LASSEN COUNTY

GENERAL PLAN NOISE ELEMENT UPDATE 2020

TECHNICAL BACKGROUND REPORT

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ATTACHMENTS

1 Acoustics Principles

1.1 Sound and Environmental Noise

Acoustics is the science of sound. Sound can be described as the energy of a vibrating object transmitted by pressure waves through a medium (e.g., air) to human (or animal) ear. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or hertz (Hz). As an example of this phenomenon, a person speaking creates energy through vibration of the vocal chords, pressure waves caused from this vibration are carried through the air to a nearby listener's ear, where they are detected as the sound of a human voice.

The speed of sound in air is approximately 770 miles per hour, or 1,130 feet/second. Knowing the speed and frequency of a sound, one may calculate its wavelength, the physical distance in air from one compression of the atmosphere to the next. An understanding of wavelength is useful in evaluating the effectiveness of physical sound control devices such as mufflers or barriers, which depend upon either absorbing or blocking sound waves to reduce sound levels.

Noise is defined as loud, unexpected, or annoying sound. The fundamental acoustics model consists of a noise source, receptor, and the propagation path between the two. The loudness of the noise source, obstructions, or atmospheric factors affecting the propagation path, determine the perceived sound level and noise characteristics at the receptor. Acoustics deal primarily with the propagation and control of sound. A typical noise environment consists of ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this ambient noise is the sound from individual local sources. These sources can vary from an occasional aircraft or train passing by to continuous noise from traffic on a major highway. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a large range of numbers. To avoid this, the decibel (dB) scale was devised. The dB scale uses the hearing threshold of 20 micropascals (µPa) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB; another useful aspect of the decibel scale is that changes in levels (dB) are uniform throughout the scale, which corresponds closely to human perception of relative loudness.

1.2 Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The equivalent noise level (L_{eq}) is the average noise level averaged over the measurement period, while the day-night noise level (L_{dn}) and Community Equivalent Noise Level (CNEL) are measures of energy average during a 24-hour period, with dB weighted sound levels from 7:00 PM to 7:00 AM Most commonly, environmental sounds are described in terms of L_{eq} that has the same acoustical energy as the summation of all the time-varying events.

1.3 Metrics Used in Noise Assessment

A-Weighted Decibel Scale

The A weighted decibel (dBA) sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be used. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source.

The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by dBA values. There is a strong correlation between dBA and the way the human ear perceives sound. For this reason, the dBA has become the standard tool of environmental noise assessment. All noise levels reported in this document are in terms of dBA, but are expressed as dB, unless otherwise noted.

Addition of Decibels

The dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic dB is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound (Caltrans 2013). When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions. Under the dB scale, three sources of equal loudness together would produce an increase of approximately 5 dBA. (Caltrans 2013)

Sound Propagation and Attenuation

Sound spreads (propagates uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Caltrans 2013). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. Thus, soft-site attenuation from a point source is at a rate of 7.5 dB for each doubling of distance, while soft-site attenuation from a line source is 4.5 dB per each doubling of distance (Caltrans 2013).

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA (Cowan 1994). The way older homes in California were constructed generally provides a

reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more with windows closed (HUD 2009).

1.4 Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases, and the acceptability of the environment for people decreases. This decrease in acceptability and the threat to public well-being is the basis for land use planning policies directed towards the prevention of exposure to excessive community noise levels. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA (Cowan 1994). Interior noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted (Caltrans 2020).

- Except in carefully controlled laboratory experiments, a 1-dBA change cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A minimum 5-dBA change is required before any noticeable change in community response would be expected. A 5-dBA increase is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Health Effects of Noise on People

Hearing Loss. While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

Annoyance. Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. A noise level of about 55 dBA L_{dn} is the threshold at which a substantial percentage of people begin to report annoyance (FICON 1992).

2 Community Noise Survey

2.1 Description of Major Noise Sources in the Community

Attachment 1 to this report provides a summary table of the data sources used to describe and quantify existing major noise sources in Lassen County. The Attachment 1 summary table identifies the major noise sources in each of the categories described below, and therefore may be helpful as an overall reference for the reader.

2.1.1 Transportation Noise Sources

Aviation

There are five public use airports, one army airfield, and two heliports located in Lassen County. The five public use airports include Susanville Municipal Airport, Herlong, Spalding, Bieber, and Ravendale. The City of Susanville is the operator of the Susanville Municipal Airport, and the remainder are operated by Lassen County. Airport Land Use Plans have been adopted by the Lassen County Airport Land Use Commission (ALUC) for each of the airports listed above, which include noise exposure contours (on a CNEL basis). Airport noise depends on the type of aircraft and the frequency and direction of flights. Current and future predicted operations at each airport were compared against levels used for preparation of the Airport Land Use Plan (ALUP) noise contours to determine if adjustments needed to be made to noise contour boundaries. According to the City of Susanville (Datema, June 2019), airport operations levels have remained substantially below maximum predicted levels in the 1987 ALUP; there is no expectation that future airport operations would reach this predicted maximum level, and therefore the CNEL contours from the 1987 ALUP remain a conservative representation of potential airport noise associated with the Susanville Airport. According to Lassen County Public Works (Heimbigner, March 2019), operations at each of the County operated airports have declined from the levels documented in the 1989 ALUP. Operations as of 2019 were less than 50% of the 1989 levels, no improvements have occurred or are planned at the airports, and therefore airport operations are not expected to reach or exceed the 1989 ALUP projections. The CNEL contours from the 1989 ALUP therefore remain a conservative representation of the airport noise associated with the County operated airports. The 65 dBA CNEL contours from each of the public airports in Lassen County have been illustrated The Master Noise Exhibit (Lassen County Community Noise Levels**,** http://www.lassencounty.org/dept/planning-and-building-services/noise-element-and-data).

The Amedee Army Airfield Airport Land Use Compatibility Plan (ALUCP) was adopted in 2016 by the County; because of the recent date of adoption, the noise contour maps of this ALUCP are considered current and appropriate for planning purposes, and are illustrated in the Master Noise Exhibit (Lassen County Community Noise Levels**,** http://www.lassencounty.org/dept/planning-and-building-services/noise-element-and-data).. For

the California Department of Forestry and Fire Protection (CAL FIRE) helipad in Bieber and for the Banner Lassen Hospital heliport in Susanville, Dudek used published noise levels from similar helipad and heliport facilities (Gerson/Overstreet Architects, 2003), to develop noise contours. Noise contours modeled for the largest (and therefore the loudest) helicopter from the 2003 helipad study are the basis of noise contours mapped for the Bieber CAL-FIRE helipad and the Banner-Lassen Hospital helipad in the Master Noise Exhibit (Lassen County Community Noise Levels, http://www.lassencounty.org/dept/planning-and-building-services/noise-element-and-data).

Roadways

Highways are a major noise source in many jurisdictions, and they are the primary means of circulation throughout Lassen County. US 395 spans the entire County from south to north and carries the largest number of vehicles; the 65 dBA CNEL contour currently extends up to 120 feet from the roadway edge and encompasses some existing residential uses in certain areas. There are also five other State highways in Lassen County which are used for regional travel by residents and visitors, the 65 dBA CNEL contours for these State highways are somewhat more limited in area and range from .approximately 20 to 70 feet from the roadway edge. A total of seven (7) short-term noise measurements and manual traffic counts were conducted for different sections of US 395 to characterize existing noise levels. At least one short-term noise measurement with manual traffic counts were conducted for each of the State highways in Lassen County (refer to Attachment 1)

Major County-maintained roadways in Lassen County also contribute traffic noise to the ambient noise environment. While traffic speeds are lower on these facilities than on highways, setback distances from travel lanes to adjacent uses tend to be less, and therefore noise from major roadways can result in unacceptably high noise levels at adjacent noise-sensitive land uses. Dudek completed a series of 18 short-term noise measurement and manual traffic counts for County-maintained major roadways to characterize existing traffic noise levels along these roadways (refer to Attachment 1). The existing 65 dBA CNEL contours for County-maintained roadways ranged from a distance of 0 (with the contour within the roadway right-of-way) to 105 feet, but with the majority of the contours at a distance less than 50 feet from the roadway edge.

Railroads

The Union Pacific Railroad (UPRR) and Burlington Northern Santa Fe (BNSF) railroad operate rail lines that traverse Lassen County, each carrying freight trains. The UPRR line extends from the Herlong vicinity, southwest through Doyle, and Hallelujah Junction before exiting Lassen County. The BNSF line is a north–south corridor from Westwood through Nubieber to Modoc County.

The 1989 Lassen County Noise Element determined that with the low frequency of rail operations on each line (averaging two to three rail operations per week), the boundary of the 60 dBA CNEL contour would remain within the rail right-of-way (ROW). Officials with UPRR did not respond to requests for information regarding current rail operations on their lines within Lassen County, but a Caltrans assessment of abandoned rail corridors indicates that only approximately 25 miles of the UPRR rail corridor in Lassen County remains (Caltrans 2005). As such, UPRR operations are assumed to remain at two to three operations per week, and the 60 dBA CNEL contour would remain within the ROW. Officials at BNSF confirmed that rail operations on their lines are approximately 6-8 trains per day. Dudek used the worst-case frequency of 8 train operations per day to model rail noise associated with the BNSF line using the Federal Transit Authority (FTA) CREATE rail noise model (USDOT 2006); the boundary of the 65 dBA contour extends approximately 100 feet from the center of the tracks. The Master Noise Exhibit (Lassen County Community Noise Levels, http://www.lassencounty.org/dept/planning-and-building-

services/noise-element-and-data) illustrates the location of rail lines in Lassen County communities, including the 65 dBA contour for he BNSF lines, Noise contours are not illustrated for the UPRR line, in that even the 60 dBA CNEL contour would be contained within the rail right-of-way..

2.1.2 Industrial - Commercial Noise Sources

Industrial and heavy commercial operations often involve the use of mechanical equipment, generators, and vehicles that contribute to noise levels associated with these industrial and heavy commercial sites, particularly if operations occur outdoors. Historically, many communities in Lassen County have been in close proximity to industrial uses, such as those associated with the production and storage of lumber products or aggregate materials. Diamond Mountain Speedway, and local prisons are also important stationary noise sources in the County. Dudek evaluated a total of 13 major stationary noise sources for the noise element update. Attachment 1 provides a succinct summary of the noise data sources used for the evaluation.

The noise evaluation for 5 of the industrial sites was based upon information from the 1989 Noise Element. Some of these sites include facilities that are not currently in operation, but because the facilities have not been demolished and no rezone has occurred, it is assumed operations could resume and the noise levels would be similar to those identified in the 1989 Noise Element. The California Correction Center and High Desert State Prison were addressed with a 24-hour noise measurement, which provides all data necessary for direct calculation of the ambient (existing) CNEL.

Detailed noise assessments were performed by other consultants to address existing and proposed activities at Sierra Army Depot (US Army, 2019) and Ward Lake Pit (Lassen County, 2019). Noise contours for these facilities were derived from the data contained in these assessments. Several noise studies were performed by various acoustical consultants to address noise levels from the operation of the Honey Lake Motocross Track (AVGL 2002a, 2002b, and 2003; BBA 2002 and 2003); these reports are on file with the Planning Division of Lassen County Public Works. Dudek used data from measurements performed with no races occurring and during race events to calculate the CNEL contour for the Honey Lake Motocross Track based upon a 24-hour period that includes race events.

Dudek performed short-term (less than one hour in duration) sound level measurements to document existing ambient noise levels for the Banner-Lassen hospital. Parking lot activity and HVAC equipment operations contributed to the measured sound levels, which are assumed to be relatively steady throughout the day and night, given the nature of hospital operations. The CNEL contour was calculated assuming more or less constant operational noise conditions. Dudek also performed a short-term sound level measurement at the HL Power facility. The CNEL contour for this facility was calculated based upon the measured short-term noise level completed during full operations, an assumed operational schedule for the facility of 8 AM to 6 PM. Refer to Attachment 2, Section 2.3 for short-term measurement results for Banner-Lassen Hospital and HL Power.

Dudek completed sound level measurements simultaneously at three different locations for the Diamond Mountain Speedway facility. Data was captured for several hours before a scheduled race event, and for several hours while the race event occurred. Dudek used measurement data for no race ambient sound levels, race event sound levels, and the duration of a typical large race event to calculate the CNEL contour for the Diamond Mountain Speedway facility based upon a 24-hour period that includes race events. Refer to Attachment 2, Section 2.3 for short-term measurement results for Diamond Mountain Speedway.

2.2 Existing Noise Levels

2.2.1 Sound Level Measurement Program

Existing noise conditions present in Lassen County were inventoried by Dudek during several discrete noise survey events throughout 2019. Three types of sound-level measurements were taken: short-term (varying from 5 to 30 minutes) measurements were performed along highways and major local roadways to characterize noise levels associated with transportation facilities and for calibration of the transportation noise model; 24-hour measurements were performed in four locations less influenced by transportation noise, to confirm more representative ambient noise levels in the County, and for comparison to the documented noise levels at the same locations in the 1989 Noise Element; and, short-term noise measurements were performed adjacent to major stationary noise sources. Noise measurement location points are illustrated in the Master Noise Exhibit (Lassen County Community Noise Levels, http://www.lassencounty.org/dept/planning-and-building-services/noise-element-and-data).

Sound-level measurements were performed using two different integrating sound-level meters: A Rion Model NL-32 (American National Standards Institute [ANSI] Type I), and SoftdB Piccolo II Model (ANSI Type II). ANSI Type I and Type II sound-level meters both have sufficient accuracy to be used for environmental noise evaluation. The sound-level meters were calibrated before and after each series of measurements using a Rion Model NC-74 calibrator.

SHORT-TERM MEASUREMENTS

Roadway Sound Level Measurements

Since roadway traffic is often a primary contributor to the noise environment in any community, short-term noise measurements were conducted adjacent to selected existing highways and major County roads (collectively "roadways") within Lassen County. These measurements are useful in characterizing ambient noise levels along roadways, as well as providing sound data and manual traffic counts used to calibrate the transportation noise model. A total of 38 short-term roadway noise measurements were conducted. The results of short-term roadway traffic noise measurements are presented in Table 1. Field data for each short-term sound level measurement are provided in Attachment 2 (Section 2.1 - Short-term Noise Measurements Field Data Sheets), including measurement locations, measured sound levels, manual traffic count results, distance from the roadway edge to the measurement point, and vehicle speed on the roadway.

Table 1
Roadway Noise Level Measurements (Existing) (dBA)

ST #	Date Measured	Measure Start Time	Measure Duration	L_{eq}	L_{max}	L_{min}	Roadway
1.1	3/18/2019	14:04	30 min	53	79	40	Clark Street
1.2	3/18/2019	14:54	15 min	71	85	42	US 395 - Longview Elementary
2.1	3/19/2019	18:32	15 min	54	75	18	Susan Hills Drive
2.2	3/19/2019	18:08	15 min	69	84	38	Richmond Road
2.3	3/19/2019	17:43	15 min	61	77	39	Gold Run Road
2.4	3/19/2019	17:18	15 min	59	80	23	Wingfield Road

Table 1
Roadway Noise Level Measurements (Existing) (dBA)

ST #	Date Measured	Measure Start Time	Measure Duration	L_{eq}	L_{max}	L_{min}	Roadway
3.1	3/18/2019	17:48	15 min	70	87	40	US 395 (at Sears Road)
3.2	3/18/2019	18:08	15 min	70	92	39	Main Street
3.3	3/18/2019	18:28	15 min	65	86	37	North Main
4.1	3/19/2019	16:23	15 min	61	78	37	Johnstonville Road (Urban)
4.2	3/19/2019	15:38	15 min	74	87	43	Johnstonville Road (Rural)
4.3	3/19/2019	15:58	15 min	75	89	55	Center Road
4.4	3/19/2019	16:48	15 min	77	91	49	US 395 (Johnstonville)
5.1	3/19/2019	8:58	15 min	67	85	38	US 395 (at Wendel Road)
5.2	3/19/2019	9:23	15 min	58	82	39	Eagle Lake Rd (at Forest)
6.1	3/20/2019	10:27	15 min	41	53	37	SR 36 (at Eagle Rd)
6.2	3/20/2019	9:38	30 min	63	86	21	SR 44 (at SR 36)
6.3	3/20/2019	9:13	15 min	75	87	44	US 395 (at Schoolhouse)
6.4	3/20/2019	10:57	15 min	70	86	13	US 395 (at Lassen Street)
7	3/19/2019	10:28	15 min	68	87	22	SR 299 (at Market)
8	3/19/2019	11:08	15 min	66	85	43	Market Street
9.1	3/19/2019	13:03	15 min	64	84	37	Susanville Road
9.2	3/19/2019	13:23	30 min	50	74	40	SR 139 Willowcreek (Campground)
9.3	3/19/2019	12:33	15 min	68	82	51	Eagle Lake Rd at Lake View
10	6/20/2019	16:51	15 min	60	78	41	Mahogany Way at Ivy Way (Eagle Lake)
11.1	6/20/2019	15:22	15 min	54	70	44	Eagle Lake Rd at Gallatin (Eagle Lake)
11.2	6/20/2019	14:38	15 min	47	61	42	Gallatin Road (Eagle Lake)
12.1	6/20/2019	13:48	15 min	53	77	40	Mooney Road (Westwood)
12.2	6/20/2019	13:19	15 min	43	64	41	SR 36
13.1	6/20/2019	11:34	15 min	53	75	41	Mooney (3rd St) Westwood
13.2	3/20/2019	11:47	15 min	70	88	40	Garnier Road
13.3	3/20/2019	12:12	15 min	65	86	16	Herlong Access Road
14.1	3/18/2019	15:29	15 min	64	82	40	SR 70
14.2	3/18/2019	15:58	15 min	67	84	37	Skyline Road
15	3/18/2019	13:09	15 min	67	81	41	Standish-Buntingville Road
16	3/19/2019	8:13	15 min	70	85	44	Sunnyside Road
17.1	3/18/2019	16:43	15 min	66	90	39	Clark Street
17.2	3/18/2019	17:24	15 min	60	82	26	US 395 - Longview Elementary

Traffic noise measurements (short-term) were collected using SoftdB Piccolo II Model meters. The meter was placed on a tri-pod at approximately five feet above the ground, in accordance with the ANSI standard for environmental noise measurements. The sound level meter was oriented toward the adjacent roadway, and a windscreen was employed. The distance from the edge of the pavement to the sound level meter was noted in the field data sheet for each measurement location. The number of cars, medium trucks, and heavy trucks passing the measurement point during the measurement period were tallied, along with identification of the posted speed limit for the roadway. The duration was noted for each measurement, and sound levels including L_{eq}. L_{max}, L_{min}, and other percentile statistics were recorded on the data sheet for each measurement location (Refer to Attachment 2.1). The measurement identifications (ST#) in Table 1 correspond to locations illustrated in the figures provided in Attachment 2.1 for these short-term measurements. As presented in Table 1, recorded traffic noise levels range from a high of 77 dBA L_{eq} to a low of 41 dBA L_{eq}. The highest traffic noise levels are associated with US Highway 395, Johnstonville Road, and Center Road, with each of these roadways carrying a large number of vehicles at higher speeds. SR36 (ST 6.1) had the lowest recorded noise level, and there were also no vehicles that passed the measurement point during the measurement.

LONG-TERM MEASUREMENTS

Dudek completed a total of four long-term (24-hour) measurements to characterize environmental noise within areas outside of transportation noise influence, as well as to update ambient noise data for the same locations included in the 1989 Noise Element. Long term measurement locations (LT#) are illustrated in the Master Noise Exhibit (Lassen County Community Noise Levels, http://www.lassencounty.org/dept/planning-and-building-services/noise-element-and-data). Measurements were conducted using SoftdB Piccolo II Model (ANSI Type II) sound level meters. The measurements were unattended, but locked cases were employed to prevent tampering of the meters. The Piccolo meters were calibrated before and after the 24-hour measurements to verify accuracy.

The Piccolo meters were configured to record data each hour (using a one-hour averaging period) across the entire 24-hour measurement. Sound level metrics including L_{eq}. L_{max}, L_{min}, and other percentile statistics were recorded for each hourly period. Data logs for each long term measurement location are included in Attachment 2 (Section 2.2). Based on the recorded hourly averages at each long-term measurement location, the CNEL was calculated at these monitoring locations; a CNEL worksheet for each location is also provided in Attachment 2. Table 2 summarizes the minimum (L_{min}) and maximum (L_{max}) sound levels recorded for each monitor location during the 24-hour measurement, as well as the calculated 24-hour weighted average noise level (CNEL).

Table 2
Ambient Sound Level Measurements (dBA)

Site	Location	Noise Sources	Dates	CNEL	L_{max}	L_{min}
LT1	Corner of 4th and Fir Streets, Westwood community	Residences, Vehicle Traffic, Distant Rail	5/8/19 - 5/9/19	56	82.5	37.1
LT2	Adjacent to Historic Rail Depot, 601 Richmond Road, Susanville	Vehicle Traffic, Parking Lot Activity, Electric Utility Substation	5/8/19 - 5/9/19	72	94.9	43
LT3	West of Hi Desert Prison, Rice Canyon Road, Leavitt community	Prisons Activity, Vehicle Traffic	5/8/19 - 5/9/19	67	92.7	43.1
LT4	Bay Drive, East of 395, Doyle community	Rangeland, Rural Residences, Vehicle Traffic	5/8/19 - 5/9/19	57		

2.2.2 Traffic Noise Modeling (Existing Conditions)

The traffic noise levels presented in Table 1 are the average noise level (L_{eq}) over the period of the measurement. In order to determine the CNEL associated with current traffic volumes, traffic modeling is performed. The existing CNEL was calculated for each of the roadways represented by the short-term measurement locations.

Traffic counts, vehicle speeds, roadway configuration, and noise levels recorded during the short-term measurements were used to set up and calibrate the TNM 2.5 Traffic Noise Model (FHWA 2004) in order to model existing traffic noise (CNEL) along the roadway segments adjacent to these measurement points. In accordance with FHWA guidelines for TNM 2.5, the counted vehicles at each measurement point were normalized to a one-hour volume (for example if the measurement period was for thirty minutes, the counted number of vehicles was doubled to account for vehicles passing the measurement point during a 60-minute period). The normalized traffic volume, vehicle composition ratios, vehicle speeds, and lane configurations recorded during the noise measurement at each location were used to calibrate the model and verify the input used in the noise model. The modeled L_{eq} for short-term measurement locations are within two dB of the measured noise levels. This result generally confirms the assumptions used in the noise model.

The calibrated noise model was then run using "existing" average daily trip (ADT) data. For State highways (those within the jurisdiction of the California Department of Transportation or CalTrans), ADT data was obtained from the Caltrans 2017 annual traffic count report (CalTrans 2017). For County-maintained roadways, ADT data was supplied by Lassen County Public Works. The existing scenario input ADT data for the model runs in presented in Attachment 3 (Table A - Traffic Count Data and Future traffic Volume Forecast Summary). Worksheets based upon the FHWA TNM 2.5 algorithms and used for determining the existing CNEL for each of the roadways are provided in Attachment 3; the CNEL value is identified in each case to correspond to the associated noise level measurement location. Dudek also calculated the distance to the 65 dBA CNEL contour, using the standard outdoor attenuation rate of 3 dB per doubling of distance. Tables 3 and 4 in the **Noise Element** summarize the modeling results for the Existing CNEL values for highways and roads in Lassen County.

It should be noted the modeling of roadway traffic noise ignores topography, the presence of structures or walls, and the presence of vegetation, and is therefore very conservative (i.e., the presence of buildings along a roadway would partially or fully block the propagation of sound, reducing the distance from the roadway to the calculated noise contour boundary). The distance to the existing 65 dBA CNEL contour is also reported in Tables 3 and 4 of the **Noise Element**.

3 Predicted Future Noise Levels

The highway and major roadway network in Lassen County represent the most important source of community noise, given that roadways are pervasive throughout every section of the County. Therefore, the modeling of traffic noise associated with ADT forecasts pertaining to major local roadways and highways is an important aspect of predicting future community noise levels in Lassen County.

In order to predict future traffic volumes on State highways, Dudek determined the change from 2013 to 2017 at each highway noise measurement location, based upon published Caltrans traffic counts (Caltrans 2013 and 2017). The average annual traffic volume growth rate from this determination was then applied on an annual basis through 2040. For County-maintained roads, Dudek applied the annual growth rate indicated in the 2017 Regional Transportation Plan (LCTC 2018) to each of the ADT volumes supplied for roadway segments by the

County Public Works Department. The RTP identifies an annual growth rate of -0.22%, which Dudek applied to the 2018/2019 County roads ADT values to the Year 2040.

The calibrated noise model was then run using the calculated Year 2040 ADT data (described above) for each of the selected highway and roadway segments. The Year 2040 scenario input ADT data for the model runs in presented in Attachment 3 (Table A - Traffic Count Data and Future traffic Volume Forecast Summary). Worksheets based upon the FHWA TNM 2.5 algorithms and used for determining the future predicted (Year 2040) CNEL for each of the roadways are provided in Attachment 3; the Year 2040 CNEL value in the worksheets is identified in each case to correspond to the associated noise level measurement location. Dudek also calculated the distance to the Year 2040, 65 dBA CNEL contour, using the standard outdoor attenuation rate of 3 dB per doubling of distance. Tables 3 and 4 in the **Noise Element** summarize the modeling results for the Year 2040 CNEL values for highways and roads in Lassen County, indicating the future distance to the 65 dBA CNEL contour from highways and roads.

It should be noted the modeling of roadway traffic noise ignores topography, the presence of structures or walls, and the presence of vegetation, and is therefore very conservative (i.e., the presence of buildings along a roadway would partially or fully block the propagation of sound, reducing the distance from the roadway to the calculated noise contour boundary).

