Appendix E Noise Modeling Data



Appendices

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Appendix E

Details and Additional Information for Noise & Vibration Analyses

This Appendix contains the following groupings of information:

- Pertinent excerpts from the City of Pasadena Municipal Code
 - o Chapter 9.36 dealing with noise restrictions
 - o Section 17.40.150 dealing with screening restrictions
 - o Section 8.60.205 dealing with trash pick-up time restrictions
- Traffic Noise Modeling details analysis spreadsheets
 - o 2022 Conditions with 2-lane Project
 - o 2022 Conditions with 4-lane Project
- Construction Vibration Propagation Calculations

Chapter 9.36 - NOISE RESTRICTIONS*

Sections:

- 9.36.010 Short title.
- 9.36.020 Declaration of policy.
- 9.36.030 Definitions.
- 9.36.040 Ambient noise level.
- 9.36.050 General noise sources.
- 9.36.060 Interior noise standard—Multifamily residential property.
- 9.36.070 Construction projects.
- 9.36.080 Construction equipment.
- 9.36.090 Machinery, equipment, fans and air conditioning.
- 9.36.100 Motor driven vehicles and vehicle repairs.
- 9.36.110 Radio, television sets and similar devices.
- 9.36.120 Near schools, hospitals and churches.
- 9.36.130 Hawkers and peddlers.
- 9.36.140 Drums.
- 9.36.150 Animals and fowl.
- 9.36.160 Amplified sound on public property.
- 9.36.170 Exemptions.
- 9.36.180 Enforcement responsibility.
- 9.36.190 Violation-Penalty.

9.36.010 - Short title.

This chapter shall be known as the "noise restrictions ordinance."

(Ord. 7150 § 2 (part), 2008)

9.36.020 - Declaration of policy.

It is declared to be the policy of the city to prohibit unnecessary, excessive and annoying noises from all sources pursuant to its police power. Noise at certain levels is detrimental to the health and welfare of the general public. Consequently, it shall be systematically proscribed in the public interest.

(Ord. 7150 § 2 (part), 2008)

9.36.030 - Definitions.

As used in this chapter, unless the context otherwise clearly indicates, the words and phrases used in the ordinance codified in this chapter are defined as follows:

A. "Ambient noise" means the all-encompassing noise associated with a given environment, being usually a composite of many sources near and far. For the purpose of this chapter, ambient noise level is the level obtained when the noise level is averaged over a period of 15 minutes without inclusion of noise from isolated identifiable sources, at the location and time of day near that at which a comparison is to be made. This value shall not include noise from occasional, or occasional

and transient sources.

- B. "A-weighted sound level" means the sound level in decibels as measured on sound level meter using the A weighting network. The level so read is designated "dB(A)" or "dBA."
- C. "Commercial purpose" means and includes the use, operation or maintenance of any sound amplifying equipment for the purpose of advertising any business, or any goods, or any services, or for the purpose of attracting the attention of the public to, or advertising for, or soliciting patronage or customers to or for any performance, show, entertainment, exhibition or event, or for the purpose of demonstrating such sound equipment.
- D. "Decibel" means a unit measure of sound (noise) level. It is a unit for expressing the relative intensity of sounds on a scale from zero for the average least perceptible sound to about 130 for the average pain level; also a unit for expressing the ratio of two amounts of electric or acoustic signal power equal to 10 times the common logarithm of this ratio.
- E. "Emergency work" means work made necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger or work by private or public utilities when restoring utility service.
- F. "General noise" means noise from any source not specifically exempted in this chapter.
- G. "Noncommercial purpose" means the use, operation or maintenance of any sound equipment for other than a commercial purpose. "Noncommercial purpose" means and includes, but shall not be limited to, religious, philanthropic, political, patriotic and charitable purposes.
- H. "Property line" means the line that separates private property or the event from the public right-of-way.
- I. "Sound amplifying equipment" means any machine or device for the amplification of the human voice, music or any other sound. "Sound amplifying equipment" shall not include standard automobile radios when used and heard only by the occupants of the vehicle in which the automobile radio is installed. "Sound amplifying equipment," as used in this chapter, shall not include warning devices on authorized emergency vehicles or horns or other warning devices on any vehicle used only for traffic safety purposes.
- J. "Sound level" (noise level), in decibels (dB), is the sound measured with the A weighting and slow response by a sound level meter.
- K. "Sound level meter" means an instrument including a microphone, an amplifier, an output meter and frequency weighting networks for the measurement of sound levels which satisfies the pertinent requirements in American Standard Specifications for sound level meters S1.4-1971 or the most recent revision thereof.
- L. Supplementary Definitions of Technical Terms. Definitions of technical terms not defined herein shall be obtained from the American National Standards Institute's Acoustical Terminology S1-1-1971 or any revision thereof.

(Ord. 7150 § 2 (part), 2008)

9.36.040 - Ambient noise level.

- A. When "ambient noise level" is referred to in this chapter, it means the actual measured ambient noise level.
- B. Any sound level measurement made pursuant to the provisions of this chapter shall be measured with a sound level meter using the A weighting.
 - 1. Where the sound alleged to be offending is of a type or character set forth below, the following values shall be added to the sound level measurement of the offending noise:
 - a. Except for noise emanating from any electrical transformer or gas metering and pressure control equipment existing and installed prior to the effective date of the ordinance codified herein, any steady audible tone: + 5;
 - b. Repeated impulsive noise: + 5;
 - c. Noise occurring more than 5 but less than 15 minutes per hour: 5;
 - d. Noise occurring more than 1 but less than 5 minutes per hour: 10;
 - e. Noise occurring less than 1 minute per hour: -20.
 - 2. Values of subsections (B)(1)(c), (B)(1)(d) and (B)(1)(e) of this section shall be added to the sound level measurements during daytime (6 a.m. to 11 p.m.) periods only.

(Ord. 7150 § 2 (part), 2008)

9.36.050 - General noise sources.

- A. It is unlawful for any person to create, cause, make or continue to make or permit to be made or continued any noise or sound which exceeds the ambient noise level at the property line of any property by more than 5 decibels.
- B. Notwithstanding any other provision of this chapter and in addition thereto it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary or unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standards which shall be considered in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:
 - 1. The level of the noise;
 - 2. The intensity of the noise;
 - 3. Whether the nature of the noise is usual or unusual;
 - 4. Whether the origin of the noise is natural or unnatural;
 - 5. The level and intensity of the background noise, if any;
 - 6. The proximity of the noise to residential sleeping facilities;

- 7. The nature and zoning of the area within which the noise emanates;
- 8. The density of the inhabitation of the area within which the noise emanates;
- 9. The time of the day or night the noise occurs;
- 10. The duration of the noise;
- 11. Whether the noise is recurrent, intermittent or constant; and
- 12. Whether the noise is produced by a commercial or noncommercial activity.

(Ord. 7150 § 2 (part), 2008)

9.36.060 - Interior noise standard—Multifamily residential property.

It is unlawful for any person to produce, suffer or allow to be produced on any multifamily residential property, sounds at a level in excess of those enumerated in Table No. 1 when measured inside any dwelling unit on the same property or twenty (20) feet from the outside of the dwelling unit in which the noise source or sources may be located.

TABLE NO. 1—Interior Noise Standard

Time Interval	Interior Noise Standards (dBA)
7:00 a.m. to 10:00	60
p.m.	
10:00 p.m. to 7:00	50
a.m.	

(Ord. 7150 § 2 (part), 2008)

9.36.070 - Construction projects.

- A. No person shall operate any pile driver, power shovel, pneumatic hammer, derrick power hoist, forklift, cement mixer or any other similar construction equipment within a residential district or within a radius of 500 feet therefrom at any time other than as listed below:
 - 1. From 7:00 a.m. to 7:00 p.m. Monday through Friday;
 - 2. From 8:00 a.m. to 5:00 p.m. on Saturday;
 - 3. Operation of any of the listed construction equipment is prohibited on Sundays and holidays.
- B. No person shall perform any construction or repair work on buildings, structures or projects within a residential district or within a radius of 500 feet therefrom in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance at any time other than as listed below:

- 1. From 7:00 a.m. to 7:00 p.m. Monday through Friday;
- 2. From 8:00 a.m. to 5:00 p.m. on Saturday;
- 3. Performance of construction or repair work is prohibited on Sundays and holidays.
- C. The prohibition against construction on Sundays and holidays as set forth in subsection B of this section shall not apply under either of the following conditions:
 - 1. The construction is actually performed by an individual who is the owner or lessor of the premises and who is assisted by not more than two individuals;
 - 2. The person performing the construction shall have provided the building official with a petition which indicates the consent of 65 percent of the households residing within 500 feet of the construction site and the unanimous consent of the households adjacent to the construction site. Said petition shall be on a form promulgated by said building official and shall be accompanied by a fee, the amount of which shall be established by resolution by the city council.
- D. The prohibitions of this section shall not apply to the performance of emergency work as defined in Section 9.36.030
- E. For purposes of this section, holidays are New Year's Day, Martin Luther King Jr. Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, and Christmas.

