Appendix G Noise Data

Appendices

This page intentionally left blank.

City of Industry General Plan, 2014

Noise section of Safety Element

The use, storage, and transportation of hazardous materials and hazardous waste are heavily controlled at the federal, state, and local level through regulations and government agency monitoring and review. The Health Hazardous Materials Division of the LACFD oversees, plans, and responds to issues related to hazardous materials and waste for the City.

Goal

S4 Reduced potential for hazardous materials exposure and contamination.

Policies

S4-1 Coordinate with the LACFD to identify and enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use or transport.

S4-2 Require that the users of hazardous materials be adequately prepared to prevent and mitigate hazardous materials releases.

S4-3 Discourage new sensitive land uses from locating near existing sites that use, store, or generate large quantities of hazardous materials.

4.2.5 Emergency Preparedness

In the event of an emergency, preparedness and response plans will help preserve life and minimize damage to property. The Los Angeles County Office of Emergency Management (OEM) provides emergency planning, coordination, operations, public education, training, and grants administration services for the City of Industry. The County OEM also prepares the Operational Area Emergency Response Plan (OAERP), which strengthens short and long-term emergency response and recovery capability, and identifies emergency procedures and emergency management routes in the County.

The City's major roadways and access to major freeways provide numerous evacuation routes in the event of an emergency. The presence of freight and commuter rail lines in the City results in numerous at-grade rail crossings at major roadway intersections. If these rail lines or at-grade crossings were blocked in an emergency, north–south access could be limited. Fortunately, there are already numerous grade-separated rail crossings in the City and more are planned as part of the Alameda Corridor-East project.

Goal

S5 Effective disaster mitigation, preparedness, response, and recovery.

Policies

S5-1 Coordinate with and support the County OEM in preparing and implementing the OAERP.

4.2.6 Noise and Land Use Compatibility

The City of Industry is devoted to industrial and commercial uses that are less sensitive to noise than other uses. Certain land uses are particularly sensitive to noise and vibration, including residential, school, and open space/recreation areas where quiet environments are necessary for enjoyment, public health, and safety. Excessive noise levels are not only a potential annoyance but can constitute a health threat resulting in temporary or permanent hearing loss and mental distress. Despite its industrial and commercial focus, the City of Industry does not contain land uses or businesses that generate excessive noise levels that impact surrounding sensitive land uses.

Measuring Noise

Two common terms used in reference to levels of sound or noise are the decibel (dB) and community noise equivalent level (CNEL). A decibel is a unit used to measure the intensity of a sound on a logarithmic scale. The CNEL is a weighted average of sound levels gathered throughout a 24-hour period. More specifically, it is the

energy average of the sound levels occurring during a 24-hour period, with 5 dB added to the levels occurring during the period from 7:00 PM to 10:00 PM and 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

Noise Regulations

State of California Building Code. California's noise insulation standards are codified in the California Building Code and apply to new construction for the purpose of ensuring compatibility between interior and exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans for these uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

State of California Land Use Compatibility Criteria. Table 4 presents a land use compatibility chart for community noise adopted by the State of California as part of its general plan guidelines. This table provides a tool to gauge the compatibility of new land uses relative to noise levels. This table identifies normally acceptable, conditionally acceptable, and clearly unacceptable noise levels for various land uses. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. A normally acceptable designation means that standard construction can occur with no special noise reduction requirements.

City of Industry Municipal Code. The City of Industry regulates noise nuisances under Chapter 1.30, which addresses public nuisances; and under Chapter 17.12, which addresses noise from entertainment uses.

Existing Noise Sources

The City of Industry is impacted by a multitude of existing noise sources, many of them directly connected with major interstate commerce and intrastate thoroughfares that divide the City. Major noise sources affecting the City of Industry include stationary and mobile sources, which are described below.

Mobile Sources. Traffic and truck noise is generated on regional and local roadways within the City of Industry. Noise generated by the train traffic on UPRR's Alhambra and Los Angeles Subdivision lines contributes to the ambient noise environment along these two transportation routes. At an at-grade crossing, a train is required by the Federal Railroad Administration to sound a warning horn at a distance of a quarter mile from all intersections, except those which have established a "quiet zone." A quiet zone is a segment of rail line where locomotive horns are not routinely sounded while the train approaches the public railroad grade crossings.

Stationary Sources. Stationary sources of noise include commercial and industrial equipment and activities. Whereas mobile source noise affects many noise receptors along an entire length of roadway, stationary noise sources affect their immediate areas. Major stationary sources within the City include industrial and warehousing operations and schools (stationary noise from sounding of bells and whistles at at-grade rail crossings is described under mobile source noise).

Industrial and warehousing operations are major noise sources in the City of Industry. In addition to onsite mechanical equipment, which generates noise, warehousing and industrial land uses generate substantial truck traffic, which results in additional noise on local roadways in the vicinity of industrial operations.

Schools are considered both sensitive noise receptors and noise generators. They are considered noise sensitive because of the necessity for quiet in the classroom to provide an adequate environment for learning. However, outdoor activities that occur on school campuses throughout the City generate noticeable levels of noise within the vicinity of the campus. While it is preferable to have schools located in a residential setting to support the

neighborhood, noise generated on both the weekdays (from physical education classes and sports programs) and weekends (from use of the fields) can elevate noise levels within the community.

Noise Assessment and Modeling

To understand and evaluate the impacts of land use patterns, traffic, and individual developments on the noise environment, a variety of data has been collected and existing and future impacts have been modeled. Projected noise contours for the City's roadways and freeways at buildout are presented in Figure 18. Future noise impacts to the community are expected to be primarily generated by increasing traffic volumes that accompany increased development. The greatest increases in noise are expected on lands subject to increased development intensity, especially in the IBC area in the eastern portion of the City. However, all existing uses and land use designations for future development adjacent to roadway segments with high noise levels are warehousing and industrial.

It is important to note that special attention to project-specific site design may substantially reduce noise impacts below those projected; therefore, these estimates are considered conservative and unmitigated. A wide range of design criteria affecting roadway engineering and traffic noise abatement include differences in final grade between the roadbed and the top of walls, spacing of intersections, setbacks and parkway widths, roadway composition, and other considerations.

Goal

S6 An environment where noise does not adversely affect sensitive land uses.

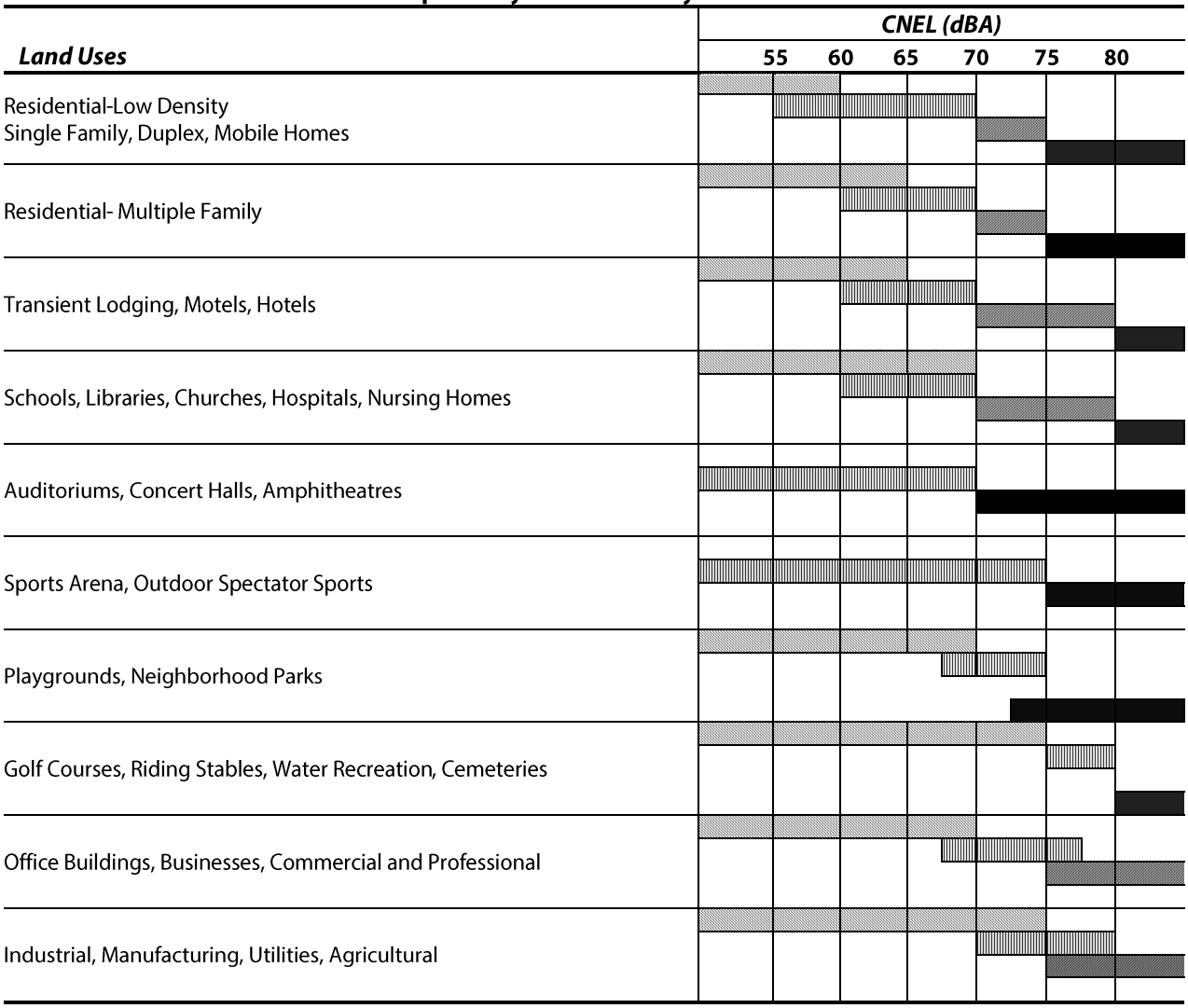
Policies

S6-1 Coordinate with Caltrans, San Gabriel Valley Council of Governments, Southern California Association of Governments, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of transportation and land use plans to minimize noise impacts and provide appropriate mitigation measures.

S6-2 Address noise impacts through the effective enforcement of the noise ordinance, project and environmental review, and compliance with state and federal noise standards.

S6-3 Consider the noise levels likely to be produced by any new businesses or substantially expanded business activities locating near existing noise-sensitive uses such as schools, community facilities, and residences, as well as adjacent to established businesses involving vibration-sensitive activities.

Table 4
Land Use Compatibility for Community Noise Environments



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

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

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

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

Source: OPR 2003. Adapted from the US EPA Office of Noise Abatement Control, Washington D.C. Community Noise. Prepared by Wyle Laboratories. December 1971.

Los Angeles County Code

Chapter 12.08 - NOISE CONTROL

Parts:

Part 1 - GENERAL PROVISIONS

Sections:

12.08.010 - Title for citation.

The ordinance codified in this chapter may be cited as the "noise control ordinance of the county of Los Angeles."

(Ord. 11778 § 2 (Art. 1 § 101), 1978: Ord. 11773 § 2 (Art. 1 § 101), 1978.)

12.08.020 - Declaration of policy—Nuisances deemed misdemeanors.

A. In order to control unnecessary, excessive and annoying noise and vibration in the county of Los Angeles, it is declared to be the policy of the county to prohibit such noise and vibration generated from any sources as specified in this chapter. It shall be the policy of the county to maintain quiet in those areas which exhibit low noise levels and to implement programs aimed at reducing noise in those areas within the county where noise levels are above acceptable values.

B. It is determined that certain noise levels and vibration are detrimental to the public health, welfare and safety and contrary to public interest, and therefore the board of supervisors of the county does ordain and declare that creating, maintaining, causing or allowing to be created, caused or maintained any noise or vibration in a manner prohibited by or not in conformity with the provisions of this chapter is a public nuisance and shall be punishable as such.

(Ord. 11778 § 2 (Art. 2 § 201), 1978: Ord. 11773 § 2 (Art. 2 § 201), 1978.)

Part 2 - DEFINITIONS

Sections:

12.08.030 - Terminology—Conformity with ANSI standards.

All terminology used in this chapter, not defined in this Part 2, shall be in conformance with applicable publications of the American National Standards Institute (ANSI) or its successor body.

(Ord. 11778 § 2 (Art. 3 § 301), 1978: Ord. 11773 § 2 (Art. 3 § 301), 1978.)

12.08.040 - Definitions applicable.

The following words, phrases and terms as used in this chapter shall have the meanings as indicated in this Part 2.

(Ord. 11778 § 2 (Art. 3 § 302 (part)), 1978: Ord. 11773 § 2 (Art. 3 § 302 (part)), 1978.)

12.08.050 - Agricultural property.

"Agricultural property" means a parcel of real property which is undeveloped for any use other than agricultural purposes.

(Ord. 11778 § 2 (Art. 3 § 302(a)), 1978: Ord. 11773 § 2 (Art. 3 § 302(a)), 1978.)

12.08.060 - Ambient noise histogram.

"Ambient noise histogram" means the composite of all noise from sources near and far, excluding the alleged intrusive noise source. In this context, the ambient noise histogram shall constitute the normal or existing level of environmental noise at a given location.

(Ord. 11778 § 2 (Art. 3 § 302(b)), 1978: Ord. 11773 § 2 (Art. 3 § 302(b)), 1978.)

12.08.070 - A-weighted sound level.

"A-weighted sound level" means the sound level in decibels as measured on a soundlevel meter using the A-weighting network. The level so read is designated dB (A) or dBA.

(Ord. 11778 § 2 (Art. 3 § 302(c)), 1978: Ord. 11773 § 2 (Art. 3 § 302(c)), 1978.)

12.08.080 - Commercial property.

"Commercial property" means a parcel of real property which is developed and used either in part or in whole for commercial purposes. In cases of multiple land uses of any property, the county zoning classification of such property pursuant to county Ordinance 1494, as amended, shall be applicable. (See Title 22 of this code.)

(Ord. 11778 § 2 (Art. 3 § 302(d)), 1978: Ord. 11773 § 2 (Art. 3 § 302(d)), 1978.)

12.08.090 - Construction.

"Construction" means any site preparation, assembly, erection, substantial repair, alteration, or similar action, for or of public or private rights-of-way, structures, utilities, or similar property.

(Ord. 11778 § 2 (Art. 3 § 302(e)), 1978: Ord. 11773 § 2 (Art. 3 § 302(e)), 1978.)

12.08.100 - Cumulative period.

"Cumulative period" means an additive period of time composed of individual time segments which may be continuous or interrupted.

(Ord. 11778 § 2 (Art. 3 § 302(f)), 1978: Ord. 11773 § 2 (Art. 3 § 302(f)), 1978.)

12.08.110 - Decibel.

"Decibel" means a unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base of 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals.

(Ord. 11778 § 2 (Art. 3 § 302(g)), 1978: Ord. 11773 § 2 (Art. 3 § 302(g)), 1978.)

12.08.120 - Dwelling unit.

"Dwelling unit" means a single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

(Ord. 11778 § 2 (Art. 3 § 302(h)), 1978: Ord. 11773 § 2 (Art. 3 § 302(h)), 1978.)

12.08.130 - Emergency machinery, vehicle or alarm.

"Emergency machinery, vehicle or alarm" means any machinery, vehicle or alarm used, employed, performed or operated in an effort to protect, provide or restore safe conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

(Ord. 11778 § 2 (Art. 3 § 302(i)), 1978: Ord. 11773 (Art. 3 § 302(i)), 1978.)

12.08.140 - Emergency work.

"Emergency work" means any work performed for the purpose of preventing or alleviating the physical trauma or property damage threatened or caused by an emergency.

(Ord. 11778 § 2 (Art. 3 § 302(j)), 1978: Ord. 11773 (Art. 3 § 302(j)), 1978.)

12.08.150 - Fixed noise source.

"Fixed noise source" means a stationary device which creates sounds while fixed or motionless, including but not limited to residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigeration equipment.

(Ord. 11778 § 2 (Art. 3 § 302(k)), 1978: Ord. 11773 (Art. 3 § 302(k)), 1978.)

12.08.160 - Grading.

"Grading" means any excavating or filling of earth material or any combination thereof conducted at a site to prepare said site for construction or other improvements thereon.

(Ord. 11778 § 2 (Art. 3 § 302(1)), 1978: Ord. 11773 (Art. 3 § 302(1)), 1978.)

12.08.170 - Health care institution.

"Health care institution" means any hospital, convalescent home, or other similar facilities which provide health care, medical treatment, room, board or other services for the ill, retarded or convalescent.

(Ord. 11778 § 2 (Art. 3 § 302(m)), 1978: Ord. 11773 (Art. 3 § 302(m)), 1978.)

12.08.180 - Health officer.

"Health officer" means the director of the department of public health of the county of Los Angeles, or his duly authorized representative.

(Ord. 2006-0040 § 106, 2006: Ord. 11778 § 2 (Art. 3 § 302(n)), 1978: Ord. 11773 (Art. 3 § 302(n)), 1978.)

12.08.190 - Impulsive noise.

"Impulsive noise" means a sound of short duration, usually less than one second and of high intensity, with an abrupt onset and rapid decay.

(Ord. 11778 § 2 (Art. 3 § 302(o)), 1978: Ord. 11773 (Art. 3 § 302 (o)), 1978.)

12.08.200 - Industrial property.

"Industrial property" means property which is developed and used either in part or in whole for manufacturing purposes. In cases of multiple land uses of any property, the county zoning classification of such property pursuant to county Ordinance 1494, as amended, shall be applicable. (See Title 22 of this code.)

(Ord. 11778 § 2 (Art. 3 § 302(p)), 1978: Ord. 11773 § 2 (Art. 3 § 302(p)), 1978.)

12.08.210 - Intrusive noise.

"Intrusive noise" means that alleged offensive noise which intrudes over and above the existing ambient noise at the receptor property.

(Ord. 11778 § 2 (Art. 3 § 302(q)), 1978: Ord. 11773 § 2 (Art. 3 § 302(q)), 1978.)

12.08.220 - Mobile noise source.

"Mobile noise source" means any noise source other than a fixed noise source.

(Ord. 11778 § 2 (Art. 3 § 302(r)), 1978: Ord. 11773 § 2 (Art. 3 § 302(r)), 1978.)

12.08.230 - Noise disturbance.

