | 90.00 | 0.01 | 0.04 | 66.98 | 0.34 | 0.95 | % A | | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | | 5 |
| ADJUSTMENTS | | | | | | | | | | | | |
| Flow | 21.11 | -10.59 | -6.16 | 13.80 | -24.40 | -19.96 | 12.51 | -10.42 | -5.98 | | | |
| Distance | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | LEFT | | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | | 65.06 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | | 63.94 |
| LEQ | 63.67 | 41.68 | 51.34 | 56.35 | 27.88 | 37.54 | 55.07 | 41.86 | 51.52 | Day hour | | 89.00 |
| | | | | | | | | | | Absorbtive? | no | |
| | DAY LEQ | 63.94 | | EVENING LEQ | 56.42 | | NIGHT LEQ | 56.80 | | Use hour? | no | |
| | | | | | | | | | | GRADE dB | | 0.00 |
| | CNEL | | 65.06 | | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 18200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 9.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 484.88 | 0.33 | 0.91 | 90.00 | 0.01 | 0.04 | 66.98 | 0.34 | 0.95 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.11 | -10.59 | -6.16 | 13.80 | -24.40 | -19.96 | 12.51 | -10.42 | -5.98 | | |
| Distance | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | 7.38 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.87 |
| LEQ | 68.60 | 46.61 | 56.27 | 61.28 | 32.81 | 42.47 | 60.00 | 46.79 | 56.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.87 | | EVENING LEQ | 61.35 | | NIGHT LEQ | 61.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **120th Street to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 135.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 729.98 | 0.49 | 1.37 | 135.49 | 0.02 | 0.06 | 100.83 | 0.51 | 1.43 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.89 | -8.82 | -4.38 | 15.57 | -22.62 | -18.18 | 14.29 | -8.64 | -4.20 | | |
| Distance | -4.38 | -4.38 | -4.38 | -4.38 | -4.38 | -4.38 | -4.38 | -4.38 | -4.38 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.83 | 32.48 | 50.02 | 36.81 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **120th Street to El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 43.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 729.98 | 0.49 | 1.37 | 135.49 | 0.02 | 0.06 | 100.83 | 0.51 | 1.43 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.89 | -8.82 | -4.38 | 15.57 | -22.62 | -18.18 | 14.29 | -8.64 | -4.20 | | |
| Distance | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.97 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.85 |
| LEQ | 63.58 | 41.60 | 51.25 | 56.27 | 27.79 | 37.45 | 54.98 | 41.77 | 51.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.85 | | EVENING LEQ | 56.33 | | NIGHT LEQ | 56.71 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.97 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **120th Street to El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 14.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 729.98 | 0.49 | 1.37 | 135.49 | 0.02 | 0.06 | 100.83 | 0.51 | 1.43 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.89 | -8.82 | -4.38 | 15.57 | -22.62 | -18.18 | 14.29 | -8.64 | -4.20 | | |
| Distance | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.85 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.73 |
| LEQ | 68.45 | 46.47 | 56.13 | 61.14 | 32.67 | 42.32 | 59.86 | 46.65 | 56.30 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.73 | | EVENING LEQ | 61.20 | | NIGHT LEQ | 61.59 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.85 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 133.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 719.33 | 0.49 | 1.35 | 133.52 | 0.02 | 0.06 | 99.36 | 0.51 | 1.41 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.82 | -8.88 | -4.44 | 15.51 | -22.68 | -18.25 | 14.23 | -8.70 | -4.27 | | |
| Distance | -4.32 | -4.32 | -4.32 | -4.32 | -4.32 | -4.32 | -4.32 | -4.32 | -4.32 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.83 | 32.48 | 50.02 | 36.81 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 42.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 719.33 | 0.49 | 1.35 | 133.52 | 0.02 | 0.06 | 99.36 | 0.51 | 1.41 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.82 | -8.88 | -4.44 | 15.51 | -22.68 | -18.25 | 14.23 | -8.70 | -4.27 | | |
| Distance | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.64 | 51.29 | 56.31 | 27.83 | 37.49 | 55.02 | 41.81 | 51.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 13.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 719.33 | 0.49 | 1.35 | 133.52 | 0.02 | 0.06 | 99.36 | 0.51 | 1.41 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.82 | -8.88 | -4.44 | 15.51 | -22.68 | -18.25 | 14.23 | -8.70 | -4.27 | | |
| Distance | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.99 |
| LEQ | 68.71 | 46.73 | 56.38 | 61.40 | 32.93 | 42.58 | 60.12 | 46.91 | 56.56 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.99 | | EVENING LEQ | 61.46 | | NIGHT LEQ | 61.84 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.11 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 118.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 636.74 | 0.43 | 1.20 | 118.19 | 0.02 | 0.05 | 87.95 | 0.45 | 1.24 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.29 | -9.41 | -4.97 | 14.98 | -23.21 | -18.77 | 13.70 | -9.23 | -4.80 | | |
| Distance | -3.80 | -3.80 | -3.80 | -3.80 | -3.80 | -3.80 | -3.80 | -3.80 | -3.80 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.60 | 36.62 | 46.27 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 37.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 636.74 | 0.43 | 1.20 | 118.19 | 0.02 | 0.05 | 87.95 | 0.45 | 1.24 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.29 | -9.41 | -4.97 | 14.98 | -23.21 | -18.77 | 13.70 | -9.23 | -4.80 | | |
| Distance | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.91 |
| LEQ | 63.64 | 41.66 | 51.31 | 56.33 | 27.85 | 37.51 | 55.04 | 41.83 | 51.49 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.91 | | EVENING LEQ | 56.39 | | NIGHT LEQ | 56.77 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 12.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 636.74 | 0.43 | 1.20 | 118.19 | 0.02 | 0.05 | 87.95 | 0.45 | 1.24 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.29 | -9.41 | -4.97 | 14.98 | -23.21 | -18.77 | 13.70 | -9.23 | -4.80 | | |
| Distance | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.92 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.80 |
| LEQ | 68.53 | 46.55 | 56.20 | 61.22 | 32.74 | 42.40 | 59.93 | 46.72 | 56.38 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.80 | | EVENING LEQ | 61.28 | | NIGHT LEQ | 61.66 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.92 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **North of Lennox Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 156.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 844.54 | 0.57 | 1.59 | 156.76 | 0.02 | 0.07 | 116.66 | 0.59 | 1.65 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.52 | -8.18 | -3.75 | 16.21 | -21.99 | -17.55 | 14.92 | -8.01 | -3.57 | | |
| Distance | -5.01 | -5.01 | -5.01 | -5.01 | -5.01 | -5.01 | -5.01 | -5.01 | -5.01 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.62 | 36.63 | 46.29 | 51.30 | 22.83 | 32.49 | 50.02 | 36.81 | 46.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **North of Lennox Bouelvard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 31700.00 |
| Vehicles per hour | 844.54 | 0.57 | 1.59 | 156.76 | 0.02 | 0.07 | 116.66 | 0.59 | 1.65 | SPEED | 35.00 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | DISTANCE | 49.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | 92 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | 3 |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.52 | -8.18 | -3.75 | 16.21 | -21.99 | -17.55 | 14.92 | -8.01 | -3.57 | | |
| Distance | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.92 |
| LEQ | 63.65 | 41.66 | 51.32 | 56.33 | 27.86 | 37.52 | 55.05 | 41.84 | 51.49 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.92 | | EVENING LEQ | 56.40 | | NIGHT LEQ | 56.78 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **North of Lennox Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 844.54 | 0.57 | 1.59 | 156.76 | 0.02 | 0.07 | 116.66 | 0.59 | 1.65 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.52 | -8.18 | -3.75 | 16.21 | -21.99 | -17.55 | 14.92 | -8.01 | -3.57 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.90 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.78 |
| LEQ | 68.51 | 46.52 | 56.18 | 61.19 | 32.72 | 42.38 | 59.91 | 46.70 | 56.36 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.78 | | EVENING LEQ | 61.26 | | NIGHT LEQ | 61.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.90 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Lennox Boulevard to I-105 WB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 175.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 948.44 | 0.64 | 1.78 | 176.04 | 0.03 | 0.07 | 131.01 | 0.67 | 1.85 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.02 | -7.68 | -3.24 | 16.71 | -21.48 | -17.04 | 15.43 | -7.50 | -3.07 | | |
| Distance | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.90 |
| LEQ | 58.62 | 36.64 | 46.29 | 51.31 | 22.84 | 32.49 | 50.03 | 36.82 | 46.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.90 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Lennox Bouelvard to I-105 WB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 55.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 948.44 | 0.64 | 1.78 | 176.04 | 0.03 | 0.07 | 131.01 | 0.67 | 1.85 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.02 | -7.68 | -3.24 | 16.71 | -21.48 | -17.04 | 15.43 | -7.50 | -3.07 | | |
| Distance | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.92 |
| LEQ | 63.65 | 41.66 | 51.32 | 56.34 | 27.86 | 37.52 | 55.05 | 41.84 | 51.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.92 | | EVENING LEQ | 56.40 | | NIGHT LEQ | 56.78 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Lennox Boulevard to I-105 WB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 17.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 948.44 | 0.64 | 1.78 | 176.04 | 0.03 | 0.07 | 131.01 | 0.67 | 1.85 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.02 | -7.68 | -3.24 | 16.71 | -21.48 | -17.04 | 15.43 | -7.50 | -3.07 | | |
| Distance | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.14 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.02 |
| LEQ | 68.75 | 46.76 | 56.42 | 61.43 | 32.96 | 42.62 | 60.15 | 46.94 | 56.60 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.02 | | EVENING LEQ | 61.50 | | NIGHT LEQ | 61.88 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.14 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **I-105 WB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 161.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 868.52 | 0.59 | 1.63 | 161.21 | 0.02 | 0.07 | 119.97 | 0.61 | 1.70 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.64 | -8.06 | -3.62 | 16.33 | -21.86 | -17.43 | 15.04 | -7.88 | -3.45 | | |
| Distance | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.60 | 36.62 | 46.27 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **I-105 WB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 51.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 868.52 | 0.59 | 1.63 | 161.21 | 0.02 | 0.07 | 119.97 | 0.61 | 1.70 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.64 | -8.06 | -3.62 | 16.33 | -21.86 | -17.43 | 15.04 | -7.88 | -3.45 | | |
| Distance | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.87 |
| LEQ | 63.60 | 41.61 | 51.27 | 56.28 | 27.81 | 37.46 | 55.00 | 41.79 | 51.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.87 | | EVENING LEQ | 56.34 | | NIGHT LEQ | 56.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **I-105 WB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 868.52 | 0.59 | 1.63 | 161.21 | 0.02 | 0.07 | 119.97 | 0.61 | 1.70 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.64 | -8.06 | -3.62 | 16.33 | -21.86 | -17.43 | 15.04 | -7.88 | -3.45 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.90 |
| LEQ | 68.63 | 46.64 | 56.30 | 61.32 | 32.84 | 42.50 | 60.03 | 46.82 | 56.48 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.90 | | EVENING LEQ | 61.38 | | NIGHT LEQ | 61.76 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 160.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 863.19 | 0.58 | 1.62 | 160.22 | 0.02 | 0.07 | 119.23 | 0.61 | 1.69 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.61 | -8.09 | -3.65 | 16.30 | -21.89 | -17.45 | 15.02 | -7.91 | -3.47 | | |
| Distance | -5.12 | -5.12 | -5.12 | -5.12 | -5.12 | -5.12 | -5.12 | -5.12 | -5.12 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.60 | 36.62 | 46.27 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 863.19 | 0.58 | 1.62 | 160.22 | 0.02 | 0.07 | 119.23 | 0.61 | 1.69 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.61 | -8.09 | -3.65 | 16.30 | -21.89 | -17.45 | 15.02 | -7.91 | -3.47 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.93 |
| LEQ | 63.65 | 41.67 | 51.32 | 56.34 | 27.87 | 37.52 | 55.06 | 41.85 | 51.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.93 | | EVENING LEQ | 56.40 | | NIGHT LEQ | 56.79 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.05 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 863.19 | 0.58 | 1.62 | 160.22 | 0.02 | 0.07 | 119.23 | 0.61 | 1.69 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.61 | -8.09 | -3.65 | 16.30 | -21.89 | -17.45 | 15.02 | -7.91 | -3.47 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.88 |
| LEQ | 68.60 | 46.62 | 56.27 | 61.29 | 32.82 | 42.47 | 60.01 | 46.80 | 56.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.88 | | EVENING LEQ | 61.35 | | NIGHT LEQ | 61.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33100.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 163.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 881.84 | 0.60 | 1.66 | 163.68 | 0.02 | 0.07 | 121.81 | 0.62 | 1.72 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.71 | -8.00 | -3.56 | 16.39 | -21.80 | -17.36 | 15.11 | -7.82 | -3.38 | | |
| Distance | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.61 | 36.63 | 46.29 | 51.30 | 22.83 | 32.48 | 50.02 | 36.81 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33100.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 51.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 881.84 | 0.60 | 1.66 | 163.68 | 0.02 | 0.07 | 121.81 | 0.62 | 1.72 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.71 | -8.00 | -3.56 | 16.39 | -21.80 | -17.36 | 15.11 | -7.82 | -3.38 | | |
| Distance | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.93 |
| LEQ | 63.66 | 41.68 | 51.33 | 56.35 | 27.87 | 37.53 | 55.06 | 41.85 | 51.51 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.93 | | EVENING LEQ | 56.41 | | NIGHT LEQ | 56.79 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.05 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33100.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 881.84 | 0.60 | 1.66 | 163.68 | 0.02 | 0.07 | 121.81 | 0.62 | 1.72 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.71 | -8.00 | -3.56 | 16.39 | -21.80 | -17.36 | 15.11 | -7.82 | -3.38 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.09 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.97 |
| LEQ | 68.70 | 46.71 | 56.37 | 61.38 | 32.91 | 42.56 | 60.10 | 46.89 | 56.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.97 | | EVENING LEQ | 61.44 | | NIGHT LEQ | 61.83 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.09 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Broadway to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 177.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 959.10 | 0.65 | 1.80 | 178.02 | 0.03 | 0.08 | 132.48 | 0.68 | 1.88 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.07 | -7.63 | -3.19 | 16.76 | -21.43 | -17.00 | 15.47 | -7.45 | -3.02 | | |
| Distance | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.62 | 36.64 | 46.29 | 51.31 | 22.84 | 32.49 | 50.02 | 36.81 | 46.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Broadway to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 56.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 959.10 | 0.65 | 1.80 | 178.02 | 0.03 | 0.08 | 132.48 | 0.68 | 1.88 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.07 | -7.63 | -3.19 | 16.76 | -21.43 | -17.00 | 15.47 | -7.45 | -3.02 | | |
| Distance | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.64 | 51.29 | 56.31 | 27.83 | 37.49 | 55.02 | 41.81 | 51.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Broadway to El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 18.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 959.10 | 0.65 | 1.80 | 178.02 | 0.03 | 0.08 | 132.48 | 0.68 | 1.88 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.07 | -7.63 | -3.19 | 16.76 | -21.43 | -17.00 | 15.47 | -7.45 | -3.02 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.94 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.82 |
| LEQ | 68.55 | 46.56 | 56.22 | 61.23 | 32.76 | 42.42 | 59.95 | 46.74 | 56.40 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.82 | | EVENING LEQ | 61.30 | | NIGHT LEQ | 61.68 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.94 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 177.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 956.44 | 0.65 | 1.80 | 177.53 | 0.03 | 0.07 | 132.11 | 0.67 | 1.87 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.06 | -7.64 | -3.21 | 16.75 | -21.44 | -17.01 | 15.46 | -7.47 | -3.03 | | |
| Distance | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | -5.56 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 56.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 956.44 | 0.65 | 1.80 | 177.53 | 0.03 | 0.07 | 132.11 | 0.67 | 1.87 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.06 | -7.64 | -3.21 | 16.75 | -21.44 | -17.01 | 15.46 | -7.47 | -3.03 | | |
| Distance | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.88 |
| LEQ | 63.61 | 41.62 | 51.28 | 56.29 | 27.82 | 37.48 | 55.01 | 41.80 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.88 | | EVENING LEQ | 56.36 | | NIGHT LEQ | 56.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 18.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 956.44 | 0.65 | 1.80 | 177.53 | 0.03 | 0.07 | 132.11 | 0.67 | 1.87 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.06 | -7.64 | -3.21 | 16.75 | -21.44 | -17.01 | 15.46 | -7.47 | -3.03 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.93 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.81 |
| LEQ | 68.54 | 46.55 | 56.21 | 61.22 | 32.75 | 42.41 | 59.94 | 46.73 | 56.38 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.81 | | EVENING LEQ | 61.29 | | NIGHT LEQ | 61.67 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.93 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 155.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 839.21 | 0.57 | 1.58 | 155.77 | 0.02 | 0.07 | 115.92 | 0.59 | 1.64 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.49 | -8.21 | -3.77 | 16.18 | -22.01 | -17.58 | 14.90 | -8.03 | -3.60 | | |
| Distance | -4.98 | -4.98 | -4.98 | -4.98 | -4.98 | -4.98 | -4.98 | -4.98 | -4.98 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.62 | 36.63 | 46.29 | 51.30 | 22.83 | 32.49 | 50.02 | 36.81 | 46.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 49.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 839.21 | 0.57 | 1.58 | 155.77 | 0.02 | 0.07 | 115.92 | 0.59 | 1.64 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.49 | -8.21 | -3.77 | 16.18 | -22.01 | -17.58 | 14.90 | -8.03 | -3.60 | | |
| Distance | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.64 | 51.29 | 56.31 | 27.83 | 37.49 | 55.02 | 41.81 | 51.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 15.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 839.21 | 0.57 | 1.58 | 155.77 | 0.02 | 0.07 | 115.92 | 0.59 | 1.64 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.49 | -8.21 | -3.77 | 16.18 | -22.01 | -17.58 | 14.90 | -8.03 | -3.60 | | |
| Distance | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.15 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.03 |
| LEQ | 68.76 | 46.78 | 56.43 | 61.45 | 32.97 | 42.63 | 60.16 | 46.95 | 56.61 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.03 | | EVENING LEQ | 61.51 | | NIGHT LEQ | 61.89 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.15 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 165.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 892.50 | 0.60 | 1.68 | 165.66 | 0.03 | 0.07 | 123.28 | 0.63 | 1.74 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.76 | -7.94 | -3.51 | 16.45 | -21.75 | -17.31 | 15.16 | -7.77 | -3.33 | | |
| Distance | -5.26 | -5.26 | -5.26 | -5.26 | -5.26 | -5.26 | -5.26 | -5.26 | -5.26 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.83 | 32.48 | 50.02 | 36.81 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 52.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 892.50 | 0.60 | 1.68 | 165.66 | 0.03 | 0.07 | 123.28 | 0.63 | 1.74 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.76 | -7.94 | -3.51 | 16.45 | -21.75 | -17.31 | 15.16 | -7.77 | -3.33 | | |
| Distance | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.90 |
| LEQ | 63.63 | 41.64 | 51.30 | 56.32 | 27.84 | 37.50 | 55.03 | 41.82 | 51.48 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.90 | | EVENING LEQ | 56.38 | | NIGHT LEQ | 56.76 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 892.50 | 0.60 | 1.68 | 165.66 | 0.03 | 0.07 | 123.28 | 0.63 | 1.74 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.76 | -7.94 | -3.51 | 16.45 | -21.75 | -17.31 | 15.16 | -7.77 | -3.33 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.14 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.02 |
| LEQ | 68.75 | 46.76 | 56.42 | 61.43 | 32.96 | 42.62 | 60.15 | 46.94 | 56.60 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.02 | | EVENING LEQ | 61.50 | | NIGHT LEQ | 61.88 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.14 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 30200.00 |
| Vehicles per hour | 804.58 | 0.54 | 1.51 | 149.34 | 0.02 | 0.06 | 111.14 | 0.57 | 1.57 | SPEED | 40.00 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | DISTANCE | 208.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | 92 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | 3 |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.73 | -8.97 | -4.54 | 15.42 | -22.78 | -18.34 | 14.13 | -8.80 | -4.36 | | |
| Distance | -6.26 | -6.26 | -6.26 | -6.26 | -6.26 | -6.26 | -6.26 | -6.26 | -6.26 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.04 |
| LEQ | 58.83 | 36.08 | 45.36 | 51.51 | 22.28 | 31.56 | 50.23 | 36.26 | 45.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.04 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 30200.00 |
| Vehicles per hour | 804.58 | 0.54 | 1.51 | 149.34 | 0.02 | 0.06 | 111.14 | 0.57 | 1.57 | SPEED | 35.00 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | DISTANCE | 47.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | 92 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | 3 |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.31 | -8.39 | -3.96 | 16.00 | -22.20 | -17.76 | 14.71 | -8.22 | -3.78 | | |
| Distance | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.63 | 51.29 | 56.30 | 27.83 | 37.49 | 55.02 | 41.81 | 51.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 30200.00 |
| Vehicles per hour | 804.58 | 0.54 | 1.51 | 149.34 | 0.02 | 0.06 | 111.14 | 0.57 | 1.57 | SPEED | 35.00 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | DISTANCE | 15.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | 92 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | 3 |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.31 | -8.39 | -3.96 | 16.00 | -22.20 | -17.76 | 14.71 | -8.22 | -3.78 | | |
| Distance | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.97 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.85 |
| LEQ | 68.58 | 46.59 | 56.25 | 61.26 | 32.79 | 42.45 | 59.98 | 46.77 | 56.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.85 | | EVENING LEQ | 61.33 | | NIGHT LEQ | 61.71 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.97 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 222.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 857.86 | 0.58 | 1.61 | 159.23 | 0.02 | 0.07 | 118.50 | 0.60 | 1.68 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.01 | -8.70 | -4.26 | 15.69 | -22.50 | -18.06 | 14.41 | -8.52 | -4.08 | | |
| Distance | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.04 |
| LEQ | 58.82 | 36.07 | 45.36 | 51.51 | 22.27 | 31.56 | 50.23 | 36.25 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.04 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 857.86 | 0.58 | 1.61 | 159.23 | 0.02 | 0.07 | 118.50 | 0.60 | 1.68 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.59 | -8.12 | -3.68 | 16.27 | -21.92 | -17.48 | 14.99 | -7.94 | -3.50 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.90 |
| LEQ | 63.63 | 41.64 | 51.30 | 56.31 | 27.84 | 37.50 | 55.03 | 41.82 | 51.48 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.90 | | EVENING LEQ | 56.38 | | NIGHT LEQ | 56.76 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 857.86 | 0.58 | 1.61 | 159.23 | 0.02 | 0.07 | 118.50 | 0.60 | 1.68 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.59 | -8.12 | -3.68 | 16.27 | -21.92 | -17.48 | 14.99 | -7.94 | -3.50 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.97 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.85 |
| LEQ | 68.58 | 46.59 | 56.25 | 61.26 | 32.79 | 42.44 | 59.98 | 46.77 | 56.42 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.85 | | EVENING LEQ | 61.32 | | NIGHT LEQ | 61.71 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.97 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 26200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 180.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 698.01 | 0.47 | 1.31 | 129.56 | 0.02 | 0.05 | 96.42 | 0.49 | 1.36 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.11 | -9.59 | -5.15 | 14.80 | -23.39 | -18.96 | 13.52 | -9.41 | -4.98 | | |
| Distance | -5.63 | -5.63 | -5.63 | -5.63 | -5.63 | -5.63 | -5.63 | -5.63 | -5.63 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.05 |
| LEQ | 58.84 | 36.09 | 45.37 | 51.53 | 22.29 | 31.57 | 50.24 | 36.27 | 45.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.05 | | EVENING LEQ | 51.57 | | NIGHT LEQ | 51.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 26200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 41.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 698.01 | 0.47 | 1.31 | 129.56 | 0.02 | 0.05 | 96.42 | 0.49 | 1.36 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.69 | -9.01 | -4.57 | 15.38 | -22.81 | -18.38 | 14.09 | -8.83 | -4.40 | | |
| Distance | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.87 |
| LEQ | 63.59 | 41.61 | 51.26 | 56.28 | 27.81 | 37.46 | 55.00 | 41.79 | 51.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.87 | | EVENING LEQ | 56.34 | | NIGHT LEQ | 56.72 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **Imperial Hwy to 120th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 26200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 13.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 698.01 | 0.47 | 1.31 | 129.56 | 0.02 | 0.05 | 96.42 | 0.49 | 1.36 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.69 | -9.01 | -4.57 | 15.38 | -22.81 | -18.38 | 14.09 | -8.83 | -4.40 | | |
| Distance | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | 5.78 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.97 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.85 |
| LEQ | 68.58 | 46.60 | 56.25 | 61.27 | 32.80 | 42.45 | 59.99 | 46.77 | 56.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.85 | | EVENING LEQ | 61.33 | | NIGHT LEQ | 61.71 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.97 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **South of 139th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 30400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 210.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 809.91 | 0.55 | 1.52 | 150.33 | 0.02 | 0.06 | 111.87 | 0.57 | 1.58 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.76 | -8.94 | -4.51 | 15.44 | -22.75 | -18.31 | 14.16 | -8.77 | -4.33 | | |
| Distance | -6.30 | -6.30 | -6.30 | -6.30 | -6.30 | -6.30 | -6.30 | -6.30 | -6.30 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.82 | 36.07 | 45.35 | 51.50 | 22.26 | 31.55 | 50.22 | 36.24 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **South of 139th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 30400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 47.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 809.91 | 0.55 | 1.52 | 150.33 | 0.02 | 0.06 | 111.87 | 0.57 | 1.58 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.34 | -8.37 | -3.93 | 16.02 | -22.17 | -17.73 | 14.74 | -8.19 | -3.75 | | |
| Distance | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.92 |
| LEQ | 63.65 | 41.66 | 51.32 | 56.33 | 27.86 | 37.51 | 55.05 | 41.84 | 51.49 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.92 | | EVENING LEQ | 56.40 | | NIGHT LEQ | 56.78 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **South of 139th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 30400.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 15.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 809.91 | 0.55 | 1.52 | 150.33 | 0.02 | 0.06 | 111.87 | 0.57 | 1.58 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.34 | -8.37 | -3.93 | 16.02 | -22.17 | -17.73 | 14.74 | -8.19 | -3.75 | | |
| Distance | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.88 |
| LEQ | 68.61 | 46.62 | 56.28 | 61.29 | 32.82 | 42.47 | 60.01 | 46.80 | 56.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.88 | | EVENING LEQ | 61.36 | | NIGHT LEQ | 61.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNELNoise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-105 WB Off-Ramp**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 9400.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 235.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 262.41 | 0.12 | 0.14 | 48.71 | 0.00 | 0.01 | 36.25 | 0.12 | 0.15 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 15.75 | -17.70 | -16.94 | 8.44 | -31.50 | -30.74 | 7.16 | -17.52 | -16.77 | | |
| Distance | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.53 |
| LEQ | 59.50 | 32.22 | 36.47 | 52.19 | 18.42 | 22.67 | 50.91 | 32.40 | 36.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.53 | | EVENING LEQ | 52.20 | | NIGHT LEQ | 51.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**
**65 dBA CNELNoise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**
Road: **I-105 WB Off-Ramp**
Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 9400.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 74.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 262.41 | 0.12 | 0.14 | 48.71 | 0.00 | 0.01 | 36.25 | 0.12 | 0.15 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 15.75 | -17.70 | -16.94 | 8.44 | -31.50 | -30.74 | 7.16 | -17.52 | -16.77 | | |
| Distance | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.55 |
| LEQ | 64.52 | 37.24 | 41.49 | 57.21 | 23.44 | 27.69 | 55.93 | 37.42 | 41.67 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.55 | | EVENING LEQ | 57.22 | | NIGHT LEQ | 56.14 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNELNoise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-105 WB Off-Ramp**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 9400.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 23.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 262.41 | 0.12 | 0.14 | 48.71 | 0.00 | 0.01 | 36.25 | 0.12 | 0.15 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 15.75 | -17.70 | -16.94 | 8.44 | -31.50 | -30.74 | 7.16 | -17.52 | -16.77 | | |
| Distance | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.10 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.63 |
| LEQ | 69.60 | 42.31 | 46.57 | 62.28 | 28.51 | 32.77 | 61.00 | 42.49 | 46.74 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.63 | | EVENING LEQ | 62.29 | | NIGHT LEQ | 61.22 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.10 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 134.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 735.31 | 0.50 | 1.38 | 136.48 | 0.02 | 0.06 | 101.57 | 0.52 | 1.44 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.92 | -8.78 | -4.35 | 15.60 | -22.59 | -18.15 | 14.32 | -8.61 | -4.17 | | |
| Distance | -4.35 | -4.35 | -4.35 | -4.35 | -4.35 | -4.35 | -4.35 | -4.35 | -4.35 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.07 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.95 |
| LEQ | 58.68 | 36.69 | 46.35 | 51.36 | 22.89 | 32.54 | 50.08 | 36.87 | 46.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.95 | | EVENING LEQ | 51.43 | | NIGHT LEQ | 51.81 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.07 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 43.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 735.31 | 0.50 | 1.38 | 136.48 | 0.02 | 0.06 | 101.57 | 0.52 | 1.44 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.92 | -8.78 | -4.35 | 15.60 | -22.59 | -18.15 | 14.32 | -8.61 | -4.17 | | |
| Distance | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.61 | 41.63 | 51.28 | 56.30 | 27.83 | 37.48 | 55.02 | 41.81 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.36 | | NIGHT LEQ | 56.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 14.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 735.31 | 0.50 | 1.38 | 136.48 | 0.02 | 0.06 | 101.57 | 0.52 | 1.44 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.92 | -8.78 | -4.35 | 15.60 | -22.59 | -18.15 | 14.32 | -8.61 | -4.17 | | |
| Distance | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.88 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.76 |
| LEQ | 68.49 | 46.50 | 56.16 | 61.17 | 32.70 | 42.35 | 59.89 | 46.68 | 56.33 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.76 | | EVENING LEQ | 61.24 | | NIGHT LEQ | 61.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.88 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 145.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 785.93 | 0.53 | 1.48 | 145.88 | 0.02 | 0.06 | 108.56 | 0.55 | 1.54 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.21 | -8.50 | -4.06 | 15.89 | -22.30 | -17.86 | 14.61 | -8.32 | -3.88 | | |
| Distance | -4.69 | -4.69 | -4.69 | -4.69 | -4.69 | -4.69 | -4.69 | -4.69 | -4.69 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.90 |
| LEQ | 58.62 | 36.64 | 46.29 | 51.31 | 22.84 | 32.49 | 50.03 | 36.82 | 46.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.90 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 46.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 785.93 | 0.53 | 1.48 | 145.88 | 0.02 | 0.06 | 108.56 | 0.55 | 1.54 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.21 | -8.50 | -4.06 | 15.89 | -22.30 | -17.86 | 14.61 | -8.32 | -3.88 | | |
| Distance | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.88 |
| LEQ | 63.61 | 41.62 | 51.28 | 56.30 | 27.82 | 37.48 | 55.01 | 41.80 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.88 | | EVENING LEQ | 56.36 | | NIGHT LEQ | 56.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 15.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 785.93 | 0.53 | 1.48 | 145.88 | 0.02 | 0.06 | 108.56 | 0.55 | 1.54 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.21 | -8.50 | -4.06 | 15.89 | -22.30 | -17.86 | 14.61 | -8.32 | -3.88 | | |
| Distance | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.87 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.75 |
| LEQ | 68.48 | 46.49 | 56.15 | 61.16 | 32.69 | 42.34 | 59.88 | 46.67 | 56.32 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.75 | | EVENING LEQ | 61.22 | | NIGHT LEQ | 61.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.87 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 154.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 831.22 | 0.56 | 1.56 | 154.28 | 0.02 | 0.07 | 114.82 | 0.59 | 1.63 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.45 | -8.25 | -3.82 | 16.14 | -22.05 | -17.62 | 14.85 | -8.07 | -3.64 | | |
| Distance | -4.96 | -4.96 | -4.96 | -4.96 | -4.96 | -4.96 | -4.96 | -4.96 | -4.96 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.60 | 36.62 | 46.28 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 49.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 831.22 | 0.56 | 1.56 | 154.28 | 0.02 | 0.07 | 114.82 | 0.59 | 1.63 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.45 | -8.25 | -3.82 | 16.14 | -22.05 | -17.62 | 14.85 | -8.07 | -3.64 | | |
| Distance | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.97 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.85 |
| LEQ | 63.58 | 41.59 | 51.25 | 56.26 | 27.79 | 37.45 | 54.98 | 41.77 | 51.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.85 | | EVENING LEQ | 56.33 | | NIGHT LEQ | 56.71 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.97 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31200.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 15.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 831.22 | 0.56 | 1.56 | 154.28 | 0.02 | 0.07 | 114.82 | 0.59 | 1.63 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.45 | -8.25 | -3.82 | 16.14 | -22.05 | -17.62 | 14.85 | -8.07 | -3.64 | | |
| Distance | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.99 |
| LEQ | 68.72 | 46.73 | 56.39 | 61.41 | 32.93 | 42.59 | 60.12 | 46.91 | 56.57 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.99 | | EVENING LEQ | 61.47 | | NIGHT LEQ | 61.85 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.11 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 143.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 772.61 | 0.52 | 1.45 | 143.41 | 0.02 | 0.06 | 106.72 | 0.54 | 1.51 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.13 | -8.57 | -4.13 | 15.82 | -22.37 | -17.93 | 14.54 | -8.39 | -3.96 | | |
| Distance | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 45.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 772.61 | 0.52 | 1.45 | 143.41 | 0.02 | 0.06 | 106.72 | 0.54 | 1.51 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.13 | -8.57 | -4.13 | 15.82 | -22.37 | -17.93 | 14.54 | -8.39 | -3.96 | | |
| Distance | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.90 |
| LEQ | 63.63 | 41.65 | 51.30 | 56.32 | 27.84 | 37.50 | 55.03 | 41.82 | 51.48 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.90 | | EVENING LEQ | 56.38 | | NIGHT LEQ | 56.76 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 14.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 772.61 | 0.52 | 1.45 | 143.41 | 0.02 | 0.06 | 106.72 | 0.54 | 1.51 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.13 | -8.57 | -4.13 | 15.82 | -22.37 | -17.93 | 14.54 | -8.39 | -3.96 | | |
| Distance | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.09 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.97 |
| LEQ | 68.70 | 46.72 | 56.37 | 61.39 | 32.91 | 42.57 | 60.10 | 46.89 | 56.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.97 | | EVENING LEQ | 61.45 | | NIGHT LEQ | 61.83 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.09 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 17700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 115.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 528.69 | 0.12 | 0.02 | 97.69 | 0.01 | 0.00 | 73.41 | 0.12 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 20.91 | -15.46 | -23.52 | 13.57 | -28.98 | -32.94 | 12.33 | -15.46 | -23.52 | | |
| Distance | -3.69 | -3.69 | -3.69 | -3.69 | -3.69 | -3.69 | -3.69 | -3.69 | -3.69 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.59 |
| LEQ | 59.58 | 32.17 | 28.96 | 52.24 | 18.65 | 19.54 | 51.00 | 32.17 | 28.96 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.59 | | EVENING LEQ | 52.25 | | NIGHT LEQ | 51.09 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 17700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 36.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 528.69 | 0.12 | 0.02 | 97.69 | 0.01 | 0.00 | 73.41 | 0.12 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 20.91 | -15.46 | -23.52 | 13.57 | -28.98 | -32.94 | 12.33 | -15.46 | -23.52 | | |
| Distance | 1.36 | 1.36 | 1.36 | 1.36 | 1.36 | 1.36 | 1.36 | 1.36 | 1.36 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.06 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.63 |
| LEQ | 64.62 | 37.21 | 34.00 | 57.29 | 23.69 | 24.58 | 56.05 | 37.21 | 34.00 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.63 | | EVENING LEQ | 57.29 | | NIGHT LEQ | 56.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.06 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 17700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 12.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 528.69 | 0.12 | 0.02 | 97.69 | 0.01 | 0.00 | 73.41 | 0.12 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 20.91 | -15.46 | -23.52 | 13.57 | -28.98 | -32.94 | 12.33 | -15.46 | -23.52 | | |
| Distance | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.83 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.40 |
| LEQ | 69.39 | 41.98 | 38.77 | 62.06 | 28.46 | 29.35 | 60.82 | 41.98 | 38.77 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.40 | | EVENING LEQ | 62.06 | | NIGHT LEQ | 60.90 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.83 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 139.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 639.20 | 0.15 | 0.02 | 118.11 | 0.01 | 0.00 | 88.76 | 0.15 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.73 | -14.63 | -22.69 | 14.40 | -28.16 | -32.11 | 13.16 | -14.63 | -22.69 | | |
| Distance | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.59 |
| LEQ | 59.58 | 32.17 | 28.96 | 52.25 | 18.65 | 19.54 | 51.01 | 32.17 | 28.96 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.59 | | EVENING LEQ | 52.25 | | NIGHT LEQ | 51.09 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 44.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 639.20 | 0.15 | 0.02 | 118.11 | 0.01 | 0.00 | 88.76 | 0.15 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.73 | -14.63 | -22.69 | 14.40 | -28.16 | -32.11 | 13.16 | -14.63 | -22.69 | | |
| Distance | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.59 |
| LEQ | 64.58 | 37.16 | 33.95 | 57.24 | 23.64 | 24.53 | 56.00 | 37.16 | 33.95 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.59 | | EVENING LEQ | 57.25 | | NIGHT LEQ | 56.08 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 14.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 639.20 | 0.15 | 0.02 | 118.11 | 0.01 | 0.00 | 88.76 | 0.15 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.73 | -14.63 | -22.69 | 14.40 | -28.16 | -32.11 | 13.16 | -14.63 | -22.69 | | |
| Distance | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.56 |
| LEQ | 69.55 | 42.14 | 38.93 | 62.21 | 28.62 | 29.51 | 60.97 | 42.14 | 38.93 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.56 | | EVENING LEQ | 62.22 | | NIGHT LEQ | 61.06 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 151.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 692.97 | 0.16 | 0.03 | 128.05 | 0.01 | 0.00 | 96.22 | 0.16 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.08 | -14.28 | -22.34 | 14.75 | -27.80 | -31.76 | 13.51 | -14.28 | -22.34 | | |
| Distance | -4.87 | -4.87 | -4.87 | -4.87 | -4.87 | -4.87 | -4.87 | -4.87 | -4.87 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.58 |
| LEQ | 59.57 | 32.16 | 28.95 | 52.24 | 18.64 | 19.53 | 51.00 | 32.16 | 28.95 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.58 | | EVENING LEQ | 52.24 | | NIGHT LEQ | 51.08 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 692.97 | 0.16 | 0.03 | 128.05 | 0.01 | 0.00 | 96.22 | 0.16 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.08 | -14.28 | -22.34 | 14.75 | -27.80 | -31.76 | 13.51 | -14.28 | -22.34 | | |
| Distance | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.56 |
| LEQ | 64.55 | 37.14 | 33.93 | 57.21 | 23.62 | 24.51 | 55.97 | 37.14 | 33.93 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.56 | | EVENING LEQ | 57.22 | | NIGHT LEQ | 56.06 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.98 | | | | | | | | |