(Ord. 7150 § 2 (part), 2008)

9.36.080 - Construction equipment.

It is unlawful for any person to operate any powered construction equipment if the operation of such equipment emits noise at a level in excess of 85 dBA when measured within a radius of 100 feet from such equipment.

(Ord. 7150 § 2 (part), 2008)

9.36.090 - Machinery, equipment, fans and air conditioning.

Except for emergency work, as defined in this chapter it is unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient noise level by more than 5 decibels.

(Ord. 7150 § 2 (part), 2008)

9.36.100 - Motor driven vehicles and vehicle repairs.

- A. It is unlawful for any person within any residential area of the city to repair, rebuild or test any motor vehicle between the hours of 10 p.m. of one day and 8 a.m. of the next day in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance.
- B. It is unlawful for any person to operate any motor driven vehicle within the city in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance; provided, however, any such vehicle which is operated upon any public highway, street, or right-of-way

shall be excluded from the provisions of this section.

(Ord. 7150 § 2 (part), 2008)

9.36.110 - Radio, television sets and similar devices.

- A. Use Restricted. It is unlawful for any person within any residential zone of the city to use or operate any radio receiving set, musical instrument, phonograph, television set or other machine or device for the producing or reproducing of sound (between the hours of 10 p.m. of one day and 7 a.m. of the following day) in such a manner as to disturb the peace, quiet and comfort of neighboring residents or any reasonable person of normal sensitiveness residing in the area.
- B. Prima Facie Violation. Any noise level exceeding the ambient base level at the property line of any property by more than 5 decibels is deemed to be prima facie evidence of a violation of the provisions of this section.

(Ord. 7150 § 2 (part), 2008)

9.36.120 - Near schools, hospitals and churches.

It is unlawful for any person to create any noise on any street, sidewalk or public place adjacent to any school, institution of learning, or church while the same is in use or adjacent to any hospital, which noise unreasonably interferes with the workings of such institution or which disturbs or unduly annoys patients in the hospital, provided conspicuous signs are displayed in such streets, sidewalk or public place indicating the presence of a school, church or hospital.

(Ord. 7150 § 2 (part), 2008)

9.36.130 - Hawkers and peddlers.

It is unlawful for any person within the city to sell anything by shouting out loud within any area of the city zoned for residential uses. The provisions of this section shall not be construed to prohibit the selling by yelling of merchandise, food and beverages at licensed sporting events, parades, fairs, circuses and other similar licensed public entertainment events.

(Ord. 7150 § 2 (part), 2008)

9.36.140 - Drums.

It is unlawful for any person to use any drum or other instrument or device of any kind for the purpose of attracting attention by the creation of noise within the city. This section shall not apply to any person who is a participant in a school band or duly licensed parade or who has been otherwise duly authorized to engage in such conduct.

(Ord. 7150 § 2 (part), 2008)

9.36.150 - Animals and fowl.

No person shall keep or maintain, or permit the keeping of, upon any premises owned, occupied or controlled by such person any animal or fowl otherwise permitted to be kept which, by any sound, cry, or behavior, causes annoyance or discomfort to a reasonable person of normal sensitiveness in any residential neighborhood.

(Ord. 7150 § 2 (part), 2008)

9.36.160 - Amplified sound on public property.

- A. Purpose. The city council enacts this section for the sole purpose of securing and promoting the public health, comfort, safety and welfare of its residents and visitors. While recognizing that the use of sound amplifying equipment is protected by the constitutional rights of freedom of speech and assembly, the council nevertheless feels obligated to regulate reasonably the use of sound amplifying equipment in order to protect the correlative constitutional rights of the residents and visitors of this community to privacy and freedom from the public nuisance of loud and unnecessary noise.
- B. Required Registration. It is unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use or operate within the city a loudspeaker or sound amplifying equipment in a fixed or movable position or mounted upon any sound truck for the purposes of giving instructions, directions, talks, addresses, lectures or transmitting music to any persons or assemblages of persons in or upon any street, alley, sidewalk, park or public property without first filing a registration statement with the director of finance and obtaining approval thereof as set forth in this chapter.
- C. Filing. Every user of sound amplifying equipment shall file a registration statement with the director of finance 10 days prior to the date on which the sound amplifying equipment is intended to be used, which statement shall contain the following information:
 - 1. The name, address and telephone number of both the owner and user of the sound amplifying equipment;
 - 2. The maximum sound-producing power of the sound amplifying equipment which shall include the wattage to be used, the volume in decibels of sound which will be produced, and the approximate distance for which sound will be audible from the sound amplifying equipment;
 - 3. The license and motor number if a sound truck is to be used;
 - 4. A general description of the sound to be amplified (speech, music, or both) and the sound amplifying equipment which is to be used;
 - 5. Whether the sound amplifying equipment will be used for commercial or noncommercial purposes;
 - 6. Location of fixed sound equipment, or general route where the sound truck will be used; and
 - 7. Such other information as the director of finance may reasonably require.
- D. Appeal Process.
 - 1. Initial Determination. The director of finance shall return to the applicant an approved certified copy of the registration statement unless it is found that:
 - a. The conditions of the motor vehicle movement are such that in the opinion of the police chief, use of the equipment would constitute a detriment to traffic safety; or
 - b. The conditions of pedestrian movement are such that use of the equipment would constitute a detriment to traffic safety; or

- c. The registration statement required reveals that the applicant would violate the provisions set forth in subsection E of this section or any other provisions of this chapter; or
- d. Failure to file said statement within the prescribed period.

In the event the registration statement is disapproved, the director of finance shall cause to be endorsed upon the statement the reasons for disapproval, and return it forthwith to applicant.

- 2. Appeal of Decision. Any person aggrieved by disapproval of a registration statement may file a written appeal with the city manager within five (5) days of receipt of the notice of disapproval, setting forth all the facts which the applicant wishes the city manager to consider. The city manager or designee shall render a written decision on the appeal within five business days of receipt.
- 3. Fee for Operation. Prior to the issuance of the registration statement, a fee in the amount of \$25.00 per day, or any portion thereof, shall be paid to the city, if the loudspeaker or sound amplifying equipment is to be used for commercial purposes. No fee shall be required for the operation of a loudspeaker or sound amplifying equipment for noncommercial purposes.
- E. Regulations. The commercial and noncommercial use of sound amplifying equipment shall be subject to the following regulations:
 - 1. The only sounds permitted shall be either music or the human voice, or both.
 - 2. The operation of sound amplifying equipment shall only occur between the hours of 8 a.m. and 10 p.m. each day except on Sundays and legal holidays. No operation of sound amplifying equipment for commercial purposes shall be permitted on Sundays or legal holidays. The operation of sound amplifying equipment for noncommercial purposes on Sundays and legal holidays shall only occur between the hours of 10 a.m. and 10 p.m., except New Year's Day.
 - 3. Sound level emanating from sound amplifying equipment shall not exceed continuously the maximum noise level of 15 decibels above the ambient noise level when measured at the outside property line where the event is being held.
 - 4. Notwithstanding the provisions of subsection (E)(3) of this section, sound amplifying equipment shall not be operated within 200 feet of churches, schools, hospitals or city or county buildings, unless written consent thereto has been given by such church, school, hospital, city or county.
 - 5. In any event, the volume of sound shall be so controlled that it will not be unreasonably loud, raucous, jarring, disturbing or a nuisance to reasonable persons of normal sensitiveness within the area of audibility.
- F. Old Pasadena. The commercial use of sound amplifying equipment in the Old Pasadena section of the city shall be subject to the following regulations:
 - 1. In this section "amplified sound" means amplified music or the human voice used for entertainment only.
 - 2. The ambient noise level in the Old Pasadena section of the city shall be 60 decibels between 6:00 a.m. and 1:30 a.m. of the following day; and 50 decibels between 1:30 a.m. and 6:00 a.m.
 - 3. Amplified music on private property shall not exceed 15 decibels above the ambient noise

level.