"Noise disturbance" means an alleged intrusive noise which violates an applicable noise standard as set forth in this chapter.

(Ord. 11778 § 2 (Art. 3 § 302(s)), 1978: Ord. 11773 § 2 (Art. 3 § 302(s)), 1978.)

12.08.240 - Noise histogram.

"Noise histogram" means a graphical representation of the distribution of frequency of occurrence of all noise levels near and far measured over a given period of time.

(Ord. 11778 § 2 (Art. 3 § 302(u)), 1978: Ord. 11773 § 2 (Art. 3 § 302(u)), 1978.)

12.08.250 - Noise level (L).

"Noise level (L_N)" means that noise level expressed in decibels which exceeds the specified (L_N) value as a percentage of total time measured. For instance, an L_{25} noise level means that noise level which is exceeded 25 percent of the time measured.

(Ord. 11778 § 2 (Art. 3 § 302 (v)), 1978: Ord. 11773 § 2 (Art. 3 § 302(v)), 1978.)

12.08.260 - Noise-sensitive zone.

"Noise-sensitive zone" means any area designated pursuant to Part 4 of this chapter for the purpose of ensuring exceptional quiet.

(Ord. 11778 § 2 (Art. 3 § 302(t)), 1978: Ord. 11773 § 2 (Art. 3 § 302(t)), 1978.)

12.08.270 - Noise zone.

"Noise zone" means any defined area or region of a generally consistent land use, as described in Section 12.08.380.

(Ord. 11778 § 2 (Art. 3 § 302(w)), 1978: Ord. 11773 § 2 (Art. 3 § 302(w)), 1978.)

12.08.280 - Person.

"Person" means any individual, firm, association, partnership, joint venture, or corporation.

(Ord. 11778 § 2 (Art. 3 § 302(x)), 1978: Ord. 11773 § 2 (Art. 3 § 302(x)), 1978.)

12.08.290 - Powered model vehicle.

"Powered model vehicle" means any self-propelled airborne, waterborne or landborne plane, vessel or vehicle which is not designed to carry individuals, including but not limited to any model airplane, boat, car or rocket.

(Ord. 11778 § 2 (Art. 3 § 302(y)), 1978: Ord. 11773 § 2(Art. 3 § 302(y)), 1978.)

12.08.300 - Public right-of-way.

"Public right-of-way" means any street, avenue, boulevard, highway, sidewalk or alley, or similar place, which is owned or controlled by a governmental entity.

(Ord. 11778 § 2 (Art. 3 § 302(z)), 1978: Ord. 11773 § 2 (Art. 3 § 302(z)), 1978.)

12.08.310 - Pure tone noise.

"Pure tone noise" means any sound which can be judged as audible as a single pitch or a set of single pitches by the health officer, for the purposes of this chapter, a pure tone shall exist if the one-third octave band sound-pressure level in the band with the tone exceeds the arithmetic average of the sound-pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies of 500 Hertz and above, and by 8 dB for center frequencies between 160 and 400 Hertz, and by 15 dB for center frequencies less than or equal to 125 Hertz.

(Ord. 11778 § 2 (Art. 3 § 302(aa)), 1978: Ord. 11773 § 2 (Art. 3 § 302(aa)), 1978.)

12.08.320 - Real property boundary.

"Real property boundary" means an imaginary line along the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another person, but not including intra-building real property divisions.

(Ord. 11778 § 2 (Art. 3 § 302(bb)), 1978: Ord. 11773 § 2 (Art. 3 § 302(bb)), 1978.)

12.08.330 - Residential property.

"Residential property" means a parcel of real property which is developed and used either in part or in whole for residential purposes, other than transient uses such as hotels and motels. In cases of multiple land uses of any property, the county zoning classification of such property pursuant to county Ordinance 1494, as amended, shall be applicable.

(Ord. 11778 § 2 (Art. 3 § 302(cc)), 1978: Ord. 11773 § 2 (Art. 3 § 302(cc)), 1978.)

12.08.340 - Sound level meter.

"Sound level meter" means an instrument, including a microphone, an amplifier, an output meter and frequency weighting network, for the measurement of sound levels, which satisfies the requirements pertinent for Type S2A meters in American National Standards Institute specifications for sound level meters, S1.4-1971, or the most recent revision thereof.

(Ord. 11778 § 2 (Art. 3 § 302(dd)), 1978: Ord. 11773 § 2 (Art. 3 § 302(dd)), 1978.)

12.08.350 - Vibration.

"Vibration" means the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observations of moving objects. The perception threshold shall be presumed to be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.

(Ord. 11778 § 2 (Art. 3. § 302(ee)), 1978: Ord. 11773 § 2 (Art. 3 § 302(ee)), 1978.)

12.08.360 - Weekday.

"Weekday" means any day, Monday through Friday, which is not a legal holiday.

(Ord. 11778 § 2 (Art. 3 § 302(ff)), 1978: Ord. 11773 § 2 (Art. 3 § 302(ff), 1978.)

Part 3 - COMMUNITY NOISE CRITERIA

Sections:

12.08.370 - Decibel measurement—Basis.

Any decibel measurement made pursuant to the provisions of this chapter shall be based on a reference sound-pressure of 20 micropascals, as measured with a sound level meter using the A-weighted network (scale) at slow response, or at the fast response when measuring impulsive sound levels and vibrations.

(Ord. 11778 § 2 (Art. 4 § 401), 1978: Ord. 11773 § 2 (Art. 4 § 401), 1978.)

12.08.380 - Noise zones designated.

Receptor properties described hereinafter in this chapter are hereby assigned to the following noise zones:

Noise Zone I—Noise-sensitive area; Noise Zone II—Residential properties; Noise Zone III—Commercial properties; Noise Zone IV—Industrial properties.

(Ord. 11778 § 2 (Art. 4 § 402), 1978: Ord. 11773 § 2 (Art. 4 § 402), 1978.)

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

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

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

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

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

Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from subsection A of this section plus 5dB; or, if the ambient L25 exceeds the foregoing level, then the ambient L25 becomes the exterior noise level for Standard No. 2.

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

Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level from subsection

A of this section plus 15dB; or, if the ambient L1.7 exceeds the foregoing level, then the ambient L1.7 becomes the exterior noise level for Standard No. 4.

Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from subsection A of this section plus 20dB; or, if the ambient L0 exceeds the foregoing level then the ambient L0 becomes the exterior noise level for Standard No. 5.

C. If the measurement location is on a boundary property between two different zones, the exterior noise level utilized in subsection B of this section to determine the exterior standard shall be the arithmetic mean of the exterior noise levels in subsection A of the subject zones. Except as provided for above in this subsection C, when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level as designated in subsection A shall be the daytime exterior noise level for the subject receptor property.

D. The ambient noise histogram shall be measured at the same location along the property line utilized in subsection B of this section, with the alleged intruding noise source inoperative. If for any reason the alleged intruding noise source cannot be turned off, the ambient noise histogram will be estimated by performing a measurement in the same general area of the alleged intruding noise source but at a sufficient distance such that the noise from the alleged intruding noise source is at least 10dB below the ambient noise histogram in order that only the actual ambient noise histogram be measured. If the difference between the ambient noise histogram and the alleged intruding noise source is 5 to 10dB, then the level of the ambient noise histogram itself can be reasonably determined by subtracting a one-decibel correction to account for the contribution of the alleged intruding noise source.

E. In the event the intrusive exceeds the exterior noise standards as set forth in subsections B and C of this section at a specific receptor property and the health officer has reason to believe that this violation at said specific receptor property was unanticipated and due to abnormal atmospheric conditions, the health officer shall issue an abatement notice in lieu of a citation. If the specific violation is abated, no citation shall be issued therefor. If, however, the specific violation is not abated, the health officer may issue a citation.

(Ord. 11778 § 2 (Art. 4 § 403), 1978: Ord. 11773 § 2 (Art. 4 § 403), 1978.)

12.08.400 - Interior noise standards.

A. No person shall operate or cause to be operated within a dwelling unit, any source of sound, or allow the creation of any noise, which causes the noise level when measured inside a neighboring receiving dwelling unit to exceed the following standards:

Standard No. 1 The applicable interior noise level for cumulative period of more than five minutes in any hour; or

Standard No. 2 The applicable interior noise level plus 5dB for a cumulative period of more than one minute in any hour; or

Standard No. 3 The applicable interior noise level plus 10dB or the maximum measured ambient noise level for any period of time.

B. The following interior noise levels for multifamily residential dwellings shall apply, unless otherwise specifically indicated, within all such dwellings with windows in their normal seasonal configuration.

Noise Zone	Designated Land Use	Time Interval	Allowable Interior Noise Level (dB)
All	Multifamily	10 pm—7 am	40

	Residential	7 am—10 pm	45

C. If the measured ambient noise level reflected by the L50 exceeds that permissible within any of the interior noise standards in subsection A of Section 12.08.390, the allowable interior noise level shall be increased in 5dB increments in each standard as appropriate to reflect said ambient noise level (L50).

(Ord. 11778 § 2(Art. 4 § 404), 1978: Ord. 11773 § 2 (Art. 4 § 404), 1978.)

12.08.410 - Correction for certain types of sounds.

For any source of sound which emits a pure tone or impulsive noise, the noise levels as set forth in Sections 12.08.390 and 12.08.400 shall be reduced by five decibels.

(Ord. 11778 § 2 (Art. 4 § 405), 1978: Ord. 11773 § 2 (Art. 4 § 405), 1978.)

12.08.420 - Measurement methods.

A. Utilizing the A-weighting scale of the sound-level meter and the "slow" meter response (use "fast" response for impulsive type sounds), the noise level shall be measured at a position or positions at any point on the receiver's property.

B. In general, the microphone shall be located four to five feet above the ground; 10 feet or more from the nearest reflective surface, where possible. However, in those cases where another elevation is deemed appropriate, the latter shall be utilized.

C. Interior noise measurements shall be made within the affected residential unit. The measurements shall be made at a point at least four feet from the wall, ceiling or floor nearest the noise source, with windows in the normal seasonal configuration. Calibration of the measurement equipment, utilizing an acoustic calibrator, shall be performed immediately prior to recording any noise data.

(Ord. 11778 § 2 (Art. 4 § 406), 1978: Ord. 11773 § 2 (Art. 4 § 406), 1978.)

Part 4 - SPECIFIC NOISE RESTRICTIONS

Sections:

12.08.430 - Acts deemed violations when.

Notwithstanding any other provisions of this chapter, the acts set out in this Part 4, and the causing or permitting thereof, are declared to be in violation of this chapter.

(Ord. 11778 § 2 (Art. 5 § 501 (part)), 1978: Ord. 11773 § 2 (Art. 5 § 501 (part)), 1978.)

12.08.440 - Construction noise.

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

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

1. At Residential Structures.

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

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

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

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

2. At Business Structures.

a. Mobile equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment:

Daily, including Sunday and legal holidays, all hours: maximum of 85dBA.

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

D. In case of a conflict between this chapter and any other ordinance regulating construction activities, provisions of any specific ordinance regulating construction activities shall control.

(Ord. 11778 § 2 (Art. 5 § 501(c)), 1978: Ord. 11778 § 2 (Art. 5 § 501(c)), 1978.)

12.08.450 - Forced-air blowers in tunnel car washes.

Operating or permitting the operation of any forced-air blower in a tunnel car wash between the hours of 7:00 a.m. and 8:00 p.m. in such a manner as to exceed any of the following sound levels is prohibited:

	Units Installed	
Measurement Location	Before 1-1-80 dB	On or After 1-1-80 dB
Any point on contiguous receptor property, five feet above grade level, no closer than three feet from any wall		
Residential	70	60
Commercial/Industrial	75	65

(Ord. 11778 § 2 (Art. 5 § 501(m)), 1978: Ord. 11773 § 2 (Art. 5 § 501(m)), 1978.)

12.08.460 - Loading and unloading operations.

Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of 10:00 p.m. and 6:00 a.m. in such a manner as to cause noise disturbance is prohibited.

(Ord. 11778 § 2 (Art. 5 § 501(b)), 1978: Ord. 11773 § 2 (Art. 5 § 501(b)), 1978.)

12.08.470 - Noise disturbances in noise-sensitive zones.

A. Creating or causing the creation of any noise disturbance within any noise-sensitive zone, as designated by the health officer, is prohibited, provided that conspicuous signs are displayed indicating the presence of the zone.

B. Noise-sensitive zones must be indicated by the display of conspicuous signs in at least three separate locations within 164 meters (one-tenth mile) of the institution or facility.

(Ord. 11778 § 2 (Art. 5 § 501(k)), 1978: Ord. 11773 § 2(Art. 5 § 501(k)), 1978.)

12.08.480 - Places of public entertainment.

Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, sound amplifier or similar device which produces, reproduces or amplifies sound in any place of public entertainment at a sound level greater than 95dBA, as read by the slow response on a soundlevel meter at any point that is normally occupied by a customer is prohibited, unless a conspicuous and legible sign is located outside such place, near each public entrance, stating "WARNING: SOUND LEVELS WITHIN MAY CAUSE HEARING IMPAIRMENT."

(Ord. 11778 § 2 (Art. 5 § 501(f)), 1978: Ord. 11773 § 2 (Art. 5 § 501(f)), 1978.)

12.08.490 - Powered model vehicles.

Operating or permitting the operation of powered model vehicles so as to create a noise disturbance across a residential real-property boundary, or within a noise-sensitive zone between the hours of 8:00 p.m. and 7:00 a.m. the following day is prohibited.

(Ord. 11778 § 2 (Art. 5 § 501(g)), 1978: Ord. 11773 § 2 (Art. 5 § 501(g)) 1978.)

12.08.500 - Emergency signaling devices.

A. The intentional sounding or permitting the sounding outdoors of any emergency signaling device, including fire, burglar or civil-defense alarm, siren, whistle, or similar stationary emergency signaling device, except for emergency purposes or for testing, as provided in subsection B2 below, is prohibited.

B. 1. Testing of a stationary emergency signaling device shall not occur before 7:00 a.m. or after 7:00 p.m. Any such testing shall use only the minimum cycle test time. In no case shall such test time exceed 60 seconds.

2. Testing of the complete emergency signaling system, including the functioning of the signaling device, and the personnel response to the signaling device, shall not occur more than once in each calendar month. Such testing shall not occur before 7:00 a.m. or after 10:00 p.m. The time limit specified in subsection B1 above shall not apply to such complete-system testing.

C. Sounding or permitting the sounding of any exterior burglar or fire alarm, or any motor-vehicle burglar alarm is prohibited, unless such alarm is terminated within 15 minutes of activation.

(Ord. 11778 § 2 (Art. 5 § 501(i)), 1978: Ord. 11773 § 2 (Art. 5 § 501(i)), 1978.)

12.08.510 - Stationary nonemergency signaling devices.

A. Sounding or permitting the sounding of any electronically amplified signal from any stationary bell, chime, siren, whistle, or similar device intended primarily for nonemergency purposes, from any place, for more than 10 consecutive seconds in any hourly period is prohibited.

B. Houses of religious worship shall be exempt for the operation of this provision.

C. Sound sources covered by this provision and not exempted under subsection B may be exempted by a variance issued by the health officer.

(Ord. 11778 § 2 (Art. 5 § 501(h)), 1978: Ord. 11773 § 2(Art. 5 § 501(h)), 1978.)

12.08.520 - Refuse collection vehicles.

A. On or after three years following August 17, 1978, the effective date of the ordinance codified in this chapter, operating or permitting the operation of the compacting mechanism of any motor vehicle which compacts refuse and which creates, during the compacting cycle, a sound level in excess of 86dBA when measured at 50 feet from any point of the vehicle is prohibited.

B. Operating or permitting the operation of the compacting mechanism of any motor vehicle which compacts refuse between the hours of 10:00 p.m. and 6:00 a.m. the following day in a residential area or noise-sensitive zone, or within 500 feet thereof is prohibited.

C. Collecting refuse with collection vehicle between the hours of 10:00 p.m. and 6:00 a.m. the following day in a residential area or noise-sensitive zone or within 500 feet thereof.

D. In the case of conflict between this chapter and any other ordinance regulating refuse collection, provisions of any specific ordinance regulating refuse collection shall control.

(Ord. 11778 § 2 (Art. 5 § 501(j)), 1978: Ord. 11773 § 2 (Art. 5 § 501(j)), 1978.)

12.08.530 - Residential airconditioning or refrigeration equipment.

Operating or permitting the operation of any airconditioning or refrigeration equipment in such a manner as to exceed any of the following sound levels is prohibited.

Measurement Location	Units Installed Before 1-1-80 dBA	Units Installed On or After 1-1-80 dBA
Any point on neighboring property line, 5 feet above grade level, no closer than 3 feet from any wall.	60	55
Center of neighboring patio, 5 feet above grade level, no closer than 3 feet from any wall.	55	50
Outside the neighboring living area window nearest the equipment location, not more than 3 feet from the window opening, but at least 3 feet from any other surface.	55	50

(Ord. 11778 § 2 (Art. 5 § 501(1)), 1978: Ord. 11773 § 2 (Art. 5 § 501(1)), 1978.)

12.08.540 - Street sales.

Offering for sale, selling anything, or advertising by shouting or outcry within any residential or commercial area or noise-sensitive zone of the unincorporated areas of the county is prohibited except by variance issued by the health officer. The provisions of this section shall not be construed to prohibit the selling by outcry of merchandise, food and beverages at licensed sporting events, parades, fairs, circuses, or other similar licensed public-entertainment events.

(Ord. 11778 § 2 (Art 5 § 501(a)), 1978: Ord. 11773 § 2 (Art. 5 § 501(a)), 1978.)

12.08.541 - Street sales—Restrictions on sound system speakers.

A person offering for sale, selling or advertising anything edible shall not emit music or other sounds from an external speaker affixed to a motor vehicle between the hours of 8:00 p.m. and 6:00 a.m. within any residential, commercial or noise sensitive-zone of the unincorporated area of the County. The provisions of this section shall not be construed to prohibit the selling by outcry of merchandise, food and beverages, at licensed sporting events, parades, fairs, circuses, or other similar licensed-entertainment events.

(Ord. 2002-0028 § 2, 2002)

12.08.550 - Vehicle or motorboat repairs and testing.

Repairing, rebuilding, modifying or testing any motor vehicle, motorcycle or motorboat in such a manner as to cause a noise disturbance across a real-property boundary or within a noisesensitive zone is prohibited.