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ATTACHMENT 1

SUMMARY OF NOISE DATA SOURCES

Lassen County Noise Element Update - Summary of Noise Data Sources

Name	Data Reference	Community Noise Source
Ambient Community Noise Levels		
LT1 - Fir Street (Westwood)	Long-term Measurement	Residences, Vehicle Traffic
LT2 - Richmond Road (Susanville)	Long-term Measurement	Rail, Vehicle Traffic
LT3 - Leavitt Prisons	Long-term Measurement	Prisons Activity, Vehicle Traffic
L4 - Doyle	Long-term Measurement	Rangeland, Rural Res., Vehicle Traffic
Roadways / Highways		
ST1.1 Clarke Street (Doyle)	Short-term Measurement	Vehicle Traffic
ST1.2 US 395 - Longview Elementary (Doyle)	Short-term Measurement	Vehicle Traffic
ST2.1 Susan Hills Drive (Susanville)	Short-term Measurement	Vehicle Traffic
ST2.2 Richmond Road (Susanville)	Short-term Measurement	Vehicle Traffic
ST2.3 Gold Run Road	Short-term Measurement	Vehicle Traffic
ST2.4 Wingfield Road	Short-term Measurement	Vehicle Traffic
ST3.1 US 395 at Sears Road (Janesville)	Short-term Measurement	Vehicle Traffic
ST3.2 Main Street (Janesville)	Short-term Measurement	Vehicle Traffic
ST3.3 North Main (Janesville)	Short-term Measurement	Vehicle Traffic
ST4.1 Johnstonville Road	Short-term Measurement	Vehicle Traffic
ST4.2 Johnstonville Road (rural)	Short-term Measurement	Vehicle Traffic
ST4.3 Center Rd (Johnstonville)	Short-term Measurement	Vehicle Traffic
ST4.4 US 395 Johnstonville	Short-term Measurement	Vehicle Traffic
ST5.1 US 395 at Wendel Road (Litchfield)	Short-term Measurement	Vehicle Traffic
ST5.2 Wendel at 395	Short-term Measurement	Vehicle Traffic
ST6.1 Tara Way	Short-term Measurement	Vehicle Traffic
ST6.2 Eagle Lake Rd. at Forest	Short-term Measurement	Vehicle Traffic
ST6.3 SR36 at Eagle Lake Rd. (Eagle Lake)	Short-term Measurement	Vehicle Traffic
ST6.4 SR 44 at SR36	Short-term Measurement	Vehicle Traffic
ST7 US 395 at Schoolhouse (Rivendale)	Short-term Measurement	Vehicle Traffic
ST8 US 395 at Lassen St (Madeline)	Short-term Measurement	Vehicle Traffic
ST9.1 SR299 at Market (Bieber)	Short-term Measurement	Vehicle Traffic
ST9.2 Market Street (Bieber)	Short-term Measurement	Vehicle Traffic
ST9.3 Susanville Road (Bieber)	Short-term Measurement	Vehicle Traffic
ST10 SR 139 (Willowcreek Campground)	Short-term Measurement	Vehicle Traffic
ST11.1 Eagle Lake Rd. at LakeView (Eagle Lake)	Short-term Measurement	Vehicle Traffic
ST11.2 Mahogany Way at Ivy Way (Eagle Lake)	Short-term Measurement	Vehicle Traffic
ST12.1 Eagle Lake Rd. at Gallitin (Eagle Lake)	Short-term Measurement	Vehicle Traffic
ST12.2 Gallatin Road (Eagle Lake)	Short-term Measurement	Vehicle Traffic
ST13.1 Mooney Road (Westwood)	Short-term Measurement	Vehicle Traffic
ST13.2 SR36 (Westwood)	Short-term Measurement	Vehicle Traffic
ST13.3 Mooney (3rd St) Westwood	Short-term Measurement	Vehicle Traffic
ST14.1 Garnier Road (Herlong)	Short-term Measurement	Vehicle Traffic
ST14.2 Herlong Access Road (Herlong)	Short-term Measurement	Vehicle Traffic
ST15 SR 70 (Hallelujah Junction)	Short-term Measurement	Vehicle Traffic
ST16 Skyline Road (Susanville)	Short-term Measurement	Vehicle Traffic
ST17.1 Standish-Buntingville Rd	Short-term Measurement	Vehicle Traffic
ST17.2 Sunnyside Road (Buntingville)	Short-term Measurement	Vehicle Traffic

Lassen County Noise Element Update - Summary of Noise Data Sources

Name	Data Reference	Community Noise Source
Airports / Heliports		
Airport - Bieber (Southard Field)	Lassen County ALUP 1988	Airport Operations/Air Traffic
Airport - Herlong	Lassen County ALUP 1988	Airport Operations/Air Traffic
Airport - Ravendale	Lassen County ALUP 1988	Airport Operations/Air Traffic
Airport - Spaulding (Eagle lake)	Lassen County ALUP 1988	Airport Operations/Air Traffic
Airport - Susanville Municipal	Susanville ALUP 1987	Airport Operations/Air Traffic
Amadee Army Airfield	AME ALUCP 2015	Airport Operations/Air Traffic
CalFire Helipad Bieber	2003 Helipad Noise Study	Helipad Operations/Heli. Traffic
Susanville Hospital Helipad	2003 Helipad Noise Study	Helipad Operations/Heli. Traffic
Stationary Noise Sources		
Banner Lassen Hospital	Short-term Measure (ST18)	Mechanical Equipment / Parking Lots
Big Valley Lumber	1989 Noise Element	Industry / Mill Operations
Calif Correction Center	Long-term Measure (LT3)	Mechanical Equip/ Prison Activites
Diamond Mtn Speedway	Short-term Measure (ST20)	Car Racing
Federal Corrections Facility (Herlong)	1989 Noise Element	Mechanical Equip/ Prison Activites
High Desert State Prison	Long-term Measure (LT3)	Mechanical Equip/ Prison Activites
HL Power Plant	Short-term Measure (ST19)	Industry / Power Plant Operations
Honey Lake Motocross	County File Noise Reports	Motocross Racing
Pozzolon Plant	1989 Noise Element	Industry / Plant Operations
Sierra Army Depot	2019 Environmental Assess	Mechanical Equip/ Vehicle Ops.
Sierra Pacific Mills	1989 Noise Element	Industry / Mill Operations
Standish Gravel Pit	1989 Noise Element	Mining Equipment/Materials Handling
Ward Lake Pit	2019 Noise Assessment	Mining Equipment/Materials Handling

ATTACHMENT 2

FIELD NOISE MEASUREMENT DATA

ATTACHMENT 2.1

SHORT-TERM TRAFFIC NOISE MEASUREMENT DATA

11630 Lassen County Noise Element Update - Short-Term Traffic Noise Level Measurement Data

Site Slow Response dBA weighting

	Date hh:mm	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	SLM Ser #
1.1	3/18/2019 14:04	30.1 min	52.9	85.5	79.4	40.3	61	47	45	41	41	41	39	41	42.7	3.68	55	45	43	1008
1.2	3/18/2019 14:54	15.0 min	70.9	100.4	85.2	42	81	77	75	61	45	43	41	61	60.4	10.82	79	75	71	1008
2.1	3/19/2019 18:32	15.1 min	54.2	83.8	75.2	18.5	69	55	45	39	35	35	35	39	40.5	6.25	63	48.8	41	1008
2.2	3/19/2019 18:08	15.1 min	68.8	98.4	83.8	37.9	79	75	73	53	41	39	37	53	54.5	12.12	79	73	65	1008
2.3	3/19/2019 17:43	15.0 min	60.9	90.4	76.8	38.7	73	67	63	53	43	41	39	53	52.5	7.55	71	63	57	1008
2.4	3/19/2019 17:18	15.0 min	58.6	88.2	80.4	23.2	71	63	57	45	41	39	39	45	47.6	7.03	68.3	59	51	1008
3.1	3/18/2019 17:48	15.0 min	70	99.5	87.2	40.2	81	77	73	53	41	41	39	53	55.5	11.76	79	75	65	1008
3.2	3/18/2019 18:08	15.3 min	69.8	99.4	91.6	39	81	67	65	41	39	39	39	41	47.1	10.42	73	65	53	1008
3.3	3/18/2019 18:28	15.0 min	65.5	95	86.2	37.3	77	71	63	45	41	39	37	45	48.1	9.31	75	65	51	1008
4.1	3/19/2019 16:23	15.0 min	61.2	90.7	78	37.1	73	67	61	51	47	47	45	51	52.5	6.33	71	63	55	1008
4.2	3/19/2019 15:38	15.1 min	73.8	103.4	87.1	42.6	83	79	77	67	55	51	45	67	66.3	8.85	81	77	73	1008
4.3	3/19/2019 15:58	15.1 min	75	104.6	88.9	54.7	85	79	77	69	61	57	55	69	69.3	6.68	83	79	75	1008
4.4	3/19/2019 16:48	15.2 min	77.3	106.9	91	49	85	83	81	69	57	55	51	69	69.4	8.97	85	81	77	1008
5.1	3/19/2019 8:58	15.0 min	66.7	96.2	84.9	38.2	79	73	65	41	37	37	37	41	45.4	10.8	77	67	45	1008
5.2	3/19/2019 9:23	15.0 min	58	87.5	82.5	39.1	69	47	43	39	39	39	39	39	40.9	5	59.2	43	41	1008
6.1	3/20/2019 10:27	15.0 min	41.5	71	52.7	37.2	47	43	43	39	39	39	37	39	40	1.75	45	43	41	1008
6.2	3/20/2019 9:38	30.4 min	62.6	95.2	86.2	20.9	75	61	53	39	37	37	37	39	41.8	8.2	71	55	41	1008
6.3	3/20/2019 9:13	14.8 min	75.5	105	87.2	43.6	83	81	79	67	51	47	43	67	66.9	10.11	83	81	75	1008
6.4	3/20/2019 10:57	15.0 min	70.1	99.6	86.3	13.2	83	77	71	45	39	37	37	45	50.5	12.88	81	73	59	1008
7	3/19/2019 10:28	14.9 min	67.8	97.3	87.2	22	81	71	65	51	45	43	41	51	52.8	8.87	79	67	57	1008
8	3/19/2019 11:08	15.0 min	66.5	96	84.7	43	81	71	59	45	43	43	43	45	48.6	8.53	77	63	50	1008
9.1	3/19/2019 13:03	15.0 min	64.5	94	84	36.7	77	69	67	53	45	43	41	53	53.7	8.42	73	67	59	1008
9.2	3/19/2019 13:23	30.0 min	50.5	83.1	74.3	40.3	59	51	49	43	41	39	39	43	43.4	4.11	55	49	45	1008
9.3	3/19/2019 12:33	15.0 min	68.9	98.4	81.9	51.5	77	73	71	65	57	55	53	65	64.6	5.48	75	73	69	1008
10	6/20/2019 16:51	15.0 min	60.5	90	78.2	40.6	75	65	55	43	41	39	39	43	46.2	7.77	73	59	49	7002
11.1	6/20/2019 15:22	15.0 min	53.9	83.4	70	43.6	63	59	55	49	45	43	43	49	49.5	4.64	61	57	53	7002
11.2	6/20/2019 14:38	15.0 min	46.9	76.4	61	41.6	57	51	47	43	41	41	41	43	44.2	3.05	53	49	45	7002
12.1	6/20/2019 13:48	14.6 min	53	82.4	76.6	40.4	65	51	43	39	39	39	39	39	41.1	4.86	61	45	41	7002
12.2	6/20/2019 13:19	14.1 min	43.3	72.6	64.5	40.6	47	41	41	39	39	39	39	39	39.7	2	43	41	39	7002
13.1	6/20/2019 11:34	15.0 min	53.1	82.6	75.3	40.6	65	51	49	45	41	39	39	45	44.5	4.66	61	49	45	7002
13.2	3/20/2019 11:47	15.0 min	70.1	99.7	87.8	40.2	81	77	73	53	41	41	41	53	55.3	11.57	79	75	63	1008
13.3	3/20/2019 12:12	15.1 min	65.2	94.8	86.5	16.2	77	69	63	41	37	37	37	41	45.5	10.64	75	65	49	1008
14.1	3/18/2019 15:29	15.0 min	64.2	93.7	82.3	40.3	77	71	65	43	39	39	39	43	46.9	9.96	75	67	49	1008
14.2	3/18/2019 15:58	15.0 min	66.7	96.2	84.3	37.3	79	73	69	43	39	39	37	43	48.3	11.34	77	71	53	1008
15	3/18/2019 13:09	15.1 min	67.2	96.8	80.7	41.1	77	75	71	49	43	41	41	49	53.8	10.77	77	73	61	1008
16	3/19/2019 8:13	15.0 min	70.2	99.7	85.5	43.7	81	77	73	53	45	45	43	53	56.8	10.67	79	75	65	1008
17.1	3/18/2019 16:43	15.0 min	66.3	95.8	90.2	39	77	71	65	41	39	39	39	41	45.7	10.4	75	67	47	1008
17.2	3/18/2019 17:24	14.5 min	59.9	89.3	82	26.5	73	65	55	39	39	39	39	39	43.4	8.15	71	59	43	1008

Short-Term Traffic Noise Measurement Data Table

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1102 R STREET
SACRAMENTO, CALIFORNIA 95811
T 916.443.8335 F 916.443.5113

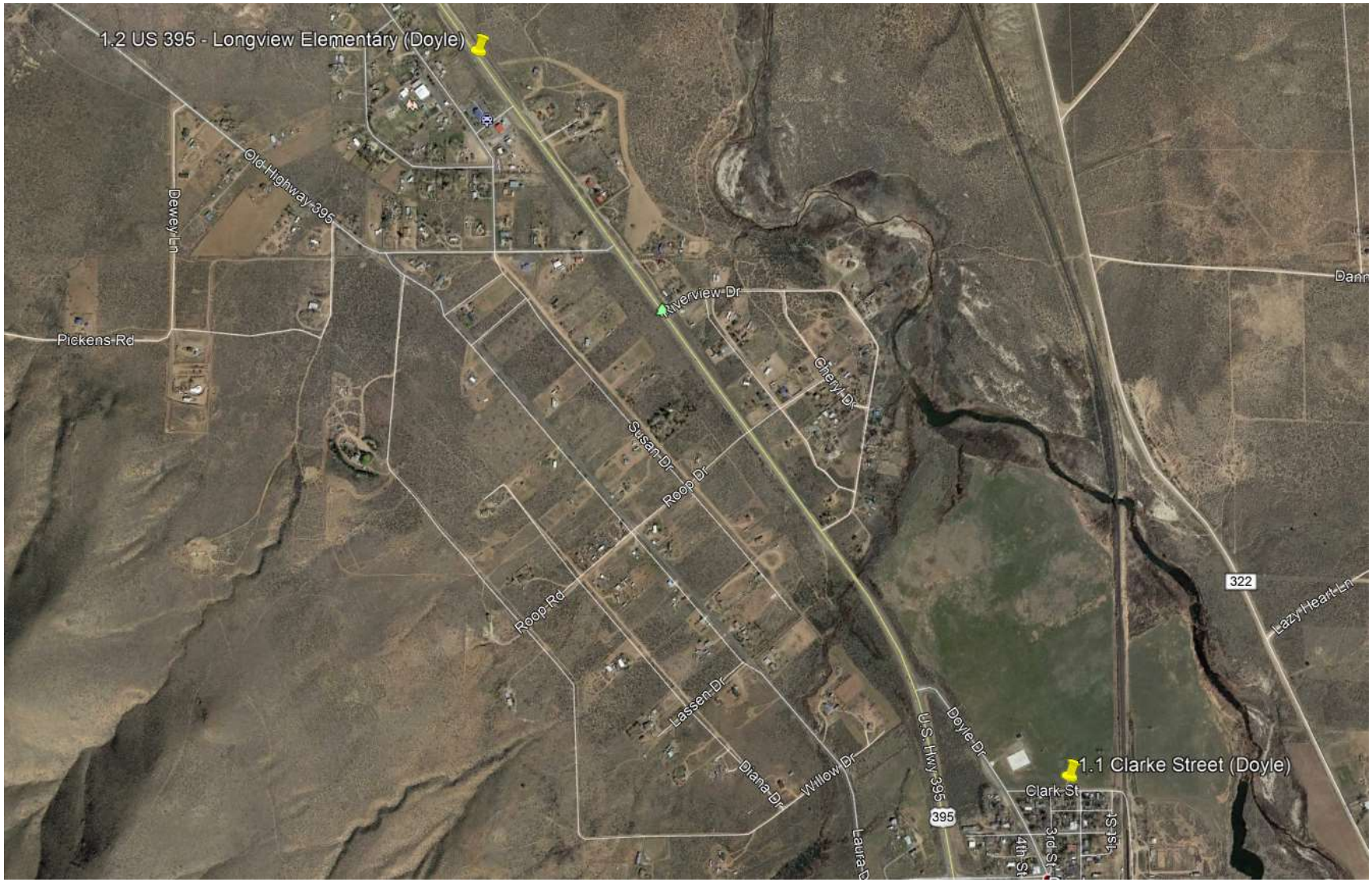
Roadway Noise Measurement Locations Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13[1]	14[1]	15	16	17
US 395	X		X	X	X		X	X									
SR 299									X								
SR 139										X *	X *						
SR 44						X *											
SR 36						X							X				
SR 70															X		
Eagle Lake Rd (MacIntosh Hwy)						X					X *	X *					
Susanville Road									X								
Standish-Buntingville Road																	X
Mooney Road													X				
Richmond Road		X															
Johnstonville Road				X													
Herlong Access Road														X			
Garnier Road														X			
Skyline Road																X	
Gold Run Road		X															
Sunnyside Road																	X
Wingfield Road		X															
Center Road				X													
Janesville Main Street			X														

Notes: [1] Long-term (24 hour) measurement location

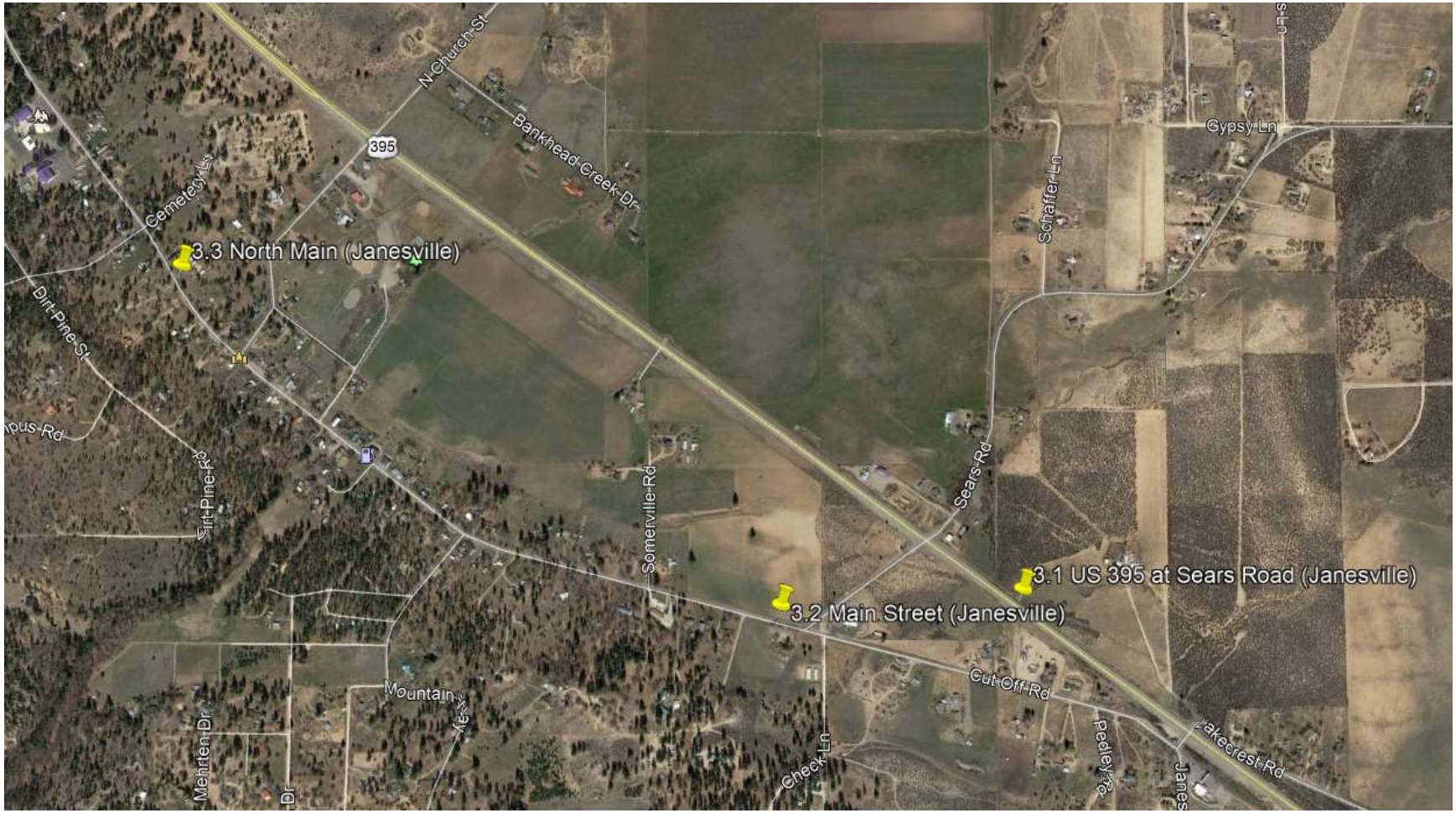
* Summer time noise measurement

Measurement Locations - 1 Doyle

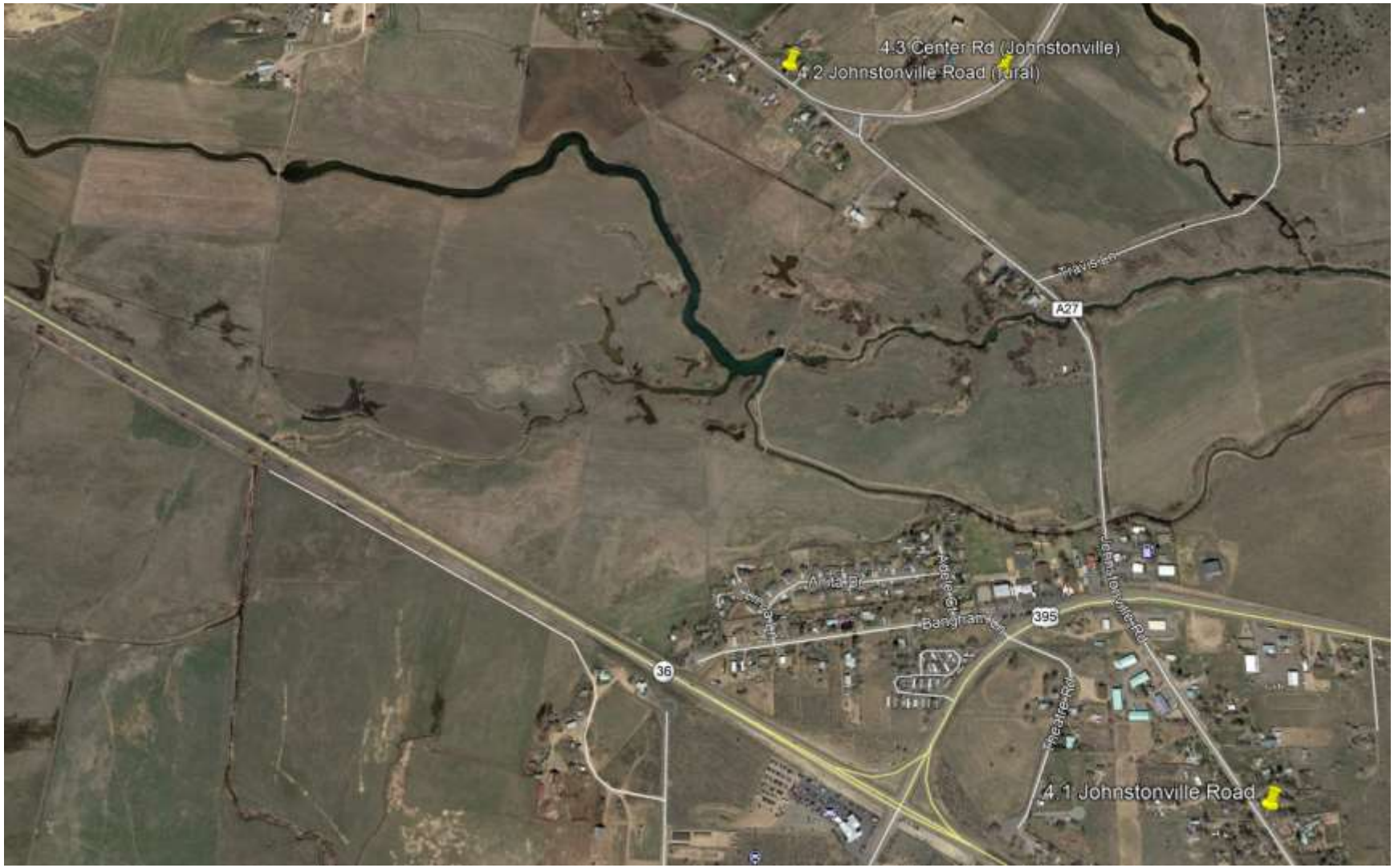


Measurement Locations 2 South Susanville

Measurement Locations 3 Janesville



Measurement Locations 4 Johnstonville



Measurement Locations 5 395 at Wendell Road

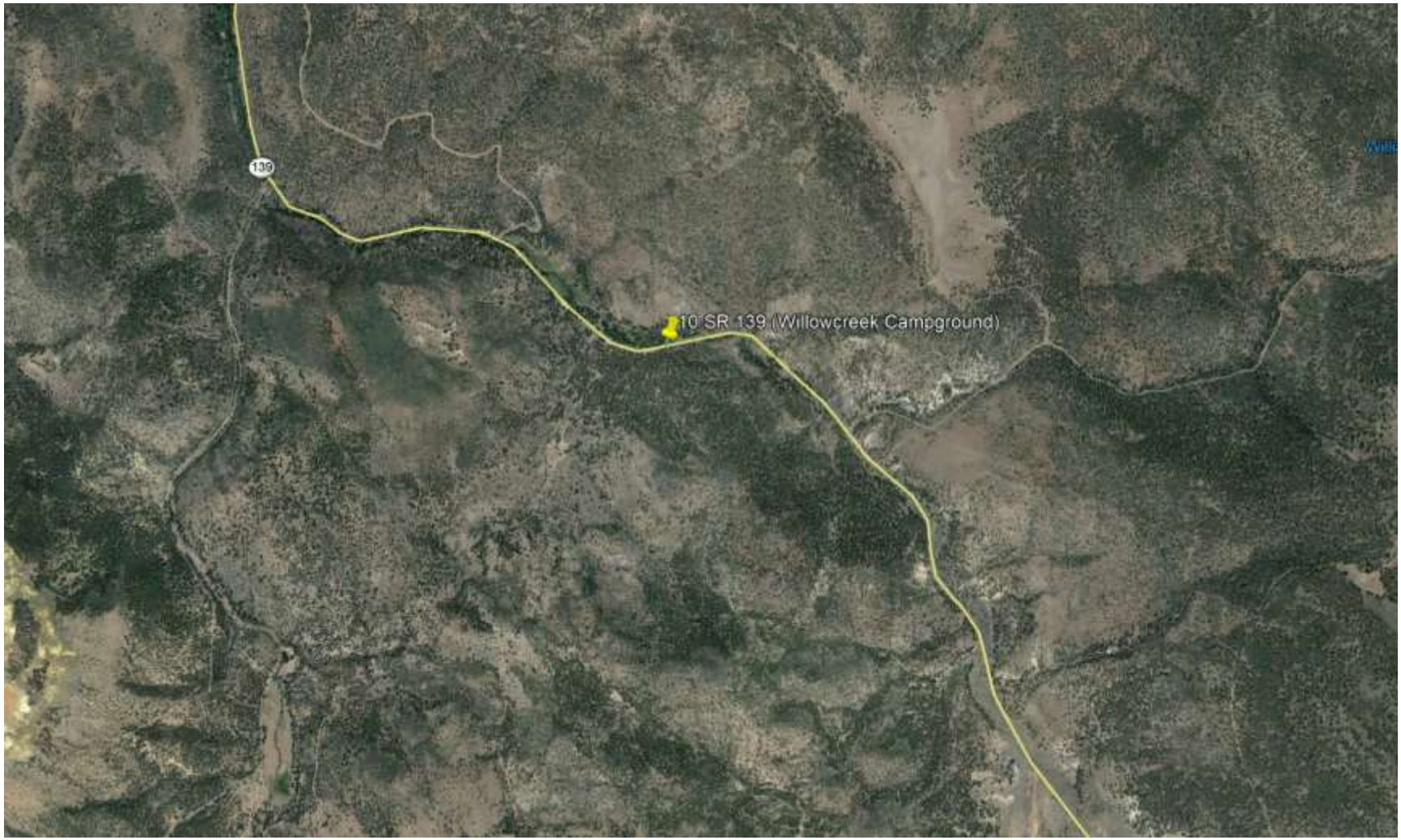
Measurement Location 6 Susanville West

Measurement Location 7 Short-term measurement on 395 at Schoolhouse Road (Rivendale)

Measurement Location 8 Short-term measurement on 395 near Lassen Street (Madeline)

Measurements Location 9 Bieber

Measurement Location 10 Short-term measurement on SR-139 near campground (Summer)

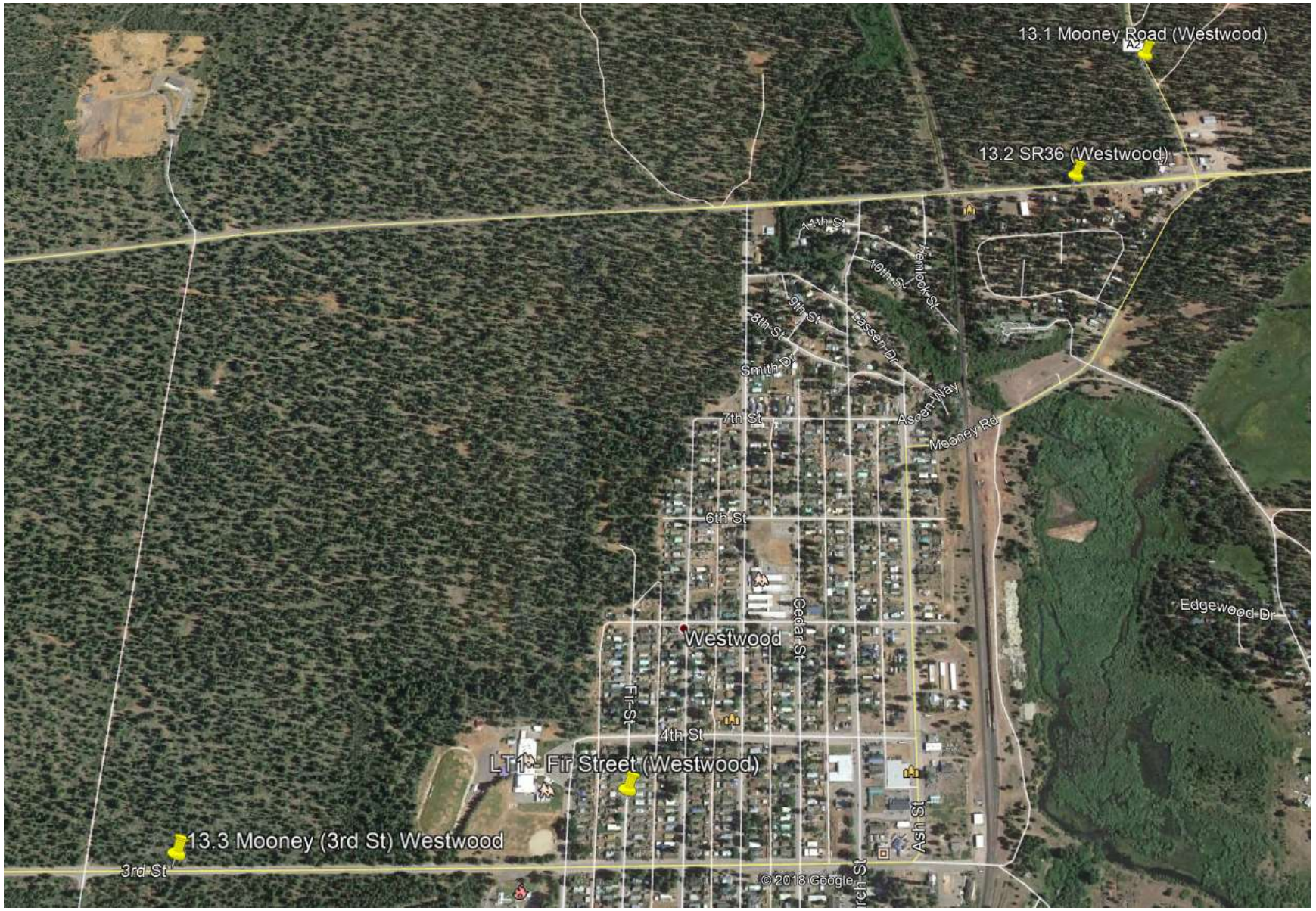


Measurements Location 11 Eagle Lake (Summer)

Measurements Location 12 Short-term measurement Gallatin Beach and Eagle Lake Road (Summer)