- 4. Use of sound amplifying equipment shall be limited to the hours between 6:00 p.m. and 1:30 a.m. of the following day.
- 5. Operators of sound amplifying equipment within 500 feet of a functioning church, school or hospital site shall initially obtain the written consent of such facility prior to commencing operation of amplified sound equipment.
- 6. Any business owner within 300 feet of a business using amplified sound equipment may request the health officer or a designee to mediate informally any dispute related to the use of such amplified sound equipment.
- 7. Notwithstanding the enactment of the ordinance codified in this chapter, the city council reserves the right at a future time to amend or repeal this provision in its entirety, and does not intend the creation of any special property rights by this amendment.

(Ord. 7150 § 2 (part), 2008)

9.36.170 - Exemptions.

- A. This chapter is not intended to regulate construction or maintenance and repair activities conducted by public agencies or their contractors necessitated by emergency conditions or deemed necessary by the city to serve the best interests of the public and to protect the public health, safety and welfare. These operations may include, but are not limited to, street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic lights, unplugging sewers, vacuuming catch basins, repairing water hydrants and mains, gas lines, oil lines, storm drains, roads, sidewalks, etc.
- B. Notwithstanding the ordinance codified in this chapter, the city manager is authorized to permit special events to generate noise levels up to the limits specified in the noise element of the city's general plan.
- C. Notwithstanding the ordinance codified in this chapter, the general manager of the Rose Bowl is authorized to permit events licensed by the Rose Bowl Operating Company to generate noise levels up to the limits specified in the noise element of the city's general plan.
- D. Provisions in the permit or license agreement shall specify the specific hour limitations imposed, and the set decibel level delineated in the noise element which would apply.

(Ord. 7150 § 2 (part), 2008)

9.36.180 - Enforcement responsibility.

The manager of the environmental health division shall have primary responsibility for the administration and enforcement of this chapter.

(Ord. 7150 § 2 (part), 2008)

9.36.190 - Violation—Penalty.

A. It shall be unlawful and a public nuisance for any person to violate the provisions of this chapter, punishable as a misdemeanor.

B. The provisions of this chapter are nonexclusive and supplementary to existing rights and remedies. Nothing in this chapter shall prevent the city from commencing any appropriate civil action to abate a public nuisance in addition to, or alternatively to, or in conjunction with the proceedings set forth in this chapter.

(Ord. 7150 § 2 (part), 2008)

17.40.150 - Screening

- A. **General requirement.** Except as otherwise specified herein, all new exterior mechanical equipment, except solar collectors, shall be screened or located out of view from public rights-of-way (not including freeways). Equipment to be screened includes air conditioning and refrigeration equipment, duct work, heating, plumbing lines, and satellite receiving antennas. (See Interpretation)
- B. **Utility meters.** Aboveground utility meters shall not be located between the front property line and the front foot of building occupancy or the corner side property line and the front foot of building occupancy.
- C. **Screening specification.** At a minimum, screening materials shall have evenly distributed openings or perforations not exceeding 50 percent of surface area and shall effectively screen mechanical equipment. (**See Interpretation**)
- D. **Exceptions.** The following are exceptions to the above screening requirements:
 - Screening requirements are not applicable to an antenna array consisting of a
 whip antenna that does not exceed a height of 15 feet or to satellite earth station
 antennas that are preempted by Part 25 of Title 47 of the Code of Federal
 Regulations.
 - The Zoning Administrator may allow utility meters to be located between the front
 property line and the front foot of building occupancy or the corner side property
 line and the front foot of building occupancy when no other location is feasible.
 Aboveground utility meters located in front or corner yards shall be screened
 from view from the public right-of-way.
 - 3. Exceptions to the screening of mechanical equipment may be approved for projects subject to Design Review in Chapter 17.61 when the equipment is designed as an integral part of the architecture or where the screening enclosure substantially increases the visual mass on the roof line of a structure and alternative treatment may be preferable.

8.60.205 - Times of collection.

There shall be no solid waste collection in the city on Sunday, nor before 7:00 a.m., nor after 5 p.m. on any other day, except as follows: in case of an emergency, as determined by the director, or as may be undertaken by the city when the director determines necessary to protect the public health, welfare or safety, or as otherwise herein provided.

(Ord. 6839 § 2 (part), 2000)

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Analyst FJS Roadway: Lincoln Av

13-Aug-12 Segment: Woodbury Rd to Idaho St Date:

ROADWAY INPUTS					
ADT	32,883				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	33				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS								
DAI	LY		HOURLY					
%	Α	99.0%	DAY	80.0%				
% I	МT	0.5%	EVENING	7.0%				
% I	ΗT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME		i i	EVENING			NIGHT	
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2170	11	11	760	4	4	470	2	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	2.6	-20.3	-20.3	-1.9	-24.9	-24.9	-4.0	-27.0	-27.0
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	67.9	54.7	59.9	63.3	50.1	55.3	61.3	48.0	53.2
VEHICULAR NOISE	DAY=	68.7	Leq	EVENING=	64.2	Leq	NIGHT=	62.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	70.0
			CNEL=	70.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	50	160	505
	CNEL:	54	171	540

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS

Segment: Idaho St to Howard St Date: 13-Aug-12

ROADWAY INPUTS					
ADT	36,290				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	33				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA									
	[DAYTIME		- I	EVENING			NIGHT	
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2395	12	12	838	4	4	519	3	3
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	3.0	-19.9	-19.9	-1.5	-24.5	-24.5	-3.6	-26.6	-26.6
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	68.3	55.1	60.3	63.8	50.5	55.7	61.7	48.4	53.7
VEHICULAR NOISE	DAY=	69.1	Leq	EVENING=	64.6	Leq	NIGHT=	62.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	70.5
			CNEL=	70.8
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	56	176	557
	CNEL:	60	188	596

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS

Segment: Howard St to Washington Blvd Date: 13-Aug-12

ROADWAY INPUTS						
ADT	25,218					
SPEED (mph)	35					
ROAD NEAR-FAR LN. DIST.	33					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA										
	[DAYTIME		Е	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	1664	8	8	583	3	3	361	2	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	1.5	-21.5	-21.5	-3.1	-26.1	-26.1	-5.2	-28.1	-28.1	
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
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	66.8	53.5	58.7	62.2	48.9	54.2	60.1	46.9	52.1	
VEHICULAR NOISE	DAY=	67.6	Leq	EVENING=	63.0	Leq	NIGHT=	60.9	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	68.9
			CNEL=	69.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	39	122	387
	CNEL:	41	131	414

Traffic Noise Modeling details analysis spreadsheets, 2022 Conditions with 4-lane Project

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS
Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	12,732
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA										
		DAYTIME		E .	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	840	4	4	294	1	1	182	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	-1.5	-24.5	-24.5	-6.1	-29.0	-29.0	-8.1	-31.1	-31.1	
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
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	63.8	50.5	55.8	59.2	46.0	51.2	57.1	43.9	49.1	
VEHICULAR NOISE	DAY=	64.6	Leq	EVENING=	60.0	Leq	NIGHT=	58.0	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.9
			CNEL=	66.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	20	62	195
	CNEL:	21	66	209

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS

Segment: Hammond St to Mountain Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	12,019				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	33				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

	VEHICLE MIX INPUTS								
I	DAILY		HOURLY						
İ	% A	99.0%	DAY	80.0%					
İ	% MT	0.5%	EVENING	7.0%					
İ	% HT	0.5%	NIGHT	13.0%					
ı									

CALCULATION AREA										
		DAYTIME		E	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	793	4	4	278	1	1	172	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	-1.8	-24.7	-24.7	-6.3	-29.3	-29.3	-8.4	-31.4	-31.4	
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
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	63.5	50.3	55.5	59.0	45.7	50.9	56.9	43.6	48.9	
VEHICULAR NOISE	DAY=	64.3	Leq	EVENING=	59.8	Leq	NIGHT=	57.7	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.7
			CNEL=	66.0
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	18	58	184
	CNEL:	20	62	197

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Woodbury Rd Analyst FJS

Segment: Casitas Av to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	23,325				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	50				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

	VEHICLE MIX INPUTS								
I	DAILY		HOURLY						
İ	% A	99.0%	DAY	80.0%					
İ	% MT	0.5%	EVENING	7.0%					
İ	% HT	0.5%	NIGHT	13.0%					
ı									