(Ord. 11778 § 2 (Art. 5 § 501(e)), 1978: Ord. 11773 § 2 (Art. 5 § 501(e)), 1978.)

12.08.560 - Vibration.

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.

(Ord. 11778 § 2 (Art. 5 § 501(d)), 1978: Ord. 11773 § 2 (Art. 5 § 501(d)), 1978.)

Part 5 - EXEMPTIONS

Sections:

12.08.570 - Activities exempt from chapter restrictions.

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

A. Emergency Exemption. The emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work;

B. Warning Devices. Warning devices necessary for the protection of public safety, as for example police, fire and ambulance sirens, and train horns;

C. Outdoor Activities. Activities conducted on public playgrounds and public or private school grounds, including but not limited to school athletic and school entertainment events;

D. Exemption from Exterior Noise Standards. The following activities are exclusively regulated by the prohibitions of Part 4 of this chapter:

1. Construction,
2. Stationary nonemergency signaling devices,
3. Emergency signaling devices,
4. Refuse collection vehicles,
5. Residential air-conditioning or refrigeration equipment,
6. Forced-air blowers;

E. Motion Picture Production and Related Activities;

F. Railroad Activities. All locomotives and rail cars operated by any railroad which is regulated by the California Public Utilities Commission;

G. Federal or State Preexempted Activities. Any activity, to the extent regulation thereof has been preempted by state or federal law;

H. Public Health and Safety Activities. All transportation, flood control, and utility company maintenance and construction operations at any time on public right-of-way, and those situations which may occur on private real property deemed necessary to serve the best interest of the public and to protect the public's health and well being, including but not limited to street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, snow removal, house moving, vacuuming catchbasins, removal of damaged poles and vehicles, repair of water hydrants and mains, gas lines, oil lines, sewers, etc.;

I. Motor Vehicles on Private Right-of-way and Private Property. Except as provided in Section 12.08.550, all legal vehicles of transportation operating in a legal manner in accordance with local, state and federal vehicle-noise regulations within the public right-of-way or air space, or on private property;

J. Seismic Surveys Authorized by the State Land Commission;

K. Agricultural Operations. All mechanical devices, apparatus or equivalent associated with agricultural operations conducted on agricultural property, unless if in the vicinity of residential land uses, in which case a variance permit is required to operate noise-producing devices, with the following stipulations:

1. Operations do not take place between 8:00 p.m. and 6:00 a.m., or
2. Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions, or
3. Such operations and equipment are associated with agricultural pest-control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the county agricultural commissioner,
4. Such devices utilized for pest control which incorporate stationary or mobile noise sources (electro-mechanical birdscare devices, etc.) are operated only by permit issued by the health officer. The allowable hours and days for operation of these devices will be specified in the permit,

5. All equipment and machinery powered by internal combustion engines shall be equipped with a proper muffler and air-intake silencer in good working order;

L. Minor Maintenance to Residential Real Property. Noise sources associated with the minor maintenance of residential real property, provided said activities take place as follows:

1. During Pacific Standard Time between the hours of 8:00 a.m. and 6:00 p.m. on any day except Sunday, when such activities may take place between the hours of 9:00 a.m. and 6:00 p.m., and

2. During Daylight Savings Time between the hours of 8:00 a.m. and 7:00 p.m. on any day except Sunday, when such activities may take place between the hours of 9:00 a.m. and 6:00 p.m.;

M. Operation of Oil and Gas Wells.

1. Normal well servicing, remedial or maintenance work performed within an existing well which does not involve drilling or redrilling and which is restricted to the hours between 7:00 a.m. and 10:00 p.m., and

2. Drilling or redrilling work which is done in full compliance with the conditions of permits issued under Chapter 5, Article 1, of the County Zoning Ordinance, as amended, as set out in Title 22 of this code.

(Ord. 97-0007 § 1, 1997: Ord. 11778 § 2(Art. 6 § 601), 1978: Ord. 11773 § 2 (Art. 6 § 601), 1978.)

Part 6 - VARIANCES

Sections:

12.08.580 - Conditions for granting variances—Health officer authority.

A. Variances from the requirements of this chapter may be granted by the health officer for a period of not to exceed two years, subject to such terms, conditions and requirements as he may deem reasonable. A variance may be granted only if the health officer makes the findings that:

1. Additional time is necessary for the applicant to alter or modify his activity, operation or noise source to comply with this chapter; or

2. The activity, operation or noise source cannot feasibly be done in a manner that would comply with the provisions of this chapter, and no other reasonable alternative is available to the applicant.

B. In granting a variance, the health officer may prescribe any conditions or requirements he deems necessary to minimize adverse effects upon the community or the surrounding neighborhood.

C. In granting variances, the health officer shall consider the magnitude of nuisance caused by the offensive noise, the uses of property within the area of impingement by the noise, operations carried on under existing nonconforming rights or conditional use permits or zone variances, the time factors related to study, design, financing and construction of remedial work, the economic factors related to age and useful life of the equipment, the general public interest, health and welfare, the feasibility of plans submitted for correction, and the effect on the community if the variance was refused.

(Ord. 11778 § 2 (Art. 7 § 701), 1978: Ord. 11773 § 2 (Art. 7 § 701), 1978.)

12.08.590 - Application—Contents.

Every applicant for a variance shall file with the health officer a written application on a form prescribed by the health officer. The application shall state the name and address of the applicant, the nature of the noise source involved, and such other information as the health officer may require.

(Ord. 11778 § 2 (Art. 7 § 702), 1978: Ord. 11773 § 2 (Art. 7 § 702), 1978.)

12.08.600 - Application—Fee.

Every applicant shall pay a fee of $25.00 for each application for variance.

(Ord. 11778 § 2 (Art. 7 § 703), 1978: Ord. 11773 § 2 (Art. 7 § 703), 1978.)

12.08.610 - Application—Action by health officer.

A. The health officer shall act, within 30 days, if possible, on an application for a variance, and shall notify the applicant of the action taken, namely, approval, conditional approval, or denial. Before acting on an application for a variance, the health officer may require the applicant to furnish further information. Failure of the applicant to provide such further information may be grounds for denial of the variance.

B. In the event of denial of an application for a variance, the health officer shall notify the applicant in writing of the reasons therefor. The health officer shall not accept a further application unless the applicant has complied with the objections specified by the health officer as his reasons for denial.

(Ord. 11778 § 2 (Art. 7 § 704), 1978: Ord. 11773 § 2 (Art. 7 § 704), 1978.)

12.08.620 - Application—Denial conditions.

The applicant may at his option deem the variance denied if the health officer fails to act on the application within 30 days after filing or within 10 days after applicant furnishes the further information requested by the health officer, whichever is later.

(Ord. 11778 § 2 (Art. 7 § 705), 1978: Ord. 11773 § 2 (Art. 7 § 705), 1978.)

12.08.630 - Public hearing—For reconsideration of health officer decision.

Within 10 days after notice by the health officer of the decision on application for variance, any interested party may petition the health officer in writing for a public hearing to reconsider the decision. The health officer shall thereupon appoint a hearing officer to conduct said hearing.

(Ord. 11778 § 2 (Art. 7 § 706), 1978: Ord. 11773 § 2 (Art. 7 § 706), 1978.)

12.08.640 - Public hearing—Decision and findings—Appeals.

A. Based upon the evidence presented at the public hearing, the hearing officer may affirm, modify or reverse the previous determination subject to such terms, conditions and requirements as he may deem necessary. The hearing officer shall be guided by the same considerations as set forth in Section 12.08.580.

B. A decision by the hearing officer to grant a variance may be made only if the hearing officer makes the findings that:

1. Additional time is necessary for the applicant to alter or modify his activity, operation or noise source to comply with this chapter; or

2. The activity, operation or noise source cannot feasibly be done in a manner that would comply with the provisions of this chapter, and no other reasonable alternative is available to the applicant.

C. The decision of the hearing officer shall be by written order, and shall be final. Appeals from an adverse decision shall be made to a court of competent jurisdiction.

(Ord. 11778 § 2 (Art. 7 § 707), 1978: Ord. 11773 § 2 (Art. 7 § 707), 1978.)

Part 7 - VIOLATIONS AND ENFORCEMENT

Sections:

12.08.650 - Enforcement—Health officer powers and duties.

The health officer shall have primary responsibility for the enforcement of the noise regulations contained in this chapter. The health officer shall make all noise-level measurements required for the enforcement of this chapter. Nothing in this chapter shall prevent the health officer from efforts to obtain voluntary compliance by way of warning, notice, or educational means.

(Ord. 11778 § 2 (Art. 8 § 801), 1978: Ord. 11773 § 2 (Art. 8 § 801), 1978.)

12.08.660 - Initial violations.

In the event of an initial violation of the provisions of this chapter a written notice of violation shall be given the alleged violator, specifying the time by which the condition shall be corrected or an application for permit or variance shall be received by the health officer. The health officer shall take no further action in the event the cause of the violation has been removed, the condition abated or fully corrected within the time period specified in the written notice.

(Ord. 11778 § 2 (Art. 8 § 802), 1978: Ord. 11773 § 2 (Art. 8 § 802), 1978.)

12.08.670 - Violation—Penalty.

Any person violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than $500.00 or be imprisoned in the County Jail for a period not exceeding six months or by both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such.

(Ord. 11778 § 2 (Art. 8 § 803), 1978: Ord. 11773 § 2 (Art. 8 § 803, 1978.)

12.08.680 - Severability.

If any provision, clause, sentence or paragraph of this chapter or the application thereof to any person or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of the provisions of this chapter which can be given effect without the invalid provisions or application and, to this end, the provisions of this chapter are hereby declared to be severable.

(Ord. 11778 § 2 (Art. 8 § 804), 1978: Ord. 11773 § 2 (Art. 8 § 804), 1978.)

Chapter 12.12 - BUILDING CONSTRUCTION NOISE

Sections:

12.12.010 - Definitions.

A. "Board" means the board of supervisors of the county of Los Angeles.

B. "Person" means an individual, partnership, firm or corporation.

C. "Section" means a section of the ordinance codified in this chapter.

(Ord. 8594 §§ 1, 2 and 3, 1964.)

12.12.020 - References to provisions.

Whenever any reference is made to the ordinance codified in this chapter or any other ordinance, or to any statute, such reference shall apply to all amendments and additions thereto now or hereafter made.

(Ord. 8594 § 4, 1964.)

12.12.030 - Construction noise prohibited when.

Except as otherwise provided in this chapter, a person, on any Sunday, or at any other time between the hours of 8:00 p.m. and 6:30 a.m. the following day, shall not perform any construction or repair work of any kind upon any building or structure, or perform any earth excavating, filling or moving, where any of the foregoing entails the use of any air compressors; jackhammers; power-driven drill; riveting machine; excavator, diesel-powered truck, tractor or other earth moving equipment; hand hammers on steel or iron, or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in a dwelling, apartment, hotel, mobilehome, or other place of residence.

(Ord. 9818 § 1, 1969: Ord. 8594 § 6, 1964.)

12.12.040 - Exemptions—Certain zoned areas.

The provisions of this chapter do not apply in any territory which is in a zone in which the Zoning Ordinance, codified in Title 22 of this code, prohibits any residential use and which is not less than 500 feet from any territory in any residential zone as defined in Section 201 of Ordinance 1494, or any territory in a residential zone in any city.

(Ord. 8594 § 11, 1964.)

12.12.050 - Exemptions—Work performed with county engineer's permission.

The provisions of Section 12.12.030 do not apply to any person who performs the construction, repair, excavation or earthmoving work involved pursuant to the express written permission of the county engineer to perform such work at times prohibited in Section 12.12.030. Upon receipt of an application in writing therefor, stating the reasons for the request and the facts upon which such reasons are based, the county engineer may grant such permission if he finds that:

A. The work proposed to be done is effected with a public interest; or

B. Hardship or injustice, or unreasonable delay, would result from the interruption thereof during the hours and days specified in Section 12.12.030; or

C. The building or structure involved is devoted or intended to be devoted to a use immediately incident to public defense.

(Ord. 9818 § 2, 1969: Ord. 8594 § 7, 1964.)

12.12.060 - Exemptions—Work by public utilities—Conditions.

The provisions of Section 12.12.030 do not apply to the construction, repair or excavation by a public utility which is subject to the jurisdiction of the Public Utilities Commission as may be necessary for the preservation of life or property, and where such necessity makes it necessary to construct, repair or excavate during the prohibited hours.

(Ord. 8594 § 10, 1964.)

12.12.070 - Exemptions—Emergency work—Permit requirements.

The provisions of Section 12.12.030 do not apply to such construction, repair or excavation during prohibited hours as may be necessary for the preservation of life or property when such necessity arises during such hours as the offices of the county are closed or where such necessity requires immediate action prior to the time at which it would be possible to obtain a permit pursuant to Section 12.12.050, if the person doing such construction, repair or excavation obtains a permit therefor within one day after the offices of the county engineer are first opened subsequent to the making of such construction, repair or excavation.

(Ord. 8594 § 9, 1964.)

12.12.080 - Appeals from county engineer's decision.

Any person dissatisfied with the decision of the county engineer may appeal to the business license commission as provided in Ordinance 5860, on business licenses, set out at Title 7 of this code, including the appointment of and reference to a referee, as in the case of a notification by the tax collector that he intends to deny a license.

(Ord. 9849 § 1, 1969: Ord. 8594 § 8, 1964.)

12.12.090 - Violation—Penalty.

Any person violating any provision of this chapter is guilty of a misdemeanor punishable by a fine of not more than $500.00 or by imprisonment in the County Jail for not more than six months, or by both such fine and imprisonment. Every such person is guilty of a separate offense for every day during any portion of which any violation or any of the provisions of this chapter is committed, continued or permitted by such person, and shall be punished as provided by this chapter.

(Ord. 8594 § 12, 1964.)

12.12.100 - Severability.

If any provision of the ordinance codified in this chapter or the application thereof to any person or circumstance is held invalid, the remainder of the ordinance, and the application of such provision to other persons or circumstances, shall not be affected thereby.

(Ord. 8594 § 5, 1964.)

Chapter 4.34
NOISE REGULATIONS

Sections:

4.34.010 Prohibited noises-General standard.

No person shall make, or cause or suffer, or permit to be made upon any premises owned, occupied or controlled by such person, any loud, raucous, jarring, unusual, unnecessary, excessive or other unreasonable noises, sounds or vibrations which are physically annoying to reasonable persons of ordinary sensitivity or which are so harsh or so prolonged or unnatural or unusual in their use, time, or place as to cause or contribute to the unnecessary and unreasonable discomfort to any persons within the neighborhood surrounding the location from which said noises emanate or which unreasonably interfere with the peace and comfort of the residents of the surrounding neighborhood or their guests, or the operators or customers in places of business in the vicinity, or which detrimentally or adversely affect such residences or places of business.

(Ord. 753 § 4 (part), 1997)

4.34.020 Prohibited noises-Specific examples.

Except as set forth in Section 4.34.030 of this chapter, the following acts and the causing or permitting thereof, are specifically declared to be a violation of this chapter:

(a) Radios, Phonographs, Etc. The using, operating or permitting to be played, used or operated between the hours of eight p.m. and seven a.m. of any radio, musical instrument, phonograph, television set, or instrument or device similar to those heretofore specifically mentioned (hereinafter "device") for the production or reproduction of sound in volume sufficiently loud as to be plainly audible at a distance of fifty feet or more from the property line of the property from which the noise, sound or vibration is emanating, and the using, operating or permitting to be played, used or operated between the hours of seven a.m. and eight p.m. of any such device for the production or reproduction of sound in volume sufficiently loud as to be plainly audible at a distance of two hundred feet or more from the property line of the property from which the noise, sound or vibration is emanating.

(b) Band or Orchestral Rehearsals. The conducting of or carrying on, or allowing the conducting carrying on of band or orchestral concerts or rehearsals or practice between the hours of eight p.m. and seven a.m. sufficiently loud as to be plainly audible at a distance of fifty feet or more from the property line of the property where the concert, rehearsal or practice is occurring, and the conducting of or carrying on, or allowing the conducting or carrying on of band or orchestral concerts or rehearsals or practice between the hours of seven a.m. and eight p.m. sufficiently loud as to be plainly audible at a distance of two hundred feet or more from the property line of the property where the concert, rehearsal or practice is occurring.

(c) Engines, Motors and Mechanical Devices Near Residential District. The sustained, continuous or repeated operation or use between the hours of eight p.m. and seven a.m. of any motor or engine or the repair, modification, reconstruction, testing or operation of any automobile, motorcycle, machine, contrivance, or mechanical device or other contrivance or facility unless such motor, engine, automobile, motorcycle, machine or mechanical device is enclosed within a sound insulated structure so as to prevent noise and sound

from being plainly audible at: (1) distance of fifty feet or more from the property line of the property from which the noise, sound or vibration is emanating or (2) the exterior wall of any adjacent residence, whichever is less.

(d) Motor Vehicles. Racing the engine of any motor vehicle or needlessly bringing to a sudden start or stop of any motor vehicle.

(e) Loading and Unloading. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of eight p.m. and seven a.m. in volume sufficiently loud as to be plainly audible at a distance of fifty feet or more from the property line of the property where the activity is occurring.

(f) Construction. Operating or causing the operation of any tools, equipment, impact devices, derricks or hoists used on construction, drilling, repair, alteration, demolition or earthwork, between the hours of eight p.m. and seven a.m. on weekdays or at any time on Saturdays (except, between the hours of seven a.m. and eight p.m., interior construction is permissible); or at any time on Sundays or city holidays.

(g) Nonemergency Signaling Devices. Sounding or permitting the sounding of any bell, chime, siren, whistle or similar device, intended primarily for nonemergency purposes between the hours of eight p.m. and seven a.m. Sound sources included within this provision may be exempted by a variance issued by the planning commission.

(h) Emergency Signaling Devices.

(1) The intentional sounding, or permitting the sounding, outdoors of any emergency signaling device including fire, burglar, civil defense alarm, siren, whistle or similar emergency signaling device, for testing, except as provided in subsection (h)(2) of this section.

(2) Testing of an emergency signaling device shall not occur between the hours of eight p.m. and seven a.m. Any such testing shall use only the minimum cycle test time. In no case shall such test time exceed sixty seconds. Testing of the emergency signaling system shall not occur more than once in each calendar month.

(3) Sounding or permitting the sounding of any exterior burglar or fire alarm unless such alarm is terminated within fifteen minutes of activation.