Measurements Location 13

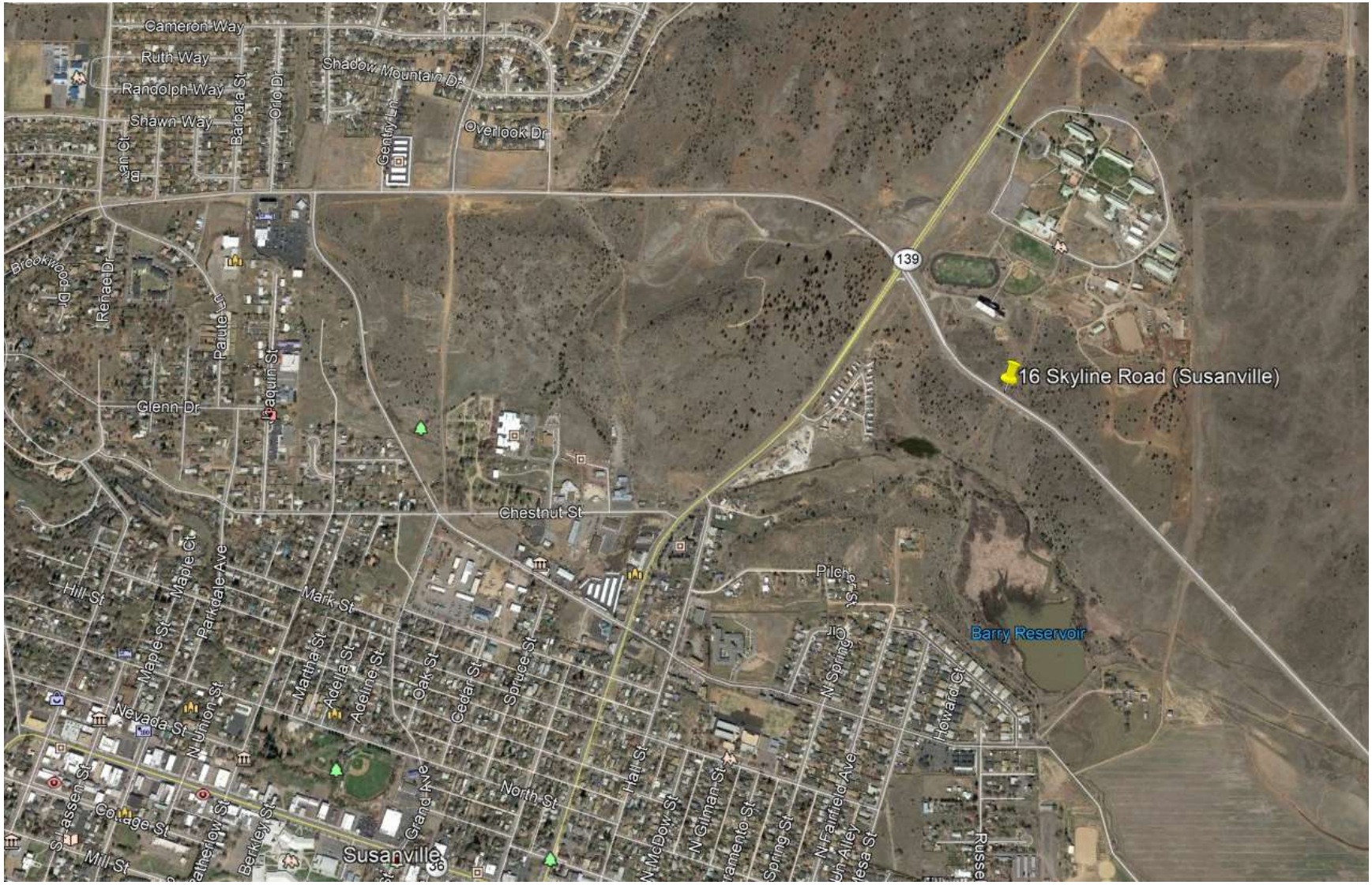
Long-term measurement at 311 Fir



Measurements Location 14 Herlong

Measurements Location 15 SR-70 Hallalujah Junction

Measurement Location 16 Skyline Road (Susanville)



Measurement Location 17 Buntingville

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 1.1 CLARK STREET
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/18/2019 — END DATE: 03/18/2019
START TIME: 1405 — END TIME: 1435

METEOROLOGICAL CONDITIONS

TEMP: ~~[illegible]~~79 F — HUMIDITY: 11.1 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 2 MPH — DIR. N NE S SE S SW W (NW)
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 15p92D008
CALIBRATOR: ~~B&K~~ R8090 — SERIAL # B008500 VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
02	1405	1435	52.9	79.4	40.3	41	41	45	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ~~[illegible]~~ COLLECTOR — DIST. TO RDWY C/L OR EOP: 8 ft
TRAFFIC COUNT DURATION: 30 MIN — SPEED: ____ MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS	2			
	MED TRKS	1			
	HVY TRKS				
	BUSES				
	MOTRCLS	1			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

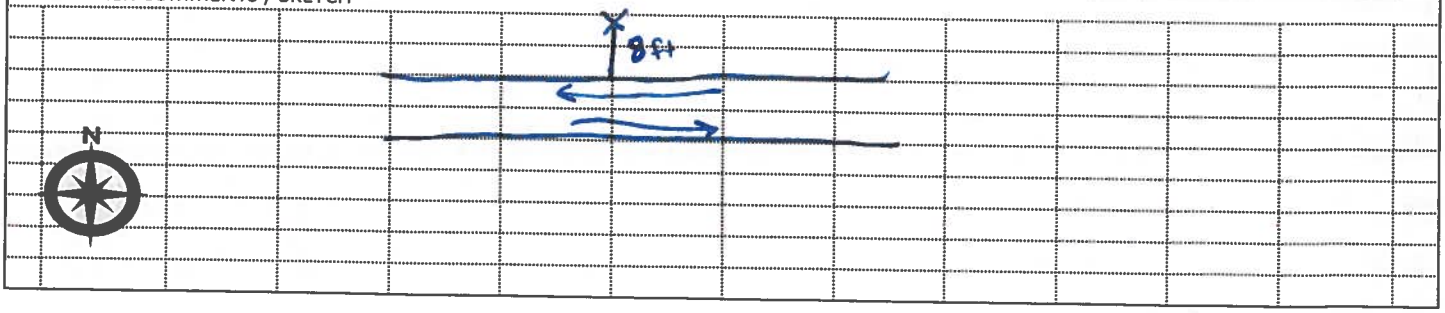
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 1.2 US 395
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/18/2019 — END DATE: 03/18/2019
START TIME: 1455 — END TIME: 1510

METEOROLOGICAL CONDITIONS

TEMP: 84 F — HUMIDITY: 6.5 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: 2 MPH — DIR. N NE S SE S SW W (NW) — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL #: 15D721008
CALIBRATOR: REED R8090 — SERIAL #: B008500VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
03	1455	1510	70.9	85.2	42	45	61	75	

COMMENTS: POINT MOVED TO (40.0512965, -120.1258864), APPROX. 600M NORTH OF GIVEN LOCATION.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR EOP: 20 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED 65

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	65			
MED TRKS	25			
HVY TRKS	13			
BUSES	3			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

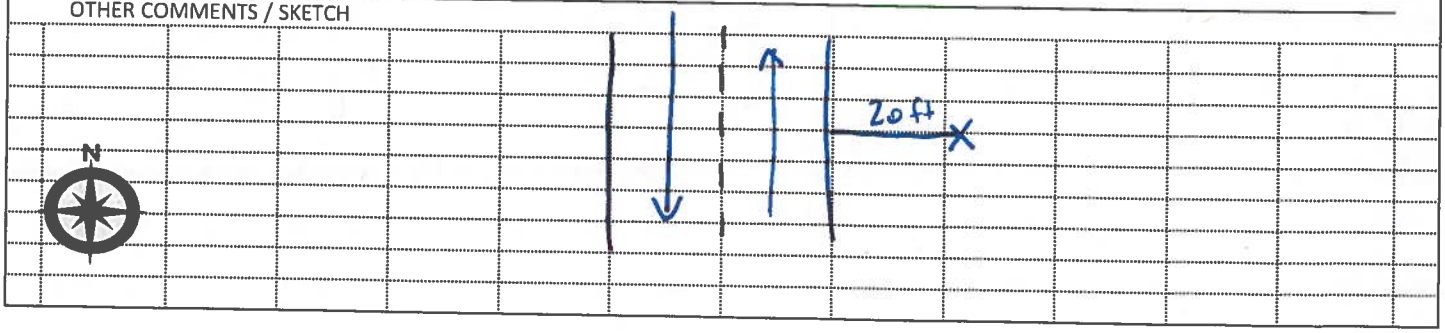
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED FLAT OTHER: SOUND METER PLACED 1' BELOW GRADE.
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 2.1 SUSAN HILLS DRIVE
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1835 — END TIME: 1850

METEOROLOGICAL CONDITIONS

TEMP: 71 F — HUMIDITY: 19.8 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15892/1008
CALIBRATOR: REED R8090 — SERIAL # B0085dOVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
17	1835	1850	54.2	75.2	18.5	35	39	45	

COMMENTS: ORIGINAL POINT ON SLOPE HIGH ABOVE ROAD. POINT MOVED ACCROSS THE STREET ON SHOULDER.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ~~ARTERIAL~~ COLLECTOR — DIST. TO RDWY C/L OR (EOP): 5 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 25

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	3			
MED TRKS	1			
HVY TRKS	0			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

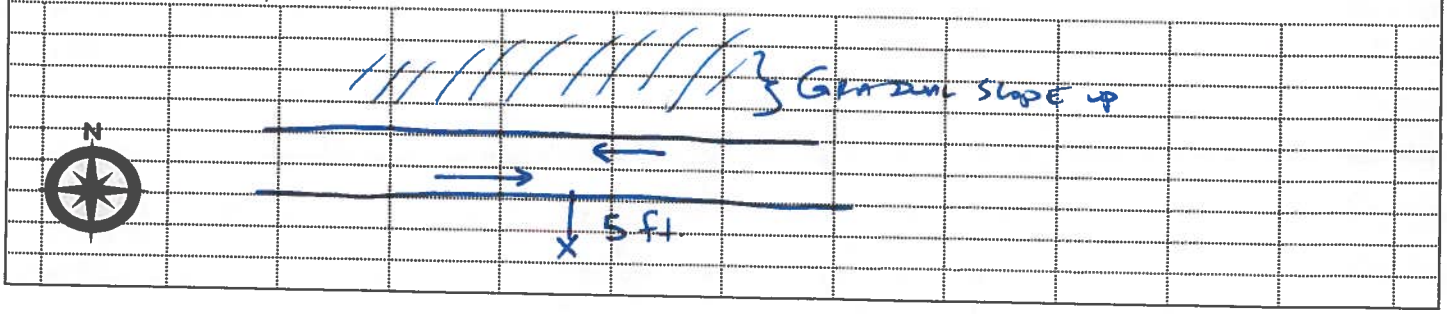
COUNT 2 (OR RDWY 2)	MIN		SPEED	
	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 25

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS @ 1843-1846) BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 2.2 — SITE ADDRESS: RICHMOND RD.
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1810 — END TIME: 1825

METEOROLOGICAL CONDITIONS

TEMP: 71 F — HUMIDITY: 19.8 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15092108
CALIBRATOR: REED R8090 — SERIAL # B008500VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER: ____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
16	1810	1825	68.8	83.8	37.9	41	53	73	

COMMENTS: ORIGINAL POINT CLOSE TO NARROW SHOULDER. POINT MOVED TO (40.3918793, -120.6503782) APPROX. 60M WEST

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER: ____
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR EOP: 10 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 55

	DIRECTION	COUNT 1 (OR RDWY 1) NB/EB	COUNT 1 (OR RDWY 1) SB/WB	COUNT 1 (OR RDWY 1) MIN NB/EB	COUNT 1 (OR RDWY 1) MIN SB/WB	COUNT 1 (OR RDWY 1) SPEED NB/EB	COUNT 1 (OR RDWY 1) SPEED SB/WB	COUNT 2 (OR RDWY 2) NB/EB	COUNT 2 (OR RDWY 2) SB/WB	COUNT 2 (OR RDWY 2) MIN NB/EB	COUNT 2 (OR RDWY 2) MIN SB/WB	COUNT 2 (OR RDWY 2) SPEED NB/EB	COUNT 2 (OR RDWY 2) SPEED SB/WB
	AUTOS	23											
	MED TRKS	2Ø											
	HVY TRKS	Ø											
	BUSES	Ø											
	MOTRCLS	Ø											

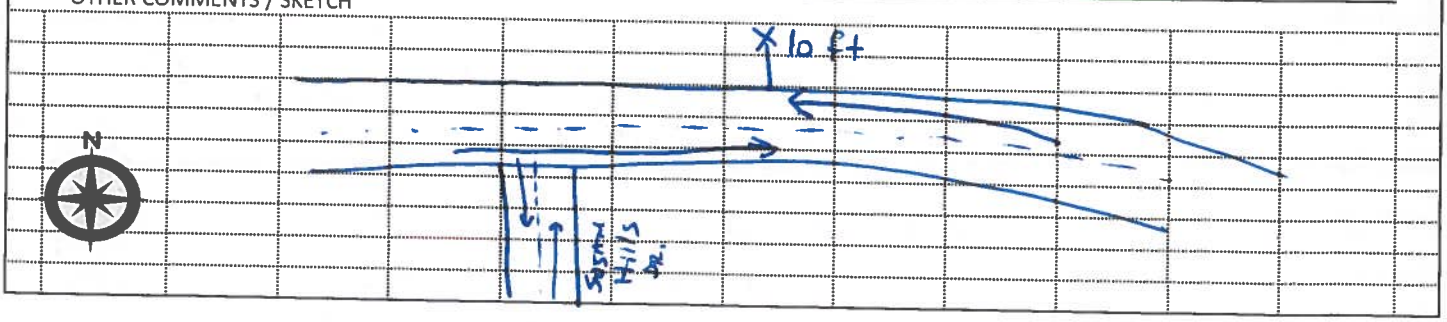
IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS) AT START OF SURVEY FOR ~30 SECONDS BIRDS DIST. INDUSTRIAL
(DIST. KIDS PLAYING) DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: OCCASIONAL VEHICLES TURNED ONTO SUSAN HILLS DR. ~5 AUTOS; COUNTED IN TALLY. + 1 MED TRK SOUTHBOUND

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER: ____
PHOTOS: ____
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 2.3 GOLD RUN ROAD
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/ /2019 — END DATE: 03/ /2019
START TIME: 1745 — END TIME: 1800

METEOROLOGICAL CONDITIONS

TEMP: 70.5 F — HUMIDITY: 17.3 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 4 MPH — DIR. N NE S SE S SW W NW (E)
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL #15@921008
CALIBRATOR: REED R8090 — SERIAL #B0085@0YR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: X

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
15	1745	1800	60.9	76.8	38.7	43	53	63	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ARTERIAL — DIST. TO RDWY C/L OR EOP: 10 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED ~~35~~ 35

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	9			
MED TRKS	9			
HVY TRKS	0			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

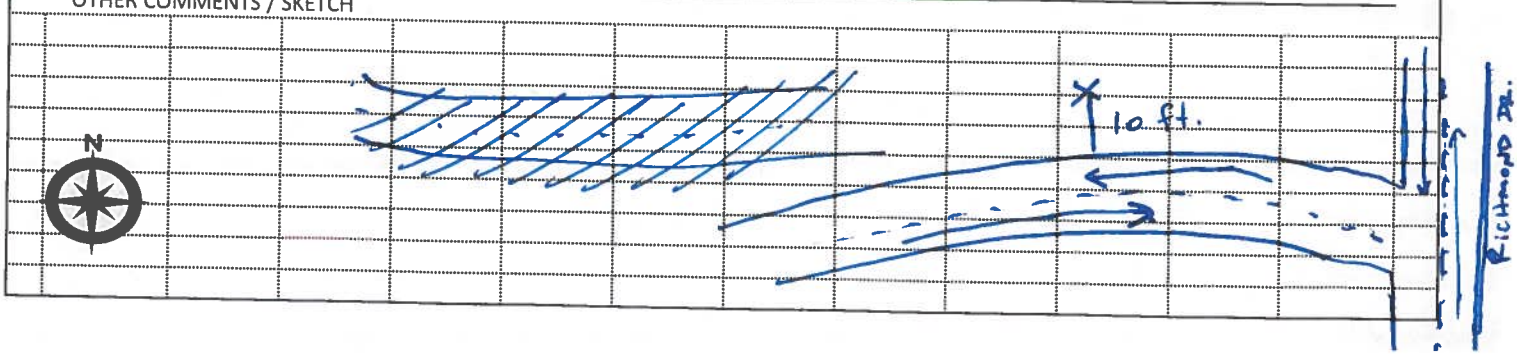
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: ~~35~~ 35

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: FREQUENT TRAFFIC OFF RICHMOND DR. TO THE EAST

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT (MIXED) FLAT OTHER: 1' DROP in GRADE ON EITHER SIDE OF ROAD. NO SHOULDER.
PHOTOS
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 2.4 WINGFIELD RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1720 — END TIME: 1735

METEOROLOGICAL CONDITIONS

TEMP: 68 F — HUMIDITY: 16.1 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 4 MPH — DIR. N NE S SE S SW W NW (E) — VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15e921008
CALIBRATOR: REED R8090 — SERIAL # B060850VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
14	1720	1735	58.6	80.4	232	41	45	57	

COMMENTS: OCCASIONAL GUSTS TO 8-10 MPH.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ~~ARTERIAL~~ COLLECTOR — DIST. TO RDWY C/L OR (EOP): 5 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 25

COUNT 1 (OR RDWY 1)

DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	~~11~~			
MED TRKS	4			
HVY TRKS	0			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

COUNT 2 (OR RDWY 2) — ____ MIN

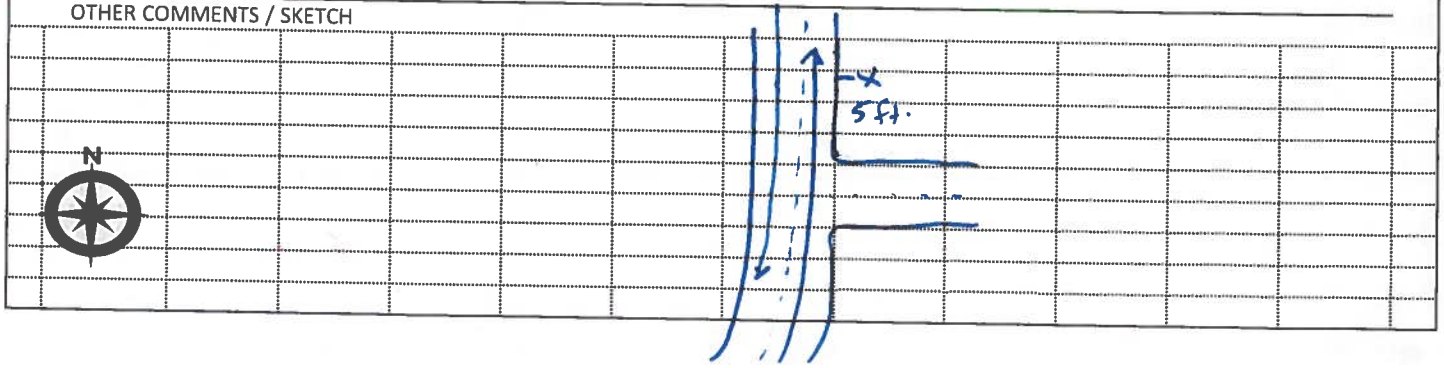
NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 25

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS) BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: OCCASIONAL DOG BARKING IN FAR DISTANCE

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: Lassen County Noise Element Update — PROJECT #: 11630
SITE ID: 3.1 US 395 @ Semas Rd.
SITE ADDRESS:
OBSERVER(S): Pedro Garcia
START DATE: 08/28/2019 — END DATE: 03/18/2019
START TIME: 1750 — END TIME: 1805

METEOROLOGICAL CONDITIONS

TEMP: 75 F — HUMIDITY: 10.0 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 15092104 08
CALIBRATOR: Rion R8090 — SERIAL # B0085 OVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
08	1750	1805	70	87.2	40.2	41	53	73	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Highway — DIST. TO RDWY C/L OR (EOP): 20 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 65

COUNT 1 (OR RDWY 1)

DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	43			
MED TRKS	18			
HVY TRKS	10			
BUSES	0			
MOTRCLS	9			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

COUNT 2 (OR RDWY 2)

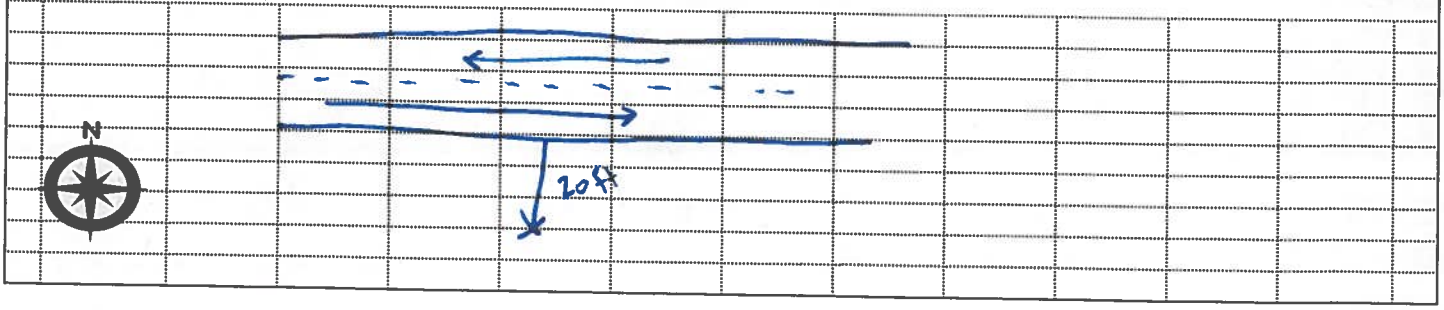
NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 3.2 MAIN ST.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/18/2019 — END DATE: 03/18/2019
START TIME: 1810 — END TIME: 1825

METEOROLOGICAL CONDITIONS

TEMP: ~~77F~~ — HUMIDITY: 10.0 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE E SE S SW W NW
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 — SERIAL # 15092198
CALIBRATOR: B&K — R8098 — SERIAL # B&K 2850VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
09	1810	1825	69.8	91.6	39	39	41	65	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ARTERIAL — DIST. TO RDWY C/L OR EOP: 10 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 25

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	6			
	MED TRKS	4			
	HVY TRKS	2			
	BUSES	0			
	MOTRCLS	2			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: ✓

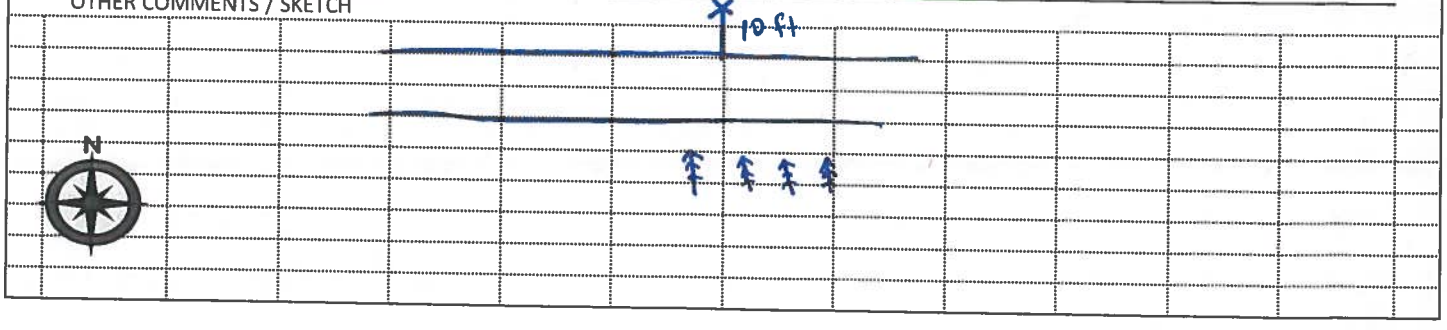
COUNT 2 (OR RDWY 2)	DURATION: ____ MIN	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 25

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS) BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: DOG STARTED BARKING FOR ~~VEH~~. AFTER 2 MOTORCYCLES PASSED. 1 MINUTE^

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: Lassen County Noise Element Update — PROJECT #: 11630
SITE ID: 3.3 North Main
SITE ADDRESS:
OBSERVER(S): Pedro Garcia
START DATE: 03/18/2019 — END DATE: 03/18/2019
START TIME: 1830 — END TIME: 1845

METEOROLOGICAL CONDITIONS

TEMP: 70 F — HUMIDITY: 15.5 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 150921008
CALIBRATOR: REED R8090 — SERIAL # B000850VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
10	1830	1845	65.5	86.2	37.3	41	45	63	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Arterial — DIST. TO RDWY C/L OR EOP: ~~left~~ 5 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 25

COUNT 1 (OR RDWY 1)

DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	4			
MED TRKS	9			
HVY TRKS	0			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

COUNT 2 (OR RDWY 2) — ____ MIN

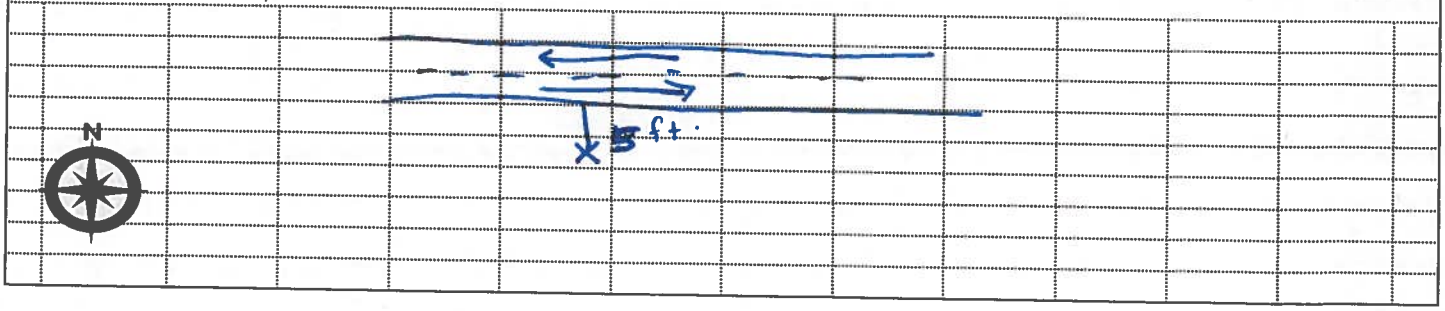
NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 25

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Pedestrian passed by first 30 seconds to ask about survey. I spoke w/ her approx. 70m away

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 4.1 JOHNSTONVILLE RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1625 — END TIME: 1640

METEOROLOGICAL CONDITIONS

TEMP: 71 F — HUMIDITY: 14.9 % R.H. — WIND: CALM / LIGHT / (MODERATE)
WINDSPD: 7 MPH — DIR. N NE S SE S SW W NW (E) — VARIABLE / STEADY / (GUSTY)
SKY: SUNNY / CLEAR / (OVRCAST) / PRTLY CLDY / FOG / RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 1S#921668
CALIBRATOR: REED R8090 — SERIAL # B#18540URS
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
12	1625	1640	61.2	78	37.1	47	51	61	

COMMENTS: POINT MOVED EAST 30M TO BE AWAY FROM SOLID FENCE

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ARTERIAL — DIST. TO RDWY C/L OR (EOP): 10 ft.
TRAFFIC COUNT DURATION: ____ MIN — SPEED: 25

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	12			
MED TRKS	5			
HVY TRKS	0			
BUSES	0			
MOTRCLS	1			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

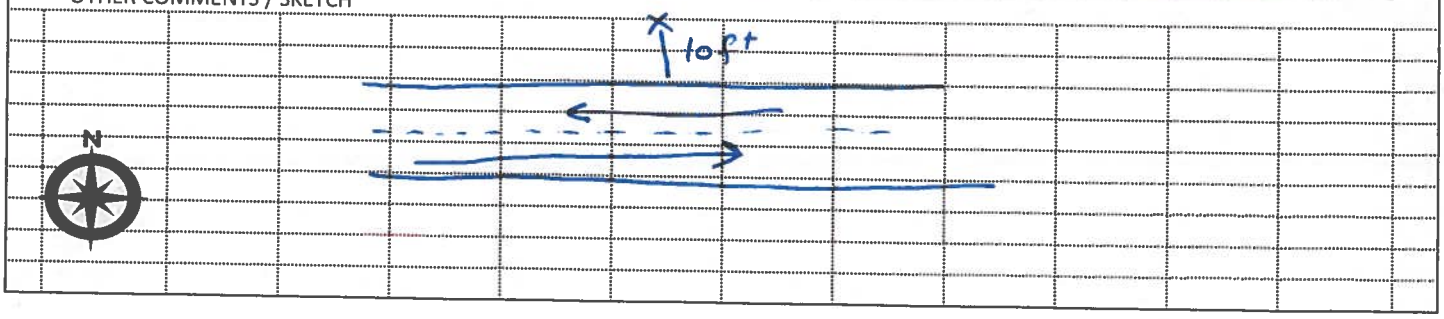
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 25

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 4.2 JOHNSTONVILLE RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: ~~1530~~ 1540 — END TIME: 1555

METEOROLOGICAL CONDITIONS

TEMP: 70 F — HUMIDITY: 17.5 % R.H. — WIND: CALM / LIGHT / (MODERATE) / VARIABLE / STEADY / (GUSTY)
WINDSPD: 8 MPH — DIR. N NE S SE S SW W NW (E)
SKY: SUNNY / CLEAR / (OVRCAST) / PRTLY CLDY / FOG / RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICOLO — TYPE 1 (2) — SERIAL # 19421608
CALIBRATOR: REED R8090 — SERIAL # B&K 8560 VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
10	1540	1555	73.8	87.1	42.6	55	67	77	

COMMENTS: OCCASIONAL GUSTS UP TO ~~15~~ 17 mpH. POINT MOVED ACCROSS THE STREET ON WIDER SHOULDER

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR (EOP): 15 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: ~~35~~ 45

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	65			
MED TRKS	40			
HVY TRKS	13			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: +