CALCULATION AREA									
	[DAYTIME		Е	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1539	8	8	539	3	3	334	2	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	1.1	-21.8	-21.8	-3.4	-26.4	-26.4	-5.5	-28.5	-28.5
Distance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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	66.8	53.5	58.8	62.2	49.0	54.2	60.1	46.9	52.1
VEHICULAR NOISE	DAY=	67.6	Leq	EVENING=	63.0	Leq	NIGHT=	61.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	68.9
			CNEL=	69.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	39	123	390
	CNEL:	42	132	417

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Woodbury Rd Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	21,212				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	50				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

	VEHICLE MIX INPUTS							
I	DAILY	Y HOURLY						
İ	% A	99.0%	DAY	80.0%				
İ	% MT	0.5%	EVENING	7.0%				
İ	% HT	0.5%	NIGHT	13.0%				
ı								

CALCULATION AREA									
	[DAYTIME		Е	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1400	7	7	490	2	2	303	2	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	0.7	-22.3	-22.3	-3.8	-26.8	-26.8	-5.9	-28.9	-28.9
Distance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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	66.4	53.1	58.3	61.8	48.6	53.8	59.7	46.5	51.7
VEHICULAR NOISE	DAY=	67.2	Leq	EVENING=	62.6	Leq	NIGHT=	60.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	68.5
			CNEL=	68.8
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	35	112	355
	CNEL:	38	120	380

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Montana St Analyst FJS

Segment: Casitas Av to lincoln Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	2,075				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY	HOURLY						
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME		Е	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	137	1	1	48	0	0	30	0	0
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	-7.9	-30.9	-30.9	-12.5	-35.4	-35.4	-14.6	-37.5	-37.5
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	51.5	40.2	46.3	46.9	35.6	41.8	44.8	33.5	39.7
VEHICULAR NOISE	DAY=	52.9	Leq	EVENING=	48.3	Leq	NIGHT=	46.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.2
			CNEL=	54.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	4	13
	CNEL:	1	4	14

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Montana St Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	3,104				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY	HOURLY						
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME	Ē	E	EVENING)	NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	205	1	1	72	0	0	44	0	0
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	-6.2	-29.1	-29.1	-10.7	-33.7	-33.7	-12.8	-35.8	-35.8
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	53.2	41.9	48.1	48.7	37.3	43.5	46.6	35.3	41.4
VEHICULAR NOISE	DAY=	54.6	Leq	EVENING=	50.1	Leq	NIGHT=	48.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	55.9
			CNEL=	56.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	2	6	20
	CNEL:	2	7	21

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Analyst FJS Roadway:

Wyoming St Lincoln Av to Glen Av Date: 13-Aug-12 Segment:

ROADWAY INPUTS				
ADT	1,192			
SPEED (mph)	25			
ROAD NEAR-FAR LN. DIST.	11			
DISTANCE ROAD CL (ft)	50			
SOFT/HARD CONDITIONS	Hard			
GRADE (%)	0%			
LEFT VIEW	-90			
RIGHT VIEW	90			

VEHICLE MIX INPUTS							
DAILY		HOURLY					
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
		DAYTIME		E	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	79	0	0	28	0	0	17	0	0
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	-10.3	-33.3	-33.3	-14.9	-37.9	-37.9	-17.0	-39.9	-39.9
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	49.1	37.7	43.9	44.5	33.2	39.3	42.4	31.1	37.3
VEHICULAR NOISE	DAY=	50.5	Leq	EVENING=	45.9	Leq	NIGHT=	43.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	51.8
			CNEL=	52.1
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	2	8
	CNEL:	1	3	8

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Idaho St Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	2,372				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY		HOURLY					
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME		EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	157	1	1	55	0	0	34	0	0
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	-7.3	-30.3	-30.3	-11.9	-34.9	-34.9	-14.0	-36.9	-36.9
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	52.1	40.7	46.9	47.5	36.2	42.3	45.4	34.1	40.2
VEHICULAR NOISE	DAY=	53.5	Leq	EVENING=	48.9	Leq	NIGHT=	46.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.8
			CNEL=	55.1
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	2	5	15
	CNEL:	2	5	16

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Howard St Analyst FJS

Segment: Arroyo Pkwy to Forest Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	2,555				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS						
DAILY		HOURLY				
% A	99.0%	DAY	80.0%			
% MT	0.5%	EVENING	7.0%			
% HT	0.5%	NIGHT	13.0%			

CALCULATION AREA										
	[DAYTIME		E	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	169	1	1	59	0	0	37	0	0	
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	-7.0	-30.0	-30.0	-11.6	-34.5	-34.5	-13.7	-36.6	-36.6	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	52.4	41.1	47.2	47.8	36.5	42.7	45.7	34.4	40.6	
VEHICULAR NOISE	DAY=	53.8	Leq	EVENING=	49.2	Leq	NIGHT=	47.1	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	55.1
			CNEL=	55.4
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	2	5	16
	CNEL:	2	5	17

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Howard St Analyst FJS

Segment: SR-210 EB ramps to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	18,326				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

	VEHICLE MIX INPUTS							
D/	AILY	HOURLY						
%	6 A	99.0%	DAY	80.0%				
%	MT	0.5%	EVENING	7.0%				
%	HT	0.5%	NIGHT	13.0%				

CALCULATION AREA										
	[DAYTIME		Е	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	1210	6	6	423	2	2	262	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	1.5	-21.4	-21.4	-3.0	-26.0	-26.0	-5.1	-28.1	-28.1	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	60.9	49.6	55.8	56.4	45.1	51.2	54.3	43.0	49.1	
VEHICULAR NOISE	DAY=	62.3	Leq	EVENING=	57.8	Leq	NIGHT=	55.7	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	63.7
			CNEL=	63.9
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	12	37	116
	CNEL:	12	39	124

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Howard St Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	6,324				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY	HOURLY						
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA										
	[DAYTIME		Е	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	417	2	2	146	1	1	90	0	0	
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	-3.1	-26.0	-26.0	-7.6	-30.6	-30.6	-9.7	-32.7	-32.7	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	56.3	45.0	51.2	51.8	40.4	46.6	49.7	38.4	44.5	
VEHICULAR NOISE	DAY=	57.7	Leq	EVENING=	53.2	Leq	NIGHT=	51.1	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	59.0
			CNEL=	59.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	4	13	40
	CNEL:	4	14	43

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Washington Blvd Analyst FJS

Segment: Forest Av to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	2,553				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY	HOURLY						
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
		DAYTIME		E	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	168	1	1	59	0	0	37	0	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	-8.5	-31.4	-31.4	-13.0	-36.0	-36.0	-15.1	-38.1	-38.1
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	43.3	48.6	52.0	38.8	44.0	49.9	36.7	41.9
VEHICULAR NOISE	DAY=	57.4	Leq	EVENING=	52.8	Leq	NIGHT=	50.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	58.7
			CNEL=	59.0
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	4	12	37
	CNEL:	4	13	40

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Washington Blvd Analyst FJS

Segment: Lincoln Av to Mentone Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	12,752				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	33				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

	VEHICLE MIX INPUTS							
D/	AILY	HOURLY						
%	6 A	99.0%	DAY	80.0%				
%	MT	0.5%	EVENING	7.0%				
%	HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME		E	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	842	4	4	295	1	1	182	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	-1.5	-24.5	-24.5	-6.1	-29.0	-29.0	-8.1	-31.1	-31.1
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	63.8	50.5	55.8	59.2	46.0	51.2	57.2	43.9	49.1
VEHICULAR NOISE	DAY=	64.6	Leq	EVENING=	60.0	Leq	NIGHT=	58.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.9
			CNEL=	66.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	20	62	196
	CNEL:	21	66	209

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Washington Blvd Analyst FJS

Segment: Mentone Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	13,481				
SPEED (mph)	35				
ROAD NEAR-FAR LN. DIST.	33				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY	HOURLY						
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME		E .	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	890	4	4	311	2	2	193	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	-1.3	-24.2	-24.2	-5.8	-28.8	-28.8	-7.9	-30.9	-30.9
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	64.0	50.8	56.0	59.5	46.2	51.4	57.4	44.1	49.4
VEHICULAR NOISE	DAY=	64.8	Leq	EVENING=	60.3	Leq	NIGHT=	58.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	66.2
			CNEL=	66.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	21	65	207
	CNEL:	22	70	221