(4) Sounding or permitting the sounding of any motor vehicle alarm unless such alarm is terminated within five minutes of activation.

(5) Sounding or permitting the sounding of any motor vehicle alarm more than three times of any duration in any twenty-four hour period.

(i) Noises by Animals. It is unlawful for any person having charge, care, custody, or control of any animal to permit such animal to emit any persistent sound, cry or other noise which disturbs the peace, quiet and comfort of any residential neighborhood. For purposes of this section, "persistent sound, cry or other noise" means any noise which is of such a magnitude to be obnoxious or physically annoying to reasonable persons of ordinary sensitivity. The city shall enforce this chapter as follows:

(1) Complaints must be submitted in writing to the Los Angeles County department of animal care and control ("department") and shall include the name, address, and telephone number of the complainant, as well as the address of the animal owner, a description of the animal, and the dates, times, duration and description of the noise.

(2) Upon receiving a complaint involving whining, barking, howling, screeching or similar animal noise, the department shall cause the following to be performed:

(A) Issue a notice of noise complaint to the animal owner or custodian describing the complaint sufficiently to help the animal owner or custodian recognize and correct the problem, and requesting immediate steps to abate the problem.

(B) If a second complaint is received, issue a notice of noncompliance to the animal owner or custodian including the information required in subsection (i)(2)(A) of this section and explaining that the animal owner or custodian may request a hearing with a member of the department to discuss the notice of noncompliance within five days of receipt of the notice.

(C) If the problem is not resolved by the end of the period stated in the notice of noncompliance, issue a citation to the animal owner or custodian including the information required in subsections (i)(2)(A) and (B) of this section and apprising the animal owner or custodian that he or she will be liable for costs pursuant to Section 4.34.080 of the La Puente Municipal Code upon issuance of a second citation.

(3) If a second citation is issued within one year of the first to the same animal owner or custodian and, if additional law enforcement personnel are required to respond to, investigate or abate the condition, the animal owner or custodian shall be required to reimburse the city for costs pursuant to Section 4.34.080 of the La Puente Municipal Code.

(j) Leaf Blowers. The use or operation or allowing the use or operation of any portable machine powered with a combustion or gasoline engine to blow leaves, dirt and other debris off sidewalks, driveways, lawns and other surfaces, between the hours of eight p.m. and seven a.m.

(k) Commercial Establishments Adjacent to Residential Property. Continuous, repeated or sustained noise, sound or vibration from the premises of any commercial establishment, including any outdoor area that is a part or under the control of the establishment, which is licensed by the city and is adjacent to one or more residential dwelling units, between the hours of eleven p.m. and seven a.m., that is plainly audible from the exterior wall of the adjacent residential dwelling unit.

(l) Loud Parties or Gatherings. Generating any noise, sound or vibration from a party or gathering of two or more people on private property (whether from a home, a nightclub, or any other location in the city) that is plainly audible from a distance of fifty feet or more from the property line of the property from which the noise, sound or vibration is emanating. The city shall enforce this subsection (l) as follows:

(1) When such a party or gathering occurs and is determined by the city manager or his or her designee or by a sheriff's deputy at the scene to constitute a violation of the California Penal Code or the La Puente Municipal Code, or is otherwise a threat or detrimental to the public peace, health, safety or welfare due to the magnitude of the crowd, noise, disturbance or unruly behavior generated by the party or gathering, excessive traffic, or destruction of property, then the city manager or his or her designee or the sheriff's department shall take such actions and give such direction as is necessary to investigate or abate the violation or condition and shall advise the responsible person orally and in writing that, if additional law enforcement personnel are required to respond to abate the condition, the responsible person and the owner or occupant of the property shall be held liable for the cost of providing such services. Such direction and advice shall be given to the person responsible for the party or gathering or to the owner or occupant of the property involved.

(2) If the condition is not voluntarily abated in the time period requested by any city official or law enforcement officer and, if additional city or law enforcement personnel are required in order to disperse the party or gathering, quell any disturbance, direct traffic, cite illegally parked vehicles or otherwise respond, then the responsible person and the owner or occupant of the property shall be required to reimburse the city for costs pursuant to Section 4.34.080 of this chapter.

(Ord. 753 § 4 (part), 1997)

4.34.030 Exemptions.

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

(a) Emergency Exemption. The emission of sound for the purpose of alerting persons to the existence of an emergency or the emission of sound in the performance of emergency work. For the purposes of this section, "emergency" means a condition that constitutes an immediate threat to public safety, health or welfare or to property.

(b) Warning Devices. Warning devices necessary for the protection of public safety as for example, police, fire and ambulance sirens and train horns.

(c) Outdoor Activities. Activities conducted on public playgrounds, fully licensed and approved child day care facilities within residential areas as permitted by law, and public or private school grounds including, but not limited to, school athletic and school entertainment events and band or orchestral rehearsals for school athletic or school entertainment events.

(d) Construction; Special Circumstances. The provisions of Section 4.34.020 of this chapter do not apply to any person who performs construction, repair, excavation or earthmoving work if and to the extent that the city manager or his or her designee has given express prior written permission to perform such work at times prohibited in Section 4.34.020 of this chapter. In order to be given such permission, the person must submit to the city manager or to the city manager's designee an application in writing, stating the reasons for the request and the facts upon which such reasons are based. The city manager or his or her designee may grant or conditionally grant such permission if the city manager, city engineer, code enforcement officer or building official has found that:

(1) The work proposed to be done is necessary to protect or promote public safety or welfare or is otherwise in the public interest; or

(2) Hardship including, but not limited to, unreasonable delay due to weather, acts of God or labor strikes, would result from the interruption thereof during the hours and days specified in Section 4.34.020 of this chapter; or

(3) The building or structure involved is devoted or intended to be devoted to a use immediately incidental to public defense.

Any applicant dissatisfied with the decision of the city manager or the city manager's designee may appeal to the city council by filing a notice of appeal with the city clerk within ten days after notice of the decision. The appeal shall be accompanied by the applicable appeal fee, which shall be established by a resolution of the city council. The city council shall, within thirty days of filing the appeal, affirm, reverse or modify the decision of the city manager.

The provisions of Section 4.34.020 of this chapter also do not apply to the construction, repair, or excavation during prohibited hours as may be necessary for the preservation of life or property, when such necessity arises during such hours as the offices of the city are closed, or where such necessity requires immediate action prior to the time at which it would be possible to obtain a permit pursuant to this section. The person doing such construction, repair or excavation shall obtain a permit therefor within one business day of such construction, repair or excavation. The application for the permit shall be accompanied by the payment of the applicable fee established by resolution of the city council.

(e) Outdoor Events. Outdoor events, such as gatherings, fairs, circuses, public dances, parades, shows and sporting events, if and to the extent the events are conducted pursuant to a permit issued by the city manager or the city manager's designee. The application for such permit shall be accompanied by the payment of the applicable fee established by resolution of the city council.

(f) Filming Activities. Filming activities, if and to the extent the filming activities are conducted pursuant to a permit issued pursuant to Chapter 5.25 of this code.

(Ord. 753 § 4 (part), 1997)

4.34.040 Enforcement.

The city manager shall have primary responsibility, with such assistance of the sheriff's department and the Los Angeles County department of animal care and control as may be necessary or desirable, for the enforcement of the noise regulations contained herein. Nothing in this chapter shall preclude the city manager from seeking to obtain voluntary compliance by way of warning, notice, or informational materials.

(Ord. 753 § 4 (part), 1997)

4.34.050 Violations-Misdemeanors.

Any person violating any of the provisions of this chapter is guilty of a misdemeanor and upon conviction thereof shall be timed in an amount not exceeding one thousand dollars or be imprisoned in the county jail for a period not exceeding six months, or by both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such.

(Ord. 753 § 4 (part), 1997)

4.34.060 Violations-Additional remedies-Injunctions.

As an additional remedy, any activity or conduct which causes or creates noise, sound or vibration in violation of the provisions of this chapter shall be deemed and is declared to be, a public nuisance and may be subject to abatement summarily by a restraining order or injunction issued by a court of competent jurisdiction.

(Ord. 753 § 4 (part), 1997)

4.34.070 Additional remedies-Motor vehicle alarms.

(a) Deactivation. In addition to the remedies set forth in this chapter, the sheriff's department may undertake such procedures as are reasonably necessary to deactivate a motor vehicle alarm generating noise in violation of this chapter. If the sheriff's department is unable to deactivate the alarm, the sheriff may cause the motor vehicle to be removed according to the procedure set forth in Section 22651.5 of the California Vehicle Code.

(b) Removal. Any costs associated with the removal or storage of a motor vehicle pursuant to subsection (a) of this section and any costs incurred by the city in connection therewith shall be paid by the registered owner of the motor vehicle.

(Ord. 753 § 4 (part), 1997)

4.34.080 Additional remedies-Recovery of law enforcement costs for certain repeat offenders.

(a) This Section 4.34.080 shall apply to the following persons or entities:

(1) The animal owner or custodian who has received more than one citation pursuant to subsection (i) of Section 4.34.020 of this chapter;

(2) The person or persons responsible for a party or gathering described in subsection (1) of Section 4.34.020 of this chapter, or the owner or occupant of the property on which the party or gathering is held or, if any such person is a minor, the parents or legal guardians of the minor.

(b) Said persons shall be jointly and severally liable for the following costs incurred by the city:

(1) The actual cost to the city of law enforcement or other services, excluding the initial response provided by city, animal control or law enforcement personnel, necessary to abate a violation of Section 4.34.020 of this chapter;

(2) Damage to public property resulting from such response; and

(3) Injuries to any city, animal control or law enforcement personnel involved in such response.

(c) The department that provided the response shall accurately compute the cost of providing such services in accordance with the schedule of rates and charges for personnel and equipment contained in any applicable agreement with the city and shall advise the city manager of such costs as well as any other costs of damage to public property or injuries to personnel resulting from the response. The city manager shall bill said costs (and any additional such costs of the city) to the person or persons specified above in subsection (a) of this Section 4.34.080. Payment shall be due and payable within thirty days of the billing date. If the amount due is not paid, the city may collect the debt, as well as any fees and costs incurred in its collection, pursuant to all applicable provisions of law.

(d) The remedies set forth in this section are not exclusive and may be used in addition to those set forth elsewhere in this code or by law.

(e) As used in this Chapter 4.34, the term "law enforcement" includes, but is not limited to, the sheriff's department, the fire department, the Los Angeles County department of animal care and control and any city department.

(Ord. 753 § 4 (part), 1997)

Utility Trailer

EXISTING NO PROJECT

#	ROADWAY	SEGMENT	ADT	POSTED SPEED LIMIT	LANE DISTANCE	SITE CONDITION	LANES	GRADE (%)
1	Azusa Avenue	Gemini St to Salais St	45,600	45	84	Soft	6D	0%
2	Azusa Avenue	Salais St to Hurley St	45,800	45	84	Soft	6D	0%
3	Azusa Avenue	Hurley St to Railroad St	56,585	45	84	Soft	6D	0%
4	Azusa Avenue	Railroad St to Gale Ave	63,152	45	84	Soft	6D	0%
5	Azusa Avenue	Gale Ave to SR 60	69,067	45	96	Soft	8D	0%
6	Azusa Avenue	SR 60 to Colima Rd	52,700	45	96	Soft	8D	0%
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,400	25	12	Soft	2U	0%
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,200	25	12	Soft	2U	0%
9	Salais Street	Azusa Ave to Hambledon Ave	5,000	30	12	Soft	2U	0%
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,400	25	12	Soft	2U	0%
11	Hurley Street	Azusa Ave to Valley Blvd	10,000	35	48	Soft	4D	0%
12	Valley Boulevard	Ferrero Ln to Hurley St	36,700	50	84	Soft	6D	0%
13	Valley Boulevard	Hurley St to Fullerton Rd	44,400	50	84	Soft	6D	0%
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,700	35	12	Soft	2U	0%
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	2,900	35	12	Soft	2U	0%
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,700	35	24	Soft	2D	0%
17	Hatcher Ave	Rowland St to Lawson St	3,600	35	24	Soft	2D	0%
18	Railroad Street	Azusa Ave to Curl Ct	16,800	35	48	Soft	4D	0%
19	Railroad Street	Curl Ct to Hatcher Ave	16,400	35	48	Soft	4D	0%
20	Rowland Street	Hatcher Ave to Lawson St	14,700	35	48	Soft	4D	0%
21	Gale Avenue	Bixby Dr to Azusa Ave	32,400	45	48	Soft	4D	0%
22	Gale Avenue	Azusa Ave to Hatcher Ave	26,400	45	48	Soft	4D	0%
23					#N/A	Soft		0%
24					#N/A	Soft		0%
25					#N/A	Soft		0%
26					#N/A	Soft		0%
27					#N/A	Soft		0%
28					#N/A	Soft		0%
29					#N/A	Soft		0%
30					54	Soft		0%

ANALYST
NJF

ROAD CLASSIFICATION	SPEED	LANE DISTANCE
2U	40	12
4U	40	36
4D	45	48
6D	45	84
2D	40	24

		73.6	75.55%
		13.6	13.96%
		10.22	10.49%

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.42%	DAY	75.5%
% MT	1.84%	EVENING	14.0%
% HT	0.74%	NIGHT	10.5%

Source: Riverside, County of, Department of Public Health, Office of Industrial Hygiene. 2009, November. For Determining and Mitigating Traf

Riverside County Fleet Mix: Secondary, Collectors, or Smaller

Vehicle	Overall %	Day (7 AM to	Evening (7	Night (10 PM to 7 AM)
Auto	97%	73.60	13.60	10.22
Medium Truck	2%	0.90	0.04	0.90
Heavy Truck	1%	0.35	0.04	0.35
		74.85	13.68	11.47

Utility Trailer
EXISTING NO PROJECT CONDITIONS NOISE CONTOURS RESULT SUMMARY TABLE

					DISTACE TO NOISE CONTOUR (FT.)		
#	ROADWAY	SEGMENT	TRAFIC VOLUMES	LEVEL AT 50 FT.	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Azusa Avenue	Gemini St to Salais St	45,600	78.6	188	404	871
2	Azusa Avenue	Salais St to Hurley St	45,800	78.6	188	406	874
3	Azusa Avenue	Hurley St to Railroad St	56,585	79.6	217	467	1006
4	Azusa Avenue	Railroad St to Gale Ave	63,152	80.0	233	502	1082
5	Azusa Avenue	Gale Ave to SR 60	69,067	84.7	480	1033	2226
6	Azusa Avenue	SR 60 to Colima Rd	52,700	83.6	401	863	1859
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,400	60.8	12	26	56
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,200	60.0	11	23	50
9	Salais Street	Azusa Ave to Hambledon Ave	5,000	60.8	12	26	57
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,400	61.8	14	31	66
11	Hurley Street	Azusa Ave to Valley Blvd	10,000	66.2	28	60	130
12	Valley Boulevard	Ferrero Ln to Hurley St	36,700	78.8	194	418	902
13	Valley Boulevard	Hurley St to Fullerton Rd	44,400	79.7	221	475	1024
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,700	63.7	19	41	88
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	2,900	60.0	11	23	50
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,700	59.9	11	23	49
17	Hatcher Ave	Rowland St to Lawson St	3,600	61.1	13	28	59
18	Railroad Street	Azusa Ave to Curl Ct	16,800	68.5	40	85	183
19	Railroad Street	Curl Ct to Hatcher Ave	16,400	68.4	39	84	180
20	Rowland Street	Hatcher Ave to Lawson St	14,700	67.9	36	78	168
21	Gale Avenue	Bixby Dr to Azusa Ave	32,400	74.0	92	199	429
22	Gale Avenue	Azusa Ave to Hatcher Ave	26,400	73.1	81	174	374
23	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
24	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
25	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
26	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
27	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
28	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
29	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
30	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!