| | |
|---|---|
| ADT | 23200.00 |
| SPEED | 40.00 |
| DISTANCE | 48.00 |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 15.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 692.97 | 0.16 | 0.03 | 128.05 | 0.01 | 0.00 | 96.22 | 0.16 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.08 | -14.28 | -22.34 | 14.75 | -27.80 | -31.76 | 13.51 | -14.28 | -22.34 | | |
| Distance | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.61 |
| LEQ | 69.60 | 42.19 | 38.98 | 62.27 | 28.67 | 29.56 | 61.03 | 42.19 | 38.98 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.61 | | EVENING LEQ | 62.27 | | NIGHT LEQ | 61.11 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 20900.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 136.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 624.27 | 0.14 | 0.02 | 115.35 | 0.01 | 0.00 | 86.69 | 0.14 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.63 | -14.74 | -22.79 | 14.29 | -28.26 | -32.21 | 13.05 | -14.74 | -22.79 | | |
| Distance | -4.42 | -4.42 | -4.42 | -4.42 | -4.42 | -4.42 | -4.42 | -4.42 | -4.42 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.58 |
| LEQ | 59.57 | 32.16 | 28.95 | 52.24 | 18.64 | 19.53 | 51.00 | 32.16 | 28.95 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.58 | | EVENING LEQ | 52.24 | | NIGHT LEQ | 51.08 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 20900.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 43.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 624.27 | 0.14 | 0.02 | 115.35 | 0.01 | 0.00 | 86.69 | 0.14 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.63 | -14.74 | -22.79 | 14.29 | -28.26 | -32.21 | 13.05 | -14.74 | -22.79 | | |
| Distance | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.58 |
| LEQ | 64.57 | 37.16 | 33.95 | 57.24 | 23.64 | 24.53 | 56.00 | 37.16 | 33.95 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.58 | | EVENING LEQ | 57.24 | | NIGHT LEQ | 56.08 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 20900.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 14.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 624.27 | 0.14 | 0.02 | 115.35 | 0.01 | 0.00 | 86.69 | 0.14 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.63 | -14.74 | -22.79 | 14.29 | -28.26 | -32.21 | 13.05 | -14.74 | -22.79 | | |
| Distance | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.88 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.46 |
| LEQ | 69.45 | 42.03 | 38.82 | 62.11 | 28.51 | 29.40 | 60.87 | 42.03 | 38.82 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.46 | | EVENING LEQ | 62.12 | | NIGHT LEQ | 60.95 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.88 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 153.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 704.92 | 0.16 | 0.03 | 130.26 | 0.01 | 0.00 | 97.88 | 0.16 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.15 | -14.21 | -22.27 | 14.82 | -27.73 | -31.69 | 13.58 | -14.21 | -22.27 | | |
| Distance | -4.93 | -4.93 | -4.93 | -4.93 | -4.93 | -4.93 | -4.93 | -4.93 | -4.93 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.60 |
| LEQ | 59.59 | 32.18 | 28.97 | 52.25 | 18.65 | 19.55 | 51.01 | 32.18 | 28.97 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.60 | | EVENING LEQ | 52.26 | | NIGHT LEQ | 51.10 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 49.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 704.92 | 0.16 | 0.03 | 130.26 | 0.01 | 0.00 | 97.88 | 0.16 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.15 | -14.21 | -22.27 | 14.82 | -27.73 | -31.69 | 13.58 | -14.21 | -22.27 | | |
| Distance | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.97 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.54 |
| LEQ | 64.53 | 37.12 | 33.91 | 57.20 | 23.60 | 24.49 | 55.96 | 37.12 | 33.91 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.54 | | EVENING LEQ | 57.20 | | NIGHT LEQ | 56.04 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.97 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 23600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 15.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 704.92 | 0.16 | 0.03 | 130.26 | 0.01 | 0.00 | 97.88 | 0.16 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.15 | -14.21 | -22.27 | 14.82 | -27.73 | -31.69 | 13.58 | -14.21 | -22.27 | | |
| Distance | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.69 |
| LEQ | 69.67 | 42.26 | 39.05 | 62.34 | 28.74 | 29.63 | 61.10 | 42.26 | 39.05 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.69 | | EVENING LEQ | 62.34 | | NIGHT LEQ | 61.18 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.11 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **West of I-405 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 263.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1015.05 | 0.69 | 1.91 | 188.40 | 0.03 | 0.08 | 140.21 | 0.71 | 1.98 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.74 | -7.96 | -3.53 | 16.42 | -21.77 | -17.33 | 15.14 | -7.79 | -3.35 | | |
| Distance | -7.28 | -7.28 | -7.28 | -7.28 | -7.28 | -7.28 | -7.28 | -7.28 | -7.28 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.82 | 36.07 | 45.35 | 51.50 | 22.27 | 31.55 | 50.22 | 36.25 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **West of I-405 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 83.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1015.05 | 0.69 | 1.91 | 188.40 | 0.03 | 0.08 | 140.21 | 0.71 | 1.98 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.74 | -7.96 | -3.53 | 16.42 | -21.77 | -17.33 | 15.14 | -7.79 | -3.35 | | |
| Distance | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.04 |
| LEQ | 63.83 | 41.08 | 50.36 | 56.51 | 27.28 | 36.56 | 55.23 | 41.25 | 50.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.04 | | EVENING LEQ | 56.56 | | NIGHT LEQ | 56.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **West of I-405 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 26.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1015.05 | 0.69 | 1.91 | 188.40 | 0.03 | 0.08 | 140.21 | 0.71 | 1.98 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.74 | -7.96 | -3.53 | 16.42 | -21.77 | -17.33 | 15.14 | -7.79 | -3.35 | | |
| Distance | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.08 |
| LEQ | 68.87 | 46.12 | 55.40 | 61.55 | 32.32 | 41.60 | 60.27 | 46.30 | 55.58 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.08 | | EVENING LEQ | 61.60 | | NIGHT LEQ | 61.67 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.05 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **I-405 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 251.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 969.76 | 0.66 | 1.82 | 180.00 | 0.03 | 0.08 | 133.95 | 0.68 | 1.90 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.54 | -8.16 | -3.73 | 16.23 | -21.96 | -17.53 | 14.94 | -7.99 | -3.55 | | |
| Distance | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.04 |
| LEQ | 58.82 | 36.07 | 45.36 | 51.51 | 22.27 | 31.55 | 50.23 | 36.25 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.04 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **I-405 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 79.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 969.76 | 0.66 | 1.82 | 180.00 | 0.03 | 0.08 | 133.95 | 0.68 | 1.90 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.54 | -8.16 | -3.73 | 16.23 | -21.96 | -17.53 | 14.94 | -7.99 | -3.55 | | |
| Distance | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.06 |
| LEQ | 63.84 | 41.09 | 50.38 | 56.53 | 27.29 | 36.58 | 55.25 | 41.27 | 50.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.06 | | EVENING LEQ | 56.58 | | NIGHT LEQ | 56.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **I-405 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 25.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 969.76 | 0.66 | 1.82 | 180.00 | 0.03 | 0.08 | 133.95 | 0.68 | 1.90 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.54 | -8.16 | -3.73 | 16.23 | -21.96 | -17.53 | 14.94 | -7.99 | -3.55 | | |
| Distance | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.05 |
| LEQ | 68.84 | 46.09 | 55.37 | 61.53 | 32.29 | 41.57 | 60.24 | 46.27 | 55.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.05 | | EVENING LEQ | 61.58 | | NIGHT LEQ | 61.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31800.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 219.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 847.21 | 0.57 | 1.59 | 157.25 | 0.02 | 0.07 | 117.02 | 0.60 | 1.66 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.95 | -8.75 | -4.31 | 15.64 | -22.55 | -18.11 | 14.36 | -8.57 | -4.14 | | |
| Distance | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.04 |
| LEQ | 58.83 | 36.08 | 45.36 | 51.51 | 22.28 | 31.56 | 50.23 | 36.26 | 45.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.04 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31800.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 69.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 847.21 | 0.57 | 1.59 | 157.25 | 0.02 | 0.07 | 117.02 | 0.60 | 1.66 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.95 | -8.75 | -4.31 | 15.64 | -22.55 | -18.11 | 14.36 | -8.57 | -4.14 | | |
| Distance | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.06 |
| LEQ | 63.84 | 41.09 | 50.38 | 56.53 | 27.29 | 36.58 | 55.25 | 41.27 | 50.56 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.06 | | EVENING LEQ | 56.58 | | NIGHT LEQ | 56.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31800.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 22.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 847.21 | 0.57 | 1.59 | 157.25 | 0.02 | 0.07 | 117.02 | 0.60 | 1.66 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.95 | -8.75 | -4.31 | 15.64 | -22.55 | -18.11 | 14.36 | -8.57 | -4.14 | | |
| Distance | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.02 |
| LEQ | 68.81 | 46.06 | 55.34 | 61.49 | 32.26 | 41.54 | 60.21 | 46.24 | 55.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.02 | | EVENING LEQ | 61.54 | | NIGHT LEQ | 61.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 219.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 844.54 | 0.57 | 1.59 | 156.76 | 0.02 | 0.07 | 116.66 | 0.59 | 1.65 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.94 | -8.76 | -4.33 | 15.63 | -22.57 | -18.13 | 14.34 | -8.59 | -4.15 | | |
| Distance | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.81 | 36.06 | 45.35 | 51.50 | 22.26 | 31.55 | 50.22 | 36.24 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 69.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 844.54 | 0.57 | 1.59 | 156.76 | 0.02 | 0.07 | 116.66 | 0.59 | 1.65 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.94 | -8.76 | -4.33 | 15.63 | -22.57 | -18.13 | 14.34 | -8.59 | -4.15 | | |
| Distance | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | -1.47 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.04 |
| LEQ | 63.83 | 41.08 | 50.36 | 56.52 | 27.28 | 36.56 | 55.23 | 41.26 | 50.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.04 | | EVENING LEQ | 56.57 | | NIGHT LEQ | 56.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 22.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 844.54 | 0.57 | 1.59 | 156.76 | 0.02 | 0.07 | 116.66 | 0.59 | 1.65 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.94 | -8.76 | -4.33 | 15.63 | -22.57 | -18.13 | 14.34 | -8.59 | -4.15 | | |
| Distance | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.01 |
| LEQ | 68.80 | 46.05 | 55.33 | 61.48 | 32.24 | 41.53 | 60.20 | 46.22 | 55.51 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.01 | | EVENING LEQ | 61.53 | | NIGHT LEQ | 61.60 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 222.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 855.20 | 0.58 | 1.61 | 158.73 | 0.02 | 0.07 | 118.13 | 0.60 | 1.67 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.99 | -8.71 | -4.27 | 15.68 | -22.51 | -18.07 | 14.40 | -8.53 | -4.09 | | |
| Distance | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | -6.54 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.02 |
| LEQ | 58.81 | 36.06 | 45.34 | 51.50 | 22.26 | 31.54 | 50.21 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.02 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 70.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 855.20 | 0.58 | 1.61 | 158.73 | 0.02 | 0.07 | 118.13 | 0.60 | 1.67 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.99 | -8.71 | -4.27 | 15.68 | -22.51 | -18.07 | 14.40 | -8.53 | -4.09 | | |
| Distance | -1.53 | -1.53 | -1.53 | -1.53 | -1.53 | -1.53 | -1.53 | -1.53 | -1.53 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.04 |
| LEQ | 63.82 | 41.07 | 50.36 | 56.51 | 27.27 | 36.55 | 55.23 | 41.25 | 50.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.04 | | EVENING LEQ | 56.56 | | NIGHT LEQ | 56.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 22.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 855.20 | 0.58 | 1.61 | 158.73 | 0.02 | 0.07 | 118.13 | 0.60 | 1.67 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.99 | -8.71 | -4.27 | 15.68 | -22.51 | -18.07 | 14.40 | -8.53 | -4.09 | | |
| Distance | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.06 |
| LEQ | 68.85 | 46.10 | 55.38 | 61.54 | 32.30 | 41.58 | 60.25 | 46.28 | 55.56 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.06 | | EVENING LEQ | 61.58 | | NIGHT LEQ | 61.65 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **139th Street**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 1600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 10.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 47.79 | 0.01 | 0.00 | 8.83 | 0.00 | 0.00 | 6.64 | 0.01 | 0.00 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 10.47 | -25.90 | -33.95 | 3.13 | -39.42 | -43.37 | 1.89 | -25.90 | -33.95 | | |
| Distance | 6.92 | 6.92 | 6.92 | 6.92 | 6.92 | 6.92 | 6.92 | 6.92 | 6.92 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.18 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.76 |
| LEQ | 59.75 | 32.34 | 29.12 | 52.41 | 18.81 | 19.70 | 51.17 | 32.34 | 29.12 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.76 | | EVENING LEQ | 52.42 | | NIGHT LEQ | 51.26 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.18 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **139th Street**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 1600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 3.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 47.79 | 0.01 | 0.00 | 8.83 | 0.00 | 0.00 | 6.64 | 0.01 | 0.00 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 10.47 | -25.90 | -33.95 | 3.13 | -39.42 | -43.37 | 1.89 | -25.90 | -33.95 | | |
| Distance | 12.15 | 12.15 | 12.15 | 12.15 | 12.15 | 12.15 | 12.15 | 12.15 | 12.15 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.41 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.99 |
| LEQ | 64.98 | 37.56 | 34.35 | 57.64 | 24.04 | 24.93 | 56.40 | 37.56 | 34.35 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.99 | | EVENING LEQ | 57.65 | | NIGHT LEQ | 56.48 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.41 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **139th Street**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 1600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 1.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 47.79 | 0.01 | 0.00 | 8.83 | 0.00 | 0.00 | 6.64 | 0.01 | 0.00 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 10.47 | -25.90 | -33.95 | 3.13 | -39.42 | -43.37 | 1.89 | -25.90 | -33.95 | | |
| Distance | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.18 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.76 |
| LEQ | 69.75 | 42.34 | 39.12 | 62.41 | 28.81 | 29.70 | 61.17 | 42.34 | 39.12 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.76 | | EVENING LEQ | 62.42 | | NIGHT LEQ | 61.26 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.18 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27500.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 190.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 732.65 | 0.50 | 1.38 | 135.99 | 0.02 | 0.06 | 101.20 | 0.52 | 1.43 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.32 | -9.38 | -4.94 | 15.01 | -23.18 | -18.75 | 13.73 | -9.20 | -4.77 | | |
| Distance | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.81 | 36.06 | 45.35 | 51.50 | 22.26 | 31.55 | 50.22 | 36.24 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27500.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 60.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 732.65 | 0.50 | 1.38 | 135.99 | 0.02 | 0.06 | 101.20 | 0.52 | 1.43 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.32 | -9.38 | -4.94 | 15.01 | -23.18 | -18.75 | 13.73 | -9.20 | -4.77 | | |
| Distance | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.03 |
| LEQ | 63.82 | 41.07 | 50.35 | 56.51 | 27.27 | 36.55 | 55.22 | 41.25 | 50.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.03 | | EVENING LEQ | 56.56 | | NIGHT LEQ | 56.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 27500.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 19.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 732.65 | 0.50 | 1.38 | 135.99 | 0.02 | 0.06 | 101.20 | 0.52 | 1.43 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.32 | -9.38 | -4.94 | 15.01 | -23.18 | -18.75 | 13.73 | -9.20 | -4.77 | | |
| Distance | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.03 |
| LEQ | 68.81 | 46.06 | 55.35 | 61.50 | 32.26 | 41.55 | 60.22 | 46.24 | 55.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.03 | | EVENING LEQ | 61.55 | | NIGHT LEQ | 61.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 30000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 207.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 799.25 | 0.54 | 1.50 | 148.35 | 0.02 | 0.06 | 110.40 | 0.56 | 1.56 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.70 | -9.00 | -4.57 | 15.39 | -22.80 | -18.37 | 14.10 | -8.83 | -4.39 | | |
| Distance | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.82 | 36.07 | 45.35 | 51.51 | 22.27 | 31.55 | 50.22 | 36.25 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 30000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 65.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 799.25 | 0.54 | 1.50 | 148.35 | 0.02 | 0.06 | 110.40 | 0.56 | 1.56 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.70 | -9.00 | -4.57 | 15.39 | -22.80 | -18.37 | 14.10 | -8.83 | -4.39 | | |
| Distance | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.06 |
| LEQ | 63.85 | 41.10 | 50.38 | 56.54 | 27.30 | 36.58 | 55.25 | 41.28 | 50.56 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.06 | | EVENING LEQ | 56.59 | | NIGHT LEQ | 56.65 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 30000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 21.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 799.25 | 0.54 | 1.50 | 148.35 | 0.02 | 0.06 | 110.40 | 0.56 | 1.56 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.70 | -9.00 | -4.57 | 15.39 | -22.80 | -18.37 | 14.10 | -8.83 | -4.39 | | |
| Distance | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.94 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.97 |
| LEQ | 68.76 | 46.01 | 55.29 | 61.44 | 32.21 | 41.49 | 60.16 | 46.18 | 55.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.97 | | EVENING LEQ | 61.49 | | NIGHT LEQ | 61.56 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.94 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 195.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 751.30 | 0.51 | 1.41 | 139.45 | 0.02 | 0.06 | 103.78 | 0.53 | 1.47 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.43 | -9.27 | -4.83 | 15.12 | -23.07 | -18.64 | 13.83 | -9.09 | -4.66 | | |
| Distance | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.02 |
| LEQ | 58.81 | 36.06 | 45.34 | 51.50 | 22.26 | 31.54 | 50.21 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.02 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 61.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 751.30 | 0.51 | 1.41 | 139.45 | 0.02 | 0.06 | 103.78 | 0.53 | 1.47 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.43 | -9.27 | -4.83 | 15.12 | -23.07 | -18.64 | 13.83 | -9.09 | -4.66 | | |
| Distance | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.07 |
| LEQ | 63.86 | 41.11 | 50.39 | 56.54 | 27.31 | 36.59 | 55.26 | 41.29 | 50.57 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.07 | | EVENING LEQ | 56.59 | | NIGHT LEQ | 56.66 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2020 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 19.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 751.30 | 0.51 | 1.41 | 139.45 | 0.02 | 0.06 | 103.78 | 0.53 | 1.47 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.43 | -9.27 | -4.83 | 15.12 | -23.07 | -18.64 | 13.83 | -9.09 | -4.66 | | |
| Distance | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.14 |
| LEQ | 68.92 | 46.17 | 55.46 | 61.61 | 32.37 | 41.66 | 60.33 | 46.35 | 55.63 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.14 | | EVENING LEQ | 61.66 | | NIGHT LEQ | 61.72 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.11 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 4300.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 107.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 120.04 | 0.05 | 0.06 | 22.28 | 0.00 | 0.00 | 16.58 | 0.06 | 0.07 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 12.36 | -21.10 | -20.34 | 5.04 | -34.90 | -34.14 | 3.76 | -20.92 | -20.16 | | |
| Distance | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.55 |
| LEQ | 59.53 | 32.24 | 36.49 | 52.21 | 18.44 | 22.69 | 50.93 | 32.42 | 36.67 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.55 | | EVENING LEQ | 52.22 | | NIGHT LEQ | 51.15 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 4300.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 34.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 120.04 | 0.05 | 0.06 | 22.28 | 0.00 | 0.00 | 16.58 | 0.06 | 0.07 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 12.36 | -21.10 | -20.34 | 5.04 | -34.90 | -34.14 | 3.76 | -20.92 | -20.16 | | |
| Distance | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.53 |
| LEQ | 64.50 | 37.22 | 41.47 | 57.19 | 23.42 | 27.67 | 55.91 | 37.40 | 41.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.53 | | EVENING LEQ | 57.20 | | NIGHT LEQ | 56.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 4300.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 11.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 120.04 | 0.05 | 0.06 | 22.28 | 0.00 | 0.00 | 16.58 | 0.06 | 0.07 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 12.36 | -21.10 | -20.34 | 5.04 | -34.90 | -34.14 | 3.76 | -20.92 | -20.16 | | |
| Distance | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.90 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.43 |
| LEQ | 69.40 | 42.12 | 46.37 | 62.09 | 28.32 | 32.57 | 60.81 | 42.30 | 46.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.43 | | EVENING LEQ | 62.10 | | NIGHT LEQ | 61.03 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.90 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 19200.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 480.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 535.98 | 0.24 | 0.29 | 99.48 | 0.01 | 0.01 | 74.04 | 0.25 | 0.30 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 18.86 | -14.60 | -13.84 | 11.54 | -28.40 | -27.64 | 10.26 | -14.42 | -13.66 | | |
| Distance | -9.89 | -9.89 | -9.89 | -9.89 | -9.89 | -9.89 | -9.89 | -9.89 | -9.89 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.53 |
| LEQ | 59.50 | 32.22 | 36.47 | 52.19 | 18.42 | 22.67 | 50.91 | 32.40 | 36.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.53 | | EVENING LEQ | 52.20 | | NIGHT LEQ | 51.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **North of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 19200.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 152.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 535.98 | 0.24 | 0.29 | 99.48 | 0.01 | 0.01 | 74.04 | 0.25 | 0.30 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 18.86 | -14.60 | -13.84 | 11.54 | -28.40 | -27.64 | 10.26 | -14.42 | -13.66 | | |
| Distance | -4.90 | -4.90 | -4.90 | -4.90 | -4.90 | -4.90 | -4.90 | -4.90 | -4.90 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.53 |
| LEQ | 64.50 | 37.21 | 41.47 | 57.18 | 23.41 | 27.67 | 55.90 | 37.39 | 41.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.53 | | EVENING LEQ | 57.19 | | NIGHT LEQ | 56.12 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-405 NB/SB On-Off Ramps**