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Hammond St Analyst FJS

Segment: Forest Av to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS					
ADT	432				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY	HOURLY						
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME		EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	29	0	0	10	0	0	6	0	0
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	-14.7	-37.7	-37.7	-19.3	-42.3	-42.3	-21.4	-44.3	-44.3
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	44.7	33.3	39.5	40.1	28.8	34.9	38.0	26.7	32.9
VEHICULAR NOISE	DAY=	46.1	Leq	EVENING=	41.5	Leq	NIGHT=	39.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	47.4
			CNEL=	47.7
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	0	1	3
	CNEL:	0	1	3

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Hammond St Analyst FJS

Segment: Lincoln Av to Mentone Av Date: 13-Aug-12

ROADWAY INPUTS				
ADT	2,077			
SPEED (mph)	25			
ROAD NEAR-FAR LN. DIST.	11			
DISTANCE ROAD CL (ft)	50			
SOFT/HARD CONDITIONS	Hard			
GRADE (%)	0%			
LEFT VIEW	-90			
RIGHT VIEW	90			

VEHICLE MIX INPUTS							
DAILY		HOURLY					
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA									
	[DAYTIME		EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	137	1	1	48	0	0	30	0	0
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	-7.9	-30.9	-30.9	-12.5	-35.4	-35.4	-14.6	-37.5	-37.5
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	51.5	40.2	46.3	46.9	35.6	41.8	44.8	33.5	39.7
VEHICULAR NOISE	DAY=	52.9	Leq	EVENING=	48.3	Leq	NIGHT=	46.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.2
			CNEL=	54.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	4	13
	CNEL:	1	4	14

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Hammond St Analyst FJS

Segment: Mentone Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS				
ADT	2,236			
SPEED (mph)	25			
ROAD NEAR-FAR LN. DIST.	11			
DISTANCE ROAD CL (ft)	50			
SOFT/HARD CONDITIONS	Hard			
GRADE (%)	0%			
LEFT VIEW	-90			
RIGHT VIEW	90			

VEHICLE MIX INPUTS							
DAILY		HOURLY					
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA										
		DAYTIME		E	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	148	1	1	52	0	0	32	0	0	
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	-7.6	-30.6	-30.6	-12.2	-35.1	-35.1	-14.2	-37.2	-37.2	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	51.8	40.5	46.6	47.2	35.9	42.1	45.2	33.8	40.0	
VEHICULAR NOISE	DAY=	53.2	Leq	EVENING=	48.6	Leq	NIGHT=	46.6	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.5
			CNEL=	54.8
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	4	14
	CNEL:	2	5	15

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Forest Av Analyst FJS

Segment: Howard St to Washington Blvd Date: 13-Aug-12

ROADWAY INPUTS					
ADT	1,373				
SPEED (mph)	25				
ROAD NEAR-FAR LN. DIST.	11				
DISTANCE ROAD CL (ft)	50				
SOFT/HARD CONDITIONS	Hard				
GRADE (%)	0%				
LEFT VIEW	-90				
RIGHT VIEW	90				

VEHICLE MIX INPUTS							
DAILY		HOURLY					
% A	99.0%	DAY	80.0%				
% MT	0.5%	EVENING	7.0%				
% HT	0.5%	NIGHT	13.0%				

CALCULATION AREA													
	DAYTIME			EVENING			NIGHT						
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT				
Vehicles per hour	91	0	0	32	0	0	20	0	0				
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	-9.7	-32.7	-32.7	-14.3	-37.2	-37.2	-16.4	-39.3	-39.3				
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
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	49.7	38.4	44.5	45.1	33.8	40.0	43.0	31.7	37.9				
VEHICULAR NOISE	DAY=	51.1	Leq	EVENING=	46.5	Leq	NIGHT=	44.4	Leq				

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	52.4
			CNEL=	52.7
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	3	9
	CNEL:	1	3	9

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Forest Av Analyst FJS
Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	1,452
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA									
	[DAYTIME		EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	96	0	0	34	0	0	21	0	0
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	-9.5	-32.4	-32.4	-14.0	-37.0	-37.0	-16.1	-39.1	-39.1
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	49.9	38.6	44.8	45.4	34.0	40.2	43.3	32.0	38.1
VEHICULAR NOISE	DAY=	51.3	Leq	EVENING=	46.8	Leq	NIGHT=	44.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	52.6
			CNEL=	52.9
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	3	9
	CNEL:	1	3	10

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Forest Av Analyst FJS

Segment: Hammond St to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS						
ADT	10,341					
SPEED (mph)	25					
ROAD NEAR-FAR LN. DIST.	11					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA									
		DAYTIME		E .	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	683	3	3	239	1	1	148	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	-0.9	-23.9	-23.9	-5.5	-28.5	-28.5	-7.6	-30.6	-30.6
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	58.5	47.1	53.3	53.9	42.6	48.7	51.8	40.5	46.6
VEHICULAR NOISE	DAY=	59.8	Leq	EVENING=	55.3	Leq	NIGHT=	53.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	61.2
			CNEL=	61.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	7	21	65
	CNEL:	7	22	70

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Seco St Analyst FJS

Segment: Prospect Blvd to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	6,223
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

		C	CALCULA	ATION ARE	A				
		DAYTIME		Е	EVENING	ì	NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	411	2	2	144	1	1	89	0	0
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	-3.1	-26.1	-26.1	-7.7	-30.7	-30.7	-9.8	-32.8	-32.8
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	44.9	51.1	51.7	40.4	46.5	49.6	38.3	44.4
VEHICULAR NOISE	DAY=	57.6	Leq	EVENING=	53.1	Leq	NIGHT=	51.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	59.0
			CNEL=	59.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	4	12	39
	CNEL:	4	13	42

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Glen Av Analyst FJS

Segment: Woodbury Rd to Idaho St Date: 13-Aug-12

ROADWAY INPUTS						
ADT	1,673					
SPEED (mph)	25					
ROAD NEAR-FAR LN. DIST.	11					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA										
	[DAYTIME		Е	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	110	1	1	39	0	0	24	0	0	
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	-8.9	-31.8	-31.8	-13.4	-36.4	-36.4	-15.5	-38.5	-38.5	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	50.5	39.2	45.4	46.0	34.7	40.8	43.9	32.6	38.7	
VEHICULAR NOISE	DAY=	51.9	Leq	EVENING=	47.4	Leq	NIGHT=	45.3	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	53.3
			CNEL=	53.6
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	3	11
	CNEL:	1	4	11

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Glen Av Analyst FJS

Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	680
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

	VEHICLE MIX INPUTS									
I	DAILY		HOURLY							
İ	% A	99.0%	DAY	80.0%						
İ	% MT	0.5%	EVENING	7.0%						
İ	% HT	0.5%	NIGHT	13.0%						
ı										

	CALCULATION AREA										
	[DAYTIME		Е	EVENING		NIGHT				
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT		
Vehicles per hour	45	0	0	16	0	0	10	0	0		
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	-12.8	-35.7	-35.7	-17.3	-40.3	-40.3	-19.4	-42.4	-42.4		
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
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	46.6	35.3	41.5	42.1	30.8	36.9	40.0	28.7	34.8		
VEHICULAR NOISE	DAY=	48.0	Leq	EVENING=	43.5	Leq	NIGHT=	41.4	Leq		

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	49.3
			CNEL=	49.6
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	0	1	4
	CNEL:	0	1	5

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Fair Oaks Av Analyst FJS

Segment: Woodbury Rd to Idaho St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	17,338
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

	VEHICLE MIX INPUTS									
I	DAILY		HOURLY							
İ	% A	99.0%	DAY	80.0%						
İ	% MT	0.5%	EVENING	7.0%						
İ	% HT	0.5%	NIGHT	13.0%						
ı										

	CALCULATION AREA										
	[DAYTIME		Е	EVENING		NIGHT				
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT		
Vehicles per hour	1144	6	6	401	2	2	248	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	1.3	-21.7	-21.7	-3.3	-26.2	-26.2	-5.3	-28.3	-28.3		
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
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	60.9	49.6	55.8	56.4	45.0	51.2	54.3	43.0	49.1		
VEHICULAR NOISE	DAY=	62.3	Leq	EVENING=	57.8	Leq	NIGHT=	55.7	Leq		

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	63.6
			CNEL=	63.9
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	12	37	116
	CNEL:	12	39	124