Scenario: EXISTING NO PROJECT
Roadway: Azusa Avenue
Segment: Gemini St to Salais St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	45,600
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2797	53	21	2067	39	16	518	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.6	-14.6	-18.6	1.3	-15.9	-19.9	-4.7	-21.9	-25.9
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	75.9	66.9	67.5	74.5	65.6	66.1	68.5	59.6	60.1
VEHICULAR NOISE	DAY=	76.9	Leq	EVENING=	75.6	Leq	NIGHT=	69.6	Leq

RESULTS					
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):		**Ldn=**	**78.0**
				CNEL=	**78.6**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**170**	**367**	**791**
			CNEL:	**188**	**404**	**871**

Scenario: EXISTING NO PROJECT
Roadway: Azusa Avenue
Segment: Salais St to Hurley St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	45,800
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2809	53	21	2076	39	16	520	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.6	-14.6	-18.5	1.3	-15.9	-19.9	-4.7	-21.9	-25.9
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	75.9	66.9	67.5	74.6	65.6	66.2	68.5	59.6	60.1
VEHICULAR NOISE	DAY=	76.9	Leq	EVENING=	75.6	Leq	NIGHT=	69.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.0**
CNEL= 78.6

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**171**	**368**	**794**
	CNEL:	**188**	**406**	**874**

Scenario: EXISTING NO PROJECT
Roadway: Azusa Avenue
Segment: Hurley St to Railroad St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	56,585
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3471	66	26	2565	48	19	643	12	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.6	-13.7	-17.6	2.3	-15.0	-18.9	-3.8	-21.0	-25.0
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.8	67.8	68.4	75.5	66.5	67.1	69.5	60.5	61.1
VEHICULAR NOISE	DAY=	77.8	Leq	EVENING=	76.5	Leq	NIGHT=	70.5	Leq

RESULTS					
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):		**Ldn=**	**78.9**
				CNEL=	**79.6**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**197**	**424**	**914**
			CNEL:	**217**	**467**	**1006**

Scenario: EXISTING NO PROJECT
Roadway: Azusa Avenue
Segment: Railroad St to Gale Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	63,152
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3873	73	29	2863	54	22	717	14	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.0	-13.2	-17.2	2.7	-14.5	-18.5	-3.3	-20.5	-24.5
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.3	68.3	68.9	76.0	67.0	67.6	69.9	61.0	61.5
VEHICULAR NOISE	DAY=	78.3	Leq	EVENING=	77.0	Leq	NIGHT=	71.0	Leq

RESULTS					
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):		**Ldn=**	**79.4**
				CNEL=	**80.0**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**212**	**456**	**983**
			CNEL:	**233**	**502**	**1082**

Scenario: EXISTING NO PROJECT
Roadway: Azusa Avenue
Segment: Gale Ave to SR 60

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	69,067
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	4236	80	32	3131	59	24	784	15	6
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.4	-12.8	-16.8	3.1	-14.1	-18.1	-2.9	-20.1	-24.1
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	82.0	73.0	73.6	80.7	71.7	72.3	74.6	65.7	66.2
VEHICULAR NOISE	DAY=	83.0	Leq	EVENING=	81.7	Leq	NIGHT=	75.7	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**84.1**
					CNEL=	**84.7**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**436**	**939**	**2022**
			CNEL:	**480**	**1033**	**2226**

Scenario: EXISTING NO PROJECT
Roadway: Azusa Avenue
Segment: SR 60 to Colima Rd

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	52,700
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3232	61	25	2389	45	18	598	11	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.3	-14.0	-17.9	1.9	-15.3	-19.2	-4.1	-21.3	-25.3
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	80.8	71.8	72.4	79.5	70.5	71.1	73.5	64.5	65.1
VEHICULAR NOISE	DAY=	81.8	Leq	EVENING=	80.5	Leq	NIGHT=	74.5	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**82.9**
					CNEL=	**83.6**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**364**	**784**	**1688**
			CNEL:	**401**	**863**	**1859**

Scenario: EXISTING NO PROJECT
Roadway: Anaheim Puente Road
Segment: Arenth Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	7,400
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	454	9	3	335	6	3	84	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-2.7	-20.0	-23.9	-4.0	-21.3	-25.2	-10.0	-27.3	-31.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.7	51.1	53.3	55.4	49.8	52.0	49.3	43.8	45.9
VEHICULAR NOISE	DAY=	59.1	Leq	EVENING=	57.7	Leq	NIGHT=	51.7	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**60.2**
					CNEL=	**60.8**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**11**	**24**	**51**
			CNEL:	**12**	**26**	**56**

Scenario: EXISTING NO PROJECT
Roadway: Salais Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,200
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	380	7	3	281	5	2	70	1	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-3.5	-20.7	-24.7	-4.8	-22.0	-26.0	-10.8	-28.0	-32.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.9	50.3	52.5	54.6	49.0	51.2	48.6	43.0	45.2
VEHICULAR NOISE	DAY=	58.3	Leq	EVENING=	57.0	Leq	NIGHT=	51.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.4**
CNEL= 60.0

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**45**
	CNEL:	**11**	**23**	**50**

Scenario: EXISTING NO PROJECT
Roadway: Salais Street
Segment: Azusa Ave to Hambledon Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	5,000
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	307	6	2	227	4	2	57	1	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.2	-22.4	-26.4	-6.5	-23.8	-27.7	-12.5	-29.8	-33.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.2	50.6	52.3	55.9	49.3	51.0	49.9	43.3	45.0
VEHICULAR NOISE	DAY=	59.1	Leq	EVENING=	57.8	Leq	NIGHT=	51.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.2**
CNEL= 60.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**11**	**24**	**52**
	CNEL:	**12**	**26**	**57**

Scenario: EXISTING NO PROJECT
Roadway: Hurley Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	9,400
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	577	11	4	426	8	3	107	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-1.7	-18.9	-22.9	-3.0	-20.2	-24.2	-9.0	-26.2	-30.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.7	52.1	54.3	56.4	50.8	53.0	50.4	44.8	47.0
VEHICULAR NOISE	DAY=	60.1	Leq	EVENING=	58.8	Leq	NIGHT=	52.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 61.2**
CNEL= 61.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**28**	**60**
	CNEL:	**14**	**31**	**66**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Hurley Street
Segment: Azusa Ave to Valley Blvd

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	10,000
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	613	12	5	453	9	3	114	2	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.9	-20.1	-24.1	-4.2	-21.4	-25.4	-10.2	-27.4	-31.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.0	55.5	56.7	61.7	54.2	55.4	55.7	48.1	49.4
VEHICULAR NOISE	DAY=	64.5	Leq	EVENING=	63.2	Leq	NIGHT=	57.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.6** **CNEL= 66.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**55**	**118**
	CNEL:	**28**	**60**	**130**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Valley Boulevard
Segment: Ferrero Ln to Hurley St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	36,700
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2251	43	17	1664	31	13	417	8	3
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	1.2	-16.0	-20.0	-0.1	-17.3	-21.3	-6.1	-23.3	-27.3
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.2	66.7	66.9	74.9	65.3	65.6	68.9	59.3	59.6
VEHICULAR NOISE	DAY=	77.1	Leq	EVENING=	75.8	Leq	NIGHT=	69.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.2**
CNEL= 78.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**176**	**380**	**819**
	CNEL:	**194**	**418**	**902**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Valley Boulevard
Segment: Hurley St to Fullerton Rd

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	44,400
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2723	51	21	2013	38	15	504	10	4
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	2.1	-15.2	-19.1	0.7	-16.5	-20.5	-5.3	-22.5	-26.5
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.1	67.5	67.8	75.7	66.2	66.4	69.7	60.2	60.4
VEHICULAR NOISE	DAY=	77.9	Leq	EVENING=	76.6	Leq	NIGHT=	70.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 79.0** **CNEL= 79.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**200**	**432**	**930**
	CNEL:	**221**	**475**	**1024**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Chestnut Street
Segment: Bixby Dr to Anaheim Puente Rd
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,700
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	411	8	3	304	6	2	76	1	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.6	-21.8	-25.8	-5.9	-23.2	-27.1	-11.9	-29.2	-33.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.4	52.9	54.2	59.1	51.6	52.9	53.1	45.6	46.9
VEHICULAR NOISE	DAY=	61.9	Leq	EVENING=	60.6	Leq	NIGHT=	54.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 63.0** **CNEL= 63.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**37**	**80**
	CNEL:	**19**	**41**	**88**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Chestnut Street
Segment: Anaheim Puente Rd to Virgil Water
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	2,900
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	178	3	1	131	2	1	33	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-8.2	-25.5	-29.4	-9.6	-26.8	-30.8	-15.6	-32.8	-36.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.8	49.3	50.5	55.5	48.0	49.2	49.5	42.0	43.2
VEHICULAR NOISE	DAY=	58.3	Leq	EVENING=	57.0	Leq	NIGHT=	51.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.4**
			CNEL=	**60.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**46**
	CNEL:	**11**	**23**	**50**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Hatcher Ave
Segment: Virgil Waters Way to Rowland St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	2,700
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	166	3	1	122	2	1	31	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-8.6	-25.8	-29.8	-9.9	-27.1	-31.1	-15.9	-33.1	-37.1
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.6	49.1	50.4	55.3	47.8	49.1	49.3	41.8	43.1
VEHICULAR NOISE	DAY=	58.1	Leq	EVENING=	56.8	Leq	NIGHT=	50.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.2** **CNEL= 59.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**44**
	CNEL:	**11**	**23**	**49**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Hatcher Ave
Segment: Rowland St to Lawson St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	3,600
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	221	4	2	163	3	1	41	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-7.3	-24.5	-28.5	-8.6	-25.9	-29.8	-14.6	-31.9	-35.8
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.9	50.4	51.6	56.6	49.1	50.3	50.6	43.0	44.3
VEHICULAR NOISE	DAY=	59.4	Leq	EVENING=	58.1	Leq	NIGHT=	52.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.5** **CNEL= 61.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**25**	**54**
	CNEL:	**13**	**28**	**59**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Railroad Street
Segment: Azusa Ave to Curl Ct

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	16,800
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1030	19	8	762	14	6	191	4	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.6	-17.9	-21.8	-1.9	-19.2	-23.1	-7.9	-25.2	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.2	57.7	59.0	63.9	56.4	57.7	57.9	50.4	51.7
VEHICULAR NOISE	DAY=	66.7	Leq	EVENING=	65.4	Leq	NIGHT=	59.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.8** **CNEL= 68.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**77**	**167**
	CNEL:	**40**	**85**	**183**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Railroad Street
Segment: Curl Ct to Hatcher Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	16,400
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1006	19	8	743	14	6	186	4	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.7	-18.0	-21.9	-2.0	-19.3	-23.2	-8.0	-25.3	-29.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.1	57.6	58.9	63.8	56.3	57.6	57.8	50.3	51.6
VEHICULAR NOISE	DAY=	66.6	Leq	EVENING=	65.3	Leq	NIGHT=	59.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.7** **CNEL= 68.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**76**	**164**
	CNEL:	**39**	**84**	**180**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Rowland Street
Segment: Hatcher Ave to Lawson St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	14,700
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	902	17	7	666	13	5	167	3	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.2	-18.4	-22.4	-2.5	-19.7	-23.7	-8.5	-25.8	-29.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.7	57.1	58.4	63.3	55.8	57.1	57.3	49.8	51.1
VEHICULAR NOISE	DAY=	66.2	Leq	EVENING=	64.9	Leq	NIGHT=	58.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.3** **CNEL= 67.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**33**	**71**	**152**
	CNEL:	**36**	**78**	**168**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Gale Avenue
Segment: Bixby Dr to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	32,400
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1987	38	15	1469	28	11	368	7	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	1.1	-16.1	-20.0	-0.2	-17.4	-21.4	-6.2	-23.4	-27.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	71.2	62.3	62.8	69.9	61.0	61.5	63.9	55.0	55.5
VEHICULAR NOISE	DAY=	72.3	Leq	EVENING=	71.0	Leq	NIGHT=	65.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.4** **CNEL= 74.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**84**	**181**	**390**
	CNEL:	**92**	**199**	**429**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING NO PROJECT
Roadway: Gale Avenue
Segment: Azusa Ave to Hatcher Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	26,400
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1619	31	12	1197	23	9	300	6	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	0.3	-17.0	-20.9	-1.1	-18.3	-22.3	-7.1	-24.3	-28.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.3	61.4	62.0	69.0	60.1	60.6	63.0	54.1	54.6
VEHICULAR NOISE	DAY=	71.4	Leq	EVENING=	70.1	Leq	NIGHT=	64.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.5** **CNEL= 73.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**73**	**158**	**340**
	CNEL:	**81**	**174**	**374**

Utility Trailer

EXISTING PLUS PROJECT

#	ROADWAY	SEGMENT	ADT	POSTED SPEED LIMIT	LANE DISTANCE	SITE CONDITION	LANES	GRADE (%)
1	Azusa Avenue	Gemini St to Salais St	45,800	45	84	Soft	6D	**0%**
2	Azusa Avenue	Salais St to Hurley St	46,200	45	84	Soft	6D	**0%**
3	Azusa Avenue	Hurley St to Railroad St	57,500	45	84	Soft	6D	**0%**
4	Azusa Avenue	Railroad St to Gale Ave	64,600	45	84	Soft	6D	**0%**
5	Azusa Avenue	Gale Ave to SR 60	70,400	45	96	Soft	8D	**0%**
6	Azusa Avenue	SR 60 to Colima Rd	52,900	45	96	Soft	8D	**0%**
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,400	25	12	Soft	2U	**0%**
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,300	25	12	Soft	2U	**0%**
9	Salais Street	Azusa Ave to Hambledon Ave	5,100	30	12	Soft	2U	**0%**
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,500	25	12	Soft	2U	**0%**
11	Hurley Street	Azusa Ave to Valley Blvd	10,600	35	48	Soft	4D	**0%**
12	Valley Boulevard	Ferrero Ln to Hurley St	37,000	50	84	Soft	6D	**0%**
13	Valley Boulevard	Hurley St to Fullerton Rd	44,700	50	84	Soft	6D	**0%**
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,700	35	12	Soft	2U	**0%**
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	3,100	35	12	Soft	2U	**0%**
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,800	35	24	Soft	2D	**0%**
17	Hatcher Ave	Rowland St to Lawson St	3,900	35	24	Soft	2D	**0%**
18	Railroad Street	Azusa Ave to Curl Ct	17,400	35	48	Soft	4D	**0%**
19	Railroad Street	Curl Ct to Hatcher Ave	16,500	35	48	Soft	4D	**0%**
20	Rowland Street	Hatcher Ave to Lawson St	14,700	35	48	Soft	4D	**0%**
21	Gale Avenue	Bixby Dr to Azusa Ave	32,500	45	48	Soft	4D	**0%**
22	Gale Avenue	Azusa Ave to Hatcher Ave	26,400	45	48	Soft	4D	**0%**
23					#N/A	Soft		**0%**
24					#N/A	Soft		**0%**
25					#N/A	Soft		**0%**
26					#N/A	Soft		**0%**
27					#N/A	Soft		**0%**
28					#N/A	Soft		**0%**
29					#N/A	Soft		**0%**
30					54	Soft		**0%**

ANALYST
NJF

ROAD CLASSIFICATION	SPEED	LANE DISTANCE
2U	40	12
4U	40	36
4D	45	48
6D	45	84
2D	40	24

		73.6	75.55%
		13.6	13.96%
		10.22	10.49%

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.42%	DAY	75.5%
% MT	1.84%	EVENING	14.0%
% HT	0.74%	NIGHT	10.5%

Source: Riverside, County of, Department of Public Health, Office of Industrial Hygiene. 2009, November. For Determining and Mitigating Traf

Riverside County Fleet Mix: Secondary, Collectors, or Smaller

Vehicle	Overall %	Day (7 AM to	Evening (7	Night (10 PM to 7 AM)
Auto	97%	73.60	13.60	10.22
Medium Truck	2%	0.90	0.04	0.90
Heavy Truck	1%	0.35	0.04	0.35
		74.85	13.68	11.47

Utility Trailer

EXISTING PLUS PROJECT CONDITIONS NOISE CONTOURS RESULT SUMMARY TABLE

					DISTACE TO NOISE CONTOUR (FT.)		
#	ROADWAY	SEGMENT	TRAFIC VOLUMES	LEVEL AT 50 FT.	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Azusa Avenue	Gemini St to Salais St	45,800	78.6	188	406	874
2	Azusa Avenue	Salais St to Hurley St	46,200	78.7	189	408	879
3	Azusa Avenue	Hurley St to Railroad St	57,500	79.6	219	472	1017
4	Azusa Avenue	Railroad St to Gale Ave	64,600	80.1	237	510	1099
5	Azusa Avenue	Gale Ave to SR 60	70,400	84.8	486	1047	2255
6	Azusa Avenue	SR 60 to Colima Rd	52,900	83.6	402	865	1864
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,400	60.8	12	26	56
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,300	60.1	11	23	51
9	Salais Street	Azusa Ave to Hambledon Ave	5,100	60.9	12	27	58
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,500	61.9	14	31	67
11	Hurley Street	Azusa Ave to Valley Blvd	10,600	66.5	29	63	135
12	Valley Boulevard	Ferrero Ln to Hurley St	37,000	78.9	195	421	906
13	Valley Boulevard	Hurley St to Fullerton Rd	44,700	79.7	222	477	1028
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,700	63.7	19	41	88
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	3,100	60.3	11	24	53
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,800	60.0	11	23	50
17	Hatcher Ave	Rowland St to Lawson St	3,900	61.5	13	29	63
18	Railroad Street	Azusa Ave to Curl Ct	17,400	68.6	40	87	188
19	Railroad Street	Curl Ct to Hatcher Ave	16,500	68.4	39	84	181
20	Rowland Street	Hatcher Ave to Lawson St	14,700	67.9	36	78	168
21	Gale Avenue	Bixby Dr to Azusa Ave	32,500	74.0	93	200	430
22	Gale Avenue	Azusa Ave to Hatcher Ave	26,400	73.1	81	174	374
23	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
24	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
25	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
26	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
27	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
28	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
29	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
30	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!

Scenario: EXISTING PLUS PROJECT
Roadway: Azusa Avenue
Segment: Gemini St to Salais St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	45,800
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2809	53	21	2076	39	16	520	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.6	-14.6	-18.5	1.3	-15.9	-19.9	-4.7	-21.9	-25.9
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	75.9	66.9	67.5	74.6	65.6	66.2	68.5	59.6	60.1
VEHICULAR NOISE	DAY=	76.9	Leq	EVENING=	75.6	Leq	NIGHT=	69.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.0**
CNEL= 78.6

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**171**	**368**	**794**
	CNEL:	**188**	**406**	**874**

Scenario: EXISTING PLUS PROJECT
Roadway: Azusa Avenue
Segment: Salais St to Hurley St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	46,200
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2834	54	22	2094	40	16	525	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.7	-14.6	-18.5	1.4	-15.9	-19.8	-4.6	-21.9	-25.8
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	75.9	66.9	67.5	74.6	65.6	66.2	68.6	59.6	60.2
VEHICULAR NOISE	DAY=	77.0	Leq	EVENING=	75.6	Leq	NIGHT=	69.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.0**
CNEL= 78.7

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**172**	**370**	**798**
	CNEL:	**189**	**408**	**879**

Scenario: EXISTING PLUS PROJECT
Roadway: Azusa Avenue
Segment: Hurley St to Railroad St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	57,500
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3527	67	27	2607	49	20	653	12	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.6	-13.6	-17.6	2.3	-14.9	-18.9	-3.7	-20.9	-24.9
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.9	67.9	68.5	75.5	66.6	67.1	69.5	60.6	61.1
VEHICULAR NOISE	DAY=	77.9	Leq	EVENING=	76.6	Leq	NIGHT=	70.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 79.0**
CNEL= 79.6

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**199**	**429**	**923**
	CNEL:	**219**	**472**	**1017**

Scenario: EXISTING PLUS PROJECT
Roadway: Azusa Avenue
Segment: Railroad St to Gale Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	64,600
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3962	75	30	2929	55	22	734	14	6
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.1	-13.1	-17.1	2.8	-14.4	-18.4	-3.2	-20.4	-24.4
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.4	68.4	69.0	76.1	67.1	67.7	70.0	61.1	61.6
VEHICULAR NOISE	DAY=	78.4	Leq	EVENING=	77.1	Leq	NIGHT=	71.1	Leq

RESULTS					
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):		**Ldn=**	**79.5**
				CNEL=	**80.1**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**215**	**463**	**998**
			CNEL:	**237**	**510**	**1099**

Scenario: EXISTING PLUS PROJECT
Roadway: Azusa Avenue
Segment: Gale Ave to SR 60

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	70,400
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	4318	82	33	3191	60	24	799	15	6
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.5	-12.7	-16.7	3.2	-14.0	-18.0	-2.8	-20.0	-24.0
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	82.0	73.1	73.6	80.7	71.8	72.3	74.7	65.8	66.3
VEHICULAR NOISE	DAY=	83.1	Leq	EVENING=	81.8	Leq	NIGHT=	75.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 84.2**
CNEL= 84.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**441**	**951**	**2048**
	CNEL:	**486**	**1047**	**2255**