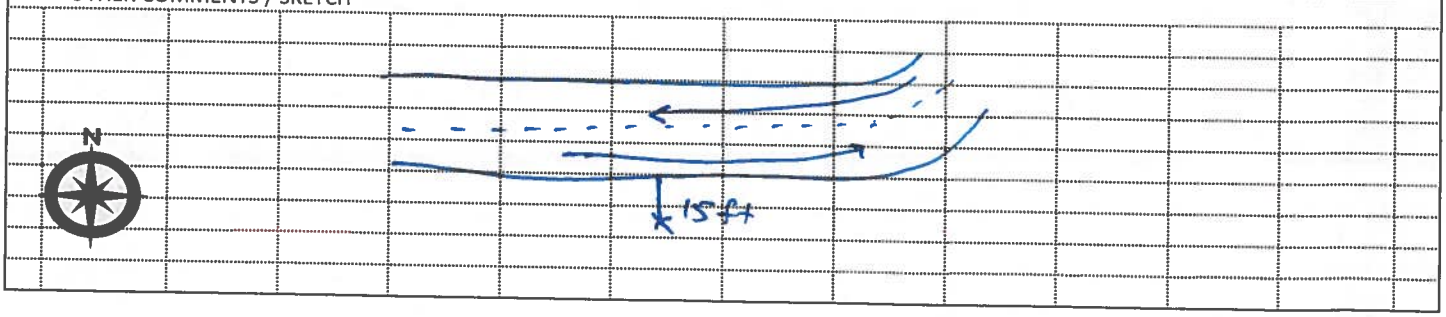
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: ~~35~~ 45

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) ~~DIST. BARKING DOGS~~ (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 4.3 CENTER RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1600 — END TIME: 1615

METEOROLOGICAL CONDITIONS

TEMP: 68 F — HUMIDITY: 21.1 % R.H. — WIND: CALM LIGHT (MODERATE) VARIABLE STEADY (GUSTY)
WINDSPD: 10 MPH — DIR. N NE S SE S SW W NW (E)
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 15492 #08
CALIBRATOR: REED R8090 — SERIAL # B#0850VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
11	1600	1615	75	88.9	54.7	61	69	77	

COMMENTS: POINT MOVED ACROSS THE STREET TO WIDER SHOULDER. OCCASIONAL GUSTS OF WIND OF 15MPH.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Highway — DIST. TO RDWY C/L OR EOP: 10 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 55

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	46			
MED TRKS	60			
HVY TRKS	14			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

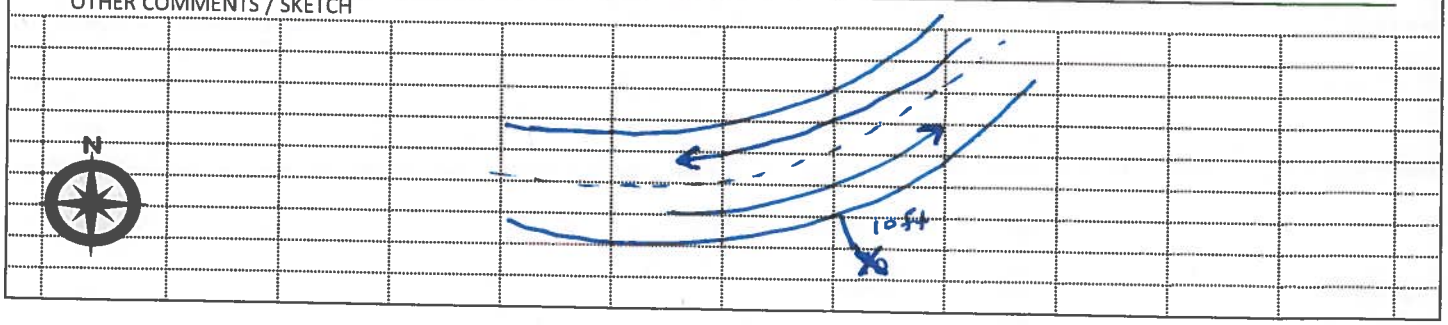
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: @1611 (1612) HELICOPTER FLEW BY IN THE DISTANCE

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 4.4 US395 JOHNSTONVILLE
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1650 — END TIME: 1705

METEOROLOGICAL CONDITIONS

TEMP: 68 F — HUMIDITY: 17.7 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 8 MPH — DIR. N NE S SE S SW W NW (E) — VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15492108
CALIBRATOR: REED R8090 — SERIAL # BA0850VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: A-WTD (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
13	1650	1705	77.3	91	49	57	69	81	

COMMENTS: POINT MOVED ACCROSS THE STREET TO WIDER SHOULDER

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR (EOP): 10 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 65

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	50			
MED TRKS	67			
HVY TRKS	9			
BUSES	1			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

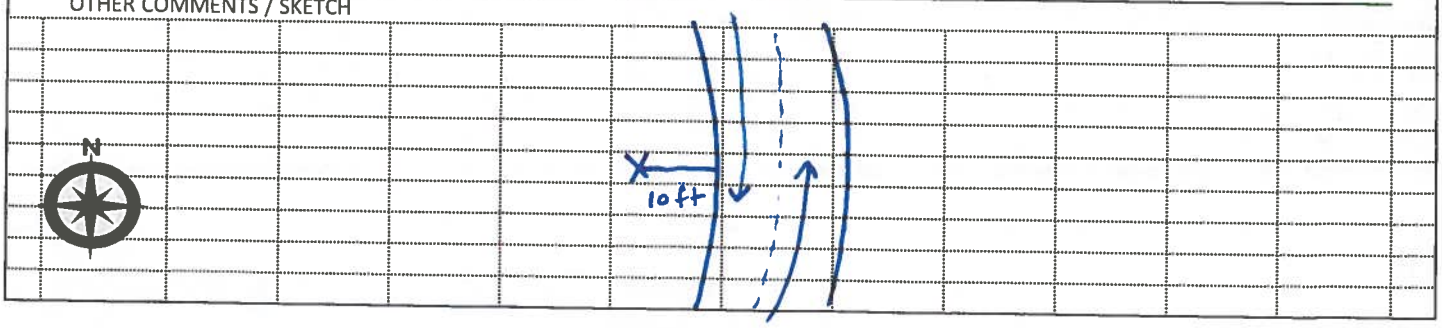
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS) BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: @ 1653 DOG STARTED BARKING APPROX. 70 M SOUTH (1656)

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER: SLIGHT DIP ON WEST SIDE SHOULDER.
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: #5.1
SITE ADDRESS: US 395 @ WENDEL RD.
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 0900 — END TIME: 0915

METEOROLOGICAL CONDITIONS

TEMP: 65 F — HUMIDITY: 24.3 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 15092108
CALIBRATOR: REED R8090 — SERIAL # B0D85 00VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER: ____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
02	0900	0915	66.7	84.9	38.2	37	41	65	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER: ____
ROADWAY TYPE: ____ — DIST. TO RDWY C/L OR EOP: 20 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 65

COUNT 1 (OR RDWY 1)	NB/EB	SB/WB	NB/EB	SB/WB
DIRECTION			MIN	SPEED
AUTOS	9			
MED TRKS	5			
HVY TRKS	2			
BUSES	1			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

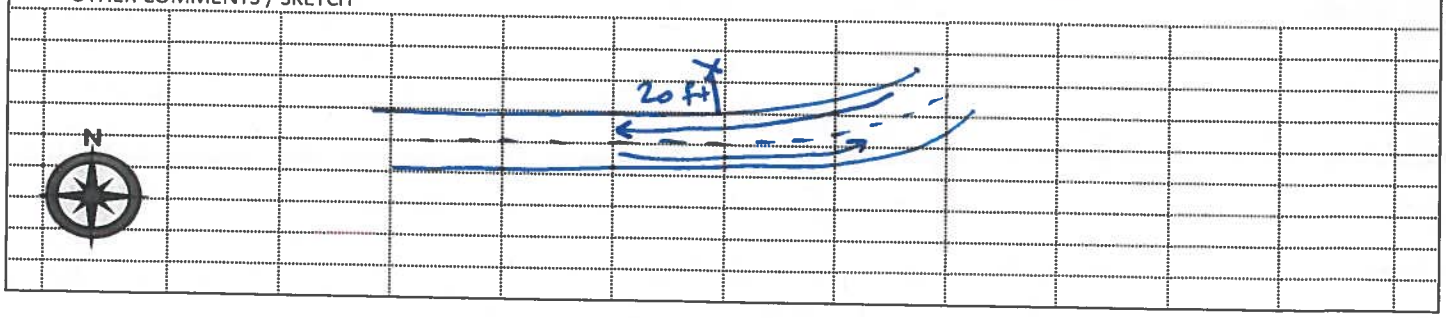
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
	MIN		SPEED	

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Flock of SNOW GOOSE Honking in the DISTANCE

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER: ____
PHOTOS: ____
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 5.2 WENDEL @ 395
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 0925 — END TIME: 0940

METEOROLOGICAL CONDITIONS

TEMP: 67 F — HUMIDITY: 23.9 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 15092100 8
CALIBRATOR: REED R8090 — SERIAL # B00850 OVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) ~~FAST~~ (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
03	0925	0940	58	82.5	39.1	39	39	43	

COMMENTS

ORIGNAL POINT NEAR NARROW SHOULDER. NEW POINT @ (40.3735572, -120.3051726) APPROX. 330m SOUTH.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR EOP: ~~30 ft~~ 10 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 55

COUNT 1 (OR RDWY 1)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	0			
MED TRKS	1			
HVY TRKS	1			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

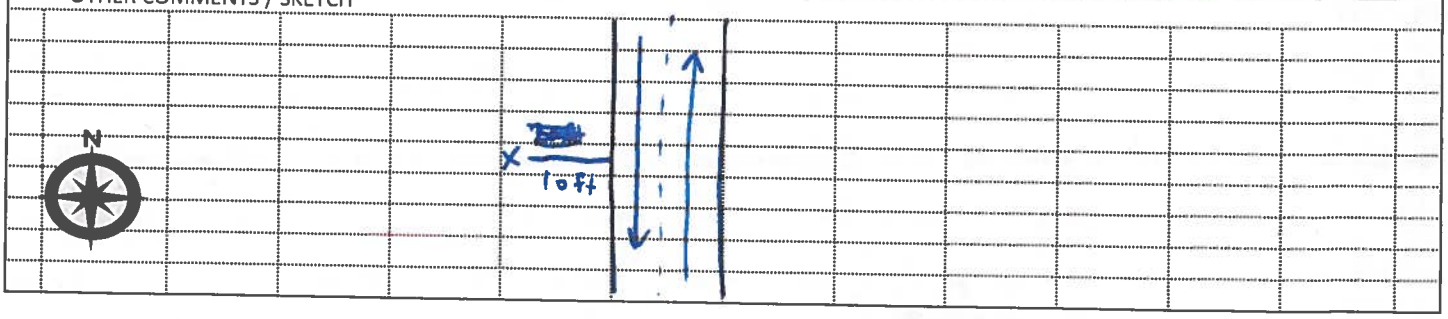
COUNT 2 (OR RDWY 2)	MIN	SPEED
	NB/EB / SB/WB	NB/EB / SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER: NARROW ROAD SURROUNDED BY LOW SHRUBS
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 6.1 TARA WAY
SITE ADDRESS:
OBSERVER(S): PEDRO CORRALES
START DATE: 03/20/2019 — END DATE: 03/20/2019
START TIME: 1030 — END TIME: 1045

METEOROLOGICAL CONDITIONS

TEMP: 54 F — HUMIDITY: 37.2 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15092068
CALIBRATOR: REED R8090 — SERIAL # B008500VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(.03)	1030	1045	41.5	52.7	37.2	39	39	43	

COMMENTS: POINT MOVED TO THE EAST ~300m AT (40.432938, -120.740196) DUE TO LAND DOG NEAR ORIGINAL POINT.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: COLLECTOR — DIST. TO RDWY C/L OR EOP: 5ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED 25

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	0			
MED TRKS	0			
HVY TRKS	0			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE

COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 25

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) (STD GARDENERS/LANDSCAPING NOISE
OTHER: SMALL GENERATOR RUNNING IN THE DISTANCE TO THE SOUTH ~300m.

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) (FLAT) OTHER: SNOW ALL OVER ROAD SHOULDERS.
PHOTOS:
OTHER COMMENTS / SKETCH

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 6.2 WILLIAM MC INTOSH @ FOREST
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/20/2019 — END DATE: 03/20/2019
START TIME: 0940 — END TIME: 1010

METEOROLOGICAL CONDITIONS

TEMP: 52 F — HUMIDITY: 38.7 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR (OVRCAST) ~~PRTLY CLDY~~ FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # I5Ø921ØØ8
CALIBRATOR: REED R8Ø9Ø — SERIAL # BØØ85ØØVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
02	0940	1010	62.6	86.2	20.9	37	39	53	

COMMENTS: POINT MOVED ACCROSS THE STREET LEVEL TO ROAD. 8 AUTOS + 2 MED TRKS DROVE FROM FOREST DR. TO EAST. ~~NE~~ NOT TALLIED IN TRAFFIC COUNTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ARTERIAL — DIST. TO RDWY C/L OR (EOR): 5 ft
TRAFFIC COUNT DURATION: 30 MIN — SPEED: 35

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	2			
	MED TRKS	6			
	HVY TRKS	Ø			
	BUSES	Ø			
	MOTRCLS	Ø			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

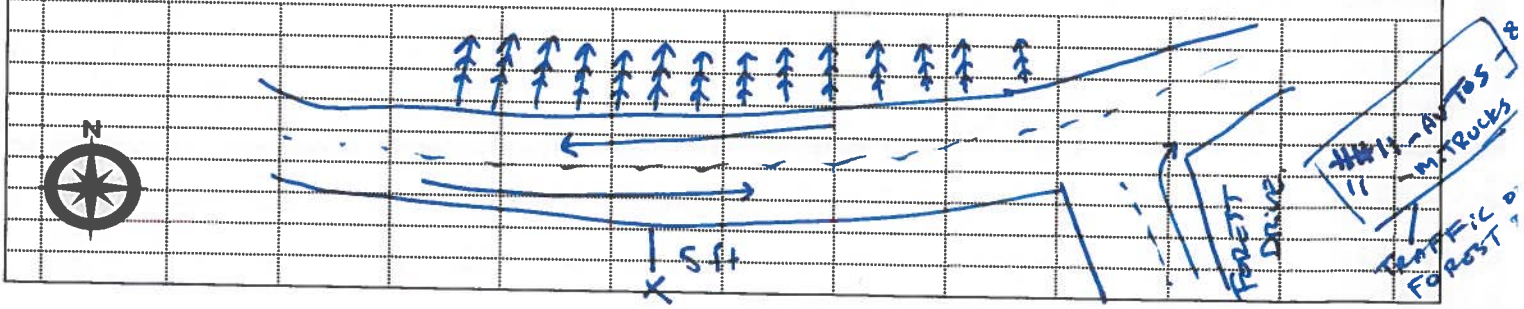
COUNT 2 (OR RDWY 2)	MIN	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 35

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DST. BARKING DOGS) BIRDS DIST. INDUSTRIAL — FIRST MIN. OF SURVEY
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN ~~HARD~~ SOFT (MIXED) (FLAT) OTHER: SNOW ALONG SHOULDERS; TALL PINES ALL AROUND
PHOTOS
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: Lassen County Noise Element Update — PROJECT #: 11630
SITE ID: 6.3 ~~B~~ SR36 @ William & McIntosh
SITE ADDRESS:
OBSERVER(S): Pedro Garcia
START DATE: 03/20/2019 — END DATE: 03/20/2019
START TIME: 0915 — END TIME: 0930

METEOROLOGICAL CONDITIONS

TEMP: 53 F — HUMIDITY: 42.3 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 15Ø921ØØ8
CALIBRATOR: REED R8Ø9Ø — SERIAL # BØØ85ØØVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
01	0915	0930	75.5	87.2	43.6	51	67	79	

COMMENTS: METER PLACED ON SHOULDER THAT SLOPES DOWN ABOUT 1 ft below GRADE

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Highway — DIST. TO RDWY C/L OR EOP: 10 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED 55

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	31			
MED TRKS	26			
HVY TRKS	9			
BUSES	1			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

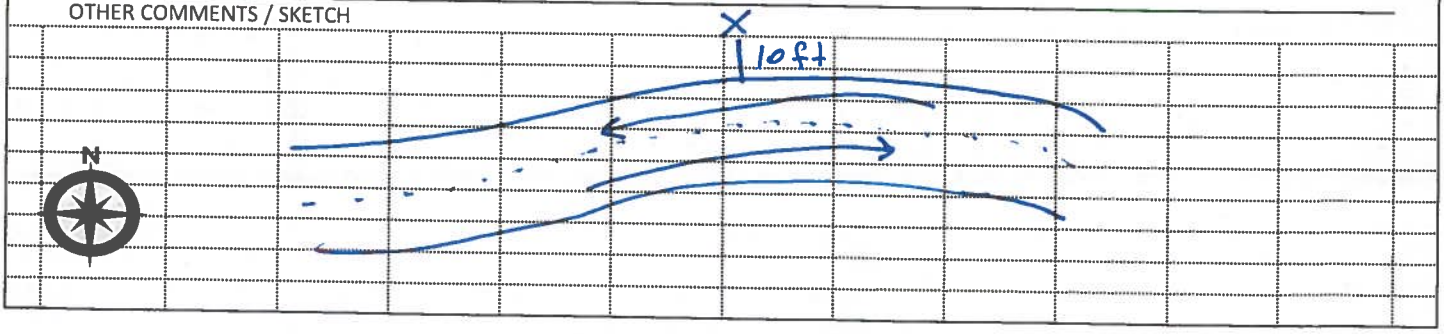
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: Laesen County Noise Element Update — PROJECT #: 11630
SITE ID: 6.4 SR44 & SR36
SITE ADDRESS:
OBSERVER(S): Pedro Garcia
START DATE: 03/20/2019 — END DATE: 03/20/2019
START TIME: 1100 — END TIME: 1115

METEOROLOGICAL CONDITIONS

TEMP: 57 F — HUMIDITY: 35.7 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 150921008
CALIBRATOR: REED R8090 — SERIAL # B008580VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
04	1100	1115	70.1	86.3	13.2	39	45	71	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Highway — DIST. TO RDWY C/L OR (EOP): 20 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 65

COUNT 1 (OR RDWY 1)

DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	13			
MED TRKS	3			
HVY TRKS	7			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

COUNT 2 (OR RDWY 2)

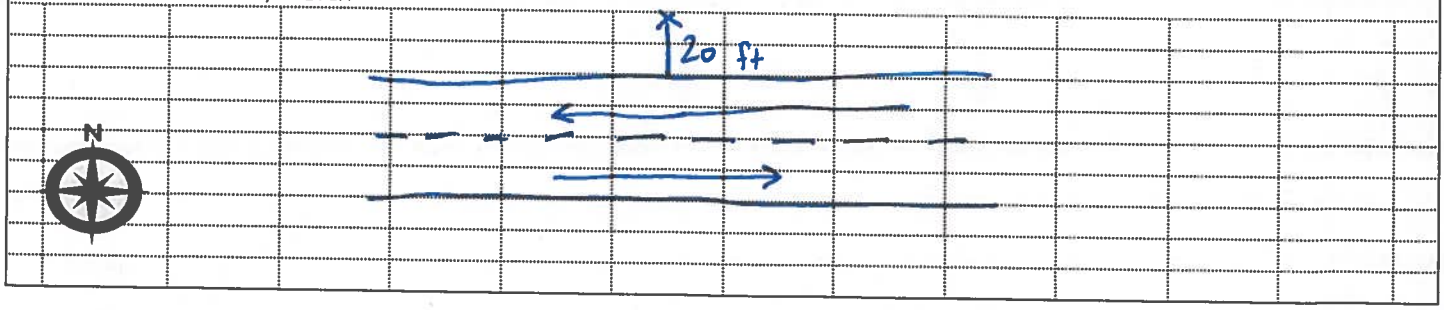
NB/EB MIN	SB/WB MIN	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER: Surrounded By Tall Conifers
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 7 US 395 e SCHOOLHOUSE
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1030 — END TIME: 1045

METEOROLOGICAL CONDITIONS

TEMP: 67 F — HUMIDITY: 14.6 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 7 MPH — DIR. N NE E SE S SW W NW (E) — VARIABLE STEADY GUSTY
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15Ø921ØØ8
CALIBRATOR: REED R8090 — SERIAL # B6Ø85ØØV82
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
05	1030	1045	67.8	87.2	22	45	51	65	

COMMENTS

LOCATION MOVED TO (40.7973579, -120.3637788) DUE TO PARKED SEMI TURNING ON ENGINE ACCROSS THE STREET FROM ORIGINAL POINT. APPROX. 150M EAST. [@1042 TRAILER SLOWED DOWN NEAR NOISE METER FOR ~6 SECONDS.]

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR (EOP): 10 ft.
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 65

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	4			
MED TRKS	4			
HVY TRKS	4			
BUSES	Ø			
MOTRCLS	Ø			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

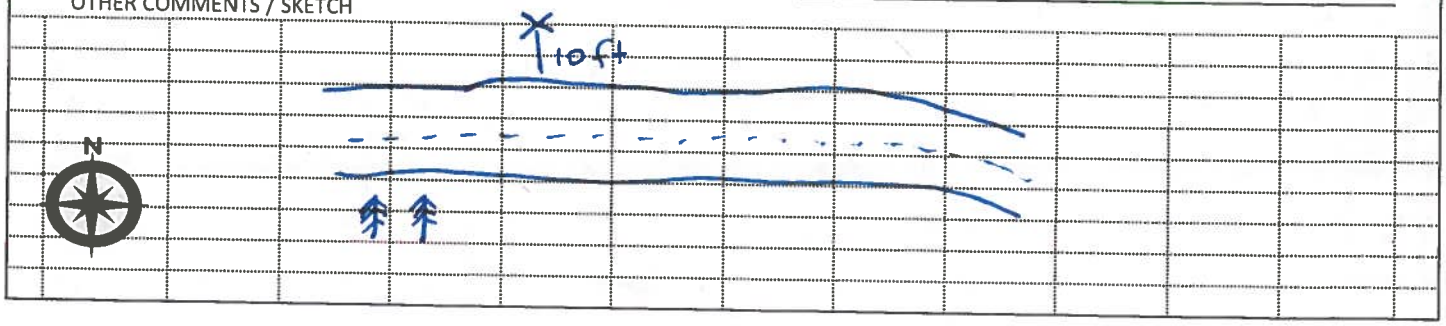
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: PARKED SEMI TRUCK TURNED ON ENGINE. POINT MOVED EAST UNTIL NO LONGER COULD BE HEARD. OCCASSIONAL RUSTLING BRANCHES OF COTTONWOOD + CONIFER 60M SOUTH.

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 8 US 395 @ LASSEN ST.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1110 — END TIME: 1125

METEOROLOGICAL CONDITIONS

TEMP: 68 F — HUMIDITY: 13.9 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 3 MPH — DIR. N NE S (SE) S SW W NW — VARIABLE (STEADY) GUSTY
SKY: (SUNNY) CLEAR — OVRCAST — (PRTLY CLDY) — FOG — RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 1S092100 8
CALIBRATOR: REED R8090 — SERIAL # B008850URZ
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
06	1110	1125	66.5	84.7	43	43	45	59	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR (EOP): 10 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 65

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
				MIN	SPEED
	AUTOS	3			
	MED TRKS	3			
	HVY TRKS	8			
	BUSES	0			
	MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

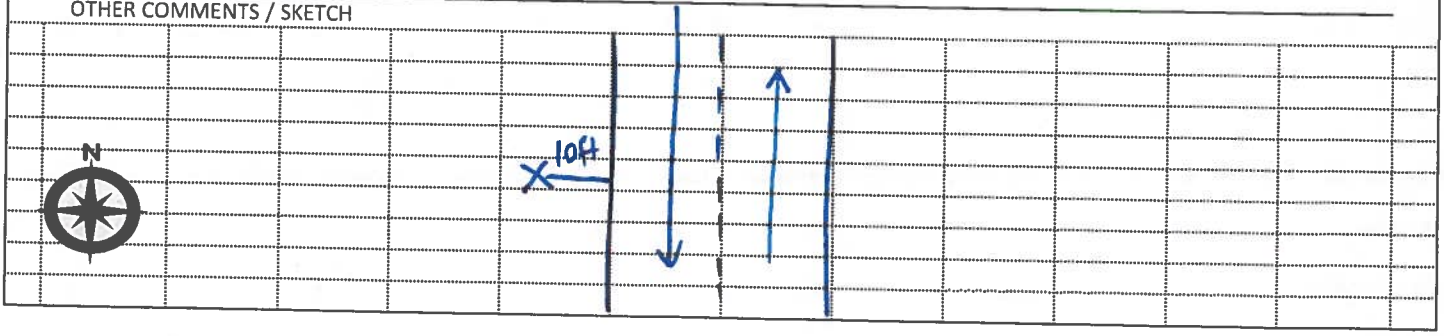
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
	MIN		SPEED	

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) (DIST. BARKING DOGS) BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: LARGE COTTONWOODS APPROX. 80m SE., LARGE DOG BARKING LAST 30 SECONDS, APPROX. 100m EAST.

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE | PROJECT #: 11630
SITE ID: 9.1 SR299 @ MARKET
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 | END DATE: 03/19/2019
START TIME: 1305 | END TIME: 1320

METEOROLOGICAL CONDITIONS

TEMP: 68 F | HUMIDITY: 14 % R.H. | WIND: CALM (LIGHT) MODERATE
WINDSPD: 3 MPH | DIR. N NE S (SE) S SW W NW | VARIABLE (STEADY) GUSTY
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo | TYPE 1 (2) | SERIAL #: 15Ø921ØØ8
CALIBRATOR: REED R8Ø9Ø | SERIAL #: BØØ85ØØVR2
CALIBRATION CHECK: PRE-MEASUREMENT 94 dBA SPL | POST-MEASUREMENT ____ dBA SPL | WINDSCRN: Y

SETTINGS: A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
08	1305	1320	64.5	84	36.7	45	53	67	

COMMENTS

~~ORIGINAL POINT HAD NARROW SHOULDER. POINT MOVED TO ([illegible]) Approx. 75m WEST.~~ OCCASSIONAL GUST OF WIND UP TO 8MPH.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY | DIST. TO RDWY C/L OR (EOP): 10 ft.
TRAFFIC COUNT DURATION: 15 MIN | SPEED 45 | MIN | SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS				
MED TRKS				
HVY TRKS				
BUSES				
MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

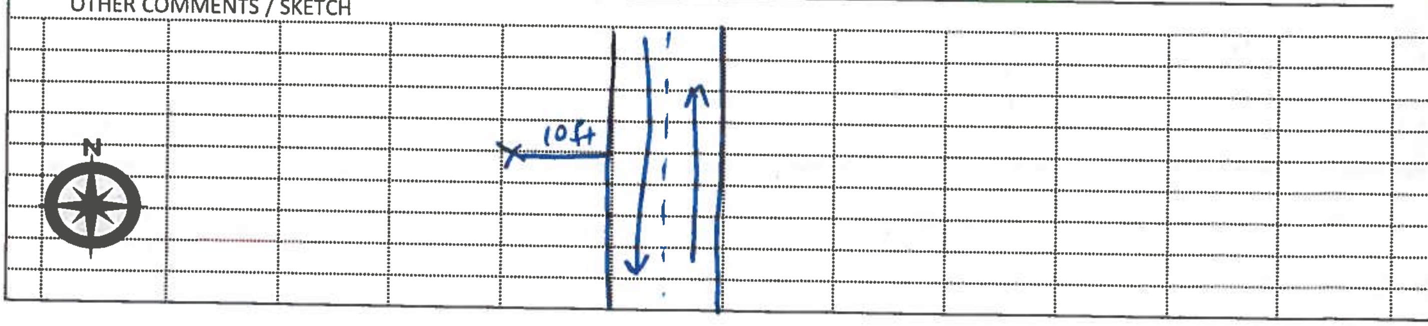
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 45

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) (DIST. BARKING DOGS) BIRDS DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: FLAG WAVING ~ 80M NORTH.

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY — PROJECT #: 11630
SITE ID: 9.2 MARKET STREET
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1325 — END TIME: 1355

METEOROLOGICAL CONDITIONS

TEMP: 70 F — HUMIDITY: 13.3 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 4 MPH — DIR. N NE S SE S SW W NW (E) — VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 1509210003
CALIBRATOR: REED R8090 — SERIAL # B008500VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
09	1325	1355	50.5	74.3	40.3	41	43	49	

COMMENTS: OCCASIONAL GUSTS OF 9mpH.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: COLLECTOR — DIST. TO RDWY C/L OR (EOP): 5 ft
TRAFFIC COUNT DURATION: 30 MIN — SPEED: 25

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	0			
	MED TRKS	3			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

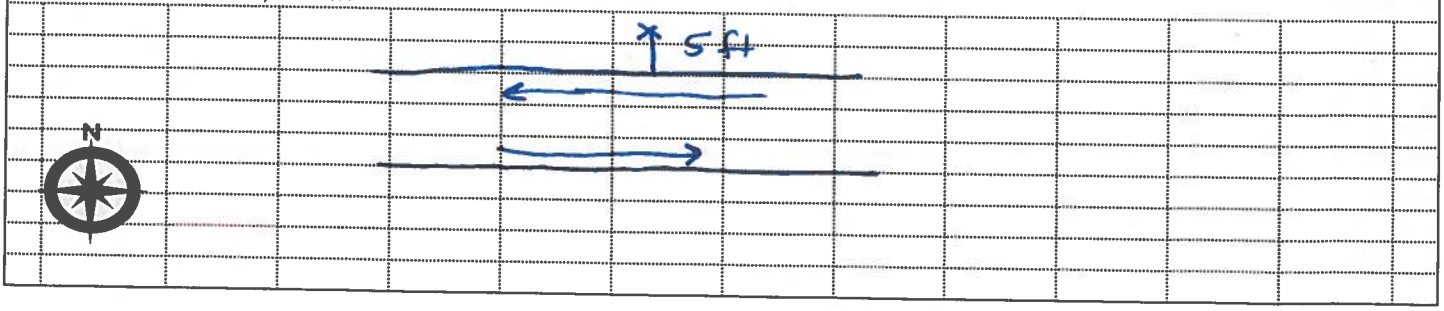
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: —

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS) BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: @1331 UTILITY TRUCK HORN BACKING UP (BEEPING) IN THE DISTANCE FOR 3 min
OCCASIONAL FLAG FLAPPING IN THE WIND.