Scenario: 2022 WITH PROJECT (4-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Fair Oaks Av Analyst FJS
Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	23,894
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA									
	[DAYTIME		E	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1577	8	8	552	3	3	342	2	2
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	-20.3	-20.3	-1.9	-24.8	-24.8	-3.9	-26.9	-26.9
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	62.3	51.0	57.1	57.8	46.4	52.6	55.7	44.4	50.5
VEHICULAR NOISE	DAY=	63.7	Leq	EVENING=	59.1	Leq	NIGHT=	57.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.0
			CNEL=	65.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	16	50	159
	CNEL:	17	54	170

Traffic Noise Modeling details analysis spreadsheets, 2022 Conditions with 2-lane Project

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS

Segment: Woodbury Rd to Idaho St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	32,883
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA									
	[DAYTIME		i i	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2170	11	11	760	4	4	470	2	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	2.6	-20.3	-20.3	-1.9	-24.9	-24.9	-4.0	-27.0	-27.0
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	67.9	54.7	59.9	63.3	50.1	55.3	61.3	48.0	53.2
VEHICULAR NOISE	DAY=	68.7	Leq	EVENING=	64.2	Leq	NIGHT=	62.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	70.0
			CNEL=	70.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	50	160	505
	CNEL:	54	171	540

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS

Segment: Idaho St to Howard St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	36,290
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA									
	[DAYTIME		- E	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	2395	12	12	838	4	4	519	3	3
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	3.0	-19.9	-19.9	-1.5	-24.5	-24.5	-3.6	-26.6	-26.6
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	68.3	55.1	60.3	63.8	50.5	55.7	61.7	48.4	53.7
VEHICULAR NOISE	DAY=	69.1	Leq	EVENING=	64.6	Leq	NIGHT=	62.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	70.5
			CNEL=	70.8
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	56	176	557
	CNEL:	60	188	596

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS

Segment: Howard St to Washington Blvd Date: 13-Aug-12

ROADWAY INPUTS						
ADT	25,218					
SPEED (mph)	35					
ROAD NEAR-FAR LN. DIST.	33					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

VEHICLE MIX INPUTS									
DAILY	HOURLY								
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA										
	[DAYTIME		E	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	1664	8	8	583	3	3	361	2	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	1.5	-21.5	-21.5	-3.1	-26.1	-26.1	-5.2	-28.1	-28.1	
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
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	66.8	53.5	58.7	62.2	48.9	54.2	60.1	46.9	52.1	
VEHICULAR NOISE	DAY=	67.6	Leq	EVENING=	63.0	Leq	NIGHT=	60.9	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	68.9
			CNEL=	69.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	39	122	387
	CNEL:	41	131	414

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS
Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS							
ADT	12,732						
SPEED (mph)	35						
ROAD NEAR-FAR LN. DIST.	11						
DISTANCE ROAD CL (ft)	50						
SOFT/HARD CONDITIONS	Hard						
GRADE (%)	0%						
LEFT VIEW	-90						
RIGHT VIEW	90						

	VEHICLE MIX INPUTS									
I	DAILY		HOURLY							
İ	% A	99.0%	DAY	80.0%						
İ	% MT	0.5%	EVENING	7.0%						
İ	% HT	0.5%	NIGHT	13.0%						
ı										

	CALCULATION AREA									
	[DAYTIME		Е	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	840	4	4	294	1	1	182	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	-1.5	-24.5	-24.5	-6.1	-29.0	-29.0	-8.1	-31.1	-31.1	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	50.3	55.5	59.0	45.8	51.0	56.9	43.7	48.9	
VEHICULAR NOISE	DAY=	64.4	Leq	EVENING=	59.8	Leq	NIGHT=	57.7	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.7
			CNEL=	66.0
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	19	59	186
	CNEL:	20	63	199

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Lincoln Av Analyst FJS

Segment: Hammond St to Mountain Av Date: 13-Aug-12

ROADWAY INPUTS							
ADT	12,019						
SPEED (mph)	35						
ROAD NEAR-FAR LN. DIST.	11						
DISTANCE ROAD CL (ft)	50						
SOFT/HARD CONDITIONS	Hard						
GRADE (%)	0%						
LEFT VIEW	-90						
RIGHT VIEW	90						

VEHICLE MIX INPUTS									
DAILY	HOURLY								
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA									
	[DAYTIME	Ē	i i	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	793	4	4	278	1	1	172	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	-1.8	-24.7	-24.7	-6.3	-29.3	-29.3	-8.4	-31.4	-31.4
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	63.3	50.1	55.3	58.8	45.5	50.7	56.7	43.4	48.6
VEHICULAR NOISE	DAY=	64.1	Leq	EVENING=	59.6	Leq	NIGHT=	57.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.4
			CNEL=	65.7
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	18	55	175
	CNEL:	19	59	187

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Woodbury Rd Analyst FJS

Segment: Casitas Av to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS	3
ADT	23,325
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	50
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA										
	[DAYTIME		- E	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	1539	8	8	539	3	3	334	2	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	1.1	-21.8	-21.8	-3.4	-26.4	-26.4	-5.5	-28.5	-28.5	
Distance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
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	66.8	53.5	58.8	62.2	49.0	54.2	60.1	46.9	52.1	
VEHICULAR NOISE	DAY=	67.6	Leq	EVENING=	63.0	Leq	NIGHT=	61.0	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	68.9
			CNEL=	69.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	39	123	390
	CNEL:	42	132	417

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Woodbury Rd Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS						
ADT	21,212					
SPEED (mph)	35					
ROAD NEAR-FAR LN. DIST.	50					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA										
	[DAYTIME		- E	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	1400	7	7	490	2	2	303	2	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	0.7	-22.3	-22.3	-3.8	-26.8	-26.8	-5.9	-28.9	-28.9	
Distance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
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	66.4	53.1	58.3	61.8	48.6	53.8	59.7	46.5	51.7	
VEHICULAR NOISE	DAY=	67.2	Leq	EVENING=	62.6	Leq	NIGHT=	60.5	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	68.5
			CNEL=	68.8
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	35	112	355
	CNEL:	38	120	380

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Montana St Analyst FJS

Segment: Casitas Av to lincoln Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	2,075
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

	CALCULATION AREA									
	[DAYTIME		Е	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	137	1	1	48	0	0	30	0	0	
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	-7.9	-30.9	-30.9	-12.5	-35.4	-35.4	-14.6	-37.5	-37.5	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	51.5	40.2	46.3	46.9	35.6	41.8	44.8	33.5	39.7	
VEHICULAR NOISE	DAY=	52.9	Leq	EVENING=	48.3	Leq	NIGHT=	46.2	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.2
			CNEL=	54.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	4	13
	CNEL:	1	4	14

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Montana St Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	3,104
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

\	/EHICLE	MIX INPUT	S
DAILY		HOURLY	
% A	99.0%	DAY	80.0%
% MT	0.5%	EVENING	7.0%
% HT	0.5%	NIGHT	13.0%

CALCULATION AREA										
	[DAYTIME	Ē	- E	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	205	1	1	72	0	0	44	0	0	
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	-6.2	-29.1	-29.1	-10.7	-33.7	-33.7	-12.8	-35.8	-35.8	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	53.2	41.9	48.1	48.7	37.3	43.5	46.6	35.3	41.4	
VEHICULAR NOISE	DAY=	54.6	Leq	EVENING=	50.1	Leq	NIGHT=	48.0	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	55.9
			CNEL=	56.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	2	6	20
	CNEL:	2	7	21

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Analyst FJS Roadway:

Wyoming St Lincoln Av to Glen Av Date: 13-Aug-12 Segment:

ROADWAY INPUTS	
ADT	1,192
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

\	/EHICLE	MIX INPUT	S
DAILY		HOURLY	
% A	99.0%	DAY	80.0%
% MT	0.5%	EVENING	7.0%
% HT	0.5%	NIGHT	13.0%

CALCULATION AREA										
	l	DAYTIME		E	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	79	0	0	28	0	0	17	0	0	
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	-10.3	-33.3	-33.3	-14.9	-37.9	-37.9	-17.0	-39.9	-39.9	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	49.1	37.7	43.9	44.5	33.2	39.3	42.4	31.1	37.3	
VEHICULAR NOISE	DAY=	50.5	Leq	EVENING=	45.9	Leq	NIGHT=	43.8	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	51.8
			CNEL=	52.1
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	2	8
	CNEL:	1	3	8