Segment: **South of El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 19200.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 48.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 535.98 | 0.24 | 0.29 | 99.48 | 0.01 | 0.01 | 74.04 | 0.25 | 0.30 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 18.86 | -14.60 | -13.84 | 11.54 | -28.40 | -27.64 | 10.26 | -14.42 | -13.66 | | |
| Distance | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.53 |
| LEQ | 69.50 | 42.22 | 46.47 | 62.19 | 28.42 | 32.67 | 60.91 | 42.40 | 46.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.53 | | EVENING LEQ | 62.20 | | NIGHT LEQ | 61.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 107.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 578.12 | 0.39 | 1.09 | 107.31 | 0.02 | 0.05 | 79.86 | 0.41 | 1.13 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.87 | -9.83 | -5.39 | 14.56 | -23.63 | -19.19 | 13.28 | -9.65 | -5.21 | | |
| Distance | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 34.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 578.12 | 0.39 | 1.09 | 107.31 | 0.02 | 0.05 | 79.86 | 0.41 | 1.13 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.87 | -9.83 | -5.39 | 14.56 | -23.63 | -19.19 | 13.28 | -9.65 | -5.21 | | |
| Distance | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.86 |
| LEQ | 63.59 | 41.60 | 51.26 | 56.27 | 27.80 | 37.46 | 54.99 | 41.78 | 51.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.86 | | EVENING LEQ | 56.34 | | NIGHT LEQ | 56.72 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **North of Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 11.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 578.12 | 0.39 | 1.09 | 107.31 | 0.02 | 0.05 | 79.86 | 0.41 | 1.13 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.87 | -9.83 | -5.39 | 14.56 | -23.63 | -19.19 | 13.28 | -9.65 | -5.21 | | |
| Distance | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.88 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.76 |
| LEQ | 68.49 | 46.50 | 56.16 | 61.18 | 32.70 | 42.36 | 59.89 | 46.68 | 56.34 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.76 | | EVENING LEQ | 61.24 | | NIGHT LEQ | 61.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.88 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 107.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 578.12 | 0.39 | 1.09 | 107.31 | 0.02 | 0.05 | 79.86 | 0.41 | 1.13 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.87 | -9.83 | -5.39 | 14.56 | -23.63 | -19.19 | 13.28 | -9.65 | -5.21 | | |
| Distance | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | -3.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 34.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 578.12 | 0.39 | 1.09 | 107.31 | 0.02 | 0.05 | 79.86 | 0.41 | 1.13 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.87 | -9.83 | -5.39 | 14.56 | -23.63 | -19.19 | 13.28 | -9.65 | -5.21 | | |
| Distance | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.86 |
| LEQ | 63.59 | 41.60 | 51.26 | 56.27 | 27.80 | 37.46 | 54.99 | 41.78 | 51.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.86 | | EVENING LEQ | 56.34 | | NIGHT LEQ | 56.72 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 11.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 578.12 | 0.39 | 1.09 | 107.31 | 0.02 | 0.05 | 79.86 | 0.41 | 1.13 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.87 | -9.83 | -5.39 | 14.56 | -23.63 | -19.19 | 13.28 | -9.65 | -5.21 | | |
| Distance | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | 6.51 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.88 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.76 |
| LEQ | 68.49 | 46.50 | 56.16 | 61.18 | 32.70 | 42.36 | 59.89 | 46.68 | 56.34 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.76 | | EVENING LEQ | 61.24 | | NIGHT LEQ | 61.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.88 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **120th Street to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 161.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 873.85 | 0.59 | 1.64 | 162.20 | 0.02 | 0.07 | 120.70 | 0.62 | 1.71 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.67 | -8.04 | -3.60 | 16.35 | -21.84 | -17.40 | 15.07 | -7.86 | -3.42 | | |
| Distance | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | -5.15 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.90 |
| LEQ | 58.63 | 36.64 | 46.30 | 51.32 | 22.84 | 32.50 | 50.03 | 36.82 | 46.48 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.90 | | EVENING LEQ | 51.38 | | NIGHT LEQ | 51.76 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **120th Street to El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 51.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 873.85 | 0.59 | 1.64 | 162.20 | 0.02 | 0.07 | 120.70 | 0.62 | 1.71 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.67 | -8.04 | -3.60 | 16.35 | -21.84 | -17.40 | 15.07 | -7.86 | -3.42 | | |
| Distance | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.64 | 51.29 | 56.31 | 27.83 | 37.49 | 55.02 | 41.81 | 51.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **120th Street to El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 873.85 | 0.59 | 1.64 | 162.20 | 0.02 | 0.07 | 120.70 | 0.62 | 1.71 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.67 | -8.04 | -3.60 | 16.35 | -21.84 | -17.40 | 15.07 | -7.86 | -3.42 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.93 |
| LEQ | 68.66 | 46.67 | 56.33 | 61.34 | 32.87 | 42.52 | 60.06 | 46.85 | 56.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.93 | | EVENING LEQ | 61.40 | | NIGHT LEQ | 61.79 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.05 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32300.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 159.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 860.53 | 0.58 | 1.62 | 159.72 | 0.02 | 0.07 | 118.86 | 0.61 | 1.68 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.60 | -8.10 | -3.66 | 16.29 | -21.90 | -17.47 | 15.00 | -7.92 | -3.49 | | |
| Distance | -5.09 | -5.09 | -5.09 | -5.09 | -5.09 | -5.09 | -5.09 | -5.09 | -5.09 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.62 | 36.63 | 46.29 | 51.30 | 22.83 | 32.48 | 50.02 | 36.81 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32300.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 50.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 860.53 | 0.58 | 1.62 | 159.72 | 0.02 | 0.07 | 118.86 | 0.61 | 1.68 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.60 | -8.10 | -3.66 | 16.29 | -21.90 | -17.47 | 15.00 | -7.92 | -3.49 | | |
| Distance | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.91 |
| LEQ | 63.64 | 41.66 | 51.31 | 56.33 | 27.85 | 37.51 | 55.04 | 41.83 | 51.49 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.91 | | EVENING LEQ | 56.39 | | NIGHT LEQ | 56.77 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 32300.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 860.53 | 0.58 | 1.62 | 159.72 | 0.02 | 0.07 | 118.86 | 0.61 | 1.68 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.60 | -8.10 | -3.66 | 16.29 | -21.90 | -17.47 | 15.00 | -7.92 | -3.49 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.86 |
| LEQ | 68.59 | 46.60 | 56.26 | 61.28 | 32.80 | 42.46 | 59.99 | 46.78 | 56.44 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.86 | | EVENING LEQ | 61.34 | | NIGHT LEQ | 61.72 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 143.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 772.61 | 0.52 | 1.45 | 143.41 | 0.02 | 0.06 | 106.72 | 0.54 | 1.51 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.13 | -8.57 | -4.13 | 15.82 | -22.37 | -17.93 | 14.54 | -8.39 | -3.96 | | |
| Distance | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | -4.63 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 45.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 772.61 | 0.52 | 1.45 | 143.41 | 0.02 | 0.06 | 106.72 | 0.54 | 1.51 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.13 | -8.57 | -4.13 | 15.82 | -22.37 | -17.93 | 14.54 | -8.39 | -3.96 | | |
| Distance | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.90 |
| LEQ | 63.63 | 41.65 | 51.30 | 56.32 | 27.84 | 37.50 | 55.03 | 41.82 | 51.48 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.90 | | EVENING LEQ | 56.38 | | NIGHT LEQ | 56.76 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Inglewood Avenue**