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 9.3 SUSANVILLE ROAD
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 1235 — END TIME: 1250

METEOROLOGICAL CONDITIONS

TEMP: 66 F — HUMIDITY: 20 % R.H. — WIND: CALM / LIGHT / MODERATE / VARIABLE / STEADY / (GUSTY)
WINDSPD: 8 MPH — DIR. N NE S (SE) S SW W NW
SKY: SUNNY / CLEAR / (OVRCAST) / PRTLY CLDY / FOG / RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15Ø921ØØ8
CALIBRATOR: REED R8090 — SERIAL # BØØ85ØØVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) / (SLOW) / FAST / (FRONTAL) / RANDOM / ANSI / OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
07	1235	1250	68.9	81.9	51.5	57	65	71	

COMMENTS:
WIND STEADY 8MPH WITH OCCASIONAL GUSTS TO 12mpH.
ORIGINAL POINT WERE NARROW SHOULDER. POINT MOVED TO (41.131995, -121.125784), APPROX. 75M WEST.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) / AIRCRAFT / RAIL / INDUSTRIAL / OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR EOP: 10 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 55

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	2			
MED TRKS	6			
HVY TRKS	Ø			
BUSES	Ø			
MOTRCLS	Ø			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

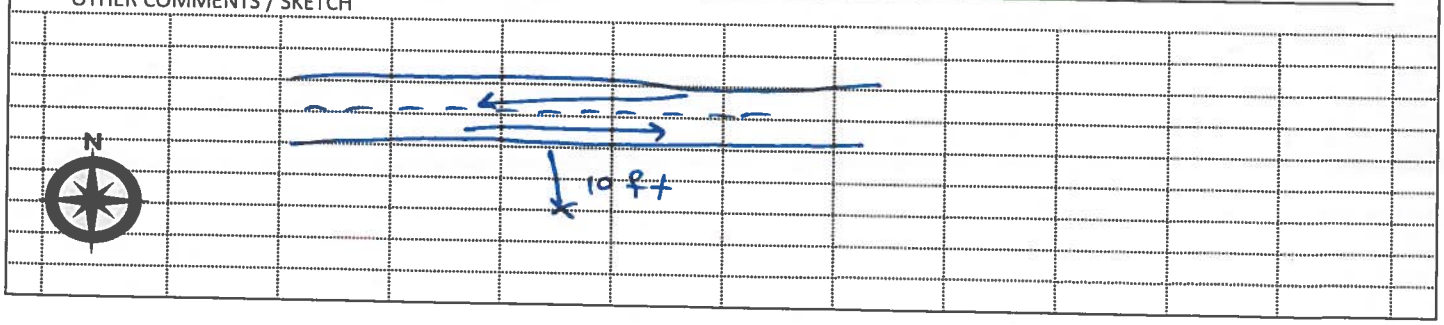
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL / DIST. KIDS PLAYING / DIST. CONVRSTNS / YELLING / DIST. TRAFFIC (LIST RDWYS BELOW) / DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) / SOFT / MIXED / (FLAT) / OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Lassen County NEL | PROJECT #: 11630
SITE ID: 10
SITE ADDRESS: Willow Creek Campground | OBSERVER(S): MJC
START DATE: 06/20/19 | END DATE: 06/20/19
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 71° F | HUMIDITY: 21 % R.H. | WIND: CALM (LIGHT) MODERATE
WINDSPD: 4-7 MPH | DIR. (N) NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY (CLEAR) | OVRCAST | PRTLY CLDY | FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo | TYPE 1 (O) | SERIAL # 7002
CALIBRATOR: Amprobe SM-Cal 1 | SERIAL # 1311067
CALIBRATION CHECK: PRE-MEASUREMENT 94.0 dBA SPL | POST-MEASUREMENT 94.0 dBA SPL | WINDSCRN ✓

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
7	4:49p	5:04p	60.5	78.2	40.6	41	43	55	

COMMENTS: Mic @ 5ft AGL & 3ft above rd grade

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: AC | DIST. TO RDWY (C/L) OR EOP: 40'
TRAFFIC COUNT DURATION: 15 MIN | SPEED 60 | ___ MIN | SPEED

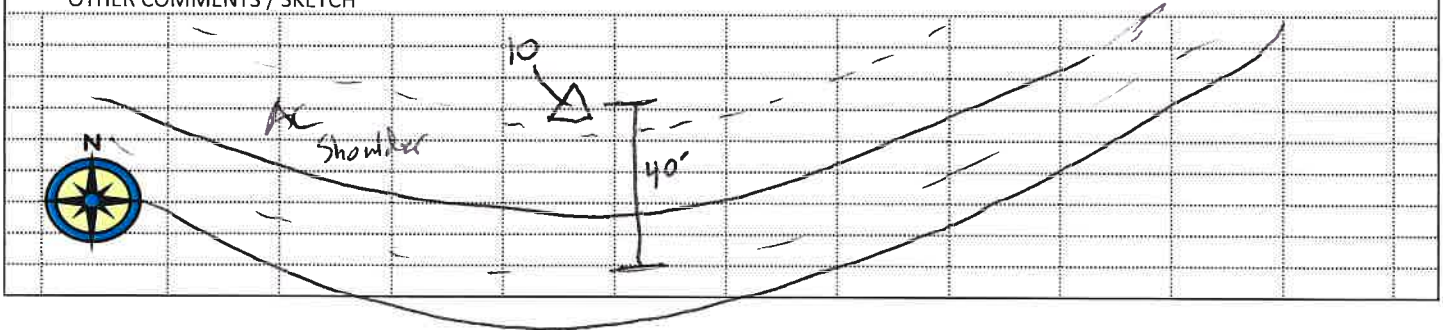
COUNT 1 (OR RDWY 1)	DIRECTION	(NB)/EB	(SB)/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS	8	3								
	MED TRKS										
	HVY TRKS										
	BUSES										
	MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED FLAT OTHER:
PHOTOS
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Lassen County NEM — PROJECT #: 11630
SITE ID: 11.1
SITE ADDRESS — OBSERVER(S): MJC
START DATE: 06/20/19 — END DATE: 06/20/19
START TIME — END TIME

METEOROLOGICAL CONDITIONS

TEMP: 73 F — HUMIDITY: 19 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 2-5 MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: SUNNY (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 ✓ — SERIAL #: 7002
CALIBRATOR: Amprobe Sm-Cal 1 — SERIAL #: 1311006?
CALIBRATION CHECK — PRE-MEASUREMENT: 94.0 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: ✓

SETTINGS: A (WTD) SLOW FAST (IMPULSE) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
6	3:20p	3:35	53.9	70.0	43.6	45	49	55	

COMMENTS: Mic @ 5' AGL ≈ 1' above rd. grade

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: AC — DIST. TO RDWY C/L OR EOP:
TRAFFIC COUNT DURATION: 15 MIN — SPEED

COUNT 1 (OR RDWY 1)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	3	2		
MED TRKS				
HVY TRKS				
BUSES				
MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ____

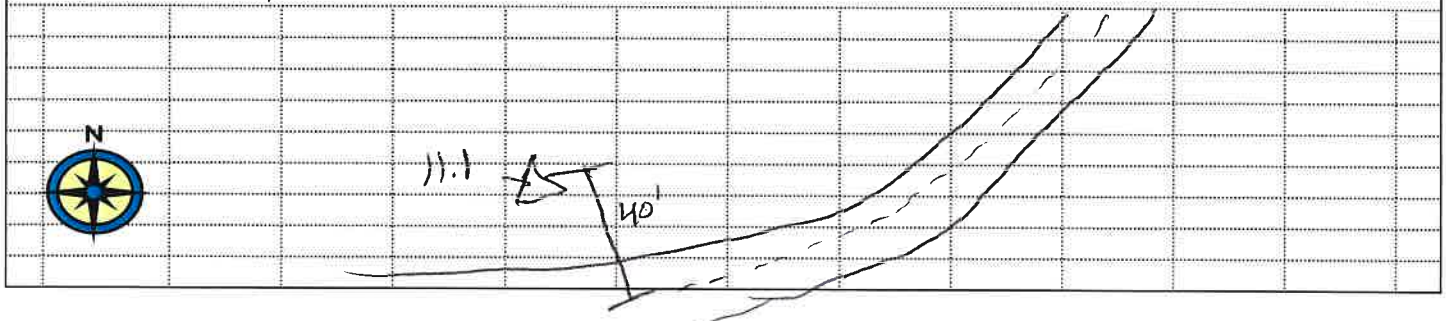
COUNT 2 (OR RDWY 2)	____ MIN NB/EB	SB/WB	SPEED NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD (SOFT) MIXED FLAT OTHER:
PHOTOS
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT Lassen County NEM | PROJECT # 11630
SITE ID 11.2
SITE ADDRESS | OBSERVER(S) MJC
START DATE 06/20/19 | END DATE 06/20/19
START TIME | END TIME

METEOROLOGICAL CONDITIONS

TEMP 72 F | HUMIDITY 20 % R.H. | WIND CALM (LIGHT) MODERATE
WINDSPD 4-7 MPH | DIR. (NW) NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY SUNNY (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Piccolo | TYPE 1 (2) | SERIAL # 7002
CALIBRATOR Amprobe SM-Cal 1 | SERIAL # 13110067
CALIBRATION CHECK PRE-MEASUREMENT 94.0 dBA SPL | POST-MEASUREMENT 94.0 dBA SPL | WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
5	2:36	2:51	46.9	61.0	41.6				

COMMENTS
Mic @ 5' AGL ≈ 4' above rd grade

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: Windin trees
ROADWAY TYPE: AC | DIST. TO RDWY (C/L) OR EOP: 25'
TRAFFIC COUNT DURATION: 15 MIN | SPEED 25 | ___ MIN | SPEED

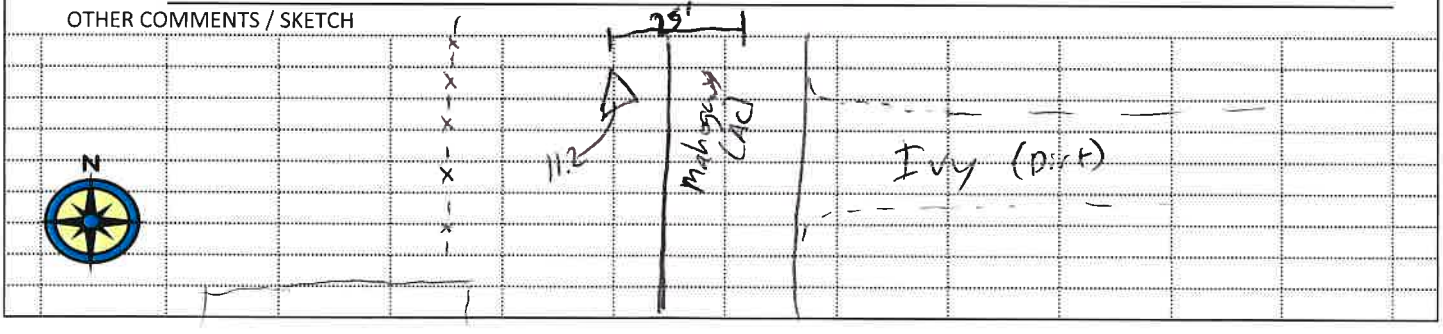
COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	1	2								
MED TRKS										
HVY TRKS										
BUSES										
MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 25

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Lassen County NEM — PROJECT #: 11630
SITE ID: 12.1
SITE ADDRESS: N/A - Eagle Lake Rd — OBSERVER(S): MJC
START DATE: 06/20/19 — END DATE: 06/20/19
START TIME: 1:45 pm — END TIME: 2:00 pm

METEOROLOGICAL CONDITIONS

TEMP: 72° F — HUMIDITY: 20 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 4-7 MPH — DIR. (N) NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: SUNNY (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 7002
CALIBRATOR: Amprobe SM-Cal1 — SERIAL # 1311067
CALIBRATION CHECK — PRE-MEASUREMENT: 94.0 dBA SPL — POST-MEASUREMENT: 94.0 dBA SPL — WINDSCRN: ✓

SETTINGS: ~~A-WTD~~ (SLOW) FAST ~~FRONTAL~~ RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
4	1:45pm	2:00p	53.0	76.6	40.4	39	39	43	

COMMENTS: Mic @ 5' AGL & 4' above rd grade

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: AC — DIST. TO RDWY (C/L) OR EOP: 25 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 55 — ___ MIN — SPEED

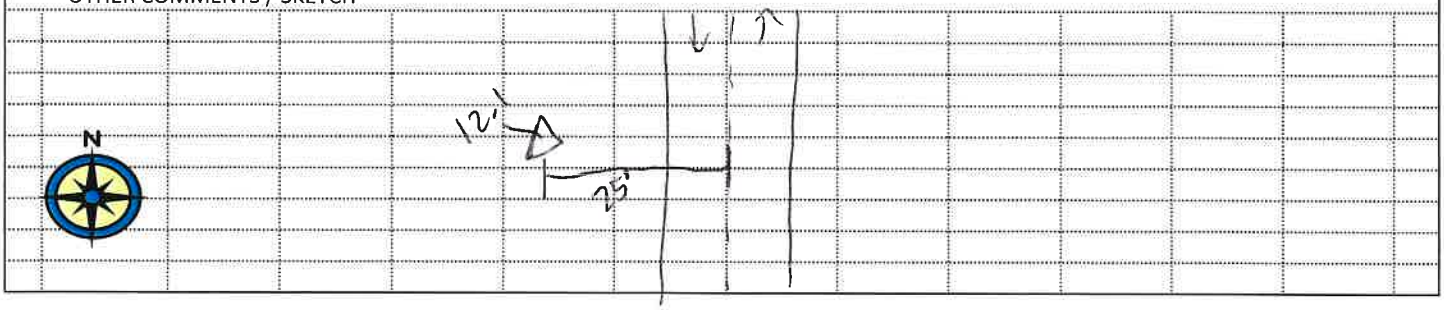
COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	4	2							
MED TRKS									
HVY TRKS									
BUSES									
MOTRCLS									

SPEEDS ESTIMATED BY: RADAR / ~~DRIVING THE PACE~~
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD (SOFT) MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Lassen County NEM | PROJECT #: 11630
SITE ID: 12.2
SITE ADDRESS: N/A - Aspen Grove Campground | OBSERVER(S): MJC
START DATE: 06/20/19 | END DATE: 06/20/19
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 72 ° F | HUMIDITY: 23 % R.H. | WIND: CALM (LIGHT) MODERATE
WINDSPD: 4-10 MPH | DIR. (N) NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo | TYPE 1 (2) | SERIAL #: 7002
CALIBRATOR: Amprobe SM-Cal-1 | SERIAL #: 1311006J
CALIBRATION CHECK: PRE-MEASUREMENT 94.0 dBA SPL | POST-MEASUREMENT 94.0 dBA SPL | WINDSCRN: ✓

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
~~2~~		~~49.9~~	~~71.4~~						Disrupted by camp Host
3	1:17 pm	1:22p	43.3	64.5	40.6	39	39	41	

COMMENTS: Mic @ 5' AGL and @ At grade

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: AC | DIST. TO RDWY (C/L) OR EOP: 25'
TRAFFIC COUNT DURATION: 15 MIN | SPEED 35 mph | ___ MIN | SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	2	-		
MED TRKS				
HVY TRKS				
BUSES				
MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

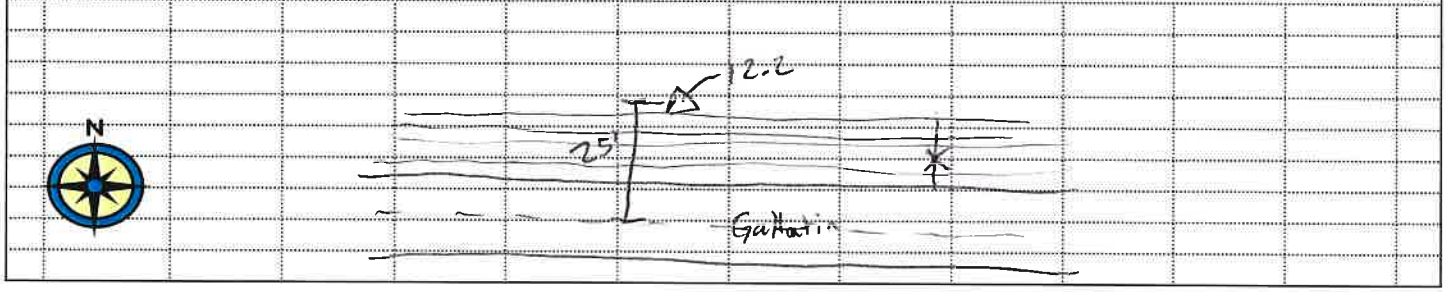
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD (SOFT) MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: Lassen County NEU — PROJECT #: 11630
SITE ID: 13.1
SITE ADDRESS: Moonacy Rd - North of — OBSERVER(S): MJC
START DATE: 06/20/19 — END DATE: 06/20/19
START TIME: 11:32 Am — END TIME: 11:47 Am

METEOROLOGICAL CONDITIONS

TEMP: 68° F — HUMIDITY: 23 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0-7 MPH — DIR. N NE E SE S SW W NW
SKY: SUNNY (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 7002
CALIBRATOR: Amprobe SM-Cal 1 — SERIAL # 13110067
CALIBRATION CHECK — PRE-MEASUREMENT: 94.0 dBA SPL — POST-MEASUREMENT: 94.0 dBA SPL — WINDSCRN: ✓

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
1	11:32	11:47	53.1	75.3	40.6	41	45	49	

COMMENTS: mic @ 5ft AGL ≈ 4ft above roadway

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: AC — DIST. TO RDWY (C/L) OR EOP: 30'
TRAFFIC COUNT DURATION: 15 MIN — SPEED 50 — ___ MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	3	3		
MED TRKS				
HVY TRKS				
BUSES				
MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

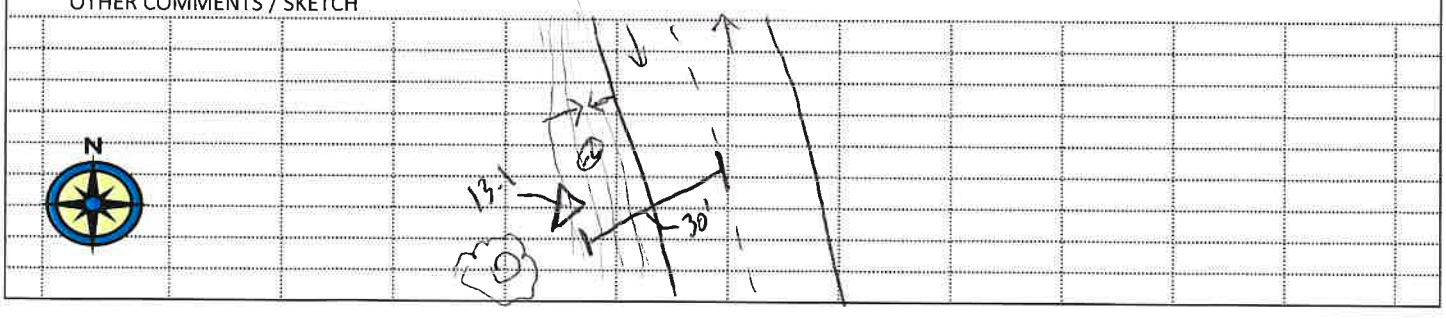
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD (SOFT) MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 13.2 SR 36
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/20/2019 — END DATE: 03/20/2019
START TIME: 1150 — END TIME: 1205

METEOROLOGICAL CONDITIONS

TEMP: 53 F — HUMIDITY: 38.1 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15692[illegible]8
CALIBRATOR: REED R8090 — SERIAL # B&K 850[illegible]
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
05	1150	1205	70.1	87.8	40.2	41	53	73	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR (EOP): 5 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 50

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	12			
MED TRKS	19			
HVY TRKS	2			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

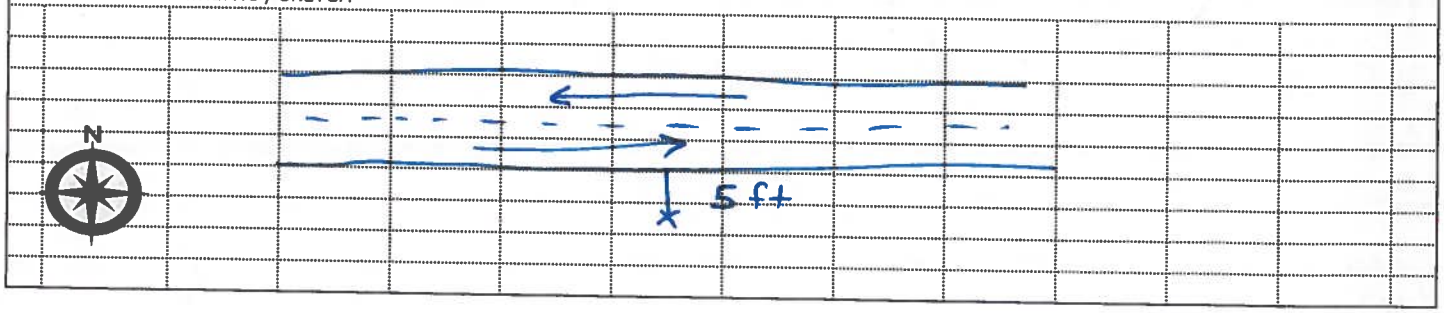
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 50

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) (FLAT) OTHER: SNOW COVERED BANKS + ROAD SHOULDERS
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 13.3 MOONEY
SITE ADDRESS:
OBSERVER(S): PEDRO GUTIERREZ
START DATE: 03/20/2019 — END DATE: 03/20/2019
START TIME: 1215 — END TIME: 1230

METEOROLOGICAL CONDITIONS

TEMP: 51 F — HUMIDITY: 34.9 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 1SQ921008
CALIBRATOR: REED R8090 — SERIAL # B008SQ0VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
06	1215	1230	65.2	86.5	16.2	37	41	63	

COMMENTS: LIGHT DRIZZLE @ 1221. HAD TO MOVE POINT 20M EAST, HIGH (~5ft) SNOW WALLS FROM SNOW PLOW. METER PLACED IN AREA WITH SMALLEST SNOW BUILDUP (~3 ft)

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR EOP: 5 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 50

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	4			
MED TRKS	4			
HVY TRKS	1			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

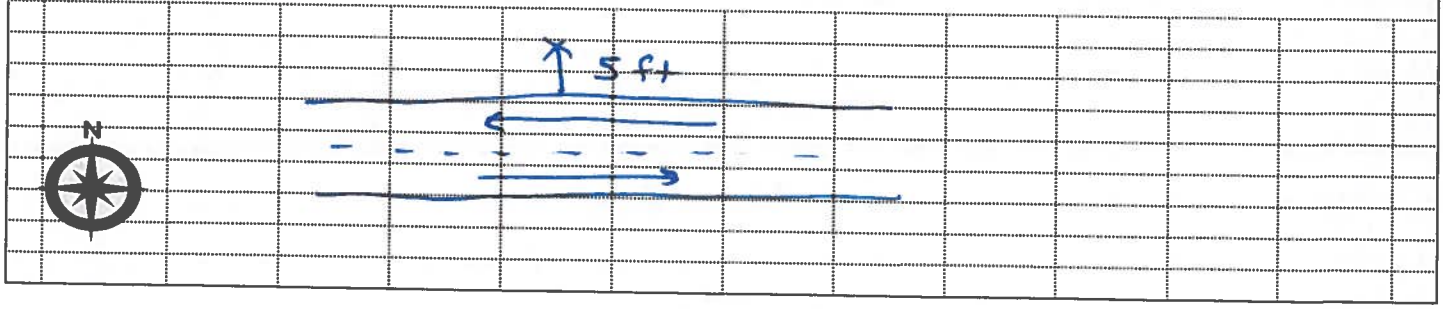
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 50

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) (FLAT) OTHER: SNOW COVERED BANKS
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPATE — PROJECT #: 11630
SITE ID: 14.1 GARNIER RD
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/18/2019 — END DATE: 03/18/2019
START TIME: 1530 — END TIME: 1545

METEOROLOGICAL CONDITIONS

TEMP: 85 F — HUMIDITY: 4.5 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 150921008
CALIBRATOR: BRUEL 8090 — SERIAL # B00856OVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
04	1530	1545	64.2	82.3	40.3	39	43	65	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Highway — DIST. TO RDWY C/L OR EOP: 20ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED 65

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	13			
MED TRKS	8			
HVY TRKS	2			
BUSES	1			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

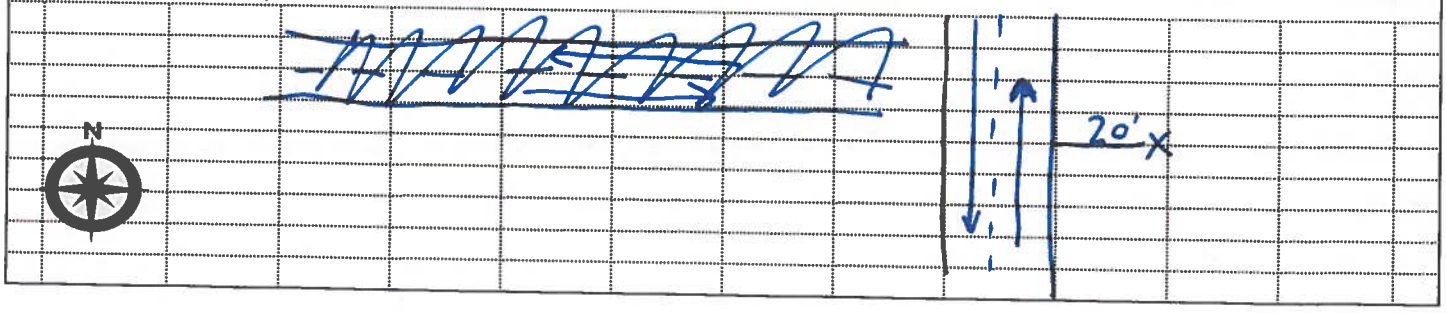
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) OTHER: METER 1ft BELOW GRADE
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 14.2 HERLONG ACCESS RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/18/2019 — END DATE: 03/18/2019
START TIME: 1600 — END TIME: 1615

METEOROLOGICAL CONDITIONS

TEMP: 85 F — HUMIDITY: 6.1 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 15992008
CALIBRATOR: REED R8090 — SERIAL # B08B5 00VRZ
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
05	1600	1615	66.7	84.3	37.3	39	43	69	

COMMENTS: GIVEN POINT LOCATED ON BERM W/ NO ~~SHOULDER~~ SHOULDER. POINT MOVED TO (40.142049, -120.181984) APPROX. 100m WEST.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR (EOP): 15 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 55

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	17			
	MED TRKS	1			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

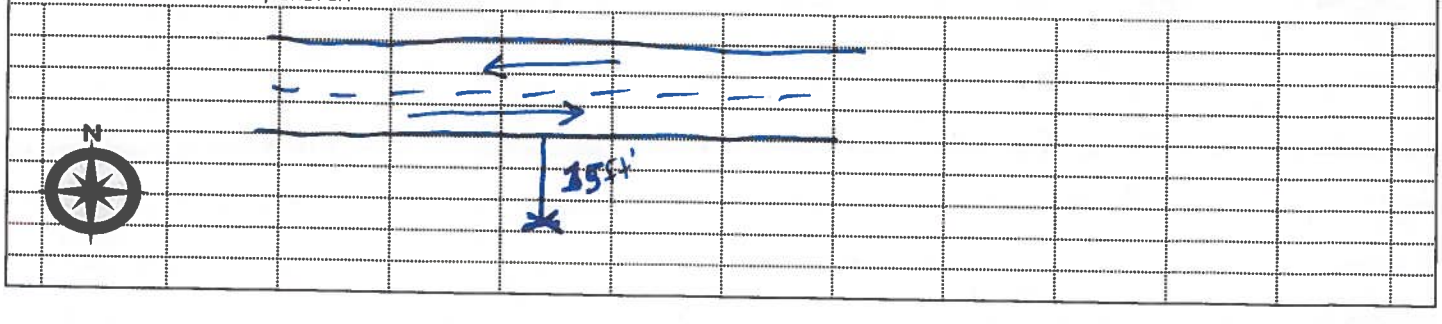
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) (FLAT) OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT Lassen County Noise Element update PROJECT # 11630
SITE ID 15 SIL ~~70~~
SITE ADDRESS ~~1305~~
OBSERVER(S) Pedro Garcia
START DATE 03/18/2019 END DATE 03/18/2019
START TIME 1310 END TIME 1325

METEOROLOGICAL CONDITIONS

TEMP ~~65~~ 75F HUMIDITY 9.8 % R.H. WIND (CALM) LIGHT MODERATE
WINDSPD 2 MPH DIR. N NE S SE S SW W NW (E) VARIABLE STEADY GUSTY
SKY (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Piccolo TYPE 1 (2) SERIAL # 15692100B
CALIBRATOR REED R8090 SERIAL # B088500VR2
CALIBRATION CHECK PRE-MEASUREMENT 94 dBA SPL POST-MEASUREMENT ____ dBA SPL WINDSCRN Y

SETTINGS (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER: ____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
01	1310	1325	67.2	80.7	41.1	43	49	71	

COMMENTS

PINNED LOCATION ~~ON~~ ON NARROW SHOULDER ON A SLOPE. POINT MOVED TO (39.7885293, -120.0884166) Appx. 380M WEST.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER: ____
ROADWAY TYPE: ____ DIST. TO RDWY C/L OR EOP: 20 ft
TRAFFIC COUNT DURATION: 15 MIN SPEED 65 ____ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	26			
MED TRKS	21			
HVY TRKS	4			
BUSES	1			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE X