Scenario: EXISTING PLUS PROJECT
Roadway: Azusa Avenue
Segment: SR 60 to Colima Rd

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	52,900
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3245	61	25	2398	45	18	601	11	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.3	-14.0	-17.9	2.0	-15.3	-19.2	-4.1	-21.3	-25.2
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	80.8	71.8	72.4	79.5	70.5	71.1	73.5	64.5	65.1
VEHICULAR NOISE	DAY=	81.8	Leq	EVENING=	80.5	Leq	NIGHT=	74.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 82.9**
CNEL= 83.6

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**365**	**786**	**1693**
	CNEL:	**402**	**865**	**1864**

Scenario: EXISTING PLUS PROJECT
Roadway: Anaheim Puente Road
Segment: Arenth Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	7,400
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	454	9	3	335	6	3	84	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-2.7	-20.0	-23.9	-4.0	-21.3	-25.2	-10.0	-27.3	-31.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.7	51.1	53.3	55.4	49.8	52.0	49.3	43.8	45.9
VEHICULAR NOISE	DAY=	59.1	Leq	EVENING=	57.7	Leq	NIGHT=	51.7	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**60.2**
					CNEL=	**60.8**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**11**	**24**	**51**
			CNEL:	**12**	**26**	**56**

Scenario: EXISTING PLUS PROJECT
Roadway: Salais Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,300
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	386	7	3	286	5	2	72	1	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-3.4	-20.7	-24.6	-4.7	-22.0	-25.9	-10.7	-28.0	-31.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.0	50.4	52.6	54.7	49.1	51.3	48.6	43.1	45.2
VEHICULAR NOISE	DAY=	58.4	Leq	EVENING=	57.0	Leq	NIGHT=	51.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.5**
CNEL= 60.1

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**46**
	CNEL:	**11**	**23**	**51**

Scenario: EXISTING PLUS PROJECT
Roadway: Salais Street
Segment: Azusa Ave to Hambledon Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	5,100
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	313	6	2	231	4	2	58	1	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.1	-22.4	-26.3	-6.4	-23.7	-27.6	-12.4	-29.7	-33.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.3	50.7	52.4	56.0	49.4	51.1	50.0	43.4	45.1
VEHICULAR NOISE	DAY=	59.2	Leq	EVENING=	57.9	Leq	NIGHT=	51.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.3**
CNEL= 60.9

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**11**	**24**	**52**
	CNEL:	**12**	**27**	**58**

Scenario: EXISTING PLUS PROJECT
Roadway: Hurley Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	9,500
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	583	11	4	431	8	3	108	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-1.6	-18.9	-22.8	-2.9	-20.2	-24.1	-9.0	-26.2	-30.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.8	52.2	54.4	56.4	50.8	53.0	50.4	44.8	47.0
VEHICULAR NOISE	DAY=	60.1	Leq	EVENING=	58.8	Leq	NIGHT=	52.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 61.2**
CNEL= 61.9

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**28**	**60**
	CNEL:	**14**	**31**	**67**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Hurley Street
Segment: Azusa Ave to Valley Blvd
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	10,600
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	650	12	5	481	9	4	120	2	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.6	-19.9	-23.8	-3.9	-21.2	-25.1	-9.9	-27.2	-31.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.2	55.7	57.0	61.9	54.4	55.7	55.9	48.4	49.7
VEHICULAR NOISE	DAY=	64.7	Leq	EVENING=	63.4	Leq	NIGHT=	57.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.8** **CNEL= 66.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**26**	**57**	**123**
	CNEL:	**29**	**63**	**135**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Valley Boulevard
Segment: Ferrero Ln to Hurley St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	37,000
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2269	43	17	1677	32	13	420	8	3
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	1.3	-16.0	-19.9	0.0	-17.3	-21.2	-6.1	-23.3	-27.3
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.3	66.7	67.0	74.9	65.4	65.7	68.9	59.4	59.6
VEHICULAR NOISE	DAY=	77.2	Leq	EVENING=	75.8	Leq	NIGHT=	69.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.2** **CNEL= 78.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**177**	**382**	**823**
	CNEL:	**195**	**421**	**906**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Valley Boulevard
Segment: Hurley St to Fullerton Rd
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	44,700
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2742	52	21	2026	38	15	508	10	4
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	2.1	-15.2	-19.1	0.8	-16.5	-20.4	-5.2	-22.5	-26.4
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.1	67.5	67.8	75.8	66.2	66.5	69.8	60.2	60.5
VEHICULAR NOISE	DAY=	78.0	Leq	EVENING=	76.7	Leq	NIGHT=	70.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 79.1**, **CNEL= 79.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**201**	**433**	**934**
	CNEL:	**222**	**477**	**1028**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Chestnut Street
Segment: Bixby Dr to Anaheim Puente Rd
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,700
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	411	8	3	304	6	2	76	1	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.6	-21.8	-25.8	-5.9	-23.2	-27.1	-11.9	-29.2	-33.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.4	52.9	54.2	59.1	51.6	52.9	53.1	45.6	46.9
VEHICULAR NOISE	DAY=	61.9	Leq	EVENING=	60.6	Leq	NIGHT=	54.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 63.0** **CNEL= 63.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**37**	**80**
	CNEL:	**19**	**41**	**88**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Chestnut Street
Segment: Anaheim Puente Rd to Virgil Water
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	3,100
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	190	4	1	141	3	1	35	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-8.0	-25.2	-29.2	-9.3	-26.5	-30.5	-15.3	-32.5	-36.5
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.1	49.6	50.8	55.8	48.3	49.5	49.8	42.3	43.5
VEHICULAR NOISE	DAY=	58.6	Leq	EVENING=	57.3	Leq	NIGHT=	51.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.7**
			CNEL=	**60.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**22**	**48**
	CNEL:	**11**	**24**	**53**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Hatcher Ave
Segment: Virgil Waters Way to Rowland St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	2,800
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	172	3	1	127	2	1	32	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-8.4	-25.6	-29.6	-9.7	-26.9	-30.9	-15.7	-33.0	-36.9
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.8	49.3	50.5	55.5	48.0	49.2	49.5	42.0	43.2
VEHICULAR NOISE	DAY=	58.3	Leq	EVENING=	57.0	Leq	NIGHT=	51.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.4**
			CNEL=	**60.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**46**
	CNEL:	**11**	**23**	**50**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Hatcher Ave
Segment: Rowland St to Lawson St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	3,900
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	239	5	2	177	3	1	44	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-7.0	-24.2	-28.2	-8.3	-25.5	-29.5	-14.3	-31.5	-35.5
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.2	50.7	52.0	56.9	49.4	50.7	50.9	43.4	44.7
VEHICULAR NOISE	DAY=	59.7	Leq	EVENING=	58.4	Leq	NIGHT=	52.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**60.8**
			CNEL=	**61.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**26**	**57**
	CNEL:	**13**	**29**	**63**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Railroad Street
Segment: Azusa Ave to Curl Ct

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	17,400
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1067	20	8	789	15	6	198	4	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.5	-17.7	-21.7	-1.8	-19.0	-23.0	-7.8	-25.0	-29.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.4	57.9	59.1	64.1	56.6	57.8	58.1	50.5	51.8
VEHICULAR NOISE	DAY=	66.9	Leq	EVENING=	65.6	Leq	NIGHT=	59.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.0** **CNEL= 68.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**37**	**79**	**171**
	CNEL:	**40**	**87**	**188**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Railroad Street
Segment: Curl Ct to Hatcher Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	16,500
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1012	19	8	748	14	6	187	4	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.7	-17.9	-21.9	-2.0	-19.2	-23.2	-8.0	-25.3	-29.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.2	57.6	58.9	63.9	56.3	57.6	57.8	50.3	51.6
VEHICULAR NOISE	DAY=	66.7	Leq	EVENING=	65.4	Leq	NIGHT=	59.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.8** **CNEL= 68.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**76**	**165**
	CNEL:	**39**	**84**	**181**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Rowland Street
Segment: Hatcher Ave to Lawson St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	14,700
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	902	17	7	666	13	5	167	3	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.2	-18.4	-22.4	-2.5	-19.7	-23.7	-8.5	-25.8	-29.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.7	57.1	58.4	63.3	55.8	57.1	57.3	49.8	51.1
VEHICULAR NOISE	DAY=	66.2	Leq	EVENING=	64.9	Leq	NIGHT=	58.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.3**
			CNEL=	**67.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**33**	**71**	**152**
	CNEL:	**36**	**78**	**168**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Gale Avenue
Segment: Bixby Dr to Azusa Ave
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	32,500
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1993	38	15	1473	28	11	369	7	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	1.2	-16.1	-20.0	-0.2	-17.4	-21.3	-6.2	-23.4	-27.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	71.3	62.3	62.9	69.9	61.0	61.5	63.9	55.0	55.5
VEHICULAR NOISE	DAY=	72.3	Leq	EVENING=	71.0	Leq	NIGHT=	65.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.4** **CNEL= 74.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**84**	**181**	**390**
	CNEL:	**93**	**200**	**430**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: EXISTING PLUS PROJECT
Roadway: Gale Avenue
Segment: Azusa Ave to Hatcher Ave
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	26,400
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1619	31	12	1197	23	9	300	6	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	0.3	-17.0	-20.9	-1.1	-18.3	-22.3	-7.1	-24.3	-28.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.3	61.4	62.0	69.0	60.1	60.6	63.0	54.1	54.6
VEHICULAR NOISE	DAY=	71.4	Leq	EVENING=	70.1	Leq	NIGHT=	64.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.5** **CNEL= 73.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**73**	**158**	**340**
	CNEL:	**81**	**174**	**374**

Utility Trailer

BUILDOUT 2017 NO PROJECT

#	ROADWAY	SEGMENT	ADT	POSTED SPEED LIMIT	LANE DISTANCE	SITE CONDITION	LANES	GRADE (%)
1	Azusa Avenue	Gemini St to Salais St	46,800	45	84	Soft	6D	**0%**
2	Azusa Avenue	Salais St to Hurley St	47,400	45	84	Soft	6D	**0%**
3	Azusa Avenue	Hurley St to Railroad St	59,200	45	84	Soft	6D	**0%**
4	Azusa Avenue	Railroad St to Gale Ave	66,000	45	84	Soft	6D	**0%**
5	Azusa Avenue	Gale Ave to SR 60	72,200	45	96	Soft	8D	**0%**
6	Azusa Avenue	SR 60 to Colima Rd	56,400	45	96	Soft	8D	**0%**
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,500	25	12	Soft	2U	**0%**
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,500	25	12	Soft	2U	**0%**
9	Salais Street	Azusa Ave to Hambledon Ave	5,200	30	12	Soft	2U	**0%**
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,800	25	12	Soft	2U	**0%**
11	Hurley Street	Azusa Ave to Valley Blvd	10,900	35	48	Soft	4D	**0%**
12	Valley Boulevard	Ferrero Ln to Hurley St	37,800	50	84	Soft	6D	**0%**
13	Valley Boulevard	Hurley St to Fullerton Rd	45,700	50	84	Soft	6D	**0%**
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,800	35	12	Soft	2U	**0%**
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	3,000	35	12	Soft	2U	**0%**
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,700	35	24	Soft	2D	**0%**
17	Hatcher Ave	Rowland St to Lawson St	3,700	35	24	Soft	2D	**0%**
18	Railroad Street	Azusa Ave to Curl Ct	17,500	35	48	Soft	4D	**0%**
19	Railroad Street	Curl Ct to Hatcher Ave	17,000	35	48	Soft	4D	**0%**
20	Rowland Street	Hatcher Ave to Lawson St	15,300	35	48	Soft	4D	**0%**
21	Gale Avenue	Bixby Dr to Azusa Ave	33,200	45	48	Soft	4D	**0%**
22	Gale Avenue	Azusa Ave to Hatcher Ave	27,000	45	48	Soft	4D	**0%**
23					#N/A	Soft		**0%**
24					#N/A	Soft		**0%**
25					#N/A	Soft		**0%**
26					#N/A	Soft		**0%**
27					#N/A	Soft		**0%**
28					#N/A	Soft		**0%**
29					#N/A	Soft		**0%**
30					54	Soft		**0%**

ANALYST
NJF

ROAD CLASSIFICATION	SPEED	LANE DISTANCE
2U	40	12
4U	40	36
4D	45	48
6D	45	84
2D	40	24

		73.6	75.55%
		13.6	13.96%
		10.22	10.49%

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.42%	DAY	75.5%
% MT	1.84%	EVENING	14.0%
% HT	0.74%	NIGHT	10.5%

Source: Riverside, County of, Department of Public Health, Office of Industrial Hygiene. 2009, November. For Determining and Mitigating Traf

Riverside County Fleet Mix: Secondary, Collectors, or Smaller

Vehicle	Overall %	Day (7 AM to	Evening (7	Night (10 PM to 7 AM)
Auto	97%	73.60	13.60	10.22
Medium Truck	2%	0.90	0.04	0.90
Heavy Truck	1%	0.35	0.04	0.35
		74.85	13.68	11.47

Utility Trailer

BUILDOUT 2017 NO PROJECT CONDITIONS NOISE CONTOURS RESULT SUMMARY TABLE

					DISTACE TO NOISE CONTOUR (FT.)		
#	ROADWAY	SEGMENT	TRAFIC VOLUMES	LEVEL AT 50 FT.	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Azusa Avenue	Gemini St to Salais St	46,800	78.7	191	411	886
2	Azusa Avenue	Salais St to Hurley St	47,400	78.8	193	415	894
3	Azusa Avenue	Hurley St to Railroad St	59,200	79.8	223	481	1037
4	Azusa Avenue	Railroad St to Gale Ave	66,000	80.2	240	517	1115
5	Azusa Avenue	Gale Ave to SR 60	72,200	84.9	494	1064	2293
6	Azusa Avenue	SR 60 to Colima Rd	56,400	83.8	419	903	1945
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,500	60.8	12	26	57
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,500	60.2	11	24	52
9	Salais Street	Azusa Ave to Hambledon Ave	5,200	61.0	13	27	58
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,800	62.0	15	32	68
11	Hurley Street	Azusa Ave to Valley Blvd	10,900	66.6	30	64	137
12	Valley Boulevard	Ferrero Ln to Hurley St	37,800	79.0	198	427	919
13	Valley Boulevard	Hurley St to Fullerton Rd	45,700	79.8	225	484	1043
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,800	63.7	19	41	89
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	3,000	60.2	11	24	51
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,700	59.9	11	23	49
17	Hatcher Ave	Rowland St to Lawson St	3,700	61.2	13	28	60
18	Railroad Street	Azusa Ave to Curl Ct	17,500	68.6	41	87	188
19	Railroad Street	Curl Ct to Hatcher Ave	17,000	68.5	40	86	185
20	Rowland Street	Hatcher Ave to Lawson St	15,300	68.1	37	80	172
21	Gale Avenue	Bixby Dr to Azusa Ave	33,200	74.1	94	202	436
22	Gale Avenue	Azusa Ave to Hatcher Ave	27,000	73.2	82	176	380
23	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
24	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
25	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
26	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
27	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
28	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
29	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
30	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Azusa Avenue
Segment: Gemini St to Salais St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	46,800
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2870	54	22	2122	40	16	531	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.7	-14.5	-18.5	1.4	-15.8	-19.8	-4.6	-21.8	-25.8
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.0	67.0	67.6	74.7	65.7	66.3	68.6	59.7	60.2
VEHICULAR NOISE	DAY=	77.0	Leq	EVENING=	75.7	Leq	NIGHT=	69.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.1**
CNEL= 78.7

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**173**	**374**	**805**
	CNEL:	**191**	**411**	**886**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Azusa Avenue
Segment: Salais St to Hurley St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	47,400
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2907	55	22	2149	41	16	538	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.8	-14.4	-18.4	1.5	-15.8	-19.7	-4.5	-21.8	-25.7
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.0	67.1	67.6	74.7	65.7	66.3	68.7	59.7	60.3
VEHICULAR NOISE	DAY=	77.1	Leq	EVENING=	75.8	Leq	NIGHT=	69.7	Leq

RESULTS					
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):		**Ldn=**	**78.2**
				CNEL=	**78.8**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**175**	**377**	**812**
			CNEL:	**193**	**415**	**894**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Azusa Avenue
Segment: Hurley St to Railroad St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	59,200
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3631	69	28	2684	51	20	672	13	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.8	-13.5	-17.4	2.4	-14.8	-18.7	-3.6	-20.8	-24.8
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.0	68.0	68.6	75.7	66.7	67.3	69.7	60.7	61.3
VEHICULAR NOISE	DAY=	78.0	Leq	EVENING=	76.7	Leq	NIGHT=	70.7	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**79.1**
					CNEL=	**79.8**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**203**	**437**	**942**
			CNEL:	**223**	**481**	**1037**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Azusa Avenue
Segment: Railroad St to Gale Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	66,000
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	4048	76	31	2992	57	23	749	14	6
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.2	-13.0	-17.0	2.9	-14.3	-18.3	-3.1	-20.3	-24.3
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.5	68.5	69.1	76.1	67.2	67.7	70.1	61.2	61.7
VEHICULAR NOISE	DAY=	78.5	Leq	EVENING=	77.2	Leq	NIGHT=	71.2	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**79.6**
					CNEL=	**80.2**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**218**	**470**	**1012**
			CNEL:	**240**	**517**	**1115**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Azusa Avenue
Segment: Gale Ave to SR 60

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	72,200
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	4428	84	34	3273	62	25	820	15	6
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.6	-12.6	-16.6	3.3	-13.9	-17.9	-2.7	-19.9	-23.9
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	82.2	73.2	73.8	80.8	71.9	72.4	74.8	65.9	66.4
VEHICULAR NOISE	DAY=	83.2	Leq	EVENING=	81.9	Leq	NIGHT=	75.9	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**84.3**
					CNEL=	**84.9**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**449**	**967**	**2083**
			CNEL:	**494**	**1064**	**2293**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Azusa Avenue
Segment: SR 60 to Colima Rd