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Idaho St Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	2,372
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA									
	[DAYTIME		- I	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	157	1	1	55	0	0	34	0	0
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	-7.3	-30.3	-30.3	-11.9	-34.9	-34.9	-14.0	-36.9	-36.9
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	52.1	40.7	46.9	47.5	36.2	42.3	45.4	34.1	40.2
VEHICULAR NOISE	DAY=	53.5	Leq	EVENING=	48.9	Leq	NIGHT=	46.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.8
			CNEL=	55.1
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	2	5	15
	CNEL:	2	5	16

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Howard St Analyst FJS

Segment: Arroyo Pkwy to Forest Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	2,555
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

		C	ALCULA	ATION ARE	Ą				
	[DAYTIME		Е	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	169	1	1	59	0	0	37	0	0
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	-7.0	-30.0	-30.0	-11.6	-34.5	-34.5	-13.7	-36.6	-36.6
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	52.4	41.1	47.2	47.8	36.5	42.7	45.7	34.4	40.6
VEHICULAR NOISE	DAY=	53.8	Leq	EVENING=	49.2	Leq	NIGHT=	47.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	55.1
			CNEL=	55.4
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	2	5	16
	CNEL:	2	5	17

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Howard St Analyst FJS

Segment: SR-210 EB ramps to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	18,326
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA									
		DAYTIME		E	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1210	6	6	423	2	2	262	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	1.5	-21.4	-21.4	-3.0	-26.0	-26.0	-5.1	-28.1	-28.1
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	60.9	49.6	55.8	56.4	45.1	51.2	54.3	43.0	49.1
VEHICULAR NOISE	DAY=	62.3	Leq	EVENING=	57.8	Leq	NIGHT=	55.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	63.7
			CNEL=	63.9
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	12	37	116
	CNEL:	12	39	124

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Howard St Analyst FJS

Segment: Lincoln Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	6,324
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

		C	ALCULA	ATION ARE	Ą				
	[DAYTIME		Е	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	417	2	2	146	1	1	90	0	0
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	-3.1	-26.0	-26.0	-7.6	-30.6	-30.6	-9.7	-32.7	-32.7
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	56.3	45.0	51.2	51.8	40.4	46.6	49.7	38.4	44.5
VEHICULAR NOISE	DAY=	57.7	Leq	EVENING=	53.2	Leq	NIGHT=	51.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	59.0
			CNEL=	59.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	4	13	40
	CNEL:	4	14	43

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Washington Blvd Analyst FJS

Segment: Forest Av to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS						
ADT	2,553					
SPEED (mph)	35					
ROAD NEAR-FAR LN. DIST.	11					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA										
	[DAYTIME		EVENING			NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	168	1	1	59	0	0	37	0	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	-8.5	-31.4	-31.4	-13.0	-36.0	-36.0	-15.1	-38.1	-38.1	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	43.3	48.6	52.0	38.8	44.0	49.9	36.7	41.9	
VEHICULAR NOISE	DAY=	57.4	Leq	EVENING=	52.8	Leq	NIGHT=	50.8	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	58.7
			CNEL=	59.0
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	4	12	37
	CNEL:	4	13	40

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Washington Blvd Analyst FJS

Segment: Lincoln Av to Mentone Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	12,752
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

	VEHICLE MIX INPUTS									
I	DAILY		HOURLY							
İ	% A	99.0%	DAY	80.0%						
İ	% MT	0.5%	EVENING	7.0%						
İ	% HT	0.5%	NIGHT	13.0%						
ı										

CALCULATION AREA										
	[DAYTIME		E	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	842	4	4	295	1	1	182	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	-1.5	-24.5	-24.5	-6.1	-29.0	-29.0	-8.1	-31.1	-31.1	
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
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	63.8	50.5	55.8	59.2	46.0	51.2	57.2	43.9	49.1	
VEHICULAR NOISE	DAY=	64.6	Leq	EVENING=	60.0	Leq	NIGHT=	58.0	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.9
			CNEL=	66.2
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	20	62	196
	CNEL:	21	66	209

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Washington Blvd Analyst FJS

Segment: Mentone Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	13,481
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

	VEHICLE MIX INPUTS									
I	DAILY		HOURLY							
İ	% A	99.0%	DAY	80.0%						
İ	% MT	0.5%	EVENING	7.0%						
İ	% HT	0.5%	NIGHT	13.0%						
ı										

CALCULATION AREA										
	[DAYTIME		E	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	890	4	4	311	2	2	193	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	-1.3	-24.2	-24.2	-5.8	-28.8	-28.8	-7.9	-30.9	-30.9	
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
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	64.0	50.8	56.0	59.5	46.2	51.4	57.4	44.1	49.4	
VEHICULAR NOISE	DAY=	64.8	Leq	EVENING=	60.3	Leq	NIGHT=	58.2	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	66.2
			CNEL=	66.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	21	65	207
	CNEL:	22	70	221

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Hammond St Analyst FJS

Segment: Forest Av to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS						
ADT	432					
SPEED (mph)	25					
ROAD NEAR-FAR LN. DIST.	11					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

	VEHICLE MIX INPUTS								
D/	AILY		HOURLY						
%	6 A	99.0%	DAY	80.0%					
%	MT	0.5%	EVENING	7.0%					
%	HT	0.5%	NIGHT	13.0%					

CALCULATION AREA										
	[DAYTIME		E	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	29	0	0	10	0	0	6	0	0	
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	-14.7	-37.7	-37.7	-19.3	-42.3	-42.3	-21.4	-44.3	-44.3	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	44.7	33.3	39.5	40.1	28.8	34.9	38.0	26.7	32.9	
VEHICULAR NOISE	DAY=	46.1	Leq	EVENING=	41.5	Leq	NIGHT=	39.4	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	47.4
			CNEL=	47.7
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	0	1	3
	CNEL:	0	1	3

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Hammond St Analyst FJS

Segment: Lincoln Av to Mentone Av Date: 13-Aug-12

ROADWAY INPUTS							
ADT	2,077						
SPEED (mph)	25						
ROAD NEAR-FAR LN. DIST.	11						
DISTANCE ROAD CL (ft)	50						
SOFT/HARD CONDITIONS	Hard						
GRADE (%)	0%						
LEFT VIEW	-90						
RIGHT VIEW	90						

	VEHICLE MIX INPUTS								
I	DAILY		HOURLY						
İ	% A	99.0%	DAY	80.0%					
İ	% MT	0.5%	EVENING	7.0%					
İ	% HT	0.5%	NIGHT	13.0%					
ı									

	CALCULATION AREA									
	[DAYTIME		Е	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	137	1	1	48	0	0	30	0	0	
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	-7.9	-30.9	-30.9	-12.5	-35.4	-35.4	-14.6	-37.5	-37.5	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	51.5	40.2	46.3	46.9	35.6	41.8	44.8	33.5	39.7	
VEHICULAR NOISE	DAY=	52.9	Leq	EVENING=	48.3	Leq	NIGHT=	46.2	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.2
			CNEL=	54.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	4	13
	CNEL:	1	4	14

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Hammond St Analyst FJS

Segment: Mentone Av to Glen Av Date: 13-Aug-12

ROADWAY INPUTS						
ADT	2,236					
SPEED (mph)	25					
ROAD NEAR-FAR LN. DIST.	11					
DISTANCE ROAD CL (ft)	50					
SOFT/HARD CONDITIONS	Hard					
GRADE (%)	0%					
LEFT VIEW	-90					
RIGHT VIEW	90					

	VEHICLE MIX INPUTS								
D/	AILY		HOURLY						
%	6 A	99.0%	DAY	80.0%					
%	MT	0.5%	EVENING	7.0%					
%	HT	0.5%	NIGHT	13.0%					

	CALCULATION AREA									
	[DAYTIME		Е	EVENING		NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	148	1	1	52	0	0	32	0	0	
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	-7.6	-30.6	-30.6	-12.2	-35.1	-35.1	-14.2	-37.2	-37.2	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	51.8	40.5	46.6	47.2	35.9	42.1	45.2	33.8	40.0	
VEHICULAR NOISE	DAY=	53.2	Leq	EVENING=	48.6	Leq	NIGHT=	46.6	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	54.5
			CNEL=	54.8
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	4	14
	CNEL:	2	5	15