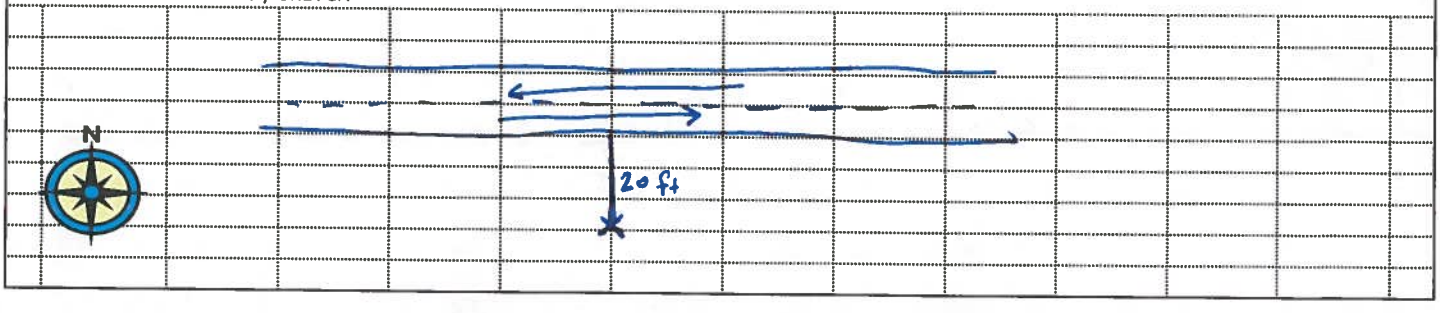
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 65

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: ____

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER: ____
PHOTOS ____
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 16 SKYLINE RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/19/2019 — END DATE: 03/19/2019
START TIME: 0815 — END TIME: 0830

METEOROLOGICAL CONDITIONS

TEMP: 49 F — HUMIDITY: 35.6 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15Φ921ΦΦ8
CALIBRATOR: REED R8090 — SERIAL # BΦ85ΦOVR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
01	0815	0830	70.2	85.5	43.7	45	53	73	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY — DIST. TO RDWY C/L OR (EOP): 20ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 65

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS	20			
	MED TRKS	17			
	HVY TRKS	1			
	BUSES	Φ			
	MOTRCLS	Φ			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

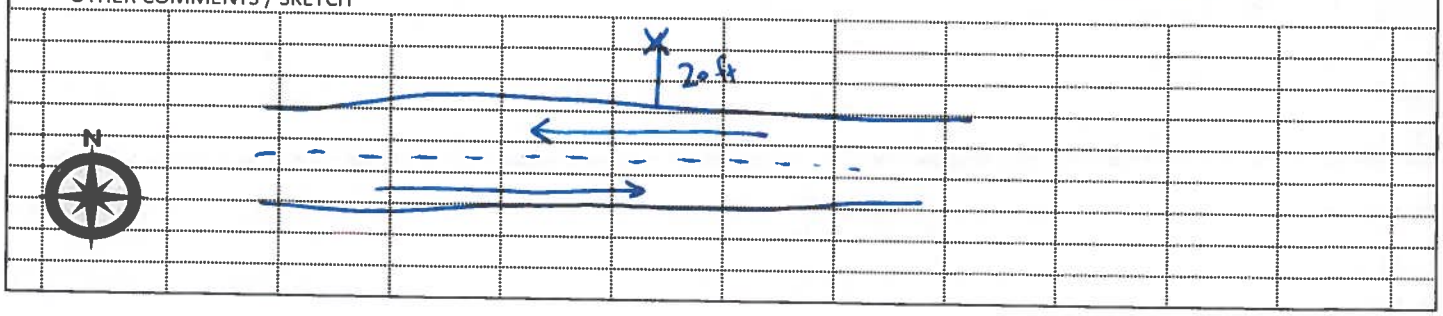
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE
PROJECT #: 11630
SITE ID: 17.1 STANDISH - BUNTINGVILLE RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GALEANA
START DATE: 03/18/2019 END DATE: 03/18/2019
START TIME: 1645 END TIME: 1700

METEOROLOGICAL CONDITIONS

TEMP: 75 F HUMIDITY: 9.1 % R.H. WIND: (CALM) LIGHT MODERATE
WINDSPD: 5 MPH DIR. N NE S (SE) S SW W NW VARIABLE STEADY GUSTY
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO TYPE 1 (2) SERIAL # 15492 1008
CALIBRATOR: REED R8090 SERIAL # B088508DVR2
CALIBRATION CHECK PRE-MEASUREMENT: 94 dBA SPL POST-MEASUREMENT: ____ dBA SPL WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
06	1645	1700	66.3	90.2	39	39	41	65	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: HIGHWAY DIST. TO RDWY C/L OR (EOP): 10ft.
TRAFFIC COUNT DURATION: 15 MIN SPEED 55

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	8			
	MED TRKS	10			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	1			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

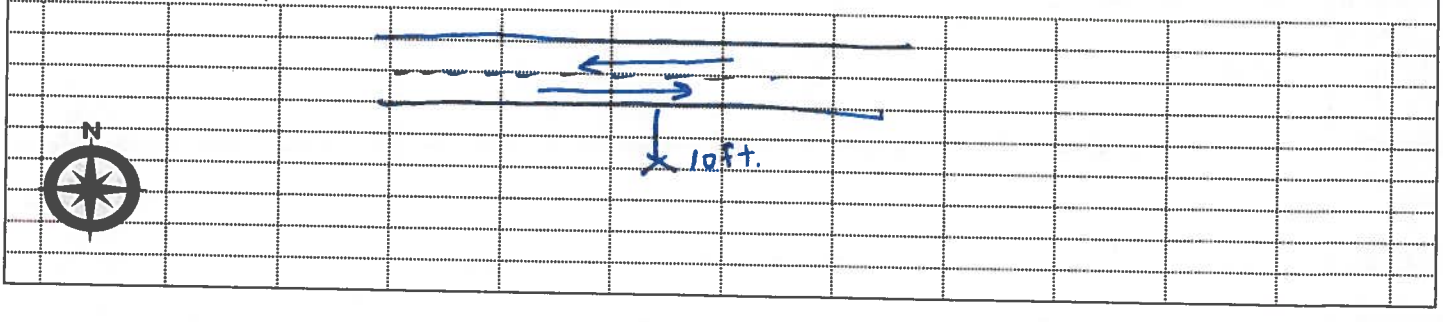
COUNT 2 (OR RDWY 2)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS				
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: 55

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS
OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: LASSEN COUNTY NOISE ELEMENT UPDATE — PROJECT #: 11630
SITE ID: 17.2 SUNNYSIDE RD.
SITE ADDRESS:
OBSERVER(S): PEDRO GARCIA
START DATE: 03/18/2019 — END DATE: 03/18/2019
START TIME: 1725 — END TIME: 1740

METEOROLOGICAL CONDITIONS

TEMP: 74 F — HUMIDITY: 7.9 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: 2 MPH — DIR. N NE S (SE) S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO — TYPE 1 (2) — SERIAL # 15092108
CALIBRATOR: B&K R8090 — SERIAL # B&K 3560VR2
CALIBRATION CHECK — PRE-MEASUREMENT: 94 dBA SPL — POST-MEASUREMENT: ____ dBA SPL — WINDSCRN: Y

SETTINGS: (A-WTD) (SLOW) FAST (FRONTAL) RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
07	1725	1740	59.9	82	26.5	39	39	55	

COMMENTS: ORIGINAL POINT LOCATED ON NARROW SHOULDER. NEW POINT MOVED TO (40.3105232, -120.4831328), APPROX. 40 M WEST.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ARTERIAL — DIST. TO RDWY C/L OR EDP: ~~15 ft~~ 15 ft
TRAFFIC COUNT DURATION: 15 MIN — SPEED: 25

COUNT 1 (OR RDWY 1)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	5			
MED TRKS	5			
HVY TRKS	1			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: X

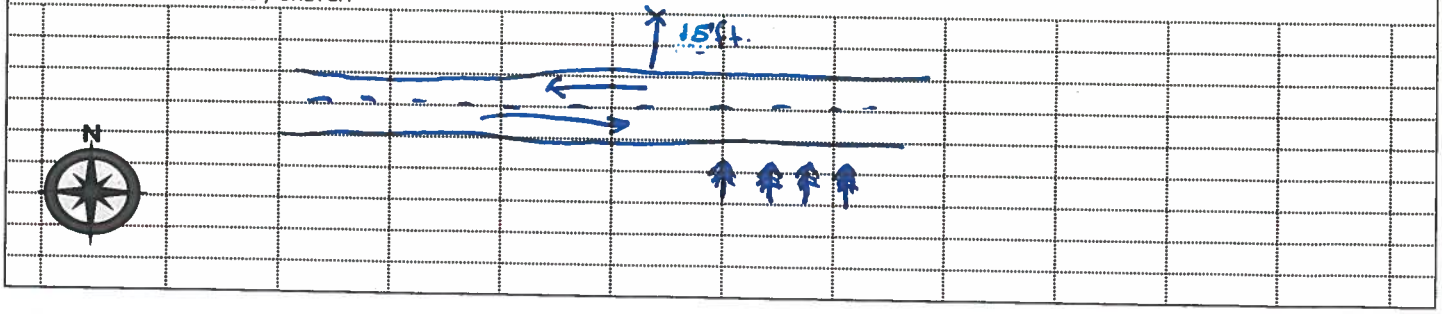
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE)
POSTED SPEED LIMIT SIGNS SAY: ~~25~~

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: ~~HARD~~ SOFT (MIXED) FLAT OTHER: PAVED ROAD, SURROUNDED BY LOW LYING SHRUBS. ~~SHOULDER FINE~~
PHOTOS:
OTHER COMMENTS / SKETCH



ATTACHMENT 2.2

LONG-TERM AMBIENT NOISE MEASUREMENT DATA

Lassen County Noise Element Update Long-Term Noise Level Measurement Data

LOCATION LT1

Rec 1 to 25	Slow Response		dBA weighting			2.0 dB resolution stats													
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
5/8/2019 19:48	1.0 hour	47.1	82.7	70	34	59	51	45	37	35	35	35	37	39.6	5.12	57	47	41	
5/8/2019 20:48	1.0 hour	41.5	77.1	64.4	34	51	43	39	37	35	35	35	37	37.1	3.1	47	41	37	
5/8/2019 21:48	1.0 hour	37.6	73.2	55.6	34	47	39	37	35	35	35	35	35	35.9	2.07	43	37	37	
5/8/2019 22:48	1.0 hour	45.3	80.9	69.8	34	55	47	41	35	35	35	35	35	36.8	4.19	51	43	37	
5/8/2019 23:48	1.0 hour	37	72.6	56.7	34	45	37	37	35	35	35	35	35	35.5	1.83	41	37	35	
5/9/2019 0:48	1.0 hour	47.8	83.4	69.5	34	59	55	37	35	35	35	35	35	36.7	5.54	59	41	35	
5/9/2019 1:48	1.0 hour	35.7	71.3	55.7	34	41	37	35	35	35	35	35	35	35.3	1.29	39	35	35	
5/9/2019 2:48	1.0 hour	52.1	87.7	79.6	34	63	53	47	35	35	35	35	35	37.2	6.21	57	51	35	
5/9/2019 3:48	1.0 hour	38.6	74.2	58.7	34	43	41	41	35	35	35	35	35	36.9	2.68	43	41	39	
5/9/2019 4:48	1.0 hour	48.3	83.9	62.5	37.8	55	53	51	43	41	41	39	43	45	4.08	55	51	47	
5/9/2019 5:48	1.0 hour	49.8	85.4	70.1	37.5	57	53	51	45	41	39	37	45	45.6	4.53	55	53	49	
5/9/2019 6:48	1.0 hour	50.7	86.3	65.7	38.7	59	53	53	47	43	41	39	47	47.4	3.95	57	53	49	
5/9/2019 7:48	1.0 hour	49	84.6	65.3	38.7	59	55	51	43	41	39	39	43	44.7	4.47	57	53	47	
5/9/2019 8:48	1.0 hour	48	83.6	62.9	38.7	57	51	49	45	41	39	39	45	45	3.59	55	49	47	
5/9/2019 9:48	1.0 hour	47.5	83.1	65.3	38.7	55	49	49	45	41	41	39	45	45.1	2.96	53	49	47	
5/9/2019 10:48	1.0 hour	47.1	82.7	63.9	39	55	49	49	45	41	41	39	45	44.7	2.9	53	49	45	
5/9/2019 11:48	1.0 hour	49.8	85.4	70.3	37.3	59	53	51	43	41	41	39	43	44.9	4.17	57	51	47	
5/9/2019 12:48	1.0 hour	47.9	83.5	67.1	38.6	59	51	47	43	41	39	39	43	43.2	3.89	55	49	45	
5/9/2019 13:48	1.0 hour	49.3	84.9	69.1	38.5	59	53	51	45	41	39	39	45	44.9	4.22	57	51	47	
5/9/2019 14:48	1.0 hour	47.6	83.2	65.3	39.1	57	51	49	43	39	39	39	43	43.7	4	55	49	45	
5/9/2019 15:48	1.0 hour	52.3	87.9	78.6	38.6	63	55	51	43	41	39	39	43	44.9	5.15	61	53	47	
5/9/2019 16:48	1.0 hour	47.6	83.2	70	38.7	57	51	47	43	39	39	37	43	43	3.91	55	49	45	
5/9/2019 17:48	1.0 hour	48.7	84.3	65.9	39.8	57	51	51	45	41	39	39	45	45.3	4.05	55	51	49	
5/9/2019 18:48	1.0 hour	51.7	87.3	78.2	37	63	53	51	43	39	39	37	43	44.1	4.99	59	51	47	
5/9/2019 19:48	18.7 min	48.4	78.9	67.7	36.9	61	53	49	41	37	37	37	41	41.8	5.09	57	51	43	

Lassen County Noise Element Update Long-Term Noise Level Measurement Data

LOCATION LT2

Rec 1 to 24	Slow Response		dBA weighting			2.0 dB resolution stats													
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
5/8/2019 20:26	1.0 hour	52.6	80.4	68.6	38.5	65	59	55	41	39	39	37	41	44	6.3	63	55	45	
5/8/2019 21:26	1.0 hour	51.2	79	68.9	36.8	63	57	53	39	35	35	35	39	41.1	6.91	61	55	43	
5/8/2019 22:26	1.0 hour	45.7	73.5	63.9	38.4	57	49	45	39	37	37	37	39	40.4	4	53	47	41	
5/8/2019 23:26	1.0 hour	49.6	77.4	68.4	36.8	61	53	47	39	37	37	35	39	39.8	5.5	59	49	39	
5/9/2019 0:26	1.0 hour	38.4	66.2	40.5	36.8	39	39	37	37	37	37	37	37	37.1	0.48	39	37	37	
5/9/2019 1:26	1.0 hour	38.2	66	42.4	36.8	39	39	37	37	35	35	35	37	36.7	1.12	39	39	37	
5/9/2019 2:26	1.0 hour	47.8	75.6	68.4	36.8	61	47	41	37	37	35	35	37	38.6	4.31	57	43	39	
5/9/2019 3:26	1.0 hour	41.6	69.4	52.9	38.1	49	45	43	39	37	37	37	39	39.4	2.73	47	43	41	
5/9/2019 4:26	1.0 hour	49.5	77.3	68.2	36.8	63	51	45	41	37	37	35	41	41.6	4.85	59	47	43	
5/9/2019 5:26	1.0 hour	56.7	84.5	72.9	43.4	69	63	57	47	45	43	43	47	48.9	5.85	67	61	49	
5/9/2019 6:26	1.0 hour	57.4	85.2	71.2	42.4	69	65	61	47	43	43	43	47	49.6	6.46	67	63	51	
5/9/2019 7:26	1.0 hour	58.8	86.6	75.9	45.5	71	65	59	51	49	47	45	51	52.5	4.94	69	61	53	
5/9/2019 8:26	1.0 hour	59.6	87.4	78.5	42.7	69	65	61	49	43	43	43	49	50.3	6.8	67	63	53	
5/9/2019 9:26	1.0 hour	58.2	93.8	76.5	40.5	69	63	61	49	43	43	41	49	51.2	6.83	65	61	57	
5/9/2019 10:26	1.0 hour	57.3	92.9	77.9	40.8	65	61	61	51	45	43	41	51	51.3	6.18	63	61	57	
5/9/2019 11:26	1.0 hour	59.8	95.4	82.7	41.3	67	65	63	53	45	43	41	53	53.1	6.75	67	63	59	
5/9/2019 12:26	1.0 hour	74.3	109.9	94.4	40.8	87	79	73	61	45	43	41	61	60.4	10.44	85	75	67	
5/9/2019 13:26	1.0 hour	59.2	94.8	75.8	39.8	67	63	63	53	43	43	41	53	53.3	6.87	65	63	59	
5/9/2019 14:26	1.0 hour	58.9	94.5	76.9	39.6	67	63	61	55	45	43	39	55	53.6	6.63	65	63	59	
5/9/2019 15:26	1.0 hour	58.9	94.5	77.7	38.6	67	63	61	53	45	43	39	53	53.1	6.69	65	63	59	
5/9/2019 16:26	1.0 hour	58	93.6	78.9	39.2	67	63	61	51	43	41	39	51	51.9	6.81	65	61	57	
5/9/2019 17:26	1.0 hour	60.2	95.8	85.1	38.5	69	63	61	53	43	41	37	53	52.5	7.33	67	63	59	
5/9/2019 18:26	1.0 hour	59.2	94.8	75.4	40.8	67	63	63	53	45	43	41	53	53.1	6.93	65	63	59	
5/9/2019 19:26	1.0 hour	59.8	91	77.9	38.8	69	65	63	53	43	41	39	53	52.5	7.45	67	63	59	

Lassen County Noise Element Update Long-Term Noise Level Measurement Data

LOCATION LT3

Rec 1 to 25	Slow Response		dBA weighting			2.0 dB resolution stats													
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
5/8/2019 19:07	1.0 hour	55.9	91.5	77	36.1	67	59	55	47	41	39	37	47	48.2	6.05	65	57	51	
5/8/2019 20:07	1.0 hour	56.6	92.2	85.8	33.1	67	55	51	41	37	35	35	41	43.2	6.45	63	51	45	
5/8/2019 21:07	1.0 hour	61.2	96.8	82.1	34.6	71	69	65	45	37	37	35	45	47.6	9.73	71	67	53	
5/8/2019 22:07	1.0 hour	60.6	96.2	79.4	36	73	69	61	43	37	35	35	43	45.9	9.16	71	65	49	
5/8/2019 23:07	1.0 hour	48.7	84.3	75.8	35.3	53	45	41	37	35	35	35	37	37.6	4.07	49	43	39	
5/9/2019 0:07	1.0 hour	48.3	83.9	75.7	33.1	55	43	39	35	35	35	35	35	36.7	3.85	49	41	37	
5/9/2019 1:07	1.0 hour	45.9	81.5	72.8	36	53	49	47	41	37	35	35	41	41	4.02	51	47	43	
5/9/2019 2:07	1.0 hour	45.2	80.8	73.4	35.9	47	39	39	37	35	35	35	37	36.8	2.75	43	39	37	
5/9/2019 3:07	1.0 hour	52.9	88.5	74.3	34.2	67	49	43	37	35	35	35	37	38.6	5.83	63	45	39	
5/9/2019 4:07	1.0 hour	51	86.6	73.9	33.1	65	49	43	35	35	35	35	35	37.8	5.45	57	45	39	
5/9/2019 5:07	1.0 hour	65.5	101.1	80.8	36.1	73	71	69	55	41	39	37	55	55.2	10.99	73	71	65	
5/9/2019 6:07	1.0 hour	63.3	98.9	82.2	35.7	73	69	67	49	41	39	37	49	51.7	10.08	71	69	61	
5/9/2019 7:07	1.0 hour	59.4	95	74	36.1	69	67	63	47	41	39	37	47	49.1	8.49	69	65	53	
5/9/2019 8:07	1.0 hour	55.9	91.5	75.5	37	67	61	57	47	41	39	37	47	47.9	6.49	65	59	51	
5/9/2019 9:07	1.0 hour	54.7	90.3	79.1	35.8	67	57	51	43	37	37	35	43	43.7	6.61	65	53	47	
5/9/2019 10:07	1.0 hour	55.5	91.1	77.8	33.1	69	61	53	43	37	35	35	43	44.2	7.22	65	57	47	
5/9/2019 11:07	1.0 hour	54.4	90	73.4	37.8	67	59	51	41	39	39	37	41	43.6	6.31	65	53	45	
5/9/2019 12:07	1.0 hour	56	91.6	77.9	37.8	67	61	55	43	39	39	39	43	45.4	7.09	67	59	47	
5/9/2019 13:07	1.0 hour	62.1	97.7	81.4	37.8	71	69	67	49	39	39	37	49	51.5	9.77	71	67	59	
5/9/2019 14:07	1.0 hour	63.5	99.1	84.1	38.2	73	69	67	55	43	41	39	55	55	8.77	71	67	63	
5/9/2019 15:07	1.0 hour	61.8	97.4	83.8	35.5	71	67	65	51	39	37	35	51	51.5	9.55	71	67	59	
5/9/2019 16:07	1.0 hour	60.1	95.7	79.1	35.4	71	67	63	49	39	37	35	49	50.5	8.81	69	65	57	
5/9/2019 17:07	1.0 hour	60.5	96.1	84.8	36.5	71	65	61	51	43	41	39	51	52.4	6.99	69	63	57	
5/9/2019 18:07	1.0 hour	61.6	97.2	91	34.8	71	63	61	53	45	43	39	53	52.5	6.73	67	61	57	
5/9/2019 19:07	20.4 min	58.8	89.7	72.7	40.4	69	65	61	53	45	43	41	53	53.3	6.24	67	63	57	

Lassen County Noise Element Update Long-Term Noise Level Measurement Data

LOCATION LT4

Rec 1 to 25	Slow Response		dBA weighting			2.0 dB resolution stats													
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
5/8/2019 18:16	1.0 hour	54.1	89.7	69.8	35.8	67	61	51	43	37	35	35	43	43.9	6.87	65	53	47	
5/8/2019 19:16	1.0 hour	50.3	85.9	62.7	35.8	57	53	53	47	39	39	37	47	47	4.92	55	53	51	
5/8/2019 20:16	1.0 hour	53.3	88.9	72.9	35.8	63	57	55	47	39	37	35	47	46.9	6.1	61	55	51	
5/8/2019 21:16	1.0 hour	48.1	83.7	60.2	35.4	57	53	51	43	35	35	35	43	43.3	5.92	55	53	47	
5/8/2019 22:16	1.0 hour	47.2	82.8	63	32.9	55	51	49	43	35	35	35	43	42.5	5.42	53	51	47	
5/8/2019 23:16	1.0 hour	53.1	88.7	72.7	32.9	65	55	51	37	35	35	35	37	40.8	7.56	65	53	45	
5/9/2019 0:16	1.0 hour	43.5	79.1	57.4	32.9	51	49	47	37	35	35	35	37	39	5	51	49	43	
5/9/2019 1:16	1.0 hour	45	80.6	60.1	32.9	55	51	47	37	35	35	35	37	39.4	5.5	55	49	43	
5/9/2019 2:16	1.0 hour	44.6	80.2	57.6	32.9	53	51	49	37	35	35	35	37	39.3	5.54	53	49	43	
5/9/2019 3:16	1.0 hour	45.6	81.2	58.7	32.9	55	51	49	37	35	35	35	37	40.1	5.86	53	51	45	
5/9/2019 4:16	1.0 hour	54.4	90	71.2	32.9	67	59	57	45	35	35	35	45	44.8	8.1	63	57	51	
5/9/2019 5:16	1.0 hour	52.4	88	68.2	37.6	59	55	55	51	43	41	39	51	49.5	4.32	57	55	53	
5/9/2019 6:16	1.0 hour	51	86.6	68.8	38.9	57	55	53	47	41	41	39	47	47.7	4.38	57	53	51	
5/9/2019 7:16	1.0 hour	47.3	82.9	63.3	39.5	53	51	49	45	41	41	39	45	44.9	3.29	53	49	47	
5/9/2019 8:16	1.0 hour	46.1	81.7	62.1	38.8	51	49	47	45	41	41	39	45	44.2	2.68	51	47	45	
5/9/2019 9:16	1.0 hour	47.7	83.3	70.5	40.3	53	49	49	45	41	41	39	45	44.5	3.31	51	49	47	
5/9/2019 10:16	1.0 hour	48.5	84.1	61.4	38.9	53	51	51	47	43	41	39	47	46.5	3.04	53	51	49	
5/9/2019 11:16	1.0 hour	50.7	86.3	68.6	38.9	61	53	51	45	41	41	39	45	46.2	4.06	59	51	47	
5/9/2019 12:16	1.0 hour	46.9	82.5	61.1	38.1	53	51	49	45	39	39	37	45	44.3	3.61	51	49	47	
5/9/2019 13:16	1.0 hour	48.2	83.8	62.1	37.6	55	51	49	47	41	41	39	47	45.9	3.32	53	51	47	
5/9/2019 14:16	1.0 hour	47.4	83	64.2	38.7	55	51	49	45	41	39	39	45	44.7	3.54	53	49	47	
5/9/2019 15:16	1.0 hour	49.4	85	67.6	37.2	57	51	51	47	41	41	39	47	46.3	3.81	55	51	49	
5/9/2019 16:16	1.0 hour	51.2	86.8	70.2	37.5	61	55	51	47	43	41	39	47	47	4.27	59	53	49	
5/9/2019 17:16	1.0 hour	49.5	85.1	60.6	35.9	57	53	51	47	41	39	35	47	46.7	4.17	55	51	49	
5/9/2019 18:16	23.4 min	54.6	86.1	72.1	37.4	65	59	57	47	41	39	37	47	48	6.18	63	59	51	

Long-Term Noise Measure Location LT1

Leq	Time	Adjustment					
49.8	Midnight	10	59.8	59.8			
47.9	1	10	57.9	57.9			
49.3	2	10	59.3	59.3			
47.6	3	10	57.6	57.6			
52.3	4	10	62.3	62.3			
47.6	5	10	57.6	57.6			
48.7	6	10	58.7	58.7			
51.7	7am		51.7	51.7			
47.1	8		47.1	47.1			
41.5	9		41.5	41.5			
37.6	10		37.6	37.6			
45.3	11		45.3	45.3			
37	noon		37	37			
47.8	1		47.8	47.8			
35.7	2		35.7	35.7			
52.1	3		52.1	52.1			
38.6	4		38.6	38.6			
48.3	5		48.3	48.3			
49.8	6		49.8	49.8			
50.7	7	5	55.7	50.7			
49	8	5	54	49			
48	9	5	53	48			
47.5	10	10	57.5	57.5			
47.1	11	10	57.1	57.1			
			55.5	55.2			
			CNEL	LDN			

Long-Term Noise Measure Location LT2

Leq	Time	Adjustment					
74.3	Midnight	10	84.3	84.3			
59.2	1	10	69.2	69.2			
58.9	2	10	68.9	68.9			
58.9	3	10	68.9	68.9			
58	4	10	68	68			
60.2	5	10	70.2	70.2			
59.2	6	10	69.2	69.2			
59.8	7am		59.8	59.8			
52.6	8		52.6	52.6			
51.2	9		51.2	51.2			
45.7	10		45.7	45.7			
49.6	11		49.6	49.6			
38.4	noon		38.4	38.4			
38.2	1		38.2	38.2			
47.8	2		47.8	47.8			
41.6	3		41.6	41.6			
49.5	4		49.5	49.5			
56.7	5		56.7	56.7			
57.4	6		57.4	57.4			
58.8	7	5	63.8	58.8			
59.6	8	5	64.6	59.6			
58.2	9	5	63.2	58.2			
57.3	10	10	67.3	67.3			
59.8	11	10	69.8	69.8			
			71.6	71.5			
			CNEL	LDN			

Long-Term Noise Measure Location LT3

Leq	Time	Adjustment					
56	Midnight	10	66	66			
62.1	1	10	72.1	72.1			
63.5	2	10	73.5	73.5			
61.8	3	10	71.8	71.8			
60.1	4	10	70.1	70.1			
60.5	5	10	70.5	70.5			
61.6	6	10	71.6	71.6			
55.9	7am		55.9	55.9			
56.6	8		56.6	56.6			
61.2	9		61.2	61.2			
60.6	10		60.6	60.6			
48.7	11		48.7	48.7			
48.3	noon		48.3	48.3			
45.9	1		45.9	45.9			
45.2	2		45.2	45.2			
52.9	3		52.9	52.9			
51	4		51	51			
65.5	5		65.5	65.5			
63.3	6		63.3	63.3			
59.4	7	5	64.4	59.4			
55.9	8	5	60.9	55.9			
54.7	9	5	59.7	54.7			
55.5	10	10	65.5	65.5			
54.4	11	10	64.4	64.4			
			66.8	66.7			
			CNEL	LDN			

Long-Term Noise Measure Location LT4

Leq	Time	Adjustment					
46.9	Midnight	10	56.9	56.9			
48.2	1	10	58.2	58.2			
47.4	2	10	57.4	57.4			
49.4	3	10	59.4	59.4			
51.2	4	10	61.2	61.2			
49.5	5	10	59.5	59.5			
54.1	6	10	64.1	64.1			
50.3	7am		50.3	50.3			
53.3	8		53.3	53.3			
48.1	9		48.1	48.1			
47.2	10		47.2	47.2			
53.1	11		53.1	53.1			
43.5	noon		43.5	43.5			
45	1		45	45			
44.6	2		44.6	44.6			
45.6	3		45.6	45.6			
54.4	4		54.4	54.4			
52.4	5		52.4	52.4			
51	6		51	51			
47.3	7	5	52.3	47.3			
46.1	8	5	51.1	46.1			
47.7	9	5	52.7	47.7			
48.5	10	10	58.5	58.5			
50.7	11	10	60.7	60.7			
			56.6	56.5			
			CNEL	LDN			

ATTACHMENT 2.3

MAJOR STATIONARY NOISE SOURCES MEASUREMENT DATA

Rec 1	Slow Response		dBA weighting			2.0 dB resolution stats														
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%		
5/10/2019 13:12	30 min	58.4	91.1	72.7	29.4	67	65	61	53	41	41	39	53	52.4	7.13	65	63	57		

	Slow Response		dBA weighting		2.0 dB resolution stats												
Date hh:mm:ss	Leq Period	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%
5/10/2019 11:54	15.0 min	62.1	89.2	72.6	53.1	67	65	63	61	59	59	57	61	60.6	1.97	65	63	61

Diamond Mountain Speedway Race Noise Level Measurements - Map Showing Measurement Locations