Segment: **South of Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 29000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 14.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 772.61 | 0.52 | 1.45 | 143.41 | 0.02 | 0.06 | 106.72 | 0.54 | 1.51 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.13 | -8.57 | -4.13 | 15.82 | -22.37 | -17.93 | 14.54 | -8.39 | -3.96 | | |
| Distance | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.09 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.97 |
| LEQ | 68.70 | 46.72 | 56.37 | 61.39 | 32.91 | 42.57 | 60.10 | 46.89 | 56.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.97 | | EVENING LEQ | 61.45 | | NIGHT LEQ | 61.83 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.09 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **North of Lennox Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 190.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1025.70 | 0.69 | 1.93 | 190.38 | 0.03 | 0.08 | 141.68 | 0.72 | 2.01 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.36 | -7.34 | -2.90 | 17.05 | -21.14 | -16.70 | 15.77 | -7.16 | -2.72 | | |
| Distance | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **North of Lennox Bouelvard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 60.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1025.70 | 0.69 | 1.93 | 190.38 | 0.03 | 0.08 | 141.68 | 0.72 | 2.01 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.36 | -7.34 | -2.90 | 17.05 | -21.14 | -16.70 | 15.77 | -7.16 | -2.72 | | |
| Distance | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.88 |
| LEQ | 63.61 | 41.63 | 51.28 | 56.30 | 27.82 | 37.48 | 55.01 | 41.80 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.88 | | EVENING LEQ | 56.36 | | NIGHT LEQ | 56.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **North of Lennox Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 35800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 18.00 |
| Vehicles per hour | 953.77 | 0.64 | 1.79 | 177.03 | 0.03 | 0.07 | 131.74 | 0.67 | 1.86 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.05 | -7.65 | -3.22 | 16.73 | -21.46 | -17.02 | 15.45 | -7.48 | -3.04 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.92 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.80 |
| LEQ | 68.52 | 46.54 | 56.20 | 61.21 | 32.74 | 42.39 | 59.93 | 46.72 | 56.37 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.80 | | EVENING LEQ | 61.27 | | NIGHT LEQ | 61.66 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.92 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Lennox Boulevard to I-105 WB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 43300.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 213.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1153.58 | 0.78 | 2.17 | 214.12 | 0.03 | 0.09 | 159.34 | 0.81 | 2.26 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.87 | -6.83 | -2.39 | 17.56 | -20.63 | -16.19 | 16.28 | -6.65 | -2.21 | | |
| Distance | -6.36 | -6.36 | -6.36 | -6.36 | -6.36 | -6.36 | -6.36 | -6.36 | -6.36 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.62 | 36.64 | 46.29 | 51.31 | 22.83 | 32.49 | 50.02 | 36.81 | 46.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Lennox Bouelvard to I-105 WB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 43300.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 67.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1153.58 | 0.78 | 2.17 | 214.12 | 0.03 | 0.09 | 159.34 | 0.81 | 2.26 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.87 | -6.83 | -2.39 | 17.56 | -20.63 | -16.19 | 16.28 | -6.65 | -2.21 | | |
| Distance | -1.34 | -1.34 | -1.34 | -1.34 | -1.34 | -1.34 | -1.34 | -1.34 | -1.34 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.92 |
| LEQ | 63.64 | 41.66 | 51.31 | 56.33 | 27.86 | 37.51 | 55.05 | 41.84 | 51.49 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.92 | | EVENING LEQ | 56.39 | | NIGHT LEQ | 56.77 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Lennox Boulevard to I-105 WB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 43300.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 21.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1153.58 | 0.78 | 2.17 | 214.12 | 0.03 | 0.09 | 159.34 | 0.81 | 2.26 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.87 | -6.83 | -2.39 | 17.56 | -20.63 | -16.19 | 16.28 | -6.65 | -2.21 | | |
| Distance | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | 3.70 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.07 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.95 |
| LEQ | 68.68 | 46.70 | 56.35 | 61.37 | 32.89 | 42.55 | 60.08 | 46.87 | 56.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.95 | | EVENING LEQ | 61.43 | | NIGHT LEQ | 61.81 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.07 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **I-105 WB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 39500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 195.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1052.35 | 0.71 | 1.98 | 195.33 | 0.03 | 0.08 | 145.36 | 0.74 | 2.06 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.48 | -7.23 | -2.79 | 17.16 | -21.03 | -16.59 | 15.88 | -7.05 | -2.61 | | |
| Distance | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | -5.98 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.60 | 36.62 | 46.27 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **I-105 WB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 39500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 61.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1052.35 | 0.71 | 1.98 | 195.33 | 0.03 | 0.08 | 145.36 | 0.74 | 2.06 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.48 | -7.23 | -2.79 | 17.16 | -21.03 | -16.59 | 15.88 | -7.05 | -2.61 | | |
| Distance | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.92 |
| LEQ | 63.65 | 41.67 | 51.32 | 56.34 | 27.86 | 37.52 | 55.05 | 41.84 | 51.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.92 | | EVENING LEQ | 56.40 | | NIGHT LEQ | 56.78 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **I-105 WB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 39500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 20.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1052.35 | 0.71 | 1.98 | 195.33 | 0.03 | 0.08 | 145.36 | 0.74 | 2.06 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.48 | -7.23 | -2.79 | 17.16 | -21.03 | -16.59 | 15.88 | -7.05 | -2.61 | | |
| Distance | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.89 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.77 |
| LEQ | 68.49 | 46.51 | 56.16 | 61.18 | 32.71 | 42.36 | 59.90 | 46.69 | 56.34 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.77 | | EVENING LEQ | 61.24 | | NIGHT LEQ | 61.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.89 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 190.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1025.70 | 0.69 | 1.93 | 190.38 | 0.03 | 0.08 | 141.68 | 0.72 | 2.01 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.36 | -7.34 | -2.90 | 17.05 | -21.14 | -16.70 | 15.77 | -7.16 | -2.72 | | |
| Distance | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | -5.87 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 60.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1025.70 | 0.69 | 1.93 | 190.38 | 0.03 | 0.08 | 141.68 | 0.72 | 2.01 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.36 | -7.34 | -2.90 | 17.05 | -21.14 | -16.70 | 15.77 | -7.16 | -2.72 | | |
| Distance | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | -0.86 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.88 |
| LEQ | 63.61 | 41.63 | 51.28 | 56.30 | 27.82 | 37.48 | 55.01 | 41.80 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.88 | | EVENING LEQ | 56.36 | | NIGHT LEQ | 56.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 19.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1025.70 | 0.69 | 1.93 | 190.38 | 0.03 | 0.08 | 141.68 | 0.72 | 2.01 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.36 | -7.34 | -2.90 | 17.05 | -21.14 | -16.70 | 15.77 | -7.16 | -2.72 | | |
| Distance | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.88 |
| LEQ | 68.61 | 46.62 | 56.28 | 61.29 | 32.82 | 42.47 | 60.01 | 46.80 | 56.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.88 | | EVENING LEQ | 61.35 | | NIGHT LEQ | 61.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 182.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 983.08 | 0.66 | 1.85 | 182.47 | 0.03 | 0.08 | 135.79 | 0.69 | 1.92 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.18 | -7.52 | -3.09 | 16.87 | -21.33 | -16.89 | 15.58 | -7.35 | -2.91 | | |
| Distance | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.29 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 57.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 983.08 | 0.66 | 1.85 | 182.47 | 0.03 | 0.08 | 135.79 | 0.69 | 1.92 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.18 | -7.52 | -3.09 | 16.87 | -21.33 | -16.89 | 15.58 | -7.35 | -2.91 | | |
| Distance | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.92 |
| LEQ | 63.65 | 41.67 | 51.32 | 56.34 | 27.86 | 37.52 | 55.05 | 41.84 | 51.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.92 | | EVENING LEQ | 56.40 | | NIGHT LEQ | 56.78 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **120th Street to Broadway**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 18.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 983.08 | 0.66 | 1.85 | 182.47 | 0.03 | 0.08 | 135.79 | 0.69 | 1.92 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.18 | -7.52 | -3.09 | 16.87 | -21.33 | -16.89 | 15.58 | -7.35 | -2.91 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.93 |
| LEQ | 68.66 | 46.67 | 56.33 | 61.34 | 32.87 | 42.52 | 60.06 | 46.85 | 56.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.93 | | EVENING LEQ | 61.40 | | NIGHT LEQ | 61.79 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.05 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Broadway to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 41600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 205.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1108.29 | 0.75 | 2.08 | 205.71 | 0.03 | 0.09 | 153.09 | 0.78 | 2.17 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.70 | -7.00 | -2.57 | 17.39 | -20.80 | -16.37 | 16.10 | -6.83 | -2.39 | | |
| Distance | -6.20 | -6.20 | -6.20 | -6.20 | -6.20 | -6.20 | -6.20 | -6.20 | -6.20 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.83 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Broadway to El Segundo Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 41600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 65.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1108.29 | 0.75 | 2.08 | 205.71 | 0.03 | 0.09 | 153.09 | 0.78 | 2.17 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.70 | -7.00 | -2.57 | 17.39 | -20.80 | -16.37 | 16.10 | -6.83 | -2.39 | | |
| Distance | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.87 |
| LEQ | 63.60 | 41.62 | 51.27 | 56.29 | 27.81 | 37.47 | 55.00 | 41.79 | 51.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.87 | | EVENING LEQ | 56.35 | | NIGHT LEQ | 56.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Broadway to El Segundo**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 41600.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 20.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1108.29 | 0.75 | 2.08 | 205.71 | 0.03 | 0.09 | 153.09 | 0.78 | 2.17 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.70 | -7.00 | -2.57 | 17.39 | -20.80 | -16.37 | 16.10 | -6.83 | -2.39 | | |
| Distance | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.11 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.99 |
| LEQ | 68.72 | 46.73 | 56.39 | 61.41 | 32.93 | 42.59 | 60.12 | 46.91 | 56.57 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.99 | | EVENING LEQ | 61.47 | | NIGHT LEQ | 61.85 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.11 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 42000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 207.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1118.95 | 0.76 | 2.10 | 207.69 | 0.03 | 0.09 | 154.56 | 0.79 | 2.19 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.74 | -6.96 | -2.52 | 17.43 | -20.76 | -16.33 | 16.14 | -6.78 | -2.35 | | |
| Distance | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | -6.24 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 42000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 65.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1118.95 | 0.76 | 2.10 | 207.69 | 0.03 | 0.09 | 154.56 | 0.79 | 2.19 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.74 | -6.96 | -2.52 | 17.43 | -20.76 | -16.33 | 16.14 | -6.78 | -2.35 | | |
| Distance | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | -1.21 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.91 |
| LEQ | 63.64 | 41.66 | 51.31 | 56.33 | 27.86 | 37.51 | 55.04 | 41.83 | 51.49 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.91 | | EVENING LEQ | 56.39 | | NIGHT LEQ | 56.77 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **El Segundo Boulevard to Rosecrans Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 42000.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 20.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1118.95 | 0.76 | 2.10 | 207.69 | 0.03 | 0.09 | 154.56 | 0.79 | 2.19 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.74 | -6.96 | -2.52 | 17.43 | -20.76 | -16.33 | 16.14 | -6.78 | -2.35 | | |
| Distance | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.15 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.03 |
| LEQ | 68.76 | 46.78 | 56.43 | 61.45 | 32.97 | 42.63 | 60.16 | 46.95 | 56.61 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.03 | | EVENING LEQ | 61.51 | | NIGHT LEQ | 61.89 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.15 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 186.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1007.06 | 0.68 | 1.89 | 186.92 | 0.03 | 0.08 | 139.10 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.28 | -7.42 | -2.98 | 16.97 | -21.22 | -16.78 | 15.69 | -7.24 | -2.80 | | |
| Distance | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.62 | 36.63 | 46.29 | 51.30 | 22.83 | 32.49 | 50.02 | 36.81 | 46.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.37 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 59.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1007.06 | 0.68 | 1.89 | 186.92 | 0.03 | 0.08 | 139.10 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.28 | -7.42 | -2.98 | 16.97 | -21.22 | -16.78 | 15.69 | -7.24 | -2.80 | | |
| Distance | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.88 |
| LEQ | 63.60 | 41.62 | 51.28 | 56.29 | 27.82 | 37.47 | 55.01 | 41.80 | 51.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.88 | | EVENING LEQ | 56.35 | | NIGHT LEQ | 56.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **Rosecrans Avenue to Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 19.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1007.06 | 0.68 | 1.89 | 186.92 | 0.03 | 0.08 | 139.10 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.28 | -7.42 | -2.98 | 16.97 | -21.22 | -16.78 | 15.69 | -7.24 | -2.80 | | |
| Distance | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.92 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.80 |
| LEQ | 68.53 | 46.54 | 56.20 | 61.21 | 32.74 | 42.39 | 59.93 | 46.72 | 56.37 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.80 | | EVENING LEQ | 61.27 | | NIGHT LEQ | 61.66 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.92 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 40500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 200.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1078.99 | 0.73 | 2.03 | 200.27 | 0.03 | 0.08 | 149.04 | 0.76 | 2.11 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.58 | -7.12 | -2.68 | 17.27 | -20.92 | -16.48 | 15.99 | -6.94 | -2.50 | | |
| Distance | -6.09 | -6.09 | -6.09 | -6.09 | -6.09 | -6.09 | -6.09 | -6.09 | -6.09 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.60 | 36.62 | 46.27 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.35 | | NIGHT LEQ | 51.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 40500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 63.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1078.99 | 0.73 | 2.03 | 200.27 | 0.03 | 0.08 | 149.04 | 0.76 | 2.11 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.58 | -7.12 | -2.68 | 17.27 | -20.92 | -16.48 | 15.99 | -6.94 | -2.50 | | |
| Distance | -1.07 | -1.07 | -1.07 | -1.07 | -1.07 | -1.07 | -1.07 | -1.07 | -1.07 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.64 | 51.29 | 56.31 | 27.83 | 37.49 | 55.02 | 41.81 | 51.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Hawthorne Boulevard**

Segment: **South of Marine Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 40500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 20.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1078.99 | 0.73 | 2.03 | 200.27 | 0.03 | 0.08 | 149.04 | 0.76 | 2.11 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.58 | -7.12 | -2.68 | 17.27 | -20.92 | -16.48 | 15.99 | -6.94 | -2.50 | | |
| Distance | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | 3.91 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.88 |
| LEQ | 68.60 | 46.62 | 56.27 | 61.29 | 32.82 | 42.47 | 60.01 | 46.80 | 56.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.88 | | EVENING LEQ | 61.35 | | NIGHT LEQ | 61.73 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 253.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 975.09 | 0.66 | 1.83 | 180.99 | 0.03 | 0.08 | 134.69 | 0.69 | 1.91 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.56 | -8.14 | -3.70 | 16.25 | -21.94 | -17.50 | 14.97 | -7.96 | -3.52 | | |
| Distance | -7.11 | -7.11 | -7.11 | -7.11 | -7.11 | -7.11 | -7.11 | -7.11 | -7.11 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.81 | 36.06 | 45.35 | 51.50 | 22.26 | 31.54 | 50.22 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 36600.00 |
| Vehicles per hour | 975.09 | 0.66 | 1.83 | 180.99 | 0.03 | 0.08 | 134.69 | 0.69 | 1.91 | SPEED | 35.00 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | DISTANCE | 57.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | 92 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | 3 |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.14 | -7.56 | -3.12 | 16.83 | -21.36 | -16.92 | 15.55 | -7.38 | -2.94 | | |
| Distance | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | -0.64 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.61 | 41.63 | 51.28 | 56.30 | 27.83 | 37.48 | 55.02 | 41.81 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.36 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **North of I-105 EB Off-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 36600.00 |
| Vehicles per hour | 975.09 | 0.66 | 1.83 | 180.99 | 0.03 | 0.08 | 134.69 | 0.69 | 1.91 | SPEED | 35.00 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | DISTANCE | 18.00 |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % A | 92 |
| NOISE CALCULATIONS | | | | | | | | | | % MT | 3 |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.14 | -7.56 | -3.12 | 16.83 | -21.36 | -16.92 | 15.55 | -7.38 | -2.94 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.89 |
| LEQ | 68.62 | 46.64 | 56.29 | 61.31 | 32.83 | 42.49 | 60.02 | 46.81 | 56.47 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.89 | | EVENING LEQ | 61.37 | | NIGHT LEQ | 61.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38900.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 269.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1036.36 | 0.70 | 1.95 | 192.36 | 0.03 | 0.08 | 143.15 | 0.73 | 2.03 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.83 | -7.87 | -3.44 | 16.51 | -21.68 | -17.24 | 15.23 | -7.70 | -3.26 | | |
| Distance | -7.38 | -7.38 | -7.38 | -7.38 | -7.38 | -7.38 | -7.38 | -7.38 | -7.38 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.02 |
| LEQ | 58.81 | 36.06 | 45.34 | 51.50 | 22.26 | 31.54 | 50.21 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.02 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 61.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1036.36 | 0.70 | 1.95 | 192.36 | 0.03 | 0.08 | 143.15 | 0.73 | 2.03 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.41 | -7.29 | -2.86 | 17.09 | -21.10 | -16.66 | 15.81 | -7.12 | -2.68 | | |
| Distance | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | -0.93 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.86 |
| LEQ | 63.58 | 41.60 | 51.26 | 56.27 | 27.80 | 37.45 | 54.99 | 41.78 | 51.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.86 | | EVENING LEQ | 56.33 | | NIGHT LEQ | 56.72 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **I-105 EB Off-Ramp to Imperial Hwy**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 19.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1036.36 | 0.70 | 1.95 | 192.36 | 0.03 | 0.08 | 143.15 | 0.73 | 2.03 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.41 | -7.29 | -2.86 | 17.09 | -21.10 | -16.66 | 15.81 | -7.12 | -2.68 | | |
| Distance | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.92 |
| LEQ | 68.65 | 46.67 | 56.32 | 61.34 | 32.86 | 42.52 | 60.05 | 46.84 | 56.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.92 | | EVENING LEQ | 61.40 | | NIGHT LEQ | 61.78 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31800.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 219.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 847.21 | 0.57 | 1.59 | 157.25 | 0.02 | 0.07 | 117.02 | 0.60 | 1.66 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.95 | -8.75 | -4.31 | 15.64 | -22.55 | -18.11 | 14.36 | -8.57 | -4.14 | | |
| Distance | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | -6.48 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.04 |
| LEQ | 58.83 | 36.08 | 45.36 | 51.51 | 22.28 | 31.56 | 50.23 | 36.26 | 45.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.04 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **Imperial Hwy to 120th Street**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 49.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 847.21 | 0.57 | 1.59 | 157.25 | 0.02 | 0.07 | 117.02 | 0.60 | 1.66 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.53 | -8.17 | -3.73 | 16.22 | -21.97 | -17.53 | 14.94 | -7.99 | -3.56 | | |
| Distance | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.93 |
| LEQ | 63.66 | 41.68 | 51.33 | 56.35 | 27.87 | 37.53 | 55.06 | 41.85 | 51.51 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.93 | | EVENING LEQ | 56.41 | | NIGHT LEQ | 56.79 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.05 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **Imperial Hwy to 120th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 31800.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 847.21 | 0.57 | 1.59 | 157.25 | 0.02 | 0.07 | 117.02 | 0.60 | 1.66 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.53 | -8.17 | -3.73 | 16.22 | -21.97 | -17.53 | 14.94 | -7.99 | -3.56 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.91 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.79 |
| LEQ | 68.52 | 46.54 | 56.19 | 61.21 | 32.73 | 42.39 | 59.92 | 46.71 | 56.37 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.79 | | EVENING LEQ | 61.27 | | NIGHT LEQ | 61.65 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.91 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **South of 139th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35900.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 248.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 956.44 | 0.65 | 1.80 | 177.53 | 0.03 | 0.07 | 132.11 | 0.67 | 1.87 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.48 | -8.22 | -3.79 | 16.17 | -22.02 | -17.59 | 14.88 | -8.05 | -3.61 | | |
| Distance | -7.02 | -7.02 | -7.02 | -7.02 | -7.02 | -7.02 | -7.02 | -7.02 | -7.02 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.82 | 36.07 | 45.35 | 51.50 | 22.26 | 31.55 | 50.22 | 36.24 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **South of 139th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 56.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 956.44 | 0.65 | 1.80 | 177.53 | 0.03 | 0.07 | 132.11 | 0.67 | 1.87 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.06 | -7.64 | -3.21 | 16.75 | -21.44 | -17.01 | 15.46 | -7.47 | -3.03 | | |
| Distance | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.88 |
| LEQ | 63.61 | 41.62 | 51.28 | 56.29 | 27.82 | 37.48 | 55.01 | 41.80 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.88 | | EVENING LEQ | 56.36 | | NIGHT LEQ | 56.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Prairie Avenue**