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Forest Av Analyst FJS

Segment: Howard St to Washington Blvd Date: 13-Aug-12

ROADWAY INPUTS	
ADT	1,373
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA										
	[DAYTIME		E	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	91	0	0	32	0	0	20	0	0	
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	-9.7	-32.7	-32.7	-14.3	-37.2	-37.2	-16.4	-39.3	-39.3	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	49.7	38.4	44.5	45.1	33.8	40.0	43.0	31.7	37.9	
VEHICULAR NOISE	DAY=	51.1	Leq	EVENING=	46.5	Leq	NIGHT=	44.4	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	52.4
			CNEL=	52.7
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	3	9
	CNEL:	1	3	9

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Forest Av Analyst FJS
Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	1,452
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA										
	[DAYTIME		- I	EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	96	0	0	34	0	0	21	0	0	
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	-9.5	-32.4	-32.4	-14.0	-37.0	-37.0	-16.1	-39.1	-39.1	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	49.9	38.6	44.8	45.4	34.0	40.2	43.3	32.0	38.1	
VEHICULAR NOISE	DAY=	51.3	Leq	EVENING=	46.8	Leq	NIGHT=	44.7	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	52.6
			CNEL=	52.9
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	3	9
	CNEL:	1	3	10

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Forest Av Analyst FJS

Segment: Hammond St to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS							
ADT	10,341						
SPEED (mph)	25						
ROAD NEAR-FAR LN. DIST.	11						
DISTANCE ROAD CL (ft)	50						
SOFT/HARD CONDITIONS	Hard						
GRADE (%)	0%						
LEFT VIEW	-90						
RIGHT VIEW	90						

V	EHICLE	MIX INPUT	S
DAILY		HOURLY	
% A	99.0%	DAY	80.0%
% MT	0.5%	EVENING	7.0%
% HT	0.5%	NIGHT	13.0%

CALCULATION AREA									
		DAYTIME		E .	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	683	3	3	239	1	1	148	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	-0.9	-23.9	-23.9	-5.5	-28.5	-28.5	-7.6	-30.6	-30.6
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	58.5	47.1	53.3	53.9	42.6	48.7	51.8	40.5	46.6
VEHICULAR NOISE	DAY=	59.8	Leq	EVENING=	55.3	Leq	NIGHT=	53.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	61.2
			CNEL=	61.5
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	7	21	65
	CNEL:	7	22	70

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Seco St Analyst FJS

Segment: Prospect Blvd to Lincoln Av Date: 13-Aug-12

ROADWAY INPUTS	
ADT	6,223
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

	CALCULATION AREA									
		DAYTIME		Е	EVENING	ì	NIGHT			
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT	
Vehicles per hour	411	2	2	144	1	1	89	0	0	
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	-3.1	-26.1	-26.1	-7.7	-30.7	-30.7	-9.8	-32.8	-32.8	
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	44.9	51.1	51.7	40.4	46.5	49.6	38.3	44.4	
VEHICULAR NOISE	DAY=	57.6	Leq	EVENING=	53.1	Leq	NIGHT=	51.0	Leq	

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	59.0
			CNEL=	59.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	4	12	39
	CNEL:	4	13	42

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Glen Av Analyst FJS

Segment: Woodbury Rd to Idaho St Date: 13-Aug-12

ROADWAY INPUTS							
ADT	1,673						
SPEED (mph)	25						
ROAD NEAR-FAR LN. DIST.	11						
DISTANCE ROAD CL (ft)	50						
SOFT/HARD CONDITIONS	Hard						
GRADE (%)	0%						
LEFT VIEW	-90						
RIGHT VIEW	90						

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA									
	[DAYTIME		E	EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	110	1	1	39	0	0	24	0	0
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	-8.9	-31.8	-31.8	-13.4	-36.4	-36.4	-15.5	-38.5	-38.5
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	50.5	39.2	45.4	46.0	34.7	40.8	43.9	32.6	38.7
VEHICULAR NOISE	DAY=	51.9	Leq	EVENING=	47.4	Leq	NIGHT=	45.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	53.3
			CNEL=	53.6
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	1	3	11
	CNEL:	1	4	11

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Glen Av Analyst FJS
Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	680
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	11
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS									
DAILY		HOURLY							
% A	99.0%	DAY	80.0%						
% MT	0.5%	EVENING	7.0%						
% HT	0.5%	NIGHT	13.0%						

CALCULATION AREA									
		DAYTIME		[EVENING		NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	45	0	0	16	0	0	10	0	0
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	-12.8	-35.7	-35.7	-17.3	-40.3	-40.3	-19.4	-42.4	-42.4
Distance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	46.6	35.3	41.5	42.1	30.8	36.9	40.0	28.7	34.8
VEHICULAR NOISE	DAY=	48.0	Leq	EVENING=	43.5	Leq	NIGHT=	41.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	49.3
			CNEL=	49.6
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	0	1	4
	CNEL:	0	1	5

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Fair Oaks Av Analyst FJS

Segment: Woodbury Rd to Idaho St Date: 13-Aug-12

ROADWAY INPUTS	6
ADT	17,338
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS								
DAILY		HOURLY						
% A	99.0%	DAY	80.0%					
% MT	0.5%	EVENING	7.0%					
% HT	0.5%	NIGHT	13.0%					

CALCULATION AREA									
	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1144	6	6	401	2	2	248	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	1.3	-21.7	-21.7	-3.3	-26.2	-26.2	-5.3	-28.3	-28.3
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	60.9	49.6	55.8	56.4	45.0	51.2	54.3	43.0	49.1
VEHICULAR NOISE	DAY=	62.3	Leq	EVENING=	57.8	Leq	NIGHT=	55.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	63.6
			CNEL=	63.9
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	12	37	116
	CNEL:	12	39	124

Scenario: 2022 WITH PROJECT (2-LANE C Project: LINCOLN AVENUE SPECIFIC

Roadway: Fair Oaks Av Analyst FJS
Segment: Washington Blvd to Hammond St Date: 13-Aug-12

ROADWAY INPUTS	
ADT	23,894
SPEED (mph)	25
ROAD NEAR-FAR LN. DIST.	33
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Hard
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

\	/EHICLE	MIX INPUT	S
DAILY		HOURLY	
% A	99.0%	DAY	80.0%
% MT	0.5%	EVENING	7.0%
% HT	0.5%	NIGHT	13.0%

CALCULATION AREA									
	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1577	8	8	552	3	3	342	2	2
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	-20.3	-20.3	-1.9	-24.8	-24.8	-3.9	-26.9	-26.9
Distance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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	62.3	51.0	57.1	57.8	46.4	52.6	55.7	44.4	50.5
VEHICULAR NOISE	DAY=	63.7	Leq	EVENING=	59.1	Leq	NIGHT=	57.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			Ldn=	65.0
			CNEL=	65.3
NOISE CONTOUR:		70 dBA	65 dBA	60 dBA
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	Ldn:	16	50	159
	CNEL:	17	54	170

Construction Vibration Propagation Calculations

VIBRATION DAMAGE ASSESSMENT

	Distance					
Equipment	25	50	100	200	450	
Pile Driver (impact) Upper Range	1.518	0.537	0.190	0.067	0.020	
Pile Driver (impact) Lower Range	0.644	0.228	0.081	0.028	0.008	
Pile Driver (sonic) Upper Range	0.734	0.260	0.092	0.032	0.010	
Pile Driver (sonic) Lower Range	0.170	0.060	0.021	0.008	0.002	
Vibratory roller	0.210	0.074	0.026	0.009	0.003	
Large bulldozer	0.089	0.031	0.011	0.004	0.001	
Caisson drilling	0.089	0.031	0.011	0.004	0.001	
Loaded trucks	0.076	0.027	0.010	0.003	0.001	
Jackhammer	0.035	0.012	0.004	0.002	0.000	
Small bulldozer	0.003	0.001	0.000	0.000	0.000	

VIBRATION ANNOYANCE ASSESSMENT

		Distance					
Equipment	25	50	100	200	350		
Pile Driver (impact) Upper Range	112	103	94	85	78		
Pile Driver (impact) Lower Range	104	95	86	77	70		
Pile Driver (sonic) Upper Range	105	96	87	78	71		
Pile Driver (sonic) Lower Range	93	84	75	66	59		
Vibratory roller	94	85	76	67	60		
Large bulldozer	87	78	69	60	53		
Caisson drilling	87	78	69	60	53		
Loaded trucks	79	70	61	52	45		
Jackhammer	58	49	40	31	24		
Small bulldozer	86	77	68	59	52		