R1= PICC 7003

R2 = PICC 11

R3 = PICC 7001

Rec 1 to 11	Slow Response		dBA weighting		2.0 dB resolution stats													
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%
5/10/2019 9:16	1.0 hour	55.1	90.7	68.5	42.3	65	59	57	51	47	45	43	51	51.7	4.15	63	57	55
5/10/2019 10:16	1.0 hour	53	88.6	71.3	43.5	61	57	55	49	45	45	43	49	50.1	3.7	59	55	53
5/10/2019 11:16	1.0 hour	54.8	90.4	67.1	41.7	63	61	59	49	45	43	41	49	50.6	5.05	61	59	53
5/10/2019 12:16	1.0 hour	54.2	89.8	74	40.8	65	59	57	47	43	43	41	47	48.9	5.13	63	57	51
5/10/2019 13:16	1.0 hour	50.6	86.2	66.7	39.9	61	55	53	45	41	41	39	45	46	4.73	57	53	49
5/10/2019 14:16	1.0 hour	59.7	95.3	85	39.7	69	65	63	47	43	41	39	47	50	7.98	67	65	55
5/10/2019 15:16	1.0 hour	60	95.6	74.6	39.5	69	65	63	51	41	41	39	51	51.7	8.22	69	65	59
5/10/2019 16:16	1.0 hour	50.3	85.9	68.5	39.8	57	53	53	47	43	43	41	47	47.7	3.49	55	53	49
5/10/2019 17:16	1.0 hour	50.2	85.8	68.2	39.4	59	53	53	47	43	41	39	47	47.2	3.83	57	53	49
5/10/2019 18:16	1.0 hour	70.9	106.5	86.7	42.8	83	79	73	61	45	45	43	61	59.2	10.28	81	75	65
5/10/2019 19:16	51.6 min	76.4	111.3	90.8	45.7	87	83	79	65	53	51	45	65	65.6	10.1	85	81	73

Rec 1 to 11	Slow Response		dBA weighting		2.0 dB resolution stats													
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%
5/10/2019 10:00	1.0 hour	49.9	85.5	65.4	43.1	59	53	51	47	43	43	43	47	47.2	3.22	57	53	49
5/10/2019 11:00	1.0 hour	52.9	88.5	70.3	43.5	61	57	55	49	45	45	43	49	49.5	3.9	59	55	51
5/10/2019 12:00	1.0 hour	53.2	88.8	74.8	43.2	61	57	55	49	47	45	43	49	50.1	3.51	59	55	51
5/10/2019 13:00	1.0 hour	50.2	85.8	66.1	39.9	59	55	53	45	41	39	39	45	45.9	4.65	57	53	49
5/10/2019 14:00	1.0 hour	47.9	83.5	67.4	39.9	57	51	49	43	41	41	39	43	44.6	3.48	55	49	45
5/10/2019 15:00	1.0 hour	43.4	79	54	39.5	49	45	45	41	39	39	39	41	41.7	2.43	47	45	43
5/10/2019 16:00	1.0 hour	43.3	78.9	62.8	38.9	49	45	43	41	39	39	39	41	41.2	2.43	47	45	43
5/10/2019 17:00	1.0 hour	45.8	81.4	57.6	39.7	53	49	49	41	39	39	39	41	43.2	3.46	51	49	45
5/10/2019 18:00	1.0 hour	56.8	92.4	61.4	41.1	59	59	59	57	41	41	41	57	52.2	7.2	59	59	59
5/10/2019 19:00	1.0 hour	61.1	96.7	72.2	44.6	67	65	63	59	55	49	45	59	58.4	4.12	67	65	59
5/10/2019 20:00	28.4 min	60.8	93.1	74.5	42.7	69	67	65	51	45	43	43	51	54	7.57	69	65	61

Rec 2 to 7	Slow Response		dBA weighting		2.0 dB resolution stats													
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%
5/10/2019 9:39	1.0 hour	58.9	94.5	86.4	41.9	65	61	59	51	45	45	43	51	52.1	5.06	63	59	55
5/10/2019 10:39	1.0 hour	57.4	82.5	70.3	44.4	67	63	61	53	47	47	45	53	53.2	4.92	65	61	57
5/10/2019 14:18	1.0 hour	61.4	97	92.2	37.8	69	61	57	49	41	41	39	49	49.5	6.55	65	59	53
5/10/2019 15:18	1.0 hour	62	97.6	91.9	36.1	69	61	57	49	41	39	39	49	49.1	6.95	65	59	53
5/10/2019 16:18	1.0 hour	58.8	94.4	85.2	36.1	69	61	57	47	41	39	35	47	48.2	7	65	59	53
5/10/2019 17:18	1.0 hour	56.2	91.8	80.6	37.7	67	61	57	45	41	39	39	45	47.3	6.34	65	57	51
5/10/2019 18:18	1.0 hour	63.1	98.7	81.1	39.6	73	71	65	53	45	43	41	53	53.5	7.79	73	69	57
5/10/2019 19:18	1.0 hour	64.4	99.9	83.1	39.5	75	71	67	51	43	41	39	51	53.5	9.35	73	69	61

ATTACHMENT 3

TRAFFIC NOISE DATA

EXISTING AND PREDITED FUTURE TRAFFIC NOISE LEVELS

TABLE A - Traffic Count Data and Future Traffic Volume Forecast Summary

Site	Road	Minutes	Autos	MT/ Bus [1]	HT [2]	Total (A+MT+HT)	% Auto	% MT	% HT	Per Hour	Speed (mph)	EOP Distance (Ft.) [3]	Leq [4] (dBA)	2013 ADT Hwy [5]	2017 ADT Hwy [6]	Annual Growth [7]	2040 ADT Hwy [8]	County 2019 ADT [9]	County 2040 ADT [10]
1.1	Clark Street	30	3	1	0	4	75%	25%	0%	8	25	8	52.9	-	-	-0.22%	-	80	76
1.2	US 395 - Longview Elementary	15	65	38	13	116	56%	33%	11%	464	65	20	70.9	4350	5000	3.7%	8738	-	-
2.1	Susan Hills Drive	15	3	1	0	4	75%	25%	0%	16	25	5	54.2	-	-	-0.22%	-	160	153
2.2	Richmond Road	15	23	20	0	43	53%	47%	0%	172	55	10	68.8	-	-	-0.22%	-	2471	2357
2.3	Gold Run Road	15	9	9	0	18	50%	50%	0%	72	35	10	60.9	-	-	-0.22%	-	848	809
2.4	Wingfield Road	15	11	4	0	15	73%	27%	0%	60	25	5	58.6	-	-	-0.22%	-	602	574
3.1	US 395 (at Sears Road)	15	43	18	10	71	61%	25%	14%	284	65	20	70	7300	7900	2.1%	11350	-	-
3.2	Main Street	15	8	4	2	14	57%	29%	14%	56	25	10	69.8	-	-	-0.22%	-	957	913
3.3	North Main	15	4	9	0	13	31%	69%	0%	52	25	5	65.5	-	-	-0.22%	-	1170	1116
4.1	Johnstonville Road (Urban)	15	13	5	0	18	72%	28%	0%	72	25	10	61.2	-	-	-0.22%	-	3337	3183
4.2	Johnstonville Road (Rural)	15	65	40	13	118	55%	34%	11%	472	45	15	73.8	-	-	-0.22%	-	1180	1125
4.3	Center Road	15	46	60	14	120	38%	50%	12%	480	55	10	75	-	-	-0.22%	-	5247	5005
4.4	US 395 (Johnstonville)	15	50	68	9	127	39%	54%	7%	508	65	10	77.3	7300	9200	6.5%	20125	-	-
5.1	US 395 (at Wndel Road)	15	9	6	2	17	53%	35%	12%	68	65	20	66.7	1050	1250	4.8%	2400	-	-
6.2	Eagle Lake Rd (at Forest)	30	2	6	0	8	25%	75%	0%	16	35	5	62.6	-	-	-0.22%	-	929	886
6.3	SR 36 (at Eagle Rd)	15	31	27	9	67	46%	40%	13%	268	55	10	75.5	4600	5400	4.3%	10000	-	-
6.4	SR 44 (at SR 36)	15	13	3	7	23	57%	13%	30%	92	65	20	70.1	1750	1900	2.1%	2763	-	-
7	US 395 (at Schoolhouse)	15	4	4	4	12	33%	33%	33%	48	65	10	67.8	850	980	3.8%	1728	-	-
8	US 395 (at Lassen Street)	15	3	3	8	14	21%	21%	57%	56	65	10	66.5	830	870	1.2%	1100	-	
9.1	SR 299 (at Market)	15	2	1	0	3	67%	33%	0%	12	45	10	64.5	1500	1400	-1.7%	825	-	-
9.2	Market Street	30	0	3	0	3	0%	100%	0%	6	25	5	50.5	-	-	-0.22%	-	60	57
9.3	Susanville Road	15	2	6	0	8	25%	75%	0%	32	55	10	68.9	-	-	-0.22%	-	625	596
10	SR 139 Willowcreek (Campground)	15	9	0	0	9	100%	0%	0%	36	60	28	60.5	430	650	12.8%	1915	-	-
11.1	Eagle Lake Rd at Lake View	15	5	0	0	5	100%	0%	0%	20	55	28	53.9	-	-	-0.22%	-	66	63
11.2	Mahogany Way at Ivy Way (Eagle Lake)	15	3	0	0	3	100%	0%	0%	12	25	13	46.9	-	-	-0.22%	-	120	114
12.1	Eagle Lake Rd at Gallatin (Eagle Lake)	15	6	0	0	6	100%	0%	0%	24	55	13	53	-	-	-0.22%	-	138	132
12.2	Gallatin Road (Eagle Lake)	5	2	0	0	2	100%	0%	0%	24	35	13	43.3	-	-	-0.22%	-	240	229
13.1	Mooney Road (Westwood)	15	6	0	0	6	100%	0%	0%	24	55	18	53.1	-	-	-0.22%	-	234	223
13.2	SR 36	15	12	19	2	33	36%	58%	6%	132	50	5	70.1	2200	2450	2.8%	3888	-	-
13.3	Mooney (3rd St) Westwood	15	4	9	1	14	29%	64%	7%	56	50	5	65.2	-	-	-0.22%	-	1094	1043
14.1	Garnier Road	15	13	9	2	24	54%	38%	8%	96	65	20	64.2	-	-	-0.22%	-	1166	1112
14.2	Herlong Access Road	15	17	9	0	26	65%	35%	0%	104	55	15	66.7	-	-	-0.22%	-	852	813
15	SR 70	15	26	22	4	52	50%	42%	8%	208	65	20	67.2	3700	4400	4.7%	8425	-	-
16	Skyline Road	15	20	17	1	38	53%	45%	3%	152	65	20	70.2	-	-	-0.22%	-	3099	2956
17.1	Standish-Buntingville Road	15	9	10	0	19	47%	53%	0%	76	55	10	66.3	-	-	-0.22%	-	1463	1395
17.2	Sunnyside Road	15	5	5	1	11	45%	45%	9%	44	25	15	59.9	-	-	-0.22%	-	363	346

Table Notes:

1 MT stands for Medium Truck.

2 HT stands for Heavy Truck.

3 EOP is Edge of Pavement, the number provided is the distance in feet between the EOP and the sound level meter location.

4 Leq is "equivalent sound level" or "average sound level".

5 2013 Highway Traffic Data from Caltrans 2013 Annual Traffic Counts on California Highway System.

6 2017 Highway Traffic Data from Caltrans 2017 Annual Traffic Counts on California Highway System.

7 Annual growth rate for County Roads based upon Lassen County Regional Transportation Improvement Plan 2018; growth rate for Caltrans highways based on change across 2013-2017.

8 2040 Highway traffic volumes predicted by applying annual growth rate to 2017 ADT, for years 2018 to 2040.

9 County roads traffic data from Lassen County Public Works traffic counts.

10 2040 County road traffic volumes predicted by applying annual growth rate to 2019 ADT, for years 2020 to 2040.

TABLE A Traffic Count Data and Future Traffic Volume Forecast Summary

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FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Clarke Street - Doyle	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	80			PK HR VOL	8
SPEED	25				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	20		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7500
MEDIUM TRUCKS	0.874	0.051	0.075	0.2490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	44.5	42.6	40.7	34.8	44.0
MEDIUM TRUCKS	52.4	51.0	44.6	41.6	51.1
HEAVY TRUCKS	35.5	34.2	25.3	25.0	34.2
VEHICULAR NOISE	**53.1**	51.7	46.2	42.5	51.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Clarke Street - Doyle	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	80			PK HR VOL	8
SPEED	25				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	20		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7500
MEDIUM TRUCKS	0.874	0.051	0.075	0.2490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	44.5	42.6	40.7	34.8	44.0
MEDIUM TRUCKS	52.4	51.0	44.6	41.6	51.1
HEAVY TRUCKS	35.5	34.2	25.3	25.0	34.2
VEHICULAR NOISE	53.1	51.7	46.2	42.5	**51.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Clark Street - Doyle	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	76			PK HR VOL	8
SPEED	25				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	10.0
DIST WALL	0			MED TRUCK SLE DIST	9.1
DIST W/OB	20			HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7500
MEDIUM TRUCKS	0.874	0.051	0.075	0.2490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	44.3	42.3	40.5	34.5	43.7
MEDIUM TRUCKS	52.2	50.8	44.4	41.4	50.9
HEAVY TRUCKS	35.3	34.0	25.1	24.8	34.0
VEHICULAR NOISE	52.9	51.4	45.9	42.3	**51.7**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 - Doyle	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	4,640			PK HR VOL	464
SPEED	65				
PK HR %	10				
DIST CTL	32				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		31.8
DIST WALL	0		MED TRUCK SLE DIST		31.5
DIST W/OB	32		HVY TRUCK SLE DIST		31.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5600
MEDIUM TRUCKS	0.874	0.051	0.075	0.3300
HEAVY TRUCKS	0.891	0.028	0.081	0.1100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.6	58.7	56.9	50.9	60.1
MEDIUM TRUCKS	68.7	67.3	60.9	57.9	67.4
HEAVY TRUCKS	67.2	65.9	57.0	56.7	65.9
VEHICULAR NOISE	**71.4**	70.0	63.5	60.8	70.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 - Doyle	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	5,000			PK HR VOL	500
SPEED	65				
PK HR %	10				
DIST CTL	70				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		69.9
DIST WALL	0		MED TRUCK SLE DIST		69.8
DIST W/OB	70		HVY TRUCK SLE DIST		69.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.1300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.7	56.8	55.0	49.0	58.2
MEDIUM TRUCKS	55.1	53.8	47.4	44.4	53.9
HEAVY TRUCKS	64.8	63.5	54.6	54.3	63.5
VEHICULAR NOISE	66.1	64.7	58.2	55.8	**65.0**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 - Doyle	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	8,738			PK HR VOL	874
SPEED	65				
PK HR %	10				
DIST CTL	120				
DIST N/F	12	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	120.0
DIST WALL	0			MED TRUCK SLE DIST	119.9
DIST W/OB	120			HVY TRUCK SLE DIST	119.9
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.1300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.8	56.9	55.1	49.1	58.3
MEDIUM TRUCKS	55.2	53.8	47.5	44.4	53.9
HEAVY TRUCKS	64.9	63.6	54.7	54.4	63.6
VEHICULAR NOISE	66.2	64.8	58.3	55.9	**65.1**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Susan Hills Road - Souh Susanville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	160			PK HR VOL	16
SPEED	25				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	20		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7500
MEDIUM TRUCKS	0.874	0.051	0.075	0.2490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	47.5	45.6	43.8	37.8	47.0
MEDIUM TRUCKS	55.4	54.0	47.7	44.6	54.1
HEAVY TRUCKS	38.5	37.2	28.3	28.1	37.3
VEHICULAR NOISE	**56.1**	54.7	49.2	45.5	54.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Susan Hills Road - South Susanville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	160		PK HR VOL	16
SPEED	25			
PK HR %	10			
DIST CTL	20			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	10.0
DIST WALL	0		MED TRUCK SLE DIST	9.1
DIST W/OB	20		HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7500
MEDIUM TRUCKS	0.874	0.051	0.075	0.2490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	47.5	45.6	43.8	37.8	47.0
MEDIUM TRUCKS	55.4	54.0	47.7	44.6	54.1
HEAVY TRUCKS	38.5	37.2	28.3	28.1	37.3
VEHICULAR NOISE	**56.1**	54.7	49.2	45.5	54.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Susan Hills Road - South Susanville	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	153		PK HR VOL	15
SPEED	25			
PK HR %	10			
DIST CTL	20			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	10.0
DIST WALL	0		MED TRUCK SLE DIST	9.1
DIST W/OB	20		HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7500
MEDIUM TRUCKS	0.874	0.051	0.075	0.2490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	47.3	45.4	43.6	37.6	46.8
MEDIUM TRUCKS	55.2	53.8	47.5	44.4	53.9
HEAVY TRUCKS	38.3	37.1	28.1	27.9	37.1
VEHICULAR NOISE	**55.9**	54.5	49.0	45.3	54.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Richmond Road - South Susanville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	1,720			PK HR VOL	172
SPEED	55				
PK HR %	10				
DIST CTL	22				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.6
DIST WALL	0		MED TRUCK SLE DIST		12.9
DIST W/OB	22		HVY TRUCK SLE DIST		13.0
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5300
MEDIUM TRUCKS	0.874	0.051	0.075	0.4690
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.7	55.8	54.0	48.0	57.2
MEDIUM TRUCKS	68.0	66.7	60.3	57.3	66.7
HEAVY TRUCKS	45.3	44.0	35.1	34.8	44.0
VEHICULAR NOISE	**68.4**	67.0	61.2	57.8	67.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Richmond Road - South Susanville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	2,471			PK HR VOL	247
SPEED	55				
PK HR %	10				
DIST CTL	35				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		30.4
DIST WALL	0		MED TRUCK SLE DIST		30.1
DIST W/OB	35		HVY TRUCK SLE DIST		30.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5300
MEDIUM TRUCKS	0.874	0.051	0.075	0.4690
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.8	53.9	52.1	46.1	55.3
MEDIUM TRUCKS	65.9	64.6	58.2	55.2	64.6
HEAVY TRUCKS	43.2	41.9	33.0	32.7	41.9
VEHICULAR NOISE	66.4	64.9	59.2	55.7	**65.1**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Richmond Road - South Susanville	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	2,357		PK HR VOL	236
SPEED	55			
PK HR %	10			
DIST CTL	35			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	30.4
DIST WALL	0		MED TRUCK SLE DIST	30.1
DIST W/OB	35		HVY TRUCK SLE DIST	30.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS: (15=HARD SITE, 10=SOFT SITE)

AUTOM	10.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	0.0	AUTOMOBILES =	0.00	
ROAD	0.0	MEDIUM TRUCKS=	2.30	
		HEAVY TRUCKS =	8.01	
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5300
MEDIUM TRUCKS	0.874	0.051	0.075	0.4690
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.6	53.7	51.9	45.9	55.1
MEDIUM TRUCKS	65.7	64.4	58.0	54.9	64.4
HEAVY TRUCKS	43.0	41.7	32.8	32.5	41.7
VEHICULAR NOISE	**66.2**	64.7	58.9	55.5	64.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Gold Run Road - South Susanville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	720		PK HR VOL	72
SPEED	35			
PK HR %	10			
DIST CTL	20			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	10.0
DIST WALL	0		MED TRUCK SLE DIST	9.1
DIST W/OB	20		HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5000
MEDIUM TRUCKS	0.874	0.051	0.075	0.4990
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.5	47.6	45.8	39.8	49.0
MEDIUM TRUCKS	61.3	60.0	53.6	50.6	60.1
HEAVY TRUCKS	40.1	38.8	29.9	29.7	38.9
VEHICULAR NOISE	**61.6**	60.2	54.3	50.9	60.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Gold Run Road - South Susanville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	848		PK HR VOL	85
SPEED	35			
PK HR %	10			
DIST CTL	20			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	10.0
DIST WALL	0		MED TRUCK SLE DIST	9.1
DIST W/OB	20		HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5000
MEDIUM TRUCKS	0.874	0.051	0.075	0.4990
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	50.2	48.3	46.5	40.5	49.7
MEDIUM TRUCKS	62.1	60.7	54.3	51.3	60.8
HEAVY TRUCKS	40.8	39.6	30.6	30.4	39.6
VEHICULAR NOISE	62.4	61.0	55.0	51.7	**61.1**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Gold Run Road - South Susanville	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	809		PK HR VOL	81
SPEED	35			
PK HR %	10			
DIST CTL	20			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	10.0
DIST WALL	0		MED TRUCK SLE DIST	9.1
DIST W/OB	20		HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5000
MEDIUM TRUCKS	0.874	0.051	0.075	0.4990
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	50.0	48.1	46.3	40.3	49.5
MEDIUM TRUCKS	61.8	60.5	54.1	51.1	60.6
HEAVY TRUCKS	40.6	39.3	30.4	30.2	39.4
VEHICULAR NOISE	62.2	60.7	54.8	51.4	**60.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wingfield Road - South Susanville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	600		PK HR VOL	60
SPEED	25			
PK HR %	10			
DIST CTL	17			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	16.7
DIST WALL	0		MED TRUCK SLE DIST	16.1
DIST W/OB	17		HVY TRUCK SLE DIST	16.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7300
MEDIUM TRUCKS	0.874	0.051	0.075	0.2690
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.8	47.9	46.1	40.1	49.3
MEDIUM TRUCKS	57.8	56.4	50.0	47.0	56.5
HEAVY TRUCKS	40.6	39.3	30.4	30.1	39.3
VEHICULAR NOISE	**58.5**	57.0	51.5	47.9	57.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wingfield Road - South Susanville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	602			PK HR VOL	60
SPEED	25				
PK HR %	10				
DIST CTL	17				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.7
DIST WALL	0		MED TRUCK SLE DIST		16.1
DIST W/OB	17		HVY TRUCK SLE DIST		16.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7300
MEDIUM TRUCKS	0.874	0.051	0.075	0.2690
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.8	47.9	46.1	40.1	49.3
MEDIUM TRUCKS	57.8	56.4	50.0	47.0	56.5
HEAVY TRUCKS	40.6	39.3	30.4	30.1	39.3
VEHICULAR NOISE	58.5	57.0	51.5	47.9	**57.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wingfield Road - South Susanville	DATE:	5/6/2019
Scenario:	**Future**	BY:	J. Leech

ADT	574			PK HR VOL	57
SPEED	25				
PK HR %	10				
DIST CTL	17				
DIST N/F	12	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	16.7
DIST WALL	0			MED TRUCK SLE DIST	16.1
DIST W/OB	17			HVY TRUCK SLE DIST	16.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7300
MEDIUM TRUCKS	0.874	0.051	0.075	0.2690
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.6	47.7	45.9	39.9	49.1
MEDIUM TRUCKS	57.6	56.2	49.8	46.8	56.3
HEAVY TRUCKS	40.4	39.1	30.2	29.9	39.1
VEHICULAR NOISE	58.3	56.8	51.3	47.7	**57.1**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Janesville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	2,840			PK HR VOL	284
SPEED	65				
PK HR %	10				
DIST CTL	32				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		26.9
DIST WALL	0		MED TRUCK SLE DIST		26.6
DIST W/OB	32		HVY TRUCK SLE DIST		26.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6100
MEDIUM TRUCKS	0.874	0.051	0.075	0.2500
HEAVY TRUCKS	0.891	0.028	0.081	0.1400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	59.6	57.7	55.9	49.9	59.1
MEDIUM TRUCKS	66.1	64.7	58.3	55.3	64.8
HEAVY TRUCKS	66.9	65.6	56.6	56.4	65.6
VEHICULAR NOISE	**69.9**	68.5	61.8	59.4	68.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Janesville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	7,900			PK HR VOL	790
SPEED	65				
PK HR %	10				
DIST CTL	55				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		52.2
DIST WALL	0		MED TRUCK SLE DIST		52.0
DIST W/OB	55		HVY TRUCK SLE DIST		52.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8900
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.8	60.9	59.1	53.1	62.3
MEDIUM TRUCKS	56.6	55.3	48.9	45.9	55.4
HEAVY TRUCKS	61.7	60.4	51.5	51.2	60.4
VEHICULAR NOISE	65.9	64.2	60.1	55.7	**65.0**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Janesville	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	11,350			PK HR VOL	1,135
SPEED	65				
PK HR %	10				
DIST CTL	70				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		67.8
DIST WALL	0		MED TRUCK SLE DIST		67.7
DIST W/OB	70		HVY TRUCK SLE DIST		67.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8900
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.2	61.3	59.5	53.5	62.7
MEDIUM TRUCKS	57.1	55.7	49.3	46.3	55.8
HEAVY TRUCKS	62.1	60.9	51.9	51.7	60.9
VEHICULAR NOISE	66.3	64.7	60.5	56.2	**65.4**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Main Street - Janesville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	560			PK HR VOL	56
SPEED	25				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	20		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5700
MEDIUM TRUCKS	0.874	0.051	0.075	0.2900
HEAVY TRUCKS	0.891	0.028	0.081	0.1400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	51.7	49.8	48.0	42.0	51.2
MEDIUM TRUCKS	61.5	60.1	53.8	50.7	60.2
HEAVY TRUCKS	65.4	64.1	55.2	55.0	64.2
VEHICULAR NOISE	**67.0**	65.7	58.0	56.5	65.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Main Street - Janesville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	957			PK HR VOL	96
SPEED	25				
PK HR %	10				
DIST CTL	23				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		15.2
DIST WALL	0		MED TRUCK SLE DIST		14.6
DIST W/OB	23		HVY TRUCK SLE DIST		14.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5700
MEDIUM TRUCKS	0.874	0.051	0.075	0.2900
HEAVY TRUCKS	0.891	0.028	0.081	0.1400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	51.4	49.5	47.7	41.7	50.9
MEDIUM TRUCKS	60.8	59.4	53.0	50.0	59.5
HEAVY TRUCKS	64.8	63.5	54.5	54.3	63.5
VEHICULAR NOISE	66.4	65.0	57.3	55.8	**65.1**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Main Street - Janesville	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	913			PK HR VOL	91
SPEED	25				
PK HR %	10				
DIST CTL	23				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		15.2
DIST WALL	0		MED TRUCK SLE DIST		14.6
DIST W/OB	23		HVY TRUCK SLE DIST		14.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5700
MEDIUM TRUCKS	0.874	0.051	0.075	0.2900
HEAVY TRUCKS	0.891	0.028	0.081	0.1400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	51.2	49.3	47.4	41.5	50.7
MEDIUM TRUCKS	60.6	59.2	52.8	49.8	59.3
HEAVY TRUCKS	64.6	63.3	54.3	54.1	63.3
VEHICULAR NOISE	66.2	64.8	57.1	55.6	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	North Main Street - Janesville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	520			PK HR VOL	52
SPEED	35				
PK HR %	10				
DIST CTL	15				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		14.6
DIST WALL	0		MED TRUCK SLE DIST		14.0
DIST W/OB	15		HVY TRUCK SLE DIST		14.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3100
MEDIUM TRUCKS	0.874	0.051	0.075	0.6890
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	50.4	48.5	46.7	40.7	49.9
MEDIUM TRUCKS	65.6	64.3	57.9	54.8	64.3
HEAVY TRUCKS	43.0	41.7	32.8	32.6	41.8
VEHICULAR NOISE	**65.8**	64.4	58.2	55.0	64.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	North Main Street - Janesville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,170			PK HR VOL	117
SPEED	35				
PK HR %	10				
DIST CTL	23				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		22.8
DIST WALL	0		MED TRUCK SLE DIST		22.4
DIST W/OB	23		HVY TRUCK SLE DIST		22.4
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3100
MEDIUM TRUCKS	0.874	0.051	0.075	0.6890
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	51.1	49.1	47.3	41.4	50.6
MEDIUM TRUCKS	66.1	64.7	58.4	55.3	64.8
HEAVY TRUCKS	43.5	42.2	33.3	33.0	42.2
VEHICULAR NOISE	66.3	64.9	58.7	55.5	**65.0**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	North Main Street - Janesville	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	1,116			PK HR VOL	112
SPEED	35				
PK HR %	10				
DIST CTL	23				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		22.8
DIST WALL	0		MED TRUCK SLE DIST		22.4
DIST W/OB	23		HVY TRUCK SLE DIST		22.4
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3100
MEDIUM TRUCKS	0.874	0.051	0.075	0.6890
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	50.9	48.9	47.1	41.2	50.4
MEDIUM TRUCKS	65.9	64.5	58.2	55.1	64.6
HEAVY TRUCKS	43.3	42.0	33.1	32.8	42.0
VEHICULAR NOISE	66.1	64.7	58.5	55.3	**64.8**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Johnstonville Rd (Urban) - Johnstonville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	720			PK HR VOL	72
SPEED	25				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	20		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7200
MEDIUM TRUCKS	0.874	0.051	0.075	0.2790
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.8	51.9	50.1	44.1	53.3
MEDIUM TRUCKS	62.4	61.0	54.7	51.6	61.1
HEAVY TRUCKS	45.1	43.8	34.8	34.6	43.8
VEHICULAR NOISE	**63.1**	61.6	56.0	52.4	61.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Johnstonville Rd (Urban) - Johnstonville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	3,337			PK HR VOL	334
SPEED	25				
PK HR %	10				
DIST CTL	24				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.6
DIST WALL	0		MED TRUCK SLE DIST		16.1
DIST W/OB	24		HVY TRUCK SLE DIST		16.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7200
MEDIUM TRUCKS	0.874	0.051	0.075	0.2790
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.2	55.3	53.5	47.5	56.7
MEDIUM TRUCKS	65.4	64.0	57.6	54.6	64.1
HEAVY TRUCKS	48.1	46.8	37.8	37.6	46.8
VEHICULAR NOISE	66.1	64.6	59.1	55.4	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Johnstonville Rd (Urban) - Johnstonville	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	3,183			PK HR VOL	318
SPEED	25				
PK HR %	10				
DIST CTL	24				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.6
DIST WALL	0		MED TRUCK SLE DIST		16.1
DIST W/OB	24		HVY TRUCK SLE DIST		16.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7200
MEDIUM TRUCKS	0.874	0.051	0.075	0.2790
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.0	55.1	53.3	47.3	56.5
MEDIUM TRUCKS	65.2	63.8	57.4	54.4	63.9
HEAVY TRUCKS	47.9	46.6	37.6	37.4	46.6
VEHICULAR NOISE	65.9	64.4	58.9	55.2	**64.7**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Johnstonville Rd (Rural) - Johnstonville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	4,720			PK HR VOL	472
SPEED	45				
PK HR %	10				
DIST CTL	25				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		24.8
DIST WALL	0		MED TRUCK SLE DIST		24.4
DIST W/OB	25		HVY TRUCK SLE DIST		24.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5500
MEDIUM TRUCKS	0.874	0.051	0.075	0.3400
HEAVY TRUCKS	0.891	0.028	0.081	0.1100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.1	60.2	58.4	52.4	61.6
MEDIUM TRUCKS	71.1	69.8	63.4	60.4	69.8
HEAVY TRUCKS	71.0	69.7	60.8	60.5	69.7
VEHICULAR NOISE	**74.4**	73.0	66.1	63.8	73.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Johnstonville Rd (Rural) - Johnstonville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,180			PK HR VOL	118
SPEED	45				
PK HR %	10				
DIST CTL	37				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.7
DIST WALL	0		MED TRUCK SLE DIST		32.4
DIST W/OB	37		HVY TRUCK SLE DIST		32.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5500
MEDIUM TRUCKS	0.874	0.051	0.075	0.3400
HEAVY TRUCKS	0.891	0.028	0.081	0.1100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	54.3	52.4	50.6	44.6	53.8
MEDIUM TRUCKS	63.3	61.9	55.5	52.5	62.0
HEAVY TRUCKS	63.2	61.9	52.9	52.7	61.9
VEHICULAR NOISE	66.5	65.1	58.2	55.9	**65.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Johnstonville Rd (Rural) - Johnstonville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,125			PK HR VOL	113
SPEED	45				
PK HR %	10				
DIST CTL	37				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		36.9
DIST WALL	0		MED TRUCK SLE DIST		36.6
DIST W/OB	37		HVY TRUCK SLE DIST		36.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5500
MEDIUM TRUCKS	0.874	0.051	0.075	0.3400
HEAVY TRUCKS	0.891	0.028	0.081	0.1100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.3	51.4	49.6	43.6	52.8
MEDIUM TRUCKS	62.3	60.9	54.5	51.5	61.0
HEAVY TRUCKS	62.2	60.9	51.9	51.7	60.9
VEHICULAR NOISE	65.5	64.1	57.2	54.9	**64.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Center Road - Johnstonville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	4,800			PK HR VOL	480
SPEED	55				
PK HR %	10				
DIST CTL	22				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.6
DIST WALL	0		MED TRUCK SLE DIST		12.9
DIST W/OB	22		HVY TRUCK SLE DIST		13.0
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3800
MEDIUM TRUCKS	0.874	0.051	0.075	0.5000
HEAVY TRUCKS	0.891	0.028	0.081	0.1200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.7	58.8	57.0	51.0	60.2
MEDIUM TRUCKS	72.8	71.4	65.0	62.0	71.5
HEAVY TRUCKS	70.5	69.2	60.3	60.1	69.3
VEHICULAR NOISE	**75.0**	73.6	66.8	64.3	73.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Center Road - Johnstonville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	5,247			PK HR VOL	525
SPEED	55				
PK HR %	10				
DIST CTL	105				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		98.0
DIST WALL	0		MED TRUCK SLE DIST		97.9
DIST W/OB	105		HVY TRUCK SLE DIST		97.9
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3800
MEDIUM TRUCKS	0.874	0.051	0.075	0.5000
HEAVY TRUCKS	0.891	0.028	0.081	0.1200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	52.5	50.6	48.8	42.8	52.0
MEDIUM TRUCKS	64.4	63.0	56.6	53.6	63.1
HEAVY TRUCKS	62.2	60.9	51.9	51.7	60.9
VEHICULAR NOISE	66.6	65.2	58.4	56.0	**65.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Center Road - Johnstonville	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	5,005			PK HR VOL	501
SPEED	55				
PK HR %	10				
DIST CTL	105				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		103.6
DIST WALL	0		MED TRUCK SLE DIST		103.5
DIST W/OB	105		HVY TRUCK SLE DIST		103.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3800
MEDIUM TRUCKS	0.874	0.051	0.075	0.5000
HEAVY TRUCKS	0.891	0.028	0.081	0.1200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	52.1	50.2	48.4	42.4	51.6
MEDIUM TRUCKS	63.9	62.5	56.2	53.1	62.6
HEAVY TRUCKS	61.7	60.4	51.5	51.2	60.4
VEHICULAR NOISE	66.1	64.8	58.0	55.5	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Johnstonville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	5,080			PK HR VOL	508
SPEED	65				
PK HR %	10				
DIST CTL	34				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		29.3
DIST WALL	0		MED TRUCK SLE DIST		29.0
DIST W/OB	34		HVY TRUCK SLE DIST		29.0
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3900
MEDIUM TRUCKS	0.874	0.051	0.075	0.5400
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	64.4	62.4	60.6	54.6	63.8
MEDIUM TRUCKS	76.2	74.8	68.4	65.4	74.9
HEAVY TRUCKS	70.6	69.3	60.4	60.1	69.3
VEHICULAR NOISE	**77.4**	76.1	69.6	66.8	76.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Johnstonville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	9,200			PK HR VOL	920
SPEED	65				
PK HR %	10				
DIST CTL	120				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		118.7
DIST WALL	0		MED TRUCK SLE DIST		118.7
DIST W/OB	120		HVY TRUCK SLE DIST		118.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.5	59.6	57.8	51.8	61.0
MEDIUM TRUCKS	55.2	53.9	47.5	44.5	54.0
HEAVY TRUCKS	64.0	62.7	53.8	53.5	62.7
VEHICULAR NOISE	66.3	64.8	59.5	56.1	**65.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Johnstonville	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	20,125			PK HR VOL	2,013
SPEED	65				
PK HR %	10				
DIST CTL	200				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		199.3
DIST WALL	0		MED TRUCK SLE DIST		199.2
DIST W/OB	200		HVY TRUCK SLE DIST		199.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.5	59.6	57.8	51.8	61.0
MEDIUM TRUCKS	55.3	53.9	47.5	44.5	54.0
HEAVY TRUCKS	64.0	62.7	53.8	53.5	62.7
VEHICULAR NOISE	66.3	64.8	59.5	56.1	**65.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Litchfield	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	680			PK HR VOL	68
SPEED	65				
PK HR %	10				
DIST CTL	36				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	36		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5300
MEDIUM TRUCKS	0.874	0.051	0.075	0.3500
HEAVY TRUCKS	0.891	0.028	0.081	0.1200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.6	53.7	51.9	45.9	55.1
MEDIUM TRUCKS	64.2	62.8	56.5	53.4	62.9
HEAVY TRUCKS	62.9	61.6	52.6	52.4	61.6
VEHICULAR NOISE	**66.9**	65.6	58.9	56.4	65.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Litchfield	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,250			PK HR VOL	125
SPEED	65				
PK HR %	10				
DIST CTL	65				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		64.9
DIST WALL	0		MED TRUCK SLE DIST		64.8
DIST W/OB	65		HVY TRUCK SLE DIST		64.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6800
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.2800