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	56,400
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3459	65	26	2557	48	19	640	12	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.6	-13.7	-17.6	2.2	-15.0	-19.0	-3.8	-21.0	-25.0
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	81.1	72.1	72.7	79.8	70.8	71.4	73.8	64.8	65.4
VEHICULAR NOISE	DAY=	82.1	Leq	EVENING=	80.8	Leq	NIGHT=	74.8	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**83.2**
					CNEL=	**83.8**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**381**	**820**	**1767**
			CNEL:	**419**	**903**	**1945**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Anaheim Puente Road
Segment: Arenth Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	7,500
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	460	9	3	340	6	3	85	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-2.7	-19.9	-23.9	-4.0	-21.2	-25.2	-10.0	-27.2	-31.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.7	51.1	53.3	55.4	49.8	52.0	49.4	43.8	46.0
VEHICULAR NOISE	DAY=	59.1	Leq	EVENING=	57.8	Leq	NIGHT=	51.8	Leq

RESULTS

NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):		**Ldn=**	**60.2**
				CNEL=	**60.8**

		70 dBA	*65 dBA*	*60 dBA*
NOISE CONTOUR:				
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**11**	**24**	**52**
	CNEL:	**12**	**26**	**57**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Salais Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,500
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	399	8	3	295	6	2	74	1	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-3.3	-20.5	-24.5	-4.6	-21.8	-25.8	-10.6	-27.8	-31.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.1	50.5	52.7	54.8	49.2	51.4	48.8	43.2	45.4
VEHICULAR NOISE	DAY=	58.5	Leq	EVENING=	57.2	Leq	NIGHT=	51.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.6**
CNEL= 60.2

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**22**	**47**
	CNEL:	**11**	**24**	**52**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Salais Street
Segment: Azusa Ave to Hambledon Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	5,200
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	319	6	2	236	4	2	59	1	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.0	-22.3	-26.2	-6.4	-23.6	-27.5	-12.4	-29.6	-33.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.4	50.8	52.5	56.1	49.5	51.2	50.1	43.5	45.1
VEHICULAR NOISE	DAY=	59.3	Leq	EVENING=	58.0	Leq	NIGHT=	52.0	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**60.4**
					CNEL=	**61.0**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**11**	**25**	**53**
			CNEL:	**13**	**27**	**58**

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Hurley Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	9,800
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	601	11	5	444	8	3	111	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-1.5	-18.7	-22.7	-2.8	-20.0	-24.0	-8.8	-26.1	-30.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.9	52.3	54.5	56.6	51.0	53.2	50.6	45.0	47.2
VEHICULAR NOISE	DAY=	60.3	Leq	EVENING=	59.0	Leq	NIGHT=	53.0	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.4**
					CNEL=	**62.0**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**13**	**29**	**62**
			CNEL:	**15**	**32**	**68**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Hurley Street
Segment: Azusa Ave to Valley Blvd
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	10,900
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	669	13	5	494	9	4	124	2	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.5	-19.7	-23.7	-3.8	-21.0	-25.0	-9.8	-27.1	-31.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.4	55.8	57.1	62.0	54.5	55.8	56.0	48.5	49.8
VEHICULAR NOISE	DAY=	64.9	Leq	EVENING=	63.6	Leq	NIGHT=	57.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.0** **CNEL= 66.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**27**	**58**	**125**
	CNEL:	**30**	**64**	**137**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Valley Boulevard
Segment: Ferrero Ln to Hurley St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	37,800
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2318	44	18	1714	32	13	429	8	3
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	1.4	-15.9	-19.8	0.0	-17.2	-21.2	-6.0	-23.2	-27.2
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.4	66.8	67.1	75.0	65.5	65.7	69.0	59.5	59.7
VEHICULAR NOISE	DAY=	77.2	Leq	EVENING=	75.9	Leq	NIGHT=	69.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.3** **CNEL= 79.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**180**	**388**	**835**
	CNEL:	**198**	**427**	**919**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Valley Boulevard
Segment: Hurley St to Fullerton Rd
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	45,700
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2803	53	21	2072	39	16	519	10	4
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	2.2	-15.1	-19.0	0.9	-16.4	-20.3	-5.1	-22.4	-26.3
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.2	67.6	67.9	75.9	66.3	66.6	69.9	60.3	60.6
VEHICULAR NOISE	DAY=	78.1	Leq	EVENING=	76.8	Leq	NIGHT=	70.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 79.2** **CNEL= 79.8**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**204**	**440**	**948**
	CNEL:	**225**	**484**	**1043**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Chestnut Street
Segment: Bixby Dr to Anaheim Puente Rd
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,800
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	417	8	3	308	6	2	77	1	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.5	-21.8	-25.7	-5.9	-23.1	-27.1	-11.9	-29.1	-33.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.5	53.0	54.2	59.2	51.7	52.9	53.2	45.7	46.9
VEHICULAR NOISE	DAY=	62.0	Leq	EVENING=	60.7	Leq	NIGHT=	54.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 63.1** **CNEL= 63.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**37**	**81**
	CNEL:	**19**	**41**	**89**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT Project: Utility Trailer
Roadway: Chestnut Street Analyst: NJF
Segment: Anaheim Puente Rd to Virgil Water Date: 14-Jan-16

ROADWAY INPUTS	
ADT	3,000
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	184	3	1	136	3	1	34	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-8.1	-25.3	-29.3	-9.4	-26.6	-30.6	-15.4	-32.7	-36.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.0	49.4	50.7	55.6	48.1	49.4	49.6	42.1	43.4
VEHICULAR NOISE	DAY=	58.5	Leq	EVENING=	57.1	Leq	NIGHT=	51.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.6**
			CNEL=	**60.2**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**22**	**47**
	CNEL:	**11**	**24**	**51**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Hatcher Ave
Segment: Virgil Waters Way to Rowland St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	2,700
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	166	3	1	122	2	1	31	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-8.6	-25.8	-29.8	-9.9	-27.1	-31.1	-15.9	-33.1	-37.1
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.6	49.1	50.4	55.3	47.8	49.1	49.3	41.8	43.1
VEHICULAR NOISE	DAY=	58.1	Leq	EVENING=	56.8	Leq	NIGHT=	50.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.2** **CNEL= 59.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**44**
	CNEL:	**11**	**23**	**49**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Hatcher Ave
Segment: Rowland St to Lawson St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	3,700
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	227	4	2	168	3	1	42	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-7.2	-24.4	-28.4	-8.5	-25.7	-29.7	-14.5	-31.8	-35.7
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.0	50.5	51.8	56.7	49.2	50.4	50.7	43.2	44.4
VEHICULAR NOISE	DAY=	59.5	Leq	EVENING=	58.2	Leq	NIGHT=	52.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.6** **CNEL= 61.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**25**	**55**
	CNEL:	**13**	**28**	**60**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Railroad Street
Segment: Azusa Ave to Curl Ct
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	17,500
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1073	20	8	793	15	6	199	4	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.4	-17.7	-21.6	-1.8	-19.0	-22.9	-7.8	-25.0	-29.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.4	57.9	59.2	64.1	56.6	57.8	58.1	50.6	51.8
VEHICULAR NOISE	DAY=	66.9	Leq	EVENING=	65.6	Leq	NIGHT=	59.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.0** **CNEL= 68.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**37**	**79**	**171**
	CNEL:	**41**	**87**	**188**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Railroad Street
Segment: Curl Ct to Hatcher Ave
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	17,000
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1043	20	8	771	15	6	193	4	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.6	-17.8	-21.8	-1.9	-19.1	-23.1	-7.9	-25.1	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.3	57.8	59.0	64.0	56.5	57.7	58.0	50.4	51.7
VEHICULAR NOISE	DAY=	66.8	Leq	EVENING=	65.5	Leq	NIGHT=	59.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.9** **CNEL= 68.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**78**	**168**
	CNEL:	**40**	**86**	**185**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Rowland Street
Segment: Hatcher Ave to Lawson St
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	15,300
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	938	18	7	694	13	5	174	3	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.0	-18.3	-22.2	-2.3	-19.6	-23.5	-8.3	-25.6	-29.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.8	57.3	58.6	63.5	56.0	57.3	57.5	50.0	51.3
VEHICULAR NOISE	DAY=	66.3	Leq	EVENING=	65.0	Leq	NIGHT=	59.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.4** **CNEL= 68.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**34**	**73**	**157**
	CNEL:	**37**	**80**	**172**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Gale Avenue
Segment: Bixby Dr to Azusa Ave
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	33,200
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2036	38	15	1505	28	11	377	7	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	1.3	-16.0	-19.9	-0.1	-17.3	-21.3	-6.1	-23.3	-27.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	71.3	62.4	62.9	70.0	61.1	61.6	64.0	55.1	55.6
VEHICULAR NOISE	DAY=	72.4	Leq	EVENING=	71.1	Leq	NIGHT=	65.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.5** **CNEL= 74.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**85**	**184**	**396**
	CNEL:	**94**	**202**	**436**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 NO PROJECT
Roadway: Gale Avenue
Segment: Azusa Ave to Hatcher Ave
Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	27,000
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1656	31	13	1224	23	9	307	6	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	0.4	-16.9	-20.8	-1.0	-18.2	-22.2	-7.0	-24.2	-28.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.4	61.5	62.0	69.1	60.2	60.7	63.1	54.2	54.7
VEHICULAR NOISE	DAY=	71.5	Leq	EVENING=	70.2	Leq	NIGHT=	64.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.6** **CNEL= 73.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**74**	**160**	**345**
	CNEL:	**82**	**176**	**380**

Utility Trailer

BUILDOUT 2017 PLUS PROJECT

#	ROADWAY	SEGMENT	ADT	POSTED SPEED LIMIT	LANE DISTANCE	SITE CONDITION	LANES	GRADE (%)
1	Azusa Avenue	Gemini St to Salais St	47,000	45	84	Soft	6D	**0%**
2	Azusa Avenue	Salais St to Hurley St	47,800	45	84	Soft	6D	**0%**
3	Azusa Avenue	Hurley St to Railroad St	60,100	45	84	Soft	6D	**0%**
4	Azusa Avenue	Railroad St to Gale Ave	67,400	45	84	Soft	6D	**0%**
5	Azusa Avenue	Gale Ave to SR 60	73,500	45	96	Soft	8D	**0%**
6	Azusa Avenue	SR 60 to Colima Rd	56,600	45	96	Soft	8D	**0%**
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,500	25	12	Soft	2U	**0%**
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,600	25	12	Soft	2U	**0%**
9	Salais Street	Azusa Ave to Hambledon Ave	5,300	30	12	Soft	2U	**0%**
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,900	25	12	Soft	2U	**0%**
11	Hurley Street	Azusa Ave to Valley Blvd	11,400	35	48	Soft	4D	**0%**
12	Valley Boulevard	Ferrero Ln to Hurley St	38,100	50	84	Soft	6D	**0%**
13	Valley Boulevard	Hurley St to Fullerton Rd	45,900	50	84	Soft	6D	**0%**
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,800	35	12	Soft	2U	**0%**
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	3,200	35	12	Soft	2U	**0%**
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,900	35	24	Soft	2D	**0%**
17	Hatcher Ave	Rowland St to Lawson St	4,000	35	24	Soft	2D	**0%**
18	Railroad Street	Azusa Ave to Curl Ct	18,000	35	48	Soft	4D	**0%**
19	Railroad Street	Curl Ct to Hatcher Ave	17,100	35	48	Soft	4D	**0%**
20	Rowland Street	Hatcher Ave to Lawson St	15,300	35	48	Soft	4D	**0%**
21	Gale Avenue	Bixby Dr to Azusa Ave	33,200	45	48	Soft	4D	**0%**
22	Gale Avenue	Azusa Ave to Hatcher Ave	27,000	45	48	Soft	4D	**0%**
23					#N/A	Soft		**0%**
24					#N/A	Soft		**0%**
25					#N/A	Soft		**0%**
26					#N/A	Soft		**0%**
27					#N/A	Soft		**0%**
28					#N/A	Soft		**0%**
29					#N/A	Soft		**0%**
30					54	Soft		**0%**

ANALYST
NJF

ROAD CLASSIFICATION	SPEED	LANE DISTANCE
2U	40	12
4U	40	36
4D	45	48
6D	45	84
2D	40	24

		73.6	75.55%
		13.6	13.96%
		10.22	10.49%

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.42%	DAY	75.5%
% MT	1.84%	EVENING	14.0%
% HT	0.74%	NIGHT	10.5%

Source: Riverside, County of, Department of Public Health, Office of Industrial Hygiene. 2009, November. For Determining and Mitigating Traf

Riverside County Fleet Mix: Secondary, Collectors, or Smaller

Vehicle	Overall %	Day (7 AM to	Evening (7	Night (10 PM to 7 AM)
Auto	97%	73.60	13.60	10.22
Medium Truck	2%	0.90	0.04	0.90
Heavy Truck	1%	0.35	0.04	0.35
		74.85	13.68	11.47

Utility Trailer

ILDOUT 2017 PLUS PROJECT CONDITIONS NOISE CONTOURS RESULT SUMMARY TABLE

					DISTACE TO NOISE CONTOUR (FT.)		
#	ROADWAY	SEGMENT	TRAFIC VOLUMES	LEVEL AT 50 FT.	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Azusa Avenue	Gemini St to Salais St	47,000	78.7	191	413	889
2	Azusa Avenue	Salais St to Hurley St	47,800	78.8	194	417	899
3	Azusa Avenue	Hurley St to Railroad St	60,100	79.8	226	486	1047
4	Azusa Avenue	Railroad St to Gale Ave	67,400	80.3	244	525	1130
5	Azusa Avenue	Gale Ave to SR 60	73,500	85.0	500	1077	2321
6	Azusa Avenue	SR 60 to Colima Rd	56,600	83.9	420	905	1950
7	Anaheim Puente Road	Arenth Ave to Azusa Ave	7,500	60.8	12	26	57
8	Salais Street	Dora Guzman Ave to Azusa Ave	6,600	60.3	11	24	52
9	Salais Street	Azusa Ave to Hambledon Ave	5,300	61.1	13	27	59
10	Hurley Street	Dora Guzman Ave to Azusa Ave	9,900	62.0	15	32	68
11	Hurley Street	Azusa Ave to Valley Blvd	11,400	66.8	31	66	142
12	Valley Boulevard	Ferrero Ln to Hurley St	38,100	79.0	199	429	924
13	Valley Boulevard	Hurley St to Fullerton Rd	45,900	79.8	225	486	1047
14	Chestnut Street	Bixby Dr to Anaheim Puente Rd	6,800	63.7	19	41	89
15	Chestnut Street	Anaheim Puente Rd to Virgil Waters Way	3,200	60.5	12	25	54
16	Hatcher Ave	Virgil Waters Way to Rowland St	2,900	60.2	11	24	51
17	Hatcher Ave	Rowland St to Lawson St	4,000	61.6	14	30	64
18	Railroad Street	Azusa Ave to Curl Ct	18,000	68.8	41	89	192
19	Railroad Street	Curl Ct to Hatcher Ave	17,100	68.5	40	86	186
20	Rowland Street	Hatcher Ave to Lawson St	15,300	68.1	37	80	172
21	Gale Avenue	Bixby Dr to Azusa Ave	33,200	74.1	94	202	436
22	Gale Avenue	Azusa Ave to Hatcher Ave	27,000	73.2	82	176	380
23	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
24	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
25	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
26	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
27	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
28	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
29	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!
30	0	0	0	#NUM!	#NUM!	#NUM!	#NUM!

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Azusa Avenue
Segment: Gemini St to Salais St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	47,000
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2883	54	22	2131	40	16	534	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.8	-14.5	-18.4	1.4	-15.8	-19.7	-4.6	-21.8	-25.8
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.0	67.0	67.6	74.7	65.7	66.3	68.7	59.7	60.3
VEHICULAR NOISE	DAY=	77.0	Leq	EVENING=	75.7	Leq	NIGHT=	69.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.1**
CNEL= 78.7

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**174**	**375**	**807**
	CNEL:	**191**	**413**	**889**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Azusa Avenue
Segment: Salais St to Hurley St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	47,800
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2932	55	22	2167	41	16	543	10	4
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	2.8	-14.4	-18.4	1.5	-15.7	-19.7	-4.5	-21.7	-25.7
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.1	67.1	67.7	74.7	65.8	66.3	68.7	59.8	60.3
VEHICULAR NOISE	DAY=	77.1	Leq	EVENING=	75.8	Leq	NIGHT=	69.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.2**
CNEL= 78.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**176**	**379**	**816**
	CNEL:	**194**	**417**	**899**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Azusa Avenue
Segment: Hurley St to Railroad St

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	60,100
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3686	70	28	2725	51	21	682	13	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.8	-13.4	-17.4	2.5	-14.7	-18.7	-3.5	-20.7	-24.7
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.1	68.1	68.7	75.7	66.8	67.3	69.7	60.8	61.3
VEHICULAR NOISE	DAY=	78.1	Leq	EVENING=	76.8	Leq	NIGHT=	70.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 79.2**
CNEL= 79.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**205**	**441**	**951**
	CNEL:	**226**	**486**	**1047**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Azusa Avenue
Segment: Railroad St to Gale Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	67,400
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	4134	78	31	3055	58	23	765	14	6
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.3	-12.9	-16.9	3.0	-14.2	-18.2	-3.0	-20.2	-24.2
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.5	68.6	69.2	76.2	67.3	67.8	70.2	61.3	61.8
VEHICULAR NOISE	DAY=	78.6	Leq	EVENING=	77.3	Leq	NIGHT=	71.3	Leq

RESULTS					
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):		**Ldn=**	**79.7**
				CNEL=	**80.3**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**221**	**477**	**1027**
			CNEL:	**244**	**525**	**1130**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Azusa Avenue
Segment: Gale Ave to SR 60

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	73,500
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	4508	85	34	3332	63	25	835	16	6
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	4.7	-12.5	-16.5	3.4	-13.8	-17.8	-2.6	-19.9	-23.8
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	82.2	73.3	73.8	80.9	72.0	72.5	74.9	65.9	66.5
VEHICULAR NOISE	DAY=	83.3	Leq	EVENING=	82.0	Leq	NIGHT=	76.0	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**84.4**
					CNEL=	**85.0**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**454**	**978**	**2108**
			CNEL:	**500**	**1077**	**2321**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Azusa Avenue
Segment: SR 60 to Colima Rd