Segment: **South of 139th**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 18.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 956.44 | 0.65 | 1.80 | 177.53 | 0.03 | 0.07 | 132.11 | 0.67 | 1.87 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.06 | -7.64 | -3.21 | 16.75 | -21.44 | -17.01 | 15.46 | -7.47 | -3.03 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.93 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.81 |
| LEQ | 68.54 | 46.55 | 56.21 | 61.22 | 32.75 | 42.41 | 59.94 | 46.73 | 56.38 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.81 | | EVENING LEQ | 61.29 | | NIGHT LEQ | 61.67 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.93 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNELNoise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-105 WB Off-Ramp**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 11400.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 285.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 318.24 | 0.14 | 0.17 | 59.07 | 0.01 | 0.01 | 43.96 | 0.15 | 0.18 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 16.59 | -16.86 | -16.11 | 9.28 | -30.66 | -29.91 | 8.00 | -16.68 | -15.93 | | |
| Distance | -7.63 | -7.63 | -7.63 | -7.63 | -7.63 | -7.63 | -7.63 | -7.63 | -7.63 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.53 |
| LEQ | 59.50 | 32.22 | 36.47 | 52.19 | 18.42 | 22.67 | 50.91 | 32.40 | 36.65 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.53 | | EVENING LEQ | 52.20 | | NIGHT LEQ | 51.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNELNoise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-105 WB Off-Ramp**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 11400.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 90.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 318.24 | 0.14 | 0.17 | 59.07 | 0.01 | 0.01 | 43.96 | 0.15 | 0.18 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 16.59 | -16.86 | -16.11 | 9.28 | -30.66 | -29.91 | 8.00 | -16.68 | -15.93 | | |
| Distance | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | -2.62 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.54 |
| LEQ | 64.51 | 37.23 | 41.48 | 57.20 | 23.42 | 27.68 | 55.91 | 37.40 | 41.66 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.54 | | EVENING LEQ | 57.20 | | NIGHT LEQ | 56.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNELNoise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **I-105 WB Off-Ramp**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 11400.00 |
| | | | | | | | | | | SPEED | 65.00 |
| | | | | | | | | | | DISTANCE | 28.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 318.24 | 0.14 | 0.17 | 59.07 | 0.01 | 0.01 | 43.96 | 0.15 | 0.18 | % A | 96.4 |
| Speed in MPH | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | 65.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 2.1 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | 75.54 | 81.71 | 85.21 | % HT | 1.5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 16.59 | -16.86 | -16.11 | 9.28 | -30.66 | -29.91 | 8.00 | -16.68 | -15.93 | | |
| Distance | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.08 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.61 |
| LEQ | 69.58 | 42.30 | 46.55 | 62.27 | 28.49 | 32.75 | 60.98 | 42.47 | 46.73 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.61 | | EVENING LEQ | 62.27 | | NIGHT LEQ | 61.20 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.08 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 166.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 897.82 | 0.61 | 1.69 | 166.65 | 0.03 | 0.07 | 124.02 | 0.63 | 1.76 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.79 | -7.92 | -3.48 | 16.47 | -21.72 | -17.28 | 15.19 | -7.74 | -3.30 | | |
| Distance | -5.28 | -5.28 | -5.28 | -5.28 | -5.28 | -5.28 | -5.28 | -5.28 | -5.28 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.89 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.83 | 32.48 | 50.02 | 36.81 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.89 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 52.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 897.82 | 0.61 | 1.69 | 166.65 | 0.03 | 0.07 | 124.02 | 0.63 | 1.76 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.79 | -7.92 | -3.48 | 16.47 | -21.72 | -17.28 | 15.19 | -7.74 | -3.30 | | |
| Distance | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | -0.24 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.05 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.93 |
| LEQ | 63.65 | 41.67 | 51.33 | 56.34 | 27.87 | 37.52 | 55.06 | 41.85 | 51.50 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.93 | | EVENING LEQ | 56.40 | | NIGHT LEQ | 56.79 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.05 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **West of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 17.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 897.82 | 0.61 | 1.69 | 166.65 | 0.03 | 0.07 | 124.02 | 0.63 | 1.76 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.79 | -7.92 | -3.48 | 16.47 | -21.72 | -17.28 | 15.19 | -7.74 | -3.30 | | |
| Distance | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.90 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.78 |
| LEQ | 68.51 | 46.53 | 56.18 | 61.20 | 32.72 | 42.38 | 59.91 | 46.70 | 56.36 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.78 | | EVENING LEQ | 61.26 | | NIGHT LEQ | 61.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.90 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 176.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 951.11 | 0.64 | 1.79 | 176.54 | 0.03 | 0.07 | 131.38 | 0.67 | 1.86 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.04 | -7.67 | -3.23 | 16.72 | -21.47 | -17.03 | 15.44 | -7.49 | -3.05 | | |
| Distance | -5.54 | -5.54 | -5.54 | -5.54 | -5.54 | -5.54 | -5.54 | -5.54 | -5.54 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 56.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 951.11 | 0.64 | 1.79 | 176.54 | 0.03 | 0.07 | 131.38 | 0.67 | 1.86 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.04 | -7.67 | -3.23 | 16.72 | -21.47 | -17.03 | 15.44 | -7.49 | -3.05 | | |
| Distance | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | -0.56 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.86 |
| LEQ | 63.58 | 41.60 | 51.25 | 56.27 | 27.80 | 37.45 | 54.99 | 41.78 | 51.43 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.86 | | EVENING LEQ | 56.33 | | NIGHT LEQ | 56.71 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **Hawthorne Boulevard to I-105 EB On-Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35700.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 18.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 951.11 | 0.64 | 1.79 | 176.54 | 0.03 | 0.07 | 131.38 | 0.67 | 1.86 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.04 | -7.67 | -3.23 | 16.72 | -21.47 | -17.03 | 15.44 | -7.49 | -3.05 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.91 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.79 |
| LEQ | 68.51 | 46.53 | 56.18 | 61.20 | 32.73 | 42.38 | 59.92 | 46.71 | 56.36 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.79 | | EVENING LEQ | 61.26 | | NIGHT LEQ | 61.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.91 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 187.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1009.72 | 0.68 | 1.90 | 187.42 | 0.03 | 0.08 | 139.47 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.30 | -7.41 | -2.97 | 16.98 | -21.21 | -16.77 | 15.70 | -7.23 | -2.79 | | |
| Distance | -5.80 | -5.80 | -5.80 | -5.80 | -5.80 | -5.80 | -5.80 | -5.80 | -5.80 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.62 | 46.28 | 51.29 | 22.82 | 32.47 | 50.01 | 36.80 | 46.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 59.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1009.72 | 0.68 | 1.90 | 187.42 | 0.03 | 0.08 | 139.47 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.30 | -7.41 | -2.97 | 16.98 | -21.21 | -16.77 | 15.70 | -7.23 | -2.79 | | |
| Distance | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.89 |
| LEQ | 63.62 | 41.63 | 51.29 | 56.30 | 27.83 | 37.48 | 55.02 | 41.81 | 51.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.89 | | EVENING LEQ | 56.37 | | NIGHT LEQ | 56.75 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **I-105 EB On-Ramp to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37900.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 19.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1009.72 | 0.68 | 1.90 | 187.42 | 0.03 | 0.08 | 139.47 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.30 | -7.41 | -2.97 | 16.98 | -21.21 | -16.77 | 15.70 | -7.23 | -2.79 | | |
| Distance | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.93 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.81 |
| LEQ | 68.54 | 46.55 | 56.21 | 61.22 | 32.75 | 42.41 | 59.94 | 46.73 | 56.39 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.81 | | EVENING LEQ | 61.29 | | NIGHT LEQ | 61.67 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.93 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 175.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 945.78 | 0.64 | 1.78 | 175.55 | 0.03 | 0.07 | 130.64 | 0.67 | 1.85 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.01 | -7.69 | -3.25 | 16.70 | -21.49 | -17.06 | 15.41 | -7.51 | -3.08 | | |
| Distance | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | -5.51 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 58.88 |
| LEQ | 58.61 | 36.63 | 46.28 | 51.30 | 22.82 | 32.48 | 50.01 | 36.80 | 46.46 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 58.88 | | EVENING LEQ | 51.36 | | NIGHT LEQ | 51.74 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 55.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 945.78 | 0.64 | 1.78 | 175.55 | 0.03 | 0.07 | 130.64 | 0.67 | 1.85 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.01 | -7.69 | -3.25 | 16.70 | -21.49 | -17.06 | 15.41 | -7.51 | -3.08 | | |
| Distance | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | -0.48 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 63.91 |
| LEQ | 63.64 | 41.65 | 51.31 | 56.32 | 27.85 | 37.51 | 55.04 | 41.83 | 51.48 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 63.91 | | EVENING LEQ | 56.39 | | NIGHT LEQ | 56.77 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Imperial Hwy**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 35500.00 |
| | | | | | | | | | | SPEED | 35.00 |
| | | | | | | | | | | DISTANCE | 17.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 945.78 | 0.64 | 1.78 | 175.55 | 0.03 | 0.07 | 130.64 | 0.67 | 1.85 | % A | 92 |
| Speed in MPH | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | 65.11 | 74.83 | 80.05 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.01 | -7.69 | -3.25 | 16.70 | -21.49 | -17.06 | 15.41 | -7.51 | -3.08 | | |
| Distance | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.13 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.01 |
| LEQ | 68.74 | 46.75 | 56.41 | 61.42 | 32.95 | 42.60 | 60.14 | 46.93 | 56.58 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.01 | | EVENING LEQ | 61.49 | | NIGHT LEQ | 61.87 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.13 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 139.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 636.22 | 0.15 | 0.02 | 117.56 | 0.01 | 0.00 | 88.34 | 0.15 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.71 | -14.65 | -22.71 | 14.38 | -28.18 | -32.13 | 13.14 | -14.65 | -22.71 | | |
| Distance | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | -4.51 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 59.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.57 |
| LEQ | 59.56 | 32.15 | 28.94 | 52.23 | 18.63 | 19.52 | 50.98 | 32.15 | 28.94 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.57 | | EVENING LEQ | 52.23 | | NIGHT LEQ | 51.07 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 59.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 44.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 636.22 | 0.15 | 0.02 | 117.56 | 0.01 | 0.00 | 88.34 | 0.15 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.71 | -14.65 | -22.71 | 14.38 | -28.18 | -32.13 | 13.14 | -14.65 | -22.71 | | |
| Distance | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.99 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.57 |
| LEQ | 64.55 | 37.14 | 33.93 | 57.22 | 23.62 | 24.51 | 55.98 | 37.14 | 33.93 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.57 | | EVENING LEQ | 57.23 | | NIGHT LEQ | 56.06 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.99 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 21300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 14.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 636.22 | 0.15 | 0.02 | 117.56 | 0.01 | 0.00 | 88.34 | 0.15 | 0.02 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 21.71 | -14.65 | -22.71 | 14.38 | -28.18 | -32.13 | 13.14 | -14.65 | -22.71 | | |
| Distance | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.96 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.54 |
| LEQ | 69.53 | 42.12 | 38.91 | 62.19 | 28.60 | 29.49 | 60.95 | 42.12 | 38.91 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.54 | | EVENING LEQ | 62.20 | | NIGHT LEQ | 61.04 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.96 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 25600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 167.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 764.65 | 0.18 | 0.03 | 141.29 | 0.01 | 0.00 | 106.18 | 0.18 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.51 | -13.86 | -21.91 | 15.17 | -27.38 | -31.33 | 13.93 | -13.86 | -21.91 | | |
| Distance | -5.31 | -5.31 | -5.31 | -5.31 | -5.31 | -5.31 | -5.31 | -5.31 | -5.31 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.57 |
| LEQ | 59.56 | 32.15 | 28.94 | 52.23 | 18.63 | 19.52 | 50.99 | 32.15 | 28.94 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.57 | | EVENING LEQ | 52.23 | | NIGHT LEQ | 51.07 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 25600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 53.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 764.65 | 0.18 | 0.03 | 141.29 | 0.01 | 0.00 | 106.18 | 0.18 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.51 | -13.86 | -21.91 | 15.17 | -27.38 | -31.33 | 13.93 | -13.86 | -21.91 | | |
| Distance | -0.32 | -0.32 | -0.32 | -0.32 | -0.32 | -0.32 | -0.32 | -0.32 | -0.32 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.56 |
| LEQ | 64.55 | 37.13 | 33.92 | 57.21 | 23.61 | 24.50 | 55.97 | 37.13 | 33.92 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.56 | | EVENING LEQ | 57.22 | | NIGHT LEQ | 56.05 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 25600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 17.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 764.65 | 0.18 | 0.03 | 141.29 | 0.01 | 0.00 | 106.18 | 0.18 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.51 | -13.86 | -21.91 | 15.17 | -27.38 | -31.33 | 13.93 | -13.86 | -21.91 | | |
| Distance | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | 4.62 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.92 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.49 |
| LEQ | 69.48 | 42.07 | 38.86 | 62.15 | 28.55 | 29.44 | 60.91 | 42.07 | 38.86 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.49 | | EVENING LEQ | 62.15 | | NIGHT LEQ | 60.99 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.92 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 182.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 836.34 | 0.19 | 0.03 | 154.54 | 0.01 | 0.00 | 116.13 | 0.19 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.90 | -13.47 | -21.52 | 15.56 | -26.99 | -30.94 | 14.32 | -13.47 | -21.52 | | |
| Distance | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | -5.68 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.59 |
| LEQ | 59.58 | 32.17 | 28.95 | 52.24 | 18.64 | 19.53 | 51.00 | 32.17 | 28.95 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.59 | | EVENING LEQ | 52.25 | | NIGHT LEQ | 51.09 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 58.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 836.34 | 0.19 | 0.03 | 154.54 | 0.01 | 0.00 | 116.13 | 0.19 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.90 | -13.47 | -21.52 | 15.56 | -26.99 | -30.94 | 14.32 | -13.47 | -21.52 | | |
| Distance | -0.71 | -0.71 | -0.71 | -0.71 | -0.71 | -0.71 | -0.71 | -0.71 | -0.71 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.98 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.55 |
| LEQ | 64.54 | 37.13 | 33.92 | 57.21 | 23.61 | 24.50 | 55.97 | 37.13 | 33.92 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.55 | | EVENING LEQ | 57.21 | | NIGHT LEQ | 56.05 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.98 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 18.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 836.34 | 0.19 | 0.03 | 154.54 | 0.01 | 0.00 | 116.13 | 0.19 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.90 | -13.47 | -21.52 | 15.56 | -26.99 | -30.94 | 14.32 | -13.47 | -21.52 | | |
| Distance | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | 4.37 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.06 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.64 |
| LEQ | 69.62 | 42.21 | 39.00 | 62.29 | 28.69 | 29.58 | 61.05 | 42.21 | 39.00 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.64 | | EVENING LEQ | 62.30 | | NIGHT LEQ | 61.13 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.06 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 25000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 163.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 746.73 | 0.17 | 0.03 | 137.98 | 0.01 | 0.00 | 103.69 | 0.17 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.41 | -13.96 | -22.02 | 15.07 | -27.48 | -31.44 | 13.83 | -13.96 | -22.02 | | |
| Distance | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | -5.20 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.57 |
| LEQ | 59.56 | 32.15 | 28.94 | 52.23 | 18.63 | 19.52 | 50.99 | 32.15 | 28.94 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.57 | | EVENING LEQ | 52.23 | | NIGHT LEQ | 51.07 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 25000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 51.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 746.73 | 0.17 | 0.03 | 137.98 | 0.01 | 0.00 | 103.69 | 0.17 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.41 | -13.96 | -22.02 | 15.07 | -27.48 | -31.44 | 13.83 | -13.96 | -22.02 | | |
| Distance | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.04 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.62 |
| LEQ | 64.61 | 37.20 | 33.99 | 57.28 | 23.68 | 24.57 | 56.03 | 37.20 | 33.99 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.62 | | EVENING LEQ | 57.28 | | NIGHT LEQ | 56.12 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.04 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **Birch Avenue to Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 25000.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 16.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 746.73 | 0.17 | 0.03 | 137.98 | 0.01 | 0.00 | 103.69 | 0.17 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.41 | -13.96 | -22.02 | 15.07 | -27.48 | -31.44 | 13.83 | -13.96 | -22.02 | | |
| Distance | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | 4.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.08 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.66 |
| LEQ | 69.64 | 42.23 | 39.02 | 62.31 | 28.71 | 29.60 | 61.07 | 42.23 | 39.02 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.66 | | EVENING LEQ | 62.31 | | NIGHT LEQ | 61.15 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.08 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 186.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 854.26 | 0.20 | 0.03 | 157.85 | 0.01 | 0.00 | 118.62 | 0.20 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.99 | -13.37 | -21.43 | 15.66 | -26.90 | -30.85 | 14.42 | -13.37 | -21.43 | | |
| Distance | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | -5.78 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.59 |
| LEQ | 59.57 | 32.16 | 28.95 | 52.24 | 18.64 | 19.53 | 51.00 | 32.16 | 28.95 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.59 | | EVENING LEQ | 52.24 | | NIGHT LEQ | 51.08 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 59.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 854.26 | 0.20 | 0.03 | 157.85 | 0.01 | 0.00 | 118.62 | 0.20 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.99 | -13.37 | -21.43 | 15.66 | -26.90 | -30.85 | 14.42 | -13.37 | -21.43 | | |
| Distance | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | -0.79 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.57 |
| LEQ | 64.56 | 37.15 | 33.94 | 57.23 | 23.63 | 24.52 | 55.99 | 37.15 | 33.94 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.57 | | EVENING LEQ | 57.23 | | NIGHT LEQ | 56.07 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **120th Street**

Segment: **East of Prairie Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 28600.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 19.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 854.26 | 0.20 | 0.03 | 157.85 | 0.01 | 0.00 | 118.62 | 0.20 | 0.03 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 22.99 | -13.37 | -21.43 | 15.66 | -26.90 | -30.85 | 14.42 | -13.37 | -21.43 | | |
| Distance | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | 4.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.92 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.49 |
| LEQ | 69.48 | 42.07 | 38.86 | 62.15 | 28.55 | 29.44 | 60.91 | 42.07 | 38.86 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.49 | | EVENING LEQ | 62.15 | | NIGHT LEQ | 60.99 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.92 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **West of I-405 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 48100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 332.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1281.46 | 0.87 | 2.41 | 237.85 | 0.04 | 0.10 | 177.01 | 0.90 | 2.51 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.75 | -6.95 | -2.52 | 17.44 | -20.75 | -16.32 | 16.15 | -6.77 | -2.34 | | |
| Distance | -8.29 | -8.29 | -8.29 | -8.29 | -8.29 | -8.29 | -8.29 | -8.29 | -8.29 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.82 | 36.07 | 45.35 | 51.50 | 22.27 | 31.55 | 50.22 | 36.25 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **West of I-405 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 48100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 105.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1281.46 | 0.87 | 2.41 | 237.85 | 0.04 | 0.10 | 177.01 | 0.90 | 2.51 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.75 | -6.95 | -2.52 | 17.44 | -20.75 | -16.32 | 16.15 | -6.77 | -2.34 | | |
| Distance | -3.29 | -3.29 | -3.29 | -3.29 | -3.29 | -3.29 | -3.29 | -3.29 | -3.29 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.03 |
| LEQ | 63.82 | 41.07 | 50.35 | 56.50 | 27.27 | 36.55 | 55.22 | 41.25 | 50.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.03 | | EVENING LEQ | 56.55 | | NIGHT LEQ | 56.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **West of I-405 NB On-Off Ramp**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 48100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 33.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1281.46 | 0.87 | 2.41 | 237.85 | 0.04 | 0.10 | 177.01 | 0.90 | 2.51 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.75 | -6.95 | -2.52 | 17.44 | -20.75 | -16.32 | 16.15 | -6.77 | -2.34 | | |
| Distance | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.06 |
| LEQ | 68.85 | 46.09 | 55.38 | 61.53 | 32.29 | 41.58 | 60.25 | 46.27 | 55.56 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.06 | | EVENING LEQ | 61.58 | | NIGHT LEQ | 61.65 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **I-405 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 43700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 302.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1164.24 | 0.79 | 2.19 | 216.10 | 0.03 | 0.09 | 160.82 | 0.82 | 2.28 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.33 | -7.37 | -2.93 | 17.02 | -21.17 | -16.73 | 15.74 | -7.19 | -2.75 | | |
| Distance | -7.88 | -7.88 | -7.88 | -7.88 | -7.88 | -7.88 | -7.88 | -7.88 | -7.88 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.81 | 36.06 | 45.35 | 51.50 | 22.26 | 31.55 | 50.22 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **I-405 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 43700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 95.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1164.24 | 0.79 | 2.19 | 216.10 | 0.03 | 0.09 | 160.82 | 0.82 | 2.28 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.33 | -7.37 | -2.93 | 17.02 | -21.17 | -16.73 | 15.74 | -7.19 | -2.75 | | |
| Distance | -2.86 | -2.86 | -2.86 | -2.86 | -2.86 | -2.86 | -2.86 | -2.86 | -2.86 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.05 |
| LEQ | 63.84 | 41.09 | 50.37 | 56.52 | 27.28 | 36.57 | 55.24 | 41.26 | 50.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.05 | | EVENING LEQ | 56.57 | | NIGHT LEQ | 56.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **I-405 NB On-Off Ramp to Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 43700.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 30.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1164.24 | 0.79 | 2.19 | 216.10 | 0.03 | 0.09 | 160.82 | 0.82 | 2.28 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 24.33 | -7.37 | -2.93 | 17.02 | -21.17 | -16.73 | 15.74 | -7.19 | -2.75 | | |
| Distance | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.06 |
| LEQ | 68.84 | 46.09 | 55.38 | 61.53 | 32.29 | 41.57 | 60.25 | 46.27 | 55.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.06 | | EVENING LEQ | 61.58 | | NIGHT LEQ | 61.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 264.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1017.71 | 0.69 | 1.91 | 188.90 | 0.03 | 0.08 | 140.58 | 0.72 | 1.99 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.75 | -7.95 | -3.52 | 16.44 | -21.76 | -17.32 | 15.15 | -7.78 | -3.34 | | |
| Distance | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.81 | 36.06 | 45.35 | 51.50 | 22.26 | 31.54 | 50.22 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 83.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1017.71 | 0.69 | 1.91 | 188.90 | 0.03 | 0.08 | 140.58 | 0.72 | 1.99 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.75 | -7.95 | -3.52 | 16.44 | -21.76 | -17.32 | 15.15 | -7.78 | -3.34 | | |
| Distance | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | -2.27 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.05 |
| LEQ | 63.84 | 41.09 | 50.37 | 56.52 | 27.29 | 36.57 | 55.24 | 41.27 | 50.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.05 | | EVENING LEQ | 56.57 | | NIGHT LEQ | 56.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38200.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 26.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1017.71 | 0.69 | 1.91 | 188.90 | 0.03 | 0.08 | 140.58 | 0.72 | 1.99 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.75 | -7.95 | -3.52 | 16.44 | -21.76 | -17.32 | 15.15 | -7.78 | -3.34 | | |
| Distance | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.07 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.09 |
| LEQ | 68.88 | 46.13 | 55.41 | 61.57 | 32.33 | 41.61 | 60.28 | 46.31 | 55.59 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.09 | | EVENING LEQ | 61.61 | | NIGHT LEQ | 61.68 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.07 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37800.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 261.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1007.06 | 0.68 | 1.89 | 186.92 | 0.03 | 0.08 | 139.10 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.70 | -8.00 | -3.56 | 16.39 | -21.80 | -17.36 | 15.11 | -7.82 | -3.38 | | |
| Distance | -7.25 | -7.25 | -7.25 | -7.25 | -7.25 | -7.25 | -7.25 | -7.25 | -7.25 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.03 |
| LEQ | 58.82 | 36.07 | 45.35 | 51.50 | 22.27 | 31.55 | 50.22 | 36.24 | 45.53 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.03 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37800.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 82.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1007.06 | 0.68 | 1.89 | 186.92 | 0.03 | 0.08 | 139.10 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.70 | -8.00 | -3.56 | 16.39 | -21.80 | -17.36 | 15.11 | -7.82 | -3.38 | | |
| Distance | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.06 |
| LEQ | 63.85 | 41.10 | 50.38 | 56.53 | 27.29 | 36.58 | 55.25 | 41.27 | 50.56 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.06 | | EVENING LEQ | 56.58 | | NIGHT LEQ | 56.65 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **Hawthorne Boulevard to Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 37800.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 26.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1007.06 | 0.68 | 1.89 | 186.92 | 0.03 | 0.08 | 139.10 | 0.71 | 1.97 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.70 | -8.00 | -3.56 | 16.39 | -21.80 | -17.36 | 15.11 | -7.82 | -3.38 | | |
| Distance | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.05 |
| LEQ | 68.83 | 46.08 | 55.37 | 61.52 | 32.28 | 41.57 | 60.24 | 46.26 | 55.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.05 | | EVENING LEQ | 61.57 | | NIGHT LEQ | 61.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 264.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1020.38 | 0.69 | 1.92 | 189.39 | 0.03 | 0.08 | 140.94 | 0.72 | 1.99 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.76 | -7.94 | -3.50 | 16.45 | -21.74 | -17.31 | 15.16 | -7.76 | -3.33 | | |
| Distance | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | -7.30 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.04 |
| LEQ | 58.82 | 36.07 | 45.36 | 51.51 | 22.27 | 31.56 | 50.23 | 36.25 | 45.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.04 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.62 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 82.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1020.38 | 0.69 | 1.92 | 189.39 | 0.03 | 0.08 | 140.94 | 0.72 | 1.99 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.76 | -7.94 | -3.50 | 16.45 | -21.74 | -17.31 | 15.16 | -7.76 | -3.33 | | |
| Distance | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | -2.22 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.09 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.12 |
| LEQ | 63.90 | 41.15 | 50.44 | 56.59 | 27.35 | 36.63 | 55.31 | 41.33 | 50.61 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.12 | | EVENING LEQ | 56.64 | | NIGHT LEQ | 56.70 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.09 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **El Segundo Boulevard**

Segment: **East of Birch Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 38300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 26.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 1020.38 | 0.69 | 1.92 | 189.39 | 0.03 | 0.08 | 140.94 | 0.72 | 1.99 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.76 | -7.94 | -3.50 | 16.45 | -21.74 | -17.31 | 15.16 | -7.76 | -3.33 | | |
| Distance | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | 2.77 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.08 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.10 |
| LEQ | 68.89 | 46.14 | 55.42 | 61.58 | 32.34 | 41.62 | 60.29 | 46.32 | 55.60 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.10 | | EVENING LEQ | 61.63 | | NIGHT LEQ | 61.69 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.08 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **139th Street**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | ADT | 1900.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 12.00 |
| Vehicles per hour | 56.75 | 0.01 | 0.00 | 10.49 | 0.00 | 0.00 | 7.88 | 0.01 | 0.00 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 11.21 | -25.15 | -33.21 | 3.88 | -38.67 | -42.63 | 2.64 | -25.15 | -33.21 | | |
| Distance | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | 6.13 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.14 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.71 |
| LEQ | 59.70 | 32.29 | 29.08 | 52.37 | 18.77 | 19.66 | 51.13 | 32.29 | 29.08 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.71 | | EVENING LEQ | 52.37 | | NIGHT LEQ | 51.21 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.14 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **139th Street**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 1900.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 4.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 56.75 | 0.01 | 0.00 | 10.49 | 0.00 | 0.00 | 7.88 | 0.01 | 0.00 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 11.21 | -25.15 | -33.21 | 3.88 | -38.67 | -42.63 | 2.64 | -25.15 | -33.21 | | |
| Distance | 10.90 | 10.90 | 10.90 | 10.90 | 10.90 | 10.90 | 10.90 | 10.90 | 10.90 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 64.91 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.48 |
| LEQ | 64.47 | 37.06 | 33.85 | 57.14 | 23.54 | 24.43 | 55.90 | 37.06 | 33.85 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.48 | | EVENING LEQ | 57.14 | | NIGHT LEQ | 55.98 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 64.91 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **139th Street**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | | |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 56.75 | 0.01 | 0.00 | 10.49 | 0.00 | 0.00 | 7.88 | 0.01 | 0.00 | % A | 97.4 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 1.84 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 0.74 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 11.21 | -25.15 | -33.21 | 3.88 | -38.67 | -42.63 | 2.64 | -25.15 | -33.21 | | |
| Distance | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | 16.92 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.93 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 70.50 |
| LEQ | 70.49 | 43.08 | 39.87 | 63.16 | 29.56 | 30.45 | 61.92 | 43.08 | 39.87 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 70.50 | | EVENING LEQ | 63.16 | | NIGHT LEQ | 62.00 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.93 | | | | | | | | |

| | |
|---|---|
| ADT | 1900.00 |
| SPEED | 40.00 |
| DISTANCE | 1.00 |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 231.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 889.83 | 0.60 | 1.67 | 165.16 | 0.03 | 0.07 | 122.91 | 0.63 | 1.74 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.17 | -8.54 | -4.10 | 15.85 | -22.34 | -17.90 | 14.57 | -8.36 | -3.92 | | |
| Distance | -6.72 | -6.72 | -6.72 | -6.72 | -6.72 | -6.72 | -6.72 | -6.72 | -6.72 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.02 |
| LEQ | 58.81 | 36.06 | 45.34 | 51.50 | 22.26 | 31.54 | 50.21 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.02 | | EVENING LEQ | 51.54 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 73.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 889.83 | 0.60 | 1.67 | 165.16 | 0.03 | 0.07 | 122.91 | 0.63 | 1.74 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.17 | -8.54 | -4.10 | 15.85 | -22.34 | -17.90 | 14.57 | -8.36 | -3.92 | | |
| Distance | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.03 |
| LEQ | 63.81 | 41.06 | 50.35 | 56.50 | 27.26 | 36.54 | 55.22 | 41.24 | 50.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.03 | | EVENING LEQ | 56.55 | | NIGHT LEQ | 56.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **West of Inglewood Avenue**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 33400.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 23.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 889.83 | 0.60 | 1.67 | 165.16 | 0.03 | 0.07 | 122.91 | 0.63 | 1.74 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.17 | -8.54 | -4.10 | 15.85 | -22.34 | -17.90 | 14.57 | -8.36 | -3.92 | | |
| Distance | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.04 |
| LEQ | 68.83 | 46.08 | 55.36 | 61.51 | 32.28 | 41.56 | 60.23 | 46.26 | 55.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.04 | | EVENING LEQ | 61.56 | | NIGHT LEQ | 61.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 251.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 967.09 | 0.65 | 1.82 | 179.50 | 0.03 | 0.08 | 133.58 | 0.68 | 1.89 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.53 | -8.17 | -3.74 | 16.21 | -21.98 | -17.54 | 14.93 | -8.00 | -3.56 | | |
| Distance | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | -7.08 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.00 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.02 |
| LEQ | 58.81 | 36.06 | 45.34 | 51.50 | 22.26 | 31.54 | 50.21 | 36.24 | 45.52 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.02 | | EVENING LEQ | 51.55 | | NIGHT LEQ | 51.61 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.00 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 79.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 967.09 | 0.65 | 1.82 | 179.50 | 0.03 | 0.08 | 133.58 | 0.68 | 1.89 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.53 | -8.17 | -3.74 | 16.21 | -21.98 | -17.54 | 14.93 | -8.00 | -3.56 | | |
| Distance | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | -2.06 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.02 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.04 |
| LEQ | 63.83 | 41.08 | 50.37 | 56.52 | 27.28 | 36.56 | 55.23 | 41.26 | 50.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.04 | | EVENING LEQ | 56.57 | | NIGHT LEQ | 56.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.02 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **Inglewood Avenue to Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 36300.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 25.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 967.09 | 0.65 | 1.82 | 179.50 | 0.03 | 0.08 | 133.58 | 0.68 | 1.89 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.53 | -8.17 | -3.74 | 16.21 | -21.98 | -17.54 | 14.93 | -8.00 | -3.56 | | |
| Distance | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 70.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 69.04 |
| LEQ | 68.83 | 46.08 | 55.36 | 61.51 | 32.28 | 41.56 | 60.23 | 46.26 | 55.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 69.04 | | EVENING LEQ | 61.56 | | NIGHT LEQ | 61.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 70.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**60 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 34100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 235.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 908.48 | 0.61 | 1.71 | 168.62 | 0.03 | 0.07 | 125.49 | 0.64 | 1.78 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.26 | -8.45 | -4.01 | 15.94 | -22.25 | -17.81 | 14.66 | -8.27 | -3.83 | | |
| Distance | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | -6.79 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 60.01 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 59.04 |
| LEQ | 58.83 | 36.08 | 45.36 | 51.51 | 22.27 | 31.56 | 50.23 | 36.25 | 45.54 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 59.04 | | EVENING LEQ | 51.56 | | NIGHT LEQ | 51.63 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 60.01 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**65 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 34100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 74.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 908.48 | 0.61 | 1.71 | 168.62 | 0.03 | 0.07 | 125.49 | 0.64 | 1.78 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.26 | -8.45 | -4.01 | 15.94 | -22.25 | -17.81 | 14.66 | -8.27 | -3.83 | | |
| Distance | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | -1.77 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 65.03 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 64.06 |
| LEQ | 63.84 | 41.09 | 50.38 | 56.53 | 27.29 | 36.58 | 55.25 | 41.27 | 50.55 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 64.06 | | EVENING LEQ | 56.58 | | NIGHT LEQ | 56.64 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 65.03 | | | | | | | | |

FHWA Sound32 Spreadsheet

**Future 2035 Traffic Noise**

**70 dBA CNEL Noise Contour**

Project: **5872c Downtown Hawthorne Specific Plan**

Road: **Rosecrans Avenue**

Segment: **East of Hawthorne Boulevard**

| | DAYTIME | | | EVENING | | | NIGHTTIME | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | AUTOS | M.TRUCKS | H.TRUCKS | ADT | 34100.00 |
| | | | | | | | | | | SPEED | 40.00 |
| | | | | | | | | | | DISTANCE | 24.00 |
| INPUT PARAMETERS | | | | | | | | | | | |
| Vehicles per hour | 908.48 | 0.61 | 1.71 | 168.62 | 0.03 | 0.07 | 125.49 | 0.64 | 1.78 | % A | 92 |
| Speed in MPH | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | | |
| Left angle | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | -90.00 | | |
| Right angle | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | % MT | 3 |
| NOISE CALCULATIONS | | | | | | | | | | | |
| Reference levels | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | 67.36 | 76.31 | 81.16 | % HT | 5 |
| ADJUSTMENTS | | | | | | | | | | | |
| Flow | 23.26 | -8.45 | -4.01 | 15.94 | -22.25 | -17.81 | 14.66 | -8.27 | -3.83 | | |
| Distance | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | LEFT | -90.00 |
| Finite Roadway | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | RIGHT | 90.00 |
| Barrier | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | CNEL | 69.92 |
| Constant | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | -25.00 | DAY LEQ | 68.95 |
| LEQ | 68.73 | 45.98 | 55.27 | 61.42 | 32.18 | 41.47 | 60.14 | 46.16 | 55.45 | Day hour | 89.00 |
| | | | | | | | | | | Absorbtive? | no |
| | DAY LEQ | 68.95 | | EVENING LEQ | 61.47 | | NIGHT LEQ | 61.53 | | Use hour? | no |
| | | | | | | | | | | GRADE dB | 0.00 |
| | CNEL | | 69.92 | | | | | | | | |

# APPENDIX D

## City of Hawthorne Municipal Airport VFR Noise Abatement Arrival, Departure, and Pattern Procedures; Hawthorne Municipal Airport VFR Touch and Go Landing Procedures; and Noise Abatement Procedures

# HAWTHORNE MUNICIPAL AIRPORT

## VFR NOISE ABATEMENT
## ARRIVAL, DEPARTURE, and, PATTERN PROCEDURES

IN THE INTEREST OF SAFETY, TRAFFIC FLOW AND NOISE ABATEMENT DURING VFR CONDITIONS, AND UNLESS:

Considered Unsafe.
Required by applicable distance from cloud criteria, or
Required by the presence of other adverse weather phenomena, or
Otherwise directed by ATC,

## YOU ARE REQUESTED TO OBSERVE THE FOLLOWING:

1) All take-offs shall be made, as much as practicable, from the end of the runway. Intersection take-offs prohibited.
2) Use best rate of climb performance when departing either runway.
3) Reduce to climb power as soon as safely possible.
4) Traffic pattern altitude shall be maintained at 1000 feet MSL for light twin engine and single engine aircraft, 1500 feet MSL shall be used for all other aircraft.
5) Formation take-offs and landings are prohibited unless approved in writing by the Hawthorne Airport Manager.
6) When departing on Runway 25, <u>TURN CROSSWIND AT THE HAWTHORNE MALL</u>, avoid over-flights west of Hawthorne Boulevard while staying in the pattern or when making a downwind departure.
7) FLY DOWNWIND OVER EL SEGUNDO BOULEVARD, avoid over-flying the residential neighborhood south of El Segundo Boulevard while staying in the pattern or making a downwind departure.
8) When departing on runway 7, turn crosswind at the golf course or 500 feet MSL whichever comes first, avoid over-flights east of Western Avenue.
9) When traffic permits, maintain base leg portion of the pattern as close as possible to the landing runway.
10) Pattern work prohibited between the hours of 10:00 PM and 7:00 AM daily, Aircraft may arrive and depart the area only.
11) Touch and Go's prohibited between the hours of 5:00 PM and 10:00 AM daily (see Touch and Go Landing Procedures).
12) Between the hours of 10:00 PM and 7:00 AM all twin engine and jet aircraft are requested to arrive on runway 25 and depart on runway 7.
13) Whenever possible, jet aircraft are requested to arrive on runway 25 and depart runway 7.
14) Twin engine aircraft are required to make full stop landings, practice single engine operations prohibited.
15) Large twin engine and jet aircraft SHALL FLY DOWNWIND OVER ROSECRANS AVENUE.

# HAWTHORNE MUNICIPAL AIRPORT
## VFR TOUCH AND GO LANDING PROCEDURES

**IN THE INTEREST OF SAFETY, TRAFFIC FLOW AND NOISE ABATEMENT DURING VFR CONDITIONS AND UNLESS:**

**Considered Unsafe;**
**Required by the presence of other adverse weather phenomena;**
**Otherwise directed by ATC, or**
**Canceled by the Airport Manager.***

YOU ARE REQUESTED TO OBSERVE THE FOLLOWING:
HOURS OF TOUCH AND GO OPERATIONS
10:00 A.M. TO 5:00 P.M. DAILY

1. Touch and Go's require prior approval from Hawthorne Tower.

2. Touch and Go's are restricted to single engine aircraft.

3. **TWIN ENGINE AIRCRAFT MUST MAKE FULL STOP LANDINGS.**

4. All aircraft are requested to use best climb performance.

* * * * * *

5. On Runway 25, all aircraft must **TOUCH DOWN** before **"CHARLIE"** intersection, and **BECOME** airborne by **"DELTA"** intersection.

6. On Runway 7, all aircraft must **TOUCH DOWN** before **"ECHO"** intersection, and **BECOME** airborne by **"DELTA"** intersection.

* * * * * *

*The above procedures are designed to keep aircraft at a "normal Altitude" over the residential areas surrounding the airport. If you or your aircraft can not conform to these procedures, please request full-stop taxi-back take off's and landings. DO NOT jeopardize the safe operation of your aircraft for the sake of TOUCH AND GO'S.*

* * * * * *

ALL OTHER NOISE ABATEMENT PROCEDURES REMAIN IN EFFECT

* * * * * *

*Airport Management reserves the right to suspend the above procedures at anytime due to repeated unsafe operations or excessive noise complaints.

## *Fly Quietly Program*

IN THE INTEREST OF SAFETY, TRAFFIC FLOW, AND NOISE ABATEMENT DURING VFR CONDITIONS, EXCEPT WHEN OTHERWISE DIRECTED BY ATC, THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

### Hours

1. No pattern work from 2200 to 0800 weekdays and 2200 to 1000 weekends.
2. No touch and go landings from 1700 to 1000 daily.
3. From 2200 to 0800, jet powered aircraft must unless wind conditions prohibits:
   - Use RWY 25 for landing and RWY 7 for takeoff.
   - When the tower is not in operation, contact SOCAL Approach for IFR or VFR flight following on 124.9 prior to using 121.1 for common-traffic advisory.

### Traffic pattern

1. The traffic pattern altitude is 1,100 ft. MSL for single engine and light twin engine aircraft, and 1,500 ft. MSL for high performance aircraft and all jet powered aircraft.
2. All takeoffs shall be made when practical at the beginning of the active runway. Intersection takeoffs are prohibited unless required by ATC for traffic flow. Helicopters can expect nonstandard departure instructions.
3. Pilots should always climb at best rate performance to a safe traffic pattern altitude when departing either runway. When at a safe altitude and as soon as possible after takeoff, pilots are requested to adjust propeller pitch to reduce propeller noise.
4. Jet powered aircraft should climb at V2 to at least 400 ft. AGL when practical, and use manufacturers recommended noise abatement procedures at all times.
5. From 2200 to 0800, jet aircraft are required to depart from RWY 7when conditions permit.
6. Formation takeoffs and landings are prohibited unless approved in writing by the Hawthorne Airport Manager.
7. When departing from RWY 25, TURN CROSSWIND OVER THE MALL 1/4 MILES WEST OF THE RUNWAY AND FLY CROSSWIND OVER HAWTHORNE BLVD. Avoid flying over homes east or west of Hawthorne Blvd.
8. When departing from RWY 7, adjust upwind to the right to remain over the industrial area east of the airport, and then turn crosswind over the golf course.
9. From either runway, fly all downwind legs over or as near to El Segundo Blvd. as possible, and avoid the residential areas north and south of El Segundo Blvd.
10. When landing on RWY 25 and traffic permitting, turn base leg as close as possible to the runway. Remain west of,the east boundary of the golf course east of the airport.
11. When landing RWY 7 and traffic permitting, turn base leg over Hawthorne Blvd. and final over the Hawthorne Mall.

### "Touch and go" landings

1. Hours of operations: 1000 to 1700 daily
2. "Touch and go" landings:
   - Require clearance from the Hawthorne Control Tower.
   - Are restricted to single engine aircraft (MULTIENGINE AIRCRAFT MUST MAKE FULL STOP LANDINGS).
3. Pilots are requested to use best climb performance for all takeoffs.
4. "Touch and go" traffic on:
   - RWY 25, must TOUCH DOWN before "CHARLIE" intersection and BECOME AIRBORNE before "DELTA" intersection.
   - RWY 7, must TOUCH DOWN before "ECHO" intersection and BECOME AIRBORNE before "DELTA" intersection.



### Arrivals

1. From the southwest, report over King Harbor and plan to cross over and report Alondra Park at or above 1,500 ft. MSL.
2. From the Special Flight Rules Area, fly directly to Alondra Park and do not descend below 2,500 ft. MSL until east of the 405 FWY. Immediately upon departing the SVFR area, contact Hawthorne Tower on 121.1 for traffic control, or use 121.1 as a CTAF. The tower may clear aircraft for a modified direct downwind entry when traffic and altitude permit.
3. From over the 405 and 110 interchange, fly north over the 110 FWY at 1,500 ft. MSL to turn final at or above 1,500 ft. MSL prior to the 105 FWY and approach straight in parallel to the FWY.
4. From over the Los Angeles River and just south of the 105 FWY, fly straight-in to cross the 110 FWY at or above 1,500 ft. MSL

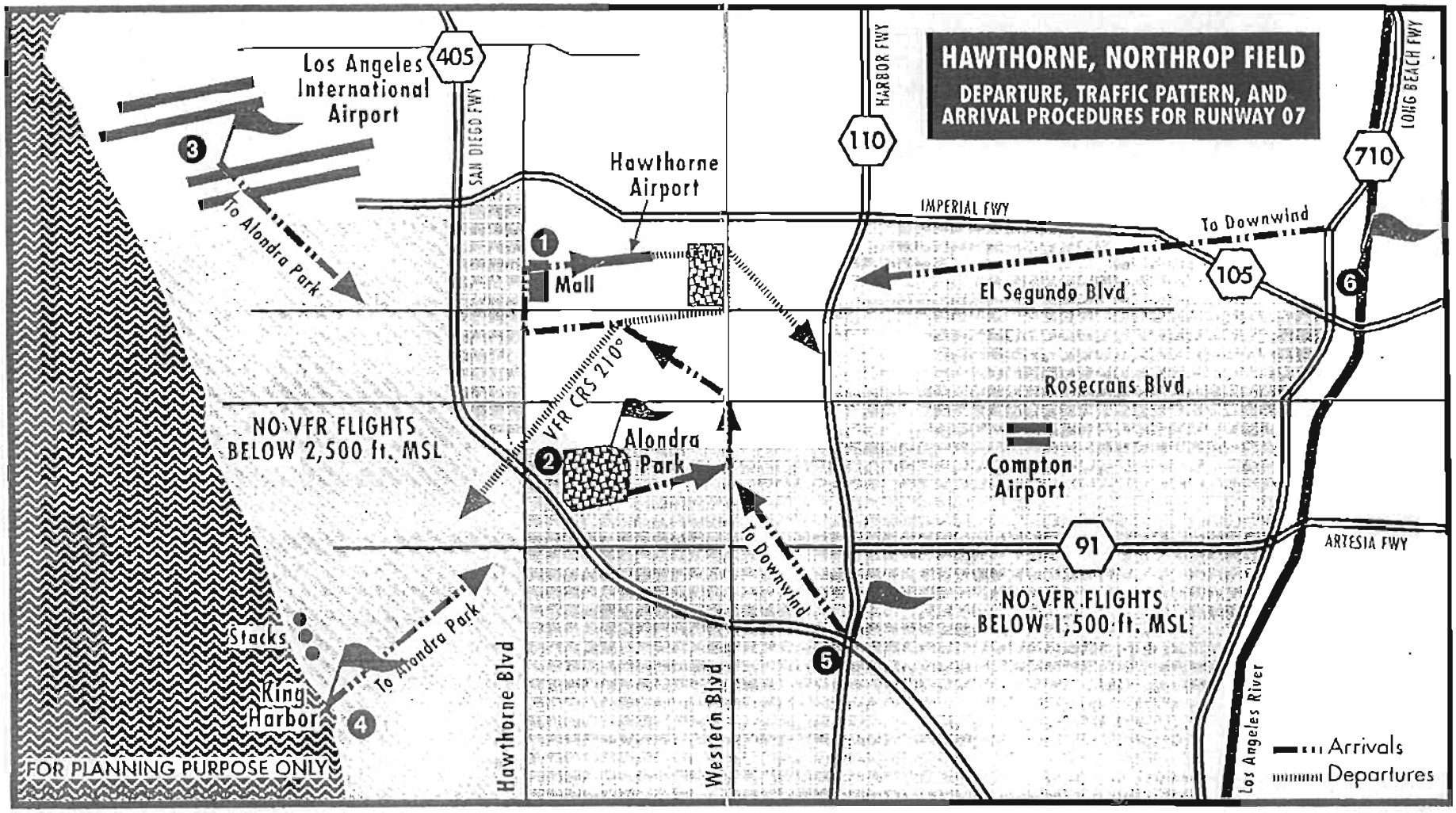
### Departures

1. **Standard departure from RWY 25:** Make a left turn over the Hawthorne Mall 1/4 miles west of the runway. Pilots should remain over Hawthorne Blvd. and traffic permitting, never fly over homes east or west of Hawthorne Blvd. Aircraft should remain over the Hawthorne Blvd. until above 1,500 ft. MSL or at least 2 miles south of the Mall before turning to a heading of approximately 210° to fly direct to King Harbor. THERE ARE NO STRAIGHT OUT OR LEFT 45° DEPARTURES FROM RWY 25.
2. **Downwind departure from RWY 25:** Make a left turn over the Hawthorne Mall 1/4 miles west of the runway and fly south over Hawthorne Blvd. Turn east over El Segundo Blvd. just south of the airport. Fly eastbound over El Segundo Blvd. After passing abeam the east boundary of the airport, continue east or depart southeast on course. Aircraft should climb to at least 1,500 ft. MSL when departing downwind.
3. **Standard departure from RWY 7:** Make a slight right turn on upwind to remain over the industrial area east of the airport. Above 500 ft. AGL and over the golf course east of the airport, make a right 45° departure. Pilots may resume own navigation after climbing above 1,500 ft. MSL. Use caution for aircraft transiting along the 110 FWY at 1,500 ft. MSL.

THE PROCEDURES LISTED ABOVE ARE FOR VFR OPERATIONS ONLY. **IFR PROCEDURES MUST FOLLOW IFR CLEARANCES.** EVERY EFFORT SHOULD BE MADE BY THOSE AIRCRAFT DEPARTING AND ARRIVING IFR TO OPERATE THEIR AIRCRAFT AS QUIETLY AS POSSIBLE USING GOOD JUDGEMENT AND GOOD NOISE ABAITMENT TECHNIQUES.

ALL PILOTS SHOULD BE AWARE OF THE NOISE SENSITIVE AREAS AROUND HAWTHORNE AIRPORT AND AVOID THEM. WHEN IN DOUBT CONTACT THE AIRPORT MANAGER AT (310) 970-7215 OR A HAWTHORNE AIRPORT FAA SAFETY PROGRAM COUNSELOR FOR ADVICE ON COMPLIANCE WITH THIS POLICY.

***We appreciate your cooperation!***




## DEPARTURE

Standard:

- After takeoff, adjust upwind to the right to remain over the industrial area to the east of the airport.
- Above 500 ft. AGL and over the golf course, turn right 45° and depart to the southeast.
- Above 1,500 ft. MSL, resume own navigation or as directed by the Hawthorne Tower.
- Avoid flying over the homes in the southwest corner of the golf course.
- Use caution for aircraft transiting the 110 Fwy at 1,500 ft. MSL

Downwind:

- Climb downwind to 1,500 ft. MSL at best rate of climb.
- Abeam mid-field, depart southwest toward King Harbor (210°).

## TRAFFIC PATTERN

Procedure:

- After takeoff, adjust upwind to the right to remain over the industrial area to the east of the airport.
- Turn crosswind over the golf course and fly on the east edge of the golf course.
- Fly downwind after crossing El Segundo Blvd. parallel to the runway.
- Turn base leg to fly over Hawthorne Blvd. and the Hawthorne Mall west of the airport.

Restrictions:

- Pattern work prohibited 2200 to 0800 weekdays, 2200 to 1000 weekends.
- Touch and go landings are restricted to single-engine aircraft only, and are prohibited 1700 to 1000 daily.
- From 2200 to 0800, multi-engine aircraft and jets are required to arrive Rwy 25 and depart Rwy 7 (when conditions permit).

## ARRIVAL

From ❷:

- Cross Alondra Park at or above 1,500 ft. MSL.
- Expect to fly east to arrive on a 45° entry leg.
- Descend to 1,100 ft. MSL prior to entering downwind.

From ❸ and ❹:

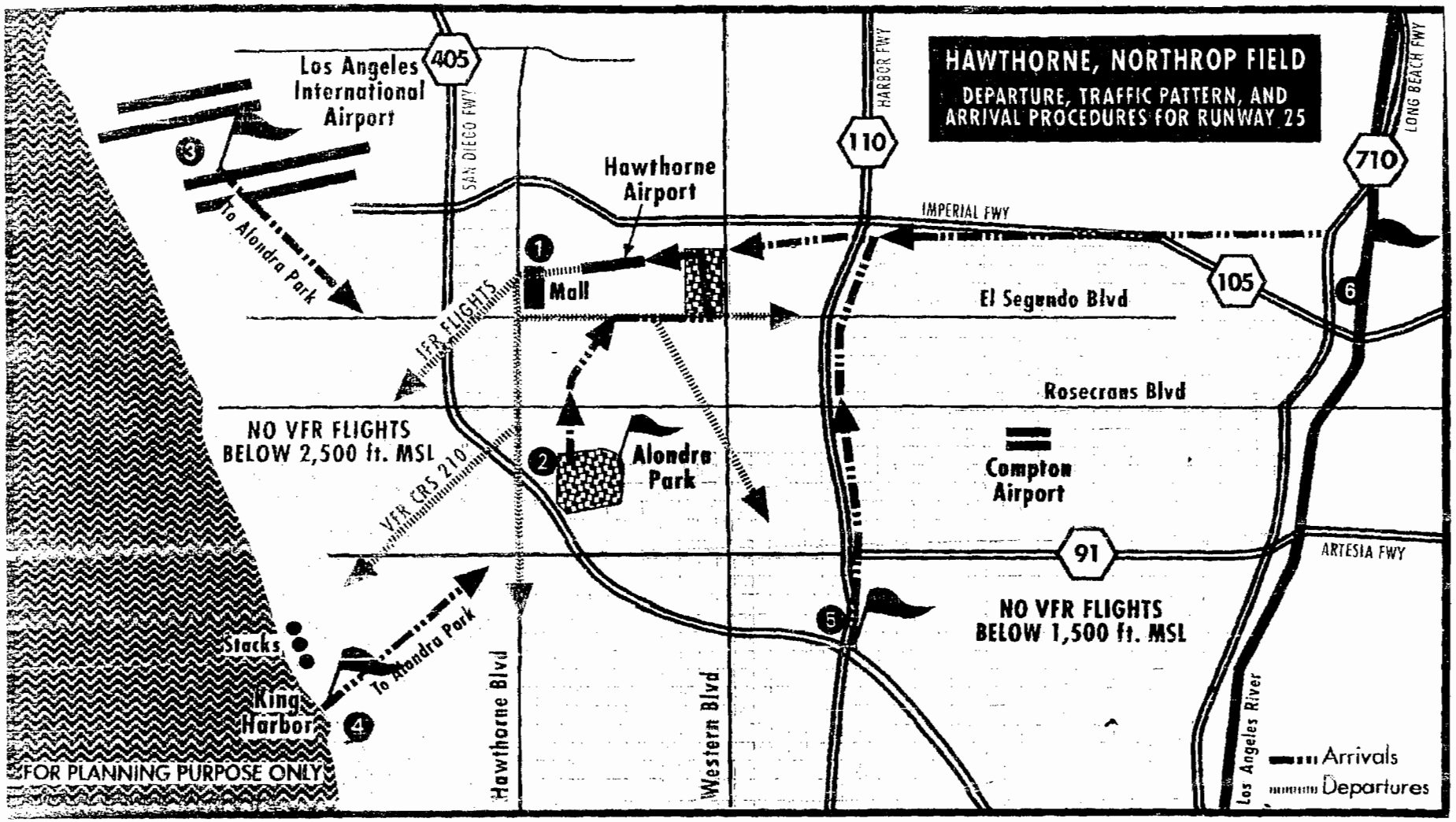
- Proceed direct to Alondra Park and remain at or above 2,500 ft. MSL until east of the 405 Fwy.

From ❺:

- Proceed on a 45° entry leg to mid-field downwind.
- Descend to 1,100 ft. MSL prior to entering a right downwind over El Segundo Blvd. south of the airport.

From ❻:

- Remain at or above 1,500 ft. MSL until crossing the 110 Fwy.
- Enter downwind directly parallel to the runway.




DEPARTURE

Standard:

- Fly runway heading until reaching 500 ft. AGL or the Hawthorne Mall ❶ 1/4 mile west of the airport
- Turn 90° left, remain over of Hawthorne Blvd.
- After crossing Rosecrans or 2 miles south ❷ or at or above 1,500 ft. MSL, turn southwest (210°)
- No southbound turns before reaching the runway end

Downwind:

- Climb downwind until reaching 1,500 ft. MSL or the east boundary of the airport.
- No turns before passing the east boundary of the airport.

**TRAFFIC PATTERN**

**Procedure:**

- Fly runway heading until reaching 500 ft. AGL or the Hawthorne Mall ❶ 1/4 mile west of the airport.
- Crosswind, remain over Hawthorne Blvd.
- Downwind, remain over El Segundo Blvd at 1,100 ft. MSL.
- Turn base within 1 mile of the east boundary of the airport (traffic permitting).

**Restrictions:**

- Pattern work prohibited 2200 to 0800 weekdays, 2200 to 1000 weekends.
- Touch and go landings are restricted to single-engine aircraft only, and are prohibited 1700 to 1000 daily.
- From 2200 to 0800, multi-engine aircraft and jets are required to arrive Rwy 25 and depart Rwy 7 (when conditions permit).

ARRIVAL

**From ❷:**

- Cross Alondra Park at or above 1,500 ft. MSL.
- Descend to 1,100 ft. MSL prior to entering downwind.

**From ❸ and ❹:**

- Proceed direct to Alondra Park and remain at or above 2,500 ft. MSL until east of the 405 Fwy.

**From ❺:**

- Remain east of the 110 Fwy at or above 1,500 ft. MSL until turning final.

**From ❻:**

- Remain at or above 1,500 ft. MSL until crossing the 110 Fwy. Remain south of the 105 Fwy.

HAWTHORNE MUNICIPAL AIRPORT
HAWTHORNE, CALIFORNIA

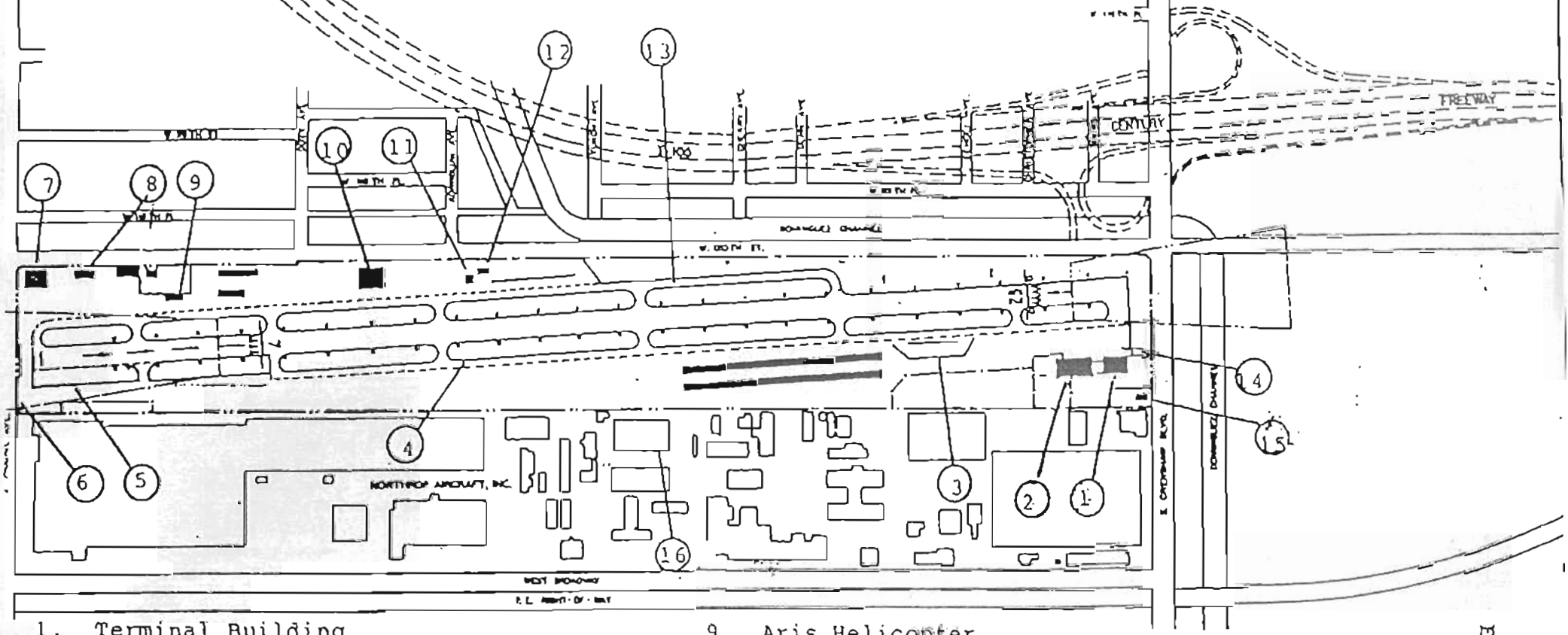
**TELEPHONE NO.**

| | |
|---|---|
| Control Tower | 310/675-1010 |
| Office | 310/675-2828 |
| ATIS | 310/675-7945 |
| Hawthorne AFSS | 310/297-0090 |
| Briefer | 800/992-7433 & 800/336-3980 |
| Airport Office | 310/970-7215 |
| LA County Fire | 310/675-0303 = 911 |
| Hawthorne Police | 310/675-4443 = 911 |

**NOTES:**

Field Elevation 64 Ft. M.S.L.

| | |
|---|---|
| Control Tower Hours: | 7:00 am-8:00 pm |
| Tower Frequency | 121.1 MHZ |
| Ground Control | 125.1 MHZ |
| ATIS | 118.4 MHZ |
| UHF | 257.8 MHZ |
| Localizer | 109.1 MHZ |
| Hawthorne AFSS | 122.5 MHZ |
| Fuel Truck | 123.3 |




1. Terminal Building
2. Automated Flight Service Station
3. Rwy 25 Run Up Area
4. South Taxiway
5. Rwy 7 Run Up Area
6. Main Entrance Gate
7. Western Museum of Flights
8. Skylink Charter L.L.C
9. Aris Helicopter
10. Security Aviation
11. Control Tower/Aux Entrance Gate
12. Fuel Pit
13. North Taxiway
14. Transient Parking
15. LA County Fire Dept.
16. Northrop Grumman Aviation

EXHIBIT A

# APPENDIX E

## Federal Rail Administration Inventory Sheets

# U. S. DOT CROSSING INVENTORY FORM

**DEPARTMENT OF TRANSPORTATION**
FEDERAL RAILROAD ADMINISTRATION

**OMB No. 2130-0017**

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

**A. Revision Date** *(MM/DD/YYYY)* 01 / 01 / 2011

**B. Reporting Agency**
☐ Railroad ☐ Transit
☒ State ☐ Other

**C. Reason for Update** *(Select only one)*
☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update
☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction

**D. DOT Crossing Inventory Number** 760595E

## Part I: Location and Classification Information

**1. Primary Operating Railroad** Union Pacific Railroad Company [UP]

**2. State** CALIFORNIA

**3. County** LOS ANGELES

**4. City / Municipality**
☒ In
☐ Near HAWTHORNE

**5. Street/Road Name & Block Number**
BIRCH ST. | _____
*(Street/Road Name)* | * *(Block Number)*

**6. Highway Type & No.**

**7. Do Other Railroads Operate a Separate Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR _____, _____, _____, _____

**8. Do Other Railroads Operate Over Your Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR _____, _____, _____, _____

**9. Railroad Division or Region**
☐ None LOS ANGELES

**10. Railroad Subdivision or District**
☐ None COLTON

**11. Branch or Line Name**
☐ None BR-EL SEGUNDO

**12. RR Milepost**
_____ | 0497.38 | _____
*(prefix)* | *(nnnn.nnn)* | *(suffix)*

**13. Line Segment** *
BBF497.38

**14. Nearest RR Timetable Station** *
HAWTHORNE

**15. Parent RR** *(if applicable)*
☐ N/A

**16. Crossing Owner** *(if applicable)*
☐ N/A

**17. Crossing Type**
☒ Public
☐ Private

**18. Crossing Purpose**
☒ Highway
☐ Pathway, Ped.
☐ Station, Ped.

**19. Crossing Position**
☒ At Grade
☐ RR Under
☐ RR Over

**20. Public Access** *(if Private Crossing)*
☐ Yes
☐ No

**21. Type of Train**
☐ Freight ☐ Transit
☐ Intercity Passenger ☐ Shared Use Transit
☐ Commuter ☐ Tourist/Other

**22. Average Passenger Train Count Per Day**
☐ Less Than One Per Day
☐ Number Per Day 0

**23. Type of Land Use**
☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

**24. Is there an Adjacent Crossing with a Separate Number?**
☐ Yes ☐ No If Yes, Provide Crossing Number _____

**25. Quiet Zone** *(FRA provided)*
☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established _____

**26. HSR Corridor ID**
_____ ☐ N/A

**27. Latitude in decimal degrees**
*(WGS84 std: nn.nnnnnnn)* 33.9747540

**28. Longitude in decimal degrees**
*(WGS84 std: -nnn.nnnnnnn)* -118.1234510

**29. Lat/Long Source**
☐ Actual ☐ Estimated

**30.A. Railroad Use** *

**31.A. State Use** *

**30.B. Railroad Use** *

**31.B. State Use** *

**30.C. Railroad Use** *

**31.C. State Use** *

**30.D. Railroad Use** *

**31.D. State Use** *

**32.A. Narrative** *(Railroad Use)* *

**32.B. Narrative** *(State Use)* *

**33. Emergency Notification Telephone No.** *(posted)*
800-848-8715

**34. Railroad Contact** *(Telephone No.)*

**35. State Contact** *(Telephone No.)*
415-703-3722

## Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)* 0

1.B. Total Night Thru Trains *(6 PM to 6 AM)* 2

1.C. Total Switching Trains 2

1.D. Total Transit Trains _____

1.E. Check if Less Than One Movement Per Day ☐
How many trains per week? _____

2. Year of Train Count Data *(YYYY)* _____

3. Speed of Train at Crossing
3.A. Maximum Timetable Speed *(mph)* 20
3.B. Typical Speed Range Over Crossing *(mph)* From 5 to 15

4. Type and Count of Tracks
Main 1 Siding _____ Yard _____ Transit _____ Industry _____

5. Train Detection *(Main Track only)*
☐ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☒ None

6. Is Track Signaled?
☐ Yes ☒ No

7.A. Event Recorder
☐ Yes ☐ No

7.B. Remote Health Monitoring
☐ Yes ☐ No

# U. S. DOT CROSSING INVENTORY FORM

| A. Revision Date *(MM/DD/YYYY)* 01/01/2011 | PAGE 2 | D. Crossing Inventory Number *(7 char.)* 760595E |
|---|---|---|

## Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

**2. Types of Passive Traffic Control Devices associated with the Crossing**

2.A. Crossbuck Assemblies *(count)* 2

2.B. STOP Signs *(R1-1) (count)* 0

2.C. YIELD Signs *(R1-2) (count)*

2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
☒ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____
☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____

2.E. Low Ground Clearance Sign *(W10-5)*
☐ Yes *(count_____)*
☐ No

2.F. Pavement Markings
☒ Stop Lines ☐ Dynamic Envelope
☒ RR Xing Symbols ☐ None

2.G. Channelization Devices/Medians
☐ All Approaches ☐ Median
☐ One Approach ☐ None

2.H. EXEMPT Sign *(R15-3)*
☐ Yes
☐ No

2.I. ENS Sign *(I-13)* Displayed
☐ Yes
☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No
Specify Type _____ Count _____
Specify Type _____ Count _____
Specify Type _____ Count _____

2.K. Private Crossing Signs *(if private)*
☐ Yes ☐ No

2.L. LED Enhanced Signs *(List types)*

**3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)***

3.A. Gate Arms *(count)*
Roadway 2
Pedestrian _____

3.B. Gate Configuration
☐ 2 Quad ☐ Full *(Barrier)* Resistance
☐ 3 Quad
☐ 4 Quad ☐ Median Gates

3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*
Over Traffic Lane 2 ☐ Incandescent
Not Over Traffic Lane 0 ☐ LED

3.D. Mast Mounted Flashing Lights *(count of masts)* 2
☐ Incandescent ☐ LED
☐ Back Lights Included ☐ Side Lights Included

3.E. Total Count of Flashing Light Pairs 0

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*
_____/_____ ☐ Not Required

3.G. Wayside Horn
☐ Yes Installed on *(MM/YYYY)* _____/_____
☐ No

3.H. Highway Traffic Signals Controlling Crossing
☐ Yes ☒ No

3.I. Bells *(count)* 2

3.J. Non-Train Active Warning
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None

3.K. Other Flashing Lights or Warning Devices
Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?
☐ Yes ☐ No

4.B. Hwy Traffic Signal Interconnection
☐ Not Interconnected
☐ For Traffic Signals
☐ For Warning Signs

4.C. Hwy Traffic Signal Preemption
☐ Simultaneous
☐ Advance

5. Highway Traffic Pre-Signals
☐ Yes ☐ No
Storage Distance * _____
Stop Line Distance * _____

6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes - Photo/Video Recording
☐ Yes – Vehicle Presence Detection
☐ None

## Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad ☐ One-way Traffic ☐ Two-way Traffic ☐ Divided Traffic
Number of Lanes 2

2. Is Roadway/Pathway Paved? ☒ Yes ☐ No

3. Does Track Run Down a Street? ☒ Yes ☐ No

4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)* ☐ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☒ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* -75

7. Smallest Crossing Angle
☒ 0° – 29° ☐ 30° – 59° ☐ 60° - 90°

8. Is Commercial Power Available? *
☒ Yes ☐ No

## Part V: Public Highway Information

1. Highway System
☐ (01) Interstate Highway System
☒ (02) Other Nat Hwy System (NHS)
☐ (03) Federal AID, Not NHS
☐ (08) Non-Federal Aid

2. Functional Classification of Road at Crossing
☐ (0) Rural ☒ (1) Urban
☐ (1) Interstate ☐ (5) Major Collector
☐ (2) Other Freeways and Expressways
☐ (3) Other Principal Arterial ☐ (6) Minor Collector
☐ (4) Minor Arterial ☒ (7) Local

3. Is Crossing on State Highway System?
☐ Yes ☒ No

4. Highway Speed Limit _____ MPH
☐ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*
Year 1988 AADT 005000

8. Estimated Percent Trucks 03 %

9. Regularly Used by School Buses?
☐ Yes ☒ No Average Number per Day 0

10. Emergency Services Route
☐ Yes ☐ No

## Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.

# U. S. DOT CROSSING INVENTORY FORM

**DEPARTMENT OF TRANSPORTATION**
FEDERAL RAILROAD ADMINISTRATION

**OMB No. 2130-0017**

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

**A. Revision Date** *(MM/DD/YYYY)*: 01 / 01 / 2011

**B. Reporting Agency**: ☐ Railroad ☐ Transit ☒ State ☐ Other

**C. Reason for Update** *(Select only one)*: ☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction

**D. DOT Crossing Inventory Number**: 760601F

## Part I: Location and Classification Information

**1. Primary Operating Railroad**: Union Pacific Railroad Company [UP]

**2. State**: CALIFORNIA

**3. County**: LOS ANGELES

**4. City / Municipality**: ☒ In ☐ Near HAWTHORNE

**5. Street/Road Name & Block Number**: EUCALYPTUS AVE. | _____ *(Street/Road Name)* | * *(Block Number)*

**6. Highway Type & No.**: _____

**7. Do Other Railroads Operate a Separate Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR _____, _____, _____, _____

**8. Do Other Railroads Operate Over Your Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR _____, _____, _____, _____

**9. Railroad Division or Region**: ☐ None LOS ANGELES

**10. Railroad Subdivision or District**: ☐ None COLTON

**11. Branch or Line Name**: ☐ None BR-EL SEGUNDO

**12. RR Milepost**: _____ | 0497.89 | _____ *(prefix)* | *(nnnn.nnn)* | *(suffix)*

**13. Line Segment** *: BBF497.89

**14. Nearest RR Timetable Station** *: HAWTHORNE

**15. Parent RR** *(if applicable)*: ☐ N/A _____

**16. Crossing Owner** *(if applicable)*: ☐ N/A _____

**17. Crossing Type**: ☒ Public ☐ Private

**18. Crossing Purpose**: ☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.

**19. Crossing Position**: ☒ At Grade ☐ RR Under ☐ RR Over

**20. Public Access** *(if Private Crossing)*: ☐ Yes ☐ No

**21. Type of Train**: ☐ Freight ☐ Transit ☐ Intercity Passenger ☐ Shared Use Transit ☐ Commuter ☐ Tourist/Other

**22. Average Passenger Train Count Per Day**: ☐ Less Than One Per Day ☐ Number Per Day 0

**23. Type of Land Use**: ☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

**24. Is there an Adjacent Crossing with a Separate Number?** ☐ Yes ☐ No If Yes, Provide Crossing Number _____

**25. Quiet Zone** *(FRA provided)*: ☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established _____

**26. HSR Corridor ID**: _____ ☐ N/A

**27. Latitude in decimal degrees** *(WGS84 std: nn.nnnnnnn)*: 33.9735070

**28. Longitude in decimal degrees** *(WGS84 std: -nnn.nnnnnnn)*: -118.1194230

**29. Lat/Long Source**: ☐ Actual ☐ Estimated

**30.A. Railroad Use** *:

**31.A. State Use** *:

**30.B. Railroad Use** *:

**31.B. State Use** *:

**30.C. Railroad Use** *:

**31.C. State Use** *:

**30.D. Railroad Use** *:

**31.D. State Use** *:

**32.A. Narrative** *(Railroad Use)* *:

**32.B. Narrative** *(State Use)* *:

**33. Emergency Notification Telephone No.** *(posted)*: 800-848-8715

**34. Railroad Contact** *(Telephone No.)*: _____

**35. State Contact** *(Telephone No.)*: 415-703-3722

## Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)*: 0

1.B. Total Night Thru Trains *(6 PM to 6 AM)*: 2

1.C. Total Switching Trains: 2

1.D. Total Transit Trains: _____

1.E. Check if Less Than One Movement Per Day ☐
How many trains per week? _____

2. Year of Train Count Data *(YYYY)*: _____

3. Speed of Train at Crossing
3.A. Maximum Timetable Speed *(mph)* 20
3.B. Typical Speed Range Over Crossing *(mph)* From 5 to 15

4. Type and Count of Tracks
Main 1 Siding 1 Yard _____ Transit _____ Industry _____

5. Train Detection *(Main Track only)*
☐ Constant Warning Time ☐ Motion Detection ☐ AFO ☐ PTC ☒ DC ☐ Other ☐ None

6. Is Track Signaled? ☐ Yes ☒ No

7.A. Event Recorder ☐ Yes ☐ No

7.B. Remote Health Monitoring ☐ Yes ☐ No

# U. S. DOT CROSSING INVENTORY FORM

| A. Revision Date *(MM/DD/YYYY)* 01/01/2011 | PAGE 2 | D. Crossing Inventory Number *(7 char.)* 760601F |
|---|---|---|

## Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

**2. Types of Passive Traffic Control Devices associated with the Crossing**

2.A. Crossbuck Assemblies *(count)* 1

2.B. STOP Signs *(R1-1) (count)* 0

2.C. YIELD Signs *(R1-2) (count)*

2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
☒ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____
☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____

2.E. Low Ground Clearance Sign *(W10-5)*
☐ Yes *(count_____)*
☐ No

2.F. Pavement Markings
☒ Stop Lines ☐ Dynamic Envelope
☒ RR Xing Symbols ☐ None

2.G. Channelization Devices/Medians
☐ All Approaches ☐ Median
☐ One Approach ☐ None

2.H. EXEMPT Sign *(R15-3)*
☐ Yes
☐ No

2.I. ENS Sign *(I-13)* Displayed
☐ Yes
☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No
Specify Type _____ Count _____
Specify Type _____ Count _____
Specify Type _____ Count _____

2.K. Private Crossing Signs *(if private)*
☐ Yes ☐ No

2.L. LED Enhanced Signs *(List types)*

**3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)***

3.A. Gate Arms *(count)*
Roadway 0
Pedestrian _____

3.B. Gate Configuration
☐ 2 Quad ☐ Full *(Barrier)* Resistance
☐ 3 Quad
☐ 4 Quad ☐ Median Gates

3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*
Over Traffic Lane 0 ☐ Incandescent
Not Over Traffic Lane 0 ☐ LED

3.D. Mast Mounted Flashing Lights *(count of masts)* 0
☐ Incandescent ☐ LED
☐ Back Lights Included ☐ Side Lights Included

3.E. Total Count of Flashing Light Pairs 0

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*
_____/_____ ☐ Not Required

3.G. Wayside Horn
☐ Yes Installed on *(MM/YYYY)* _____/_____
☐ No

3.H. Highway Traffic Signals Controlling Crossing
☐ Yes ☒ No

3.I. Bells *(count)* 1

3.J. Non-Train Active Warning
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None

3.K. Other Flashing Lights or Warning Devices
Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?
☐ Yes ☐ No

4.B. Hwy Traffic Signal Interconnection
☐ Not Interconnected
☐ For Traffic Signals
☐ For Warning Signs

4.C. Hwy Traffic Signal Preemption
☐ Simultaneous
☐ Advance

5. Highway Traffic Pre-Signals
☐ Yes ☐ No
Storage Distance * _____
Stop Line Distance * _____

6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes - Photo/Video Recording
☐ Yes – Vehicle Presence Detection
☐ None

## Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad
☐ One-way Traffic
☐ Two-way Traffic
☐ Divided Traffic
Number of Lanes 2

2. Is Roadway/Pathway Paved?
☒ Yes ☐ No

3. Does Track Run Down a Street?
☐ Yes ☒ No

4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)* ☐ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?
☐ Yes ☒ No If Yes, Approximate Distance *(feet)* _____

7. Smallest Crossing Angle
☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°

8. Is Commercial Power Available? *
☒ Yes ☐ No

## Part V: Public Highway Information

1. Highway System
☐ (01) Interstate Highway System
☐ (02) Other Nat Hwy System (NHS)
☐ (03) Federal AID, Not NHS
☒ (08) Non-Federal Aid

2. Functional Classification of Road at Crossing
☐ (0) Rural ☒ (1) Urban
☐ (1) Interstate ☐ (5) Major Collector
☐ (2) Other Freeways and Expressways
☐ (3) Other Principal Arterial ☐ (6) Minor Collector
☐ (4) Minor Arterial ☒ (7) Local

3. Is Crossing on State Highway System?
☐ Yes ☒ No

4. Highway Speed Limit
_____ MPH
☐ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*
Year 1988 AADT 001000

8. Estimated Percent Trucks
18 %

9. Regularly Used by School Buses?
☐ Yes ☒ No Average Number per Day 0

10. Emergency Services Route
☐ Yes ☐ No

## Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.

# U. S. DOT CROSSING INVENTORY FORM

**DEPARTMENT OF TRANSPORTATION**
FEDERAL RAILROAD ADMINISTRATION

**OMB No. 2130-0017**

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

**A. Revision Date** *(MM/DD/YYYY)* 01 / 01 / 2011

**B. Reporting Agency** ☐ Railroad ☐ Transit ☒ State ☐ Other

**C. Reason for Update** *(Select only one)* ☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction

**D. DOT Crossing Inventory Number** 760599G

## Part I: Location and Classification Information

**1. Primary Operating Railroad** Union Pacific Railroad Company [UP]

**2. State** CALIFORNIA

**3. County** LOS ANGELES

**4. City / Municipality** ☒ In ☐ Near HAWTHORNE

**5. Street/Road Name & Block Number** GREVILLA AVE *(Street/Road Name)* | * *(Block Number)*

**6. Highway Type & No.**

**7. Do Other Railroads Operate a Separate Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR

**8. Do Other Railroads Operate Over Your Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR

**9. Railroad Division or Region** ☐ None LOS ANGELES

**10. Railroad Subdivision or District** ☐ None COLTON

**11. Branch or Line Name** ☐ None BR-EL SEGUNDO

**12. RR Milepost** *(prefix)* | 0497.64 *(nnnn.nnn)* | *(suffix)*

**13. Line Segment** * BBF497.64

**14. Nearest RR Timetable Station** * HAWTHORNE

**15. Parent RR** *(if applicable)* ☐ N/A

**16. Crossing Owner** *(if applicable)* ☐ N/A

**17. Crossing Type** ☒ Public ☐ Private

**18. Crossing Purpose** ☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.

**19. Crossing Position** ☒ At Grade ☐ RR Under ☐ RR Over

**20. Public Access** *(if Private Crossing)* ☐ Yes ☐ No

**21. Type of Train** ☐ Freight ☐ Transit ☐ Intercity Passenger ☐ Shared Use Transit ☐ Commuter ☐ Tourist/Other

**22. Average Passenger Train Count Per Day** ☐ Less Than One Per Day ☐ Number Per Day 0

**23. Type of Land Use** ☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

**24. Is there an Adjacent Crossing with a Separate Number?** ☐ Yes ☐ No If Yes, Provide Crossing Number

**25. Quiet Zone** *(FRA provided)* ☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

**26. HSR Corridor ID** ☐ N/A

**27. Latitude in decimal degrees** *(WGS84 std: nn.nnnnnnn)* 33.9193519

**28. Longitude in decimal degrees** *(WGS84 std: -nnn.nnnnnnn)* -118.3547550

**29. Lat/Long Source** ☒ Actual ☐ Estimated

**30.A. Railroad Use** *

**31.A. State Use** *

**30.B. Railroad Use** *

**31.B. State Use** *

**30.C. Railroad Use** *

**31.C. State Use** *

**30.D. Railroad Use** *

**31.D. State Use** *

**32.A. Narrative** *(Railroad Use)* *

**32.B. Narrative** *(State Use)* *

**33. Emergency Notification Telephone No.** *(posted)* 800-848-8715

**34. Railroad Contact** *(Telephone No.)*

**35. State Contact** *(Telephone No.)* 415-703-3722

## Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)* 0

1.B. Total Night Thru Trains *(6 PM to 6 AM)* 2

1.C. Total Switching Trains 2

1.D. Total Transit Trains

1.E. Check if Less Than One Movement Per Day ☐
How many trains per week?

2. Year of Train Count Data *(YYYY)*

3. Speed of Train at Crossing
3.A. Maximum Timetable Speed *(mph)* 20
3.B. Typical Speed Range Over Crossing *(mph)* From 5 to 15

4. Type and Count of Tracks
Main 1 Siding Yard Transit Industry

5. Train Detection *(Main Track only)*
☐ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☒ DC ☐ Other ☐ None

6. Is Track Signaled? ☐ Yes ☒ No

7.A. Event Recorder ☐ Yes ☐ No

7.B. Remote Health Monitoring ☐ Yes ☐ No

# U. S. DOT CROSSING INVENTORY FORM

| A. Revision Date *(MM/DD/YYYY)* 01/01/2011 | PAGE 2 | D. Crossing Inventory Number *(7 char.)* 760599G |
|---|---|---|

## Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

**2. Types of Passive Traffic Control Devices associated with the Crossing**

2.A. Crossbuck Assemblies *(count)* 0

2.B. STOP Signs *(R1-1) (count)* 0

2.C. YIELD Signs *(R1-2) (count)*

2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
☒ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____
☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____

2.E. Low Ground Clearance Sign *(W10-5)*
☐ Yes *(count_____)*
☐ No

2.F. Pavement Markings
☒ Stop Lines ☐ Dynamic Envelope
☒ RR Xing Symbols ☐ None

2.G. Channelization Devices/Medians
☐ All Approaches ☐ Median
☐ One Approach ☐ None

2.H. EXEMPT Sign *(R15-3)*
☐ Yes
☐ No

2.I. ENS Sign *(I-13)* Displayed
☐ Yes
☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No
Specify Type _____ Count _____
Specify Type _____ Count _____
Specify Type _____ Count _____

2.K. Private Crossing Signs *(if private)*
☐ Yes ☐ No

2.L. LED Enhanced Signs *(List types)*

**3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)***

3.A. Gate Arms *(count)*
Roadway 2
Pedestrian _____

3.B. Gate Configuration
☐ 2 Quad ☐ Full *(Barrier)* Resistance
☐ 3 Quad
☐ 4 Quad ☐ Median Gates

3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*
Over Traffic Lane 0 ☐ Incandescent
Not Over Traffic Lane 0 ☐ LED

3.D. Mast Mounted Flashing Lights *(count of masts)* 2
☐ Incandescent ☐ LED
☐ Back Lights Included ☐ Side Lights Included

3.E. Total Count of Flashing Light Pairs 0

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*
_____/_____ ☐ Not Required

3.G. Wayside Horn
☐ Yes Installed on *(MM/YYYY)* _____/_____
☐ No

3.H. Highway Traffic Signals Controlling Crossing
☐ Yes ☒ No

3.I. Bells *(count)* 2

3.J. Non-Train Active Warning
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None

3.K. Other Flashing Lights or Warning Devices
Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?
☐ Yes ☐ No

4.B. Hwy Traffic Signal Interconnection
☐ Not Interconnected
☐ For Traffic Signals
☐ For Warning Signs

4.C. Hwy Traffic Signal Preemption
☐ Simultaneous
☐ Advance

5. Highway Traffic Pre-Signals
☐ Yes ☐ No
Storage Distance * _____
Stop Line Distance * _____

6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes - Photo/Video Recording
☐ Yes – Vehicle Presence Detection
☐ None

## Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad ☐ One-way Traffic ☐ Two-way Traffic ☐ Divided Traffic
Number of Lanes 2

2. Is Roadway/Pathway Paved? ☒ Yes ☐ No

3. Does Track Run Down a Street? ☐ Yes ☒ No

4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)* ☐ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?
☐ Yes ☒ No If Yes, Approximate Distance *(feet)* _____

7. Smallest Crossing Angle
☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°

8. Is Commercial Power Available? *
☒ Yes ☐ No

## Part V: Public Highway Information

1. Highway System
☐ (01) Interstate Highway System
☐ (02) Other Nat Hwy System (NHS)
☐ (03) Federal AID, Not NHS
☒ (08) Non-Federal Aid

2. Functional Classification of Road at Crossing
☐ (0) Rural ☒ (1) Urban
☐ (1) Interstate ☐ (5) Major Collector
☐ (2) Other Freeways and Expressways
☐ (3) Other Principal Arterial ☐ (6) Minor Collector
☐ (4) Minor Arterial ☒ (7) Local

3. Is Crossing on State Highway System?
☐ Yes ☒ No

4. Highway Speed Limit _____ MPH
☐ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*
Year 1988 AADT 002000

8. Estimated Percent Trucks 03 %

9. Regularly Used by School Buses?
☐ Yes ☒ No Average Number per Day 0

10. Emergency Services Route
☐ Yes ☐ No

## Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.

# U. S. DOT CROSSING INVENTORY FORM

**DEPARTMENT OF TRANSPORTATION**
FEDERAL RAILROAD ADMINISTRATION

**OMB No. 2130-0017**

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

**A. Revision Date** *(MM/DD/YYYY)* 01 / 01 / 2011

**B. Reporting Agency**
☐ Railroad ☐ Transit
☒ State ☐ Other

**C. Reason for Update** *(Select only one)*
☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update
☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction

**D. DOT Crossing Inventory Number** 760597T

## Part I: Location and Classification Information

**1. Primary Operating Railroad** Union Pacific Railroad Company [UP]

**2. State** CALIFORNIA

**3. County** LOS ANGELES

**4. City / Municipality**
☒ In
☐ Near HAWTHORNE

**5. Street/Road Name & Block Number**
HAWTHORNE BLVD | _____
*(Street/Road Name)* | * *(Block Number)*

**6. Highway Type & No.**

**7. Do Other Railroads Operate a Separate Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR _____, _____, _____, _____

**8. Do Other Railroads Operate Over Your Track at Crossing?** ☐ Yes ☒ No
If Yes, Specify RR _____, _____, _____, _____

**9. Railroad Division or Region**
☐ None LOS ANGELES

**10. Railroad Subdivision or District**
☐ None COLTON

**11. Branch or Line Name**
☐ None BR-EL SEGUNDO

**12. RR Milepost**
_____ | 0497.52 | _____
*(prefix)* | *(nnnn.nnn)* | *(suffix)*

**13. Line Segment** *
BBF497.52

**14. Nearest RR Timetable Station** *
HAWTHORNE

**15. Parent RR** *(if applicable)*
☐ N/A

**16. Crossing Owner** *(if applicable)*
☐ N/A

**17. Crossing Type**
☒ Public
☐ Private

**18. Crossing Purpose**
☒ Highway
☐ Pathway, Ped.
☐ Station, Ped.

**19. Crossing Position**
☒ At Grade
☐ RR Under
☐ RR Over

**20. Public Access** *(if Private Crossing)*
☐ Yes
☐ No

**21. Type of Train**
☐ Freight ☐ Transit
☐ Intercity Passenger ☐ Shared Use Transit
☐ Commuter ☐ Tourist/Other

**22. Average Passenger Train Count Per Day**
☐ Less Than One Per Day
☐ Number Per Day 0

**23. Type of Land Use**
☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

**24. Is there an Adjacent Crossing with a Separate Number?**
☐ Yes ☐ No If Yes, Provide Crossing Number _____

**25. Quiet Zone** *(FRA provided)*
☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established _____

**26. HSR Corridor ID**
_____ ☐ N/A

**27. Latitude in decimal degrees**
*(WGS84 std: nn.nnnnnnn)* 33.9743390

**28. Longitude in decimal degrees**
*(WGS84 std: -nnn.nnnnnnn)* -118.1221470

**29. Lat/Long Source**
☐ Actual ☐ Estimated

**30.A. Railroad Use** *

**31.A. State Use** *

**30.B. Railroad Use** *

**31.B. State Use** *

**30.C. Railroad Use** *

**31.C. State Use** *

**30.D. Railroad Use** *

**31.D. State Use** *

**32.A. Narrative** *(Railroad Use)* *

**32.B. Narrative** *(State Use)* *

**33. Emergency Notification Telephone No.** *(posted)*
800-848-8715

**34. Railroad Contact** *(Telephone No.)*

**35. State Contact** *(Telephone No.)*
415-703-3722

## Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)* 0

1.B. Total Night Thru Trains *(6 PM to 6 AM)* 2

1.C. Total Switching Trains 2

1.D. Total Transit Trains _____

1.E. Check if Less Than One Movement Per Day ☐
How many trains per week? _____

2. Year of Train Count Data *(YYYY)* _____

3. Speed of Train at Crossing
3.A. Maximum Timetable Speed *(mph)* 20
3.B. Typical Speed Range Over Crossing *(mph)* From 5 to 15

4. Type and Count of Tracks
Main 1 Siding _____ Yard _____ Transit _____ Industry _____

5. Train Detection *(Main Track only)*
☐ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☒ DC ☐ Other ☐ None

6. Is Track Signaled?
☐ Yes ☒ No

7.A. Event Recorder
☐ Yes ☐ No

7.B. Remote Health Monitoring
☐ Yes ☐ No

# U. S. DOT CROSSING INVENTORY FORM

| A. Revision Date *(MM/DD/YYYY)* 01/01/2011 | PAGE 2 | D. Crossing Inventory Number *(7 char.)* 760597T |
|---|---|---|

## Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

**2. Types of Passive Traffic Control Devices associated with the Crossing**

2.A. Crossbuck Assemblies *(count)* 1

2.B. STOP Signs *(R1-1) (count)* 0

2.C. YIELD Signs *(R1-2) (count)*

2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
☒ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____
☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____

2.E. Low Ground Clearance Sign *(W10-5)*
☐ Yes *(count_____)*
☐ No

2.F. Pavement Markings
☒ Stop Lines ☐ Dynamic Envelope
☒ RR Xing Symbols ☐ None

2.G. Channelization Devices/Medians
☐ All Approaches ☐ Median
☐ One Approach ☐ None

2.H. EXEMPT Sign *(R15-3)*
☐ Yes
☐ No

2.I. ENS Sign *(I-13)* Displayed
☐ Yes
☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No
Specify Type _____ Count _____
Specify Type _____ Count _____
Specify Type _____ Count _____

2.K. Private Crossing Signs *(if private)*
☐ Yes ☐ No

2.L. LED Enhanced Signs *(List types)*

**3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)***

3.A. Gate Arms *(count)*
Roadway 4
Pedestrian _____

3.B. Gate Configuration
☐ 2 Quad ☐ Full *(Barrier)* Resistance
☐ 3 Quad
☐ 4 Quad ☐ Median Gates

3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*
Over Traffic Lane 4 ☐ Incandescent
Not Over Traffic Lane 0 ☐ LED

3.D. Mast Mounted Flashing Lights *(count of masts)* 4
☐ Incandescent ☐ LED
☐ Back Lights Included ☐ Side Lights Included

3.E. Total Count of Flashing Light Pairs 0

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*
_____/_____ ☐ Not Required

3.G. Wayside Horn
☐ Yes Installed on *(MM/YYYY)* _____/_____
☐ No

3.H. Highway Traffic Signals Controlling Crossing
☐ Yes ☒ No

3.I. Bells *(count)* 4

3.J. Non-Train Active Warning
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None

3.K. Other Flashing Lights or Warning Devices
Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?
☐ Yes ☐ No

4.B. Hwy Traffic Signal Interconnection
☐ Not Interconnected
☐ For Traffic Signals
☐ For Warning Signs

4.C. Hwy Traffic Signal Preemption
☐ Simultaneous
☐ Advance

5. Highway Traffic Pre-Signals
☐ Yes ☐ No
Storage Distance * _____
Stop Line Distance * _____

6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes - Photo/Video Recording
☐ Yes – Vehicle Presence Detection
☐ None

## Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad
Number of Lanes 3
☐ One-way Traffic
☐ Two-way Traffic
☐ Divided Traffic

2. Is Roadway/Pathway Paved?
☒ Yes ☐ No

3. Does Track Run Down a Street?
☐ Yes ☒ No

4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)* ☐ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☒ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?
☐ Yes ☒ No If Yes, Approximate Distance *(feet)* _____

7. Smallest Crossing Angle
☒ 0° – 29° ☐ 30° – 59° ☐ 60° - 90°

8. Is Commercial Power Available? *
☒ Yes ☐ No

## Part V: Public Highway Information

1. Highway System
☐ (01) Interstate Highway System
☐ (02) Other Nat Hwy System (NHS)
☒ (03) Federal AID, Not NHS
☐ (08) Non-Federal Aid

2. Functional Classification of Road at Crossing
☐ (0) Rural ☒ (1) Urban
☐ (1) Interstate ☐ (5) Major Collector
☐ (2) Other Freeways and Expressways
☒ (3) Other Principal Arterial ☐ (6) Minor Collector
☐ (4) Minor Arterial ☐ (7) Local

3. Is Crossing on State Highway System?
☐ Yes ☒ No

4. Highway Speed Limit
_____ MPH
☐ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*
Year 1991 AADT 036000

8. Estimated Percent Trucks
15 %

9. Regularly Used by School Buses?
☐ Yes ☒ No Average Number per Day 0

10. Emergency Services Route
☐ Yes ☐ No

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