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.5	53.6	51.8	45.8	55.0
MEDIUM TRUCKS	53.5	52.2	45.8	42.7	52.2
HEAVY TRUCKS	65.3	64.0	55.1	54.8	64.0
VEHICULAR NOISE	66.0	64.6	57.1	55.6	**64.8**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 -Litchfield	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	2,400			PK HR VOL	240
SPEED	65				
PK HR %	10				
DIST CTL	95				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		94.9
DIST WALL	0		MED TRUCK SLE DIST		94.8
DIST W/OB	95		HVY TRUCK SLE DIST		94.9
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6800
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.2800

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.9	53.9	52.1	46.1	55.3
MEDIUM TRUCKS	53.9	52.5	46.1	43.1	52.6
HEAVY TRUCKS	65.6	64.4	55.4	55.2	64.4
VEHICULAR NOISE	66.3	65.0	57.4	55.9	**65.1**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	160		PK HR VOL	16
SPEED	37			
PK HR %	10			
DIST CTL	15			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	14.6
DIST WALL	0		MED TRUCK SLE DIST	14.0
DIST W/OB	15		HVY TRUCK SLE DIST	14.1
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2500
MEDIUM TRUCKS	0.874	0.051	0.075	0.7490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	45.1	43.1	41.3	35.3	44.5
MEDIUM TRUCKS	61.4	60.1	53.7	50.7	60.2
HEAVY TRUCKS	38.3	37.0	28.0	27.8	37.0
VEHICULAR NOISE	**61.6**	60.2	54.0	50.8	60.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	929		PK HR VOL	93
SPEED	37			
PK HR %	10			
DIST CTL	23			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	22.8
DIST WALL	0		MED TRUCK SLE DIST	22.4
DIST W/OB	23		HVY TRUCK SLE DIST	22.4
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2500
MEDIUM TRUCKS	0.874	0.051	0.075	0.7490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.8	47.9	46.1	40.1	49.3
MEDIUM TRUCKS	66.0	64.7	58.3	55.3	64.8
HEAVY TRUCKS	42.9	41.6	32.6	32.4	41.6
VEHICULAR NOISE	66.2	64.8	58.6	55.4	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	886		PK HR VOL	89
SPEED	37			
PK HR %	10			
DIST CTL	23			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	22.8
DIST WALL	0		MED TRUCK SLE DIST	22.4
DIST W/OB	23		HVY TRUCK SLE DIST	22.4
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2500
MEDIUM TRUCKS	0.874	0.051	0.075	0.7490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.6	47.7	45.9	39.9	49.1
MEDIUM TRUCKS	65.8	64.5	58.1	55.1	64.6
HEAVY TRUCKS	42.7	41.4	32.4	32.2	41.4
VEHICULAR NOISE	66.0	64.6	58.4	55.2	**64.7**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 36	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	2,680		PK HR VOL	268
SPEED	55			
PK HR %	10			
DIST CTL	32			
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	19.3
DIST WALL	0		MED TRUCK SLE DIST	18.8
DIST W/OB	32		HVY TRUCK SLE DIST	18.9
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.4600
MEDIUM TRUCKS	0.874	0.051	0.075	0.4000
HEAVY TRUCKS	0.891	0.028	0.081	0.1300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.0	61.0	59.2	53.3	62.5
MEDIUM TRUCKS	73.1	71.8	65.4	62.4	71.9
HEAVY TRUCKS	72.2	71.0	62.0	61.8	71.0
VEHICULAR NOISE	**76.0**	74.6	67.7	65.4	74.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 36	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	5,400			PK HR VOL	540
SPEED	55				
PK HR %	10				
DIST CTL	70				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		65.2
DIST WALL	0		MED TRUCK SLE DIST		65.0
DIST W/OB	70		HVY TRUCK SLE DIST		65.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.1	59.1	57.3	51.3	60.5
MEDIUM TRUCKS	55.1	53.7	47.4	44.3	53.8
HEAVY TRUCKS	64.5	63.3	54.3	54.1	63.3
VEHICULAR NOISE	66.5	65.0	59.4	56.2	**65.4**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 36	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	10,000			PK HR VOL	1,000
SPEED	55				
PK HR %	10				
DIST CTL	100				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		99.9
DIST WALL	0		MED TRUCK SLE DIST		99.9
DIST W/OB	100		HVY TRUCK SLE DIST		99.9
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.9	59.0	57.2	51.2	60.4
MEDIUM TRUCKS	55.0	53.6	47.3	44.2	53.7
HEAVY TRUCKS	64.4	63.1	54.2	53.9	63.1
VEHICULAR NOISE	66.4	64.9	59.3	56.1	**65.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 44	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	920		PK HR VOL	92
SPEED	65			
PK HR %	10			
DIST CTL	36			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	31.6
DIST WALL	0		MED TRUCK SLE DIST	31.3
DIST W/OB	36		HVY TRUCK SLE DIST	31.3
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5700
MEDIUM TRUCKS	0.874	0.051	0.075	0.1300
HEAVY TRUCKS	0.891	0.028	0.081	0.3000

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.1	56.2	54.4	48.4	57.6
MEDIUM TRUCKS	62.1	60.7	54.3	51.3	60.8
HEAVY TRUCKS	69.0	67.7	58.8	58.5	67.7
VEHICULAR NOISE	**70.1**	68.7	61.1	59.6	68.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 44	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,900			PK HR VOL	190
SPEED	65				
PK HR %	10				
DIST CTL	70				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		67.8
DIST WALL	0		MED TRUCK SLE DIST		67.7
DIST W/OB	70		HVY TRUCK SLE DIST		67.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.1600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.7	55.8	54.0	48.0	57.2
MEDIUM TRUCKS	55.1	53.7	47.3	44.3	53.8
HEAVY TRUCKS	64.4	63.1	54.2	53.9	63.1
VEHICULAR NOISE	65.6	64.2	57.5	55.3	**64.5**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 44	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	2,763			PK HR VOL	276
SPEED	65				
PK HR %	10				
DIST CTL	85				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		83.2
DIST WALL	0		MED TRUCK SLE DIST		83.1
DIST W/OB	85		HVY TRUCK SLE DIST		83.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.1600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.0	56.1	54.3	48.3	57.5
MEDIUM TRUCKS	55.3	54.0	47.6	44.6	54.1
HEAVY TRUCKS	64.7	63.4	54.4	54.2	63.4
VEHICULAR NOISE	65.9	64.5	57.8	55.6	**64.8**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 (Schoolhouse)	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	480			PK HR VOL	48
SPEED	65				
PK HR %	10				
DIST CTL	34				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		33.8
DIST WALL	0		MED TRUCK SLE DIST		33.6
DIST W/OB	34		HVY TRUCK SLE DIST		33.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3400
MEDIUM TRUCKS	0.874	0.051	0.075	0.3300
HEAVY TRUCKS	0.891	0.028	0.081	0.3300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	52.6	50.7	48.8	42.9	52.1
MEDIUM TRUCKS	62.8	61.4	55.1	52.0	61.5
HEAVY TRUCKS	66.1	64.8	55.9	55.7	64.8
VEHICULAR NOISE	**67.9**	66.6	59.0	57.4	66.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	980			PK HR VOL	98
SPEED	65				
PK HR %	10				
DIST CTL	50				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		49.9
DIST WALL	0		MED TRUCK SLE DIST		49.7
DIST W/OB	50		HVY TRUCK SLE DIST		49.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.2200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	56.5	54.6	52.8	46.8	56.0
MEDIUM TRUCKS	54.2	52.8	46.5	43.4	52.9
HEAVY TRUCKS	64.9	63.6	54.7	54.4	63.6
VEHICULAR NOISE	65.8	64.4	57.2	55.4	**64.6**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	1,728			PK HR VOL	173
SPEED	65				
PK HR %	10				
DIST CTL	70				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		69.9
DIST WALL	0		MED TRUCK SLE DIST		69.8
DIST W/OB	70		HVY TRUCK SLE DIST		69.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.2200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	56.8	54.9	53.1	47.1	56.3
MEDIUM TRUCKS	54.4	53.1	46.7	43.7	53.2
HEAVY TRUCKS	65.2	63.9	54.9	54.7	63.9
VEHICULAR NOISE	66.1	64.7	57.5	55.7	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 (Lassen Street)	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	560			PK HR VOL	56
SPEED	65				
PK HR %	10				
DIST CTL	34				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		29.3
DIST WALL	0		MED TRUCK SLE DIST		29.0
DIST W/OB	34		HVY TRUCK SLE DIST		29.0
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2100
MEDIUM TRUCKS	0.874	0.051	0.075	0.2100
HEAVY TRUCKS	0.891	0.028	0.081	0.5700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	47.5	45.6	43.8	37.8	47.0
MEDIUM TRUCKS	57.9	56.5	50.2	47.1	56.6
HEAVY TRUCKS	65.6	64.3	55.3	55.1	64.3
VEHICULAR NOISE	**66.3**	65.0	56.7	55.8	65.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 (Lassen Street)	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	870		PK HR VOL	87
SPEED	65			
PK HR %	10			
DIST CTL	30			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	24.5
DIST WALL	0		MED TRUCK SLE DIST	24.2
DIST W/OB	30		HVY TRUCK SLE DIST	24.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.2900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.2	53.3	51.5	45.5	54.7
MEDIUM TRUCKS	54.4	53.0	46.6	43.6	53.1
HEAVY TRUCKS	65.3	64.0	55.1	54.8	64.0
VEHICULAR NOISE	66.0	64.7	57.1	55.6	**64.8**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	US 395 (Lassen Street)	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	1,100			PK HR VOL	110
SPEED	65				
PK HR %	10				
DIST CTL	35				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		30.4
DIST WALL	0		MED TRUCK SLE DIST		30.1
DIST W/OB	35		HVY TRUCK SLE DIST		30.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.2900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.3	53.3	51.5	45.6	54.8
MEDIUM TRUCKS	54.4	53.1	46.7	43.6	53.1
HEAVY TRUCKS	65.4	64.1	55.1	54.9	64.1
VEHICULAR NOISE	66.1	64.7	57.1	55.7	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 299	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	120		PK HR VOL	12
SPEED	50			
PK HR %	10			
DIST CTL	19			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	7.9
DIST WALL	0		MED TRUCK SLE DIST	6.7
DIST W/OB	19		HVY TRUCK SLE DIST	6.8
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6700
MEDIUM TRUCKS	0.874	0.051	0.075	0.3290
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.8	53.9	52.1	46.1	55.3
MEDIUM TRUCKS	64.6	63.2	56.9	53.8	63.3
HEAVY TRUCKS	43.7	42.4	33.4	33.2	42.4
VEHICULAR NOISE	**65.2**	63.7	58.1	54.5	64.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 299	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,400			PK HR VOL	140
SPEED	50				
PK HR %	10				
DIST CTL	35				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		30.4
DIST WALL	0		MED TRUCK SLE DIST		30.1
DIST W/OB	35		HVY TRUCK SLE DIST		30.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0600
HEAVY TRUCKS	0.891	0.028	0.081	0.0900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.7	56.8	55.0	49.0	58.2
MEDIUM TRUCKS	58.0	56.7	50.3	47.3	56.8
HEAVY TRUCKS	64.2	62.9	53.9	53.7	62.9
VEHICULAR NOISE	66.0	64.6	58.2	55.6	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 299	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	825			PK HR VOL	83
SPEED	50				
PK HR %	10				
DIST CTL	30				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		24.5
DIST WALL	0		MED TRUCK SLE DIST		24.2
DIST W/OB	30		HVY TRUCK SLE DIST		24.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0600
HEAVY TRUCKS	0.891	0.028	0.081	0.0900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.8	55.9	54.1	48.1	57.3
MEDIUM TRUCKS	57.2	55.8	49.4	46.4	55.9
HEAVY TRUCKS	63.3	62.0	53.1	52.8	62.0
VEHICULAR NOISE	65.1	63.7	57.4	54.8	**64.0**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Market Street	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	60			PK HR VOL	6
SPEED	25				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	20		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.0050
MEDIUM TRUCKS	0.874	0.051	0.075	0.9910
HEAVY TRUCKS	0.891	0.028	0.081	0.0040

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	14.6	12.7	10.9	4.9	14.1
MEDIUM TRUCKS	50.0	48.7	42.3	39.3	48.8
HEAVY TRUCKS	33.2	31.9	23.0	22.8	31.9
VEHICULAR NOISE	**50.1**	48.8	42.4	39.4	48.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Market Street	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	60		PK HR VOL	6
SPEED	25			
PK HR %	10			
DIST CTL	8			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	7.3
DIST WALL	0		MED TRUCK SLE DIST	5.9
DIST W/OB	8		HVY TRUCK SLE DIST	6.1
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.0050
MEDIUM TRUCKS	0.874	0.051	0.075	0.9910
HEAVY TRUCKS	0.891	0.028	0.081	0.0040

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	16.0	14.1	12.3	6.3	15.5
MEDIUM TRUCKS	51.9	50.5	44.2	41.1	50.6
HEAVY TRUCKS	35.0	33.7	24.8	24.6	33.8
VEHICULAR NOISE	52.0	50.6	44.2	41.2	**50.7**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Market Street	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	57		PK HR VOL	6
SPEED	25			
PK HR %	10			
DIST CTL	20			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	10.0
DIST WALL	0		MED TRUCK SLE DIST	9.1
DIST W/OB	20		HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.0050
MEDIUM TRUCKS	0.874	0.051	0.075	0.9910
HEAVY TRUCKS	0.891	0.028	0.081	0.0040

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	14.4	12.4	10.6	4.6	13.9
MEDIUM TRUCKS	49.8	48.4	42.1	39.0	48.5
HEAVY TRUCKS	33.0	31.7	22.8	22.5	31.7
VEHICULAR NOISE	49.9	48.5	42.1	39.1	**48.6**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Susanville Road	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	320		PK HR VOL	32
SPEED	55			
PK HR %	10			
DIST CTL	22			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	13.6
DIST WALL	0		MED TRUCK SLE DIST	12.9
DIST W/OB	22		HVY TRUCK SLE DIST	13.0
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2500
MEDIUM TRUCKS	0.874	0.051	0.075	0.7490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.4	51.5	49.6	43.7	52.9
MEDIUM TRUCKS	69.1	67.7	61.4	58.3	67.8
HEAVY TRUCKS	44.3	43.0	34.1	33.8	43.0
VEHICULAR NOISE	**69.2**	67.8	61.6	58.5	68.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Susanville Road	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	625		PK HR VOL	63
SPEED	55			
PK HR %	10			
DIST CTL	35			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	30.4
DIST WALL	0		MED TRUCK SLE DIST	30.1
DIST W/OB	35		HVY TRUCK SLE DIST	30.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2500
MEDIUM TRUCKS	0.874	0.051	0.075	0.7490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	51.0	49.1	47.3	41.3	50.5
MEDIUM TRUCKS	66.5	65.1	58.8	55.7	65.2
HEAVY TRUCKS	41.7	40.4	31.5	31.3	40.5
VEHICULAR NOISE	66.6	65.2	59.1	55.9	**65.4**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Susanville Road	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	596		PK HR VOL	60
SPEED	55			
PK HR %	10			
DIST CTL	35			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	30.4
DIST WALL	0		MED TRUCK SLE DIST	30.1
DIST W/OB	35		HVY TRUCK SLE DIST	30.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2500
MEDIUM TRUCKS	0.874	0.051	0.075	0.7490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	50.8	48.9	47.1	41.1	50.3
MEDIUM TRUCKS	66.3	64.9	58.5	55.5	65.0
HEAVY TRUCKS	41.5	40.2	31.3	31.0	40.2
VEHICULAR NOISE	66.4	65.0	58.9	55.7	**65.2**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 139	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	360		PK HR VOL	36
SPEED	60			
PK HR %	10			
DIST CTL	40			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	36.1
DIST WALL	0		MED TRUCK SLE DIST	35.8
DIST W/OB	40		HVY TRUCK SLE DIST	35.8
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5700
MEDIUM TRUCKS	0.874	0.051	0.075	0.1300
HEAVY TRUCKS	0.891	0.028	0.081	0.3000

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	48.1	46.1	44.3	38.4	47.6
MEDIUM TRUCKS	52.1	50.8	44.4	41.4	50.9
HEAVY TRUCKS	59.4	58.1	49.2	48.9	58.1
VEHICULAR NOISE	**60.4**	59.1	51.4	49.9	59.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 139	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	650			PK HR VOL	65
SPEED	60				
PK HR %	10				
DIST CTL	25				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.1
DIST WALL	0		MED TRUCK SLE DIST		17.6
DIST W/OB	25		HVY TRUCK SLE DIST		17.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5700
MEDIUM TRUCKS	0.874	0.051	0.075	0.1300
HEAVY TRUCKS	0.891	0.028	0.081	0.3000

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.6	51.7	49.9	43.9	53.1
MEDIUM TRUCKS	57.8	56.4	50.1	47.0	56.5
HEAVY TRUCKS	65.1	63.8	54.8	54.6	63.8
VEHICULAR NOISE	**66.1**	64.7	57.0	55.6	64.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 139	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	1,915			PK HR VOL	192
SPEED	60				
PK HR %	10				
DIST CTL	50				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		46.9
DIST WALL	0		MED TRUCK SLE DIST		46.7
DIST W/OB	50		HVY TRUCK SLE DIST		46.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5700
MEDIUM TRUCKS	0.874	0.051	0.075	0.1300
HEAVY TRUCKS	0.891	0.028	0.081	0.3000

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	54.2	52.3	50.5	44.5	53.7
MEDIUM TRUCKS	58.3	56.9	50.5	47.5	57.0
HEAVY TRUCKS	65.5	64.2	55.3	55.0	64.2
VEHICULAR NOISE	**66.5**	65.2	57.5	56.1	65.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway - Eagle Lake	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	200			PK HR VOL	20
SPEED	60				
PK HR %	10				
DIST CTL	40				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		30.8
DIST WALL	0		MED TRUCK SLE DIST		30.5
DIST W/OB	38		HVY TRUCK SLE DIST		30.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.1	51.2	49.4	43.4	52.6
MEDIUM TRUCKS	33.6	32.2	25.9	22.8	32.3
HEAVY TRUCKS	37.3	36.0	27.0	26.8	36.0
VEHICULAR NOISE	**53.2**	51.3	49.4	43.5	52.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway - Eagle Lake	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	66			PK HR VOL	7
SPEED	60				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	38		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6200
MEDIUM TRUCKS	0.874	0.051	0.075	0.2900
HEAVY TRUCKS	0.891	0.028	0.081	0.0900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.5	51.6	49.8	43.8	53.0
MEDIUM TRUCKS	61.3	59.9	53.6	50.5	60.0
HEAVY TRUCKS	59.8	58.5	49.5	49.3	58.5
VEHICULAR NOISE	**64.0**	62.6	56.1	53.5	62.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway - Eagle Lake	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	63			PK HR VOL	6
SPEED	60				
PK HR %	10				
DIST CTL	20				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		10.0
DIST WALL	0		MED TRUCK SLE DIST		9.1
DIST W/OB	38		HVY TRUCK SLE DIST		9.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6200
MEDIUM TRUCKS	0.874	0.051	0.075	0.2900
HEAVY TRUCKS	0.891	0.028	0.081	0.0900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.3	51.4	49.6	43.6	52.8
MEDIUM TRUCKS	61.1	59.7	53.4	50.3	59.8
HEAVY TRUCKS	59.6	58.3	49.3	49.1	58.3
VEHICULAR NOISE	**63.8**	62.4	55.9	53.3	62.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Mahogany Way - Eagle Lake	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	120		PK HR VOL	12
SPEED	30			
PK HR %	10			
DIST CTL	25			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	18.1
DIST WALL	0		MED TRUCK SLE DIST	17.6
DIST W/OB	25		HVY TRUCK SLE DIST	17.6
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	45.9	44.0	42.2	36.2	45.4
MEDIUM TRUCKS	27.8	26.4	20.1	17.0	26.5
HEAVY TRUCKS	34.2	32.9	24.0	23.8	32.9
VEHICULAR NOISE	**46.2**	44.4	42.2	36.5	45.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Mahogany Way - Eagle Lake	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	120			PK HR VOL	12
SPEED	30				
PK HR %	10				
DIST CTL	25				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.1
DIST WALL	0		MED TRUCK SLE DIST		17.6
DIST W/OB	25		HVY TRUCK SLE DIST		17.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	45.9	44.0	42.2	36.2	45.4
MEDIUM TRUCKS	27.8	26.4	20.1	17.0	26.5
HEAVY TRUCKS	34.2	32.9	24.0	23.8	32.9
VEHICULAR NOISE	**46.2**	44.4	42.2	36.5	45.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Mahogany Way - Eagle Lake	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	114			PK HR VOL	11
SPEED	30				
PK HR %	10				
DIST CTL	25				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.1
DIST WALL	0		MED TRUCK SLE DIST		17.6
DIST W/OB	25		HVY TRUCK SLE DIST		17.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	45.7	43.7	41.9	35.9	45.2
MEDIUM TRUCKS	27.6	26.2	19.8	16.8	26.3
HEAVY TRUCKS	34.0	32.7	23.8	23.5	32.7
VEHICULAR NOISE	**46.0**	44.1	42.0	36.2	45.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway - Gallitin Beach	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	240			PK HR VOL	24
SPEED	55				
PK HR %	10				
DIST CTL	27				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		26.8
DIST WALL	0		MED TRUCK SLE DIST		26.5
DIST W/OB	27		HVY TRUCK SLE DIST		26.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.7	51.8	50.0	44.0	53.2
MEDIUM TRUCKS	34.4	33.1	26.7	23.7	33.2
HEAVY TRUCKS	38.4	37.1	28.2	27.9	37.1
VEHICULAR NOISE	**53.9**	52.0	50.0	44.2	53.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway - Gallitin Beach	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	138			PK HR VOL	14
SPEED	55				
PK HR %	10				
DIST CTL	27				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		26.8
DIST WALL	0		MED TRUCK SLE DIST		26.5
DIST W/OB	27		HVY TRUCK SLE DIST		26.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	51.0	49.1	47.3	41.3	50.5
MEDIUM TRUCKS	49.0	47.6	41.3	38.2	47.7
HEAVY TRUCKS	49.0	47.7	38.8	38.6	47.7
VEHICULAR NOISE	**54.6**	53.0	48.7	44.4	53.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Wm McIntosh Highway - Gallitin Beach	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	132			PK HR VOL	13
SPEED	55				
PK HR %	10				
DIST CTL	27				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		26.8
DIST WALL	0		MED TRUCK SLE DIST		26.5
DIST W/OB	27		HVY TRUCK SLE DIST		26.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	50.8	48.9	47.1	41.1	50.3
MEDIUM TRUCKS	48.8	47.5	41.1	38.1	47.5
HEAVY TRUCKS	48.8	47.5	38.6	38.4	47.6
VEHICULAR