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	56,600
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	96
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	3471	66	26	2566	48	19	643	12	5
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	3.6	-13.7	-17.6	2.3	-15.0	-18.9	-3.8	-21.0	-25.0
Distance	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	81.1	72.1	72.7	79.8	70.8	71.4	73.8	64.8	65.4
VEHICULAR NOISE	DAY=	82.1	Leq	EVENING=	80.8	Leq	NIGHT=	74.8	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**83.2**
					CNEL=	**83.9**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**381**	**822**	**1771**
			CNEL:	**420**	**905**	**1950**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Anaheim Puente Road
Segment: Arenth Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	7,500
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	460	9	3	340	6	3	85	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-2.7	-19.9	-23.9	-4.0	-21.2	-25.2	-10.0	-27.2	-31.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.7	51.1	53.3	55.4	49.8	52.0	49.4	43.8	46.0
VEHICULAR NOISE	DAY=	59.1	Leq	EVENING=	57.8	Leq	NIGHT=	51.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.2**
CNEL= 60.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**11**	**24**	**52**
	CNEL:	**12**	**26**	**57**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Salais Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,600
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	405	8	3	299	6	2	75	1	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-3.2	-20.5	-24.4	-4.5	-21.8	-25.7	-10.5	-27.8	-31.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.2	50.6	52.8	54.9	49.3	51.5	48.8	43.3	45.5
VEHICULAR NOISE	DAY=	58.6	Leq	EVENING=	57.2	Leq	NIGHT=	51.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.7**
CNEL= 60.3

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**22**	**47**
	CNEL:	**11**	**24**	**52**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Salais Street
Segment: Azusa Ave to Hambledon Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	5,300
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	325	6	2	240	5	2	60	1	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.0	-22.2	-26.2	-6.3	-23.5	-27.5	-12.3	-29.5	-33.5
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.5	50.9	52.6	56.2	49.5	51.2	50.2	43.5	45.2
VEHICULAR NOISE	DAY=	59.4	Leq	EVENING=	58.1	Leq	NIGHT=	52.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.5**
CNEL= 61.1

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**25**	**54**
	CNEL:	**13**	**27**	**59**

Scenario: BUILDOUT 2017 PLUS PROJECT
Roadway: Hurley Street
Segment: Dora Guzman Ave to Azusa Ave

Project: Utility Trailer
Analyst: NJF
Date: 14-Jan-16

ROADWAY INPUTS	
ADT	9,900
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	607	11	5	449	8	3	112	2	1
Speed in MPH	25	25	25	25	25	25	25	25	25
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	59.4	71.1	77.2	59.4	71.1	77.2	59.4	71.1	77.2
ADJUSTMENTS									
Flow	-1.5	-18.7	-22.6	-2.8	-20.0	-24.0	-8.8	-26.0	-30.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.9	52.3	54.5	56.6	51.0	53.2	50.6	45.0	47.2
VEHICULAR NOISE	DAY=	60.3	Leq	EVENING=	59.0	Leq	NIGHT=	53.0	Leq

RESULTS						
NOISE LEVELS AT	50	FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.4**
					CNEL=	**62.0**
NOISE CONTOUR:				*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):			**Ldn:**	**13**	**29**	**62**
			CNEL:	**15**	**32**	**68**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Hurley Street Analyst: NJF
Segment: Azusa Ave to Valley Blvd Date: 14-Jan-16

ROADWAY INPUTS	
ADT	11,400
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	699	13	5	517	10	4	129	2	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.3	-19.5	-23.5	-3.6	-20.9	-24.8	-9.6	-26.9	-30.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.6	56.0	57.3	62.2	54.7	56.0	56.2	48.7	50.0
VEHICULAR NOISE	DAY=	65.1	Leq	EVENING=	63.7	Leq	NIGHT=	57.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.2**
CNEL= 66.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**28**	**60**	**129**
	CNEL:	**31**	**66**	**142**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Valley Boulevard Analyst: NJF
Segment: Ferrero Ln to Hurley St Date: 14-Jan-16

ROADWAY INPUTS	
ADT	38,100
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2337	44	18	1727	33	13	433	8	3
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	1.4	-15.8	-19.8	0.1	-17.2	-21.1	-5.9	-23.2	-27.1
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	76.4	66.8	67.1	75.1	65.5	65.8	69.1	59.5	59.8
VEHICULAR NOISE	DAY=	77.3	Leq	EVENING=	76.0	Leq	NIGHT=	70.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 78.4**
CNEL= 79.0

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**181**	**390**	**840**
	CNEL:	**199**	**429**	**924**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Valley Boulevard Analyst: NJF
Segment: Hurley St to Fullerton Rd Date: 14-Jan-16

ROADWAY INPUTS	
ADT	45,900
SPEED (mph)	50
ROAD NEAR-FAR LN. DIST.	84
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2815	53	21	2081	39	16	521	10	4
Speed in MPH	50	50	50	50	50	50	50	50	50
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	71.1	78.8	83.0	71.1	78.8	83.0	71.1	78.8	83.0
ADJUSTMENTS									
Flow	2.2	-15.0	-19.0	0.9	-16.4	-20.3	-5.1	-22.4	-26.3
Distance	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	77.2	67.6	67.9	75.9	66.3	66.6	69.9	60.3	60.6
VEHICULAR NOISE	DAY=	78.1	Leq	EVENING=	76.8	Leq	NIGHT=	70.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 79.2**
CNEL= 79.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**205**	**441**	**951**
	CNEL:	**225**	**486**	**1047**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Chestnut Street Analyst: NJF
Segment: Bixby Dr to Anaheim Puente Rd Date: 14-Jan-16

ROADWAY INPUTS	
ADT	6,800
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	417	8	3	308	6	2	77	1	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.5	-21.8	-25.7	-5.9	-23.1	-27.1	-11.9	-29.1	-33.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.5	53.0	54.2	59.2	51.7	52.9	53.2	45.7	46.9
VEHICULAR NOISE	DAY=	62.0	Leq	EVENING=	60.7	Leq	NIGHT=	54.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 63.1** **CNEL= 63.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**37**	**81**
	CNEL:	**19**	**41**	**89**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Chestnut Street Analyst: NJF
Segment: Anaheim Puente Rd to Virgil Water Date: 14-Jan-16

ROADWAY INPUTS	
ADT	3,200
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	196	4	1	145	3	1	36	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-7.8	-25.1	-29.0	-9.1	-26.4	-30.3	-15.1	-32.4	-36.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.2	49.7	51.0	55.9	48.4	49.7	49.9	42.4	43.7
VEHICULAR NOISE	DAY=	58.7	Leq	EVENING=	57.4	Leq	NIGHT=	51.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.8**
			CNEL=	**60.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**23**	**49**
	CNEL:	**12**	**25**	**54**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Hatcher Ave Analyst: NJF
Segment: Virgil Waters Way to Rowland St Date: 14-Jan-16

ROADWAY INPUTS	
ADT	2,900
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	178	3	1	131	2	1	33	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-8.2	-25.5	-29.4	-9.6	-26.8	-30.8	-15.6	-32.8	-36.8
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.0	49.4	50.7	55.6	48.1	49.4	49.6	42.1	43.4
VEHICULAR NOISE	DAY=	58.5	Leq	EVENING=	57.1	Leq	NIGHT=	51.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.6**
CNEL= 60.2

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**22**	**47**
	CNEL:	**11**	**24**	**51**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Hatcher Ave Analyst: NJF
Segment: Rowland St to Lawson St Date: 14-Jan-16

ROADWAY INPUTS	
ADT	4,000
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	24
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	245	5	2	181	3	1	45	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-6.8	-24.1	-28.0	-8.2	-25.4	-29.4	-14.2	-31.4	-35.4
Distance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.3	50.8	52.1	57.0	49.5	50.8	51.0	43.5	44.8
VEHICULAR NOISE	DAY=	59.9	Leq	EVENING=	58.5	Leq	NIGHT=	52.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.9**, **CNEL= 61.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**27**	**58**
	CNEL:	**14**	**30**	**64**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Railroad Street Analyst: NJF
Segment: Azusa Ave to Curl Ct Date: 14-Jan-16

ROADWAY INPUTS	
ADT	18,000
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1104	21	8	816	15	6	204	4	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.3	-17.6	-21.5	-1.6	-18.9	-22.8	-7.6	-24.9	-28.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.5	58.0	59.3	64.2	56.7	58.0	58.2	50.7	52.0
VEHICULAR NOISE	DAY=	67.0	Leq	EVENING=	65.7	Leq	NIGHT=	59.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.1**
CNEL= 68.8

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**38**	**81**	**174**
	CNEL:	**41**	**89**	**192**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Railroad Street Analyst: NJF
Segment: Curl Ct to Hatcher Ave Date: 14-Jan-16

ROADWAY INPUTS	
ADT	17,100
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1049	20	8	775	15	6	194	4	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.5	-17.8	-21.7	-1.9	-19.1	-23.0	-7.9	-25.1	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.3	57.8	59.1	64.0	56.5	57.7	58.0	50.5	51.7
VEHICULAR NOISE	DAY=	66.8	Leq	EVENING=	65.5	Leq	NIGHT=	59.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.9**
CNEL= 68.5

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**78**	**169**
	CNEL:	**40**	**86**	**186**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Rowland Street Analyst: NJF
Segment: Hatcher Ave to Lawson St Date: 14-Jan-16

ROADWAY INPUTS	
ADT	15,300
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	938	18	7	694	13	5	174	3	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.0	-18.3	-22.2	-2.3	-19.6	-23.5	-8.3	-25.6	-29.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.8	57.3	58.6	63.5	56.0	57.3	57.5	50.0	51.3
VEHICULAR NOISE	DAY=	66.3	Leq	EVENING=	65.0	Leq	NIGHT=	59.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.4** **CNEL= 68.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**34**	**73**	**157**
	CNEL:	**37**	**80**	**172**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Gale Avenue Analyst: NJF
Segment: Bixby Dr to Azusa Ave Date: 14-Jan-16

ROADWAY INPUTS	
ADT	33,200
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2036	38	15	1505	28	11	377	7	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	1.3	-16.0	-19.9	-0.1	-17.3	-21.3	-6.1	-23.3	-27.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	71.3	62.4	62.9	70.0	61.1	61.6	64.0	55.1	55.6
VEHICULAR NOISE	DAY=	72.4	Leq	EVENING=	71.1	Leq	NIGHT=	65.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.5**
CNEL= 74.1

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**85**	**184**	**396**
	CNEL:	**94**	**202**	**436**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: BUILDOUT 2017 PLUS PROJECT Project: Utility Trailer
Roadway: Gale Avenue Analyst: NJF
Segment: Azusa Ave to Hatcher Ave Date: 14-Jan-16

ROADWAY INPUTS	
ADT	27,000
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	97.4%	DAY	75.5%
% MT	1.8%	EVENING	14.0%
% HT	0.7%	NIGHT	10.5%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1656	31	13	1224	23	9	307	6	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	0.4	-16.9	-20.8	-1.0	-18.2	-22.2	-7.0	-24.2	-28.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.4	61.5	62.0	69.1	60.2	60.7	63.1	54.2	54.7
VEHICULAR NOISE	DAY=	71.5	Leq	EVENING=	70.2	Leq	NIGHT=	64.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.6**
CNEL= 73.2

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**74**	**160**	**345**
	CNEL:	**82**	**176**	**380**

Construction Generated Vibration

Vibration Annoyance Criteria

Receptor:	Average Vibration Level - Houses on Chestnut St	Average Distance (feet):	950
Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB	
Vibratory Roller	94	62	
Caisson Drill	87	55	
Large bulldozer	87	55	
Small bulldozer	58	26	
Jackhammer	79	47	
Loaded trucks	86	54	
	Criteria	78	

Structural Damage Criteria

Receptor:	Maximum Vibration Levels - industrial south of bldg B	Closest Distance (feet):	20
Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second	
Vibratory Roller	0.210	0.293	
Caisson Drill	0.089	0.124	
Large bulldozer	0.089	0.124	
Small bulldozer	0.003	0.004	
Jackhammer	0.035	0.049	
Loaded trucks	0.076	0.106	
	Criteria	0.200	

Receptor:	Maximum Vibration Levels - industrial south of bldg C	Closest Distance (feet):	80
Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second	
Vibratory Roller	0.210	0.037	
Caisson Drill	0.089	0.016	
Large bulldozer	0.089	0.016	
Small bulldozer	0.003	0.001	
Jackhammer	0.035	0.006	
Loaded trucks	0.076	0.013	
	Criteria	0.200	

Receptor:	Maximum Vibration Levels - industrial to east	Closest Distance (feet):	65
Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second	
Vibratory Roller	0.210	0.050	
Caisson Drill	0.089	0.021	
Large bulldozer	0.089	0.021	
Small bulldozer	0.003	0.001	
Jackhammer	0.035	0.008	
Loaded trucks	0.076	0.018	
	Criteria	0.200	

[1.] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*

Noise Levels During Construction

Reference Levels: Construction Noise at 50 Feet (dBA Leq)[1]

Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]	Distance: Receptor to border of site	Maximum Level (dBA Lmax)[3]
Site Prep	50	84	50	82
Grading		87		85
Building Construction		82		81
Building Const + Paving + Arch Coating		85		81

Drop Off
hard=0; soft=0.5
0

Construction Noise at homes on Chestnut St

Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]	Distance: Receptor to border of site	Maximum Level (dBA Lmax)[3]
Site Prep	950	59	450	63
Grading		62		66
Building Construction		56		62
Building Const + Paving + Arch Coating		60		62

Construction Noise at La Puente residences

Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]	Distance: Receptor to border of site	Maximum Level (dBA Lmax)[3]
Site Prep	1600	54	1100	55
Grading		57		58
Building Construction		52		54
Building Const + Paving + Arch Coating		55		54

Construction Noise at Hacienda Heights residences

Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]	Distance: Receptor to border of site	Maximum Level (dBA Lmax)[3]
Site Prep	3800	47	2800	47
Grading		49		50
Building Construction		44		46
Building Const + Paving + Arch Coating		47		46

[1] Calculations based on the Roadway Construction Noise Model with the construction information provided by the applicant.
[2] Average daily noise level including all equipment in use simultaneously considering utilization factors.
[3] Maximum instanteneous noise level from the loudest equipment used during the construction phase.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/12/2016
Case Description: Site prep

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Receptor at 50 ft	Residential	60.0	60.0	60.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40	81.7	50.0		0.0
Dozer	No	40	81.7	50.0		0.0
Dozer	No	40	81.7	50.0		0.0
Backhoe	No	40	77.6	50.0		0.0
Backhoe	No	40	77.6	50.0		0.0
Backhoe	No	40	77.6	50.0		0.0
Backhoe	No	40	77.6	50.0		0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.7	84.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/12/2016
Case Description: Grading

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Receptor at 50 ft	Residential	60.0	60.0	60.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Scraper	No	40		83.6	50.0	0.0
Scraper	No	40		83.6	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	87.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/12/2016
Case Description: Building Construction + Paving + Arch Coating

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Receptor at 50 ft	Residential	60.0	60.0	60.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Generator	No	50		80.6	50.0	0.0
Welder / Torch	No	40		74.0	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74.0	70.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.6	81.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/12/2016
Case Description: Building Construction + Paving + Arch Coating

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Receptor at 50 ft	Residential	60.0	60.0	60.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Crane	No	16	80.6	50.0	0.0	
Generator	No	50	80.6	50.0	0.0	
Welder / Torch	No	40	74.0	50.0	0.0	
Backhoe	No	40	77.6	50.0	0.0	
Backhoe	No	40	77.6	50.0	0.0	
Backhoe	No	40	77.6	50.0	0.0	
Paver	No	50	77.2	50.0	0.0	
Paver	No	50	77.2	50.0	0.0	
Paver	No	50	77.2	50.0	0.0	
Paver	No	50	77.2	50.0	0.0	
Roller	No	20	80.0	50.0	0.0	
Roller	No	20	80.0	50.0	0.0	
Compressor (air)	No	40	77.7	50.0	0.0	

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74.0	70.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.6	85.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Loading Bay Operations Noise Level Calculations

Trucks per day	447

24-hour operations

Trucks per hour	447/24 =	18.63
Total operational time per hour (10 mins operational time per truck)		186.3
Trucks operating simultaneously	186.3/60	3.10

exceeds 50% of 60 mins - all noise metrics are applicable
exceeds 100% of 60 mins - truck operations will overlap

single truck L_{eq} 73 dBA

Sound Level for 3.1 Trucks Operating Simultaneously

Lt = Ls+10*log10(n) Lt = total noise level Ls = noise level of single source n = number of identical sources

	3.1 simultaneous trucks
one truck	Lt = 73 + 10*log10(3.1)
73	77.91

1.5 truck L_{eq} 78

Noise Metric	Noise Levels at 50 ft (dBA)	Noise Levels (dBA) at 950 ft - nearest receptors (26 dB distance attenuation)	Noise Levels (dBA) after additional 15 dB attenuation from buildings	Noise Levels (dBA) after additional 5 dB attenuation from elevated Azusa Ave
$L_{50} = L_{eq}$ - 3 dB	75	49	34	29
$L_{25} = L_{eq}$	78	52	37	32
$L_8 = L_{eq}$ + 3 dB	81	55	40	35
$L_2 = L_{eq}$ + 7 dB	85	59	44	39
$L_0 = L_{eq}$ + 10 dB	88	62	47	42

11-hour operations

Trucks per hour	447/11 =	40.64
Total operational time per hour (10 mins operational time per truck)		406.4
Trucks operating simultaneously	406.4/60	6.77

exceeds 100% of 60 mins - truck operations will overlap

Sound Level for 6.8 Trucks Operating Simultaneously

Lt = Ls+10*log10(n) Lt = total noise level Ls = noise level of single source n = number of identical sources

	6.8 simultaneous trucks
one truck	Lt = 73 + 10*log10(6.8)
73	81.33

6.8 truck L_{eq} 81

Noise Metric	Noise Levels at 50 ft (dBA)	Noise Levels (dBA) at 950 ft - nearest homes & school - (26 dB distance attenuation)	Noise Levels (dBA) after additional 15 dB attenuation from buildings	Noise Levels (dBA) after additional 5 dB attenuation from elevated Azusa Ave
$L_{50} = L_{eq}$ - 3 dB	78	52	37	32
$L_{25} = L_{eq}$	81	55	40	35
$L_8 = L_{eq}$ + 3 dB	84	58	43	38
$L_2 = L_{eq}$ + 7 dB	88	62	47	42
$L_0 = L_{eq}$ + 10 dB	91	65	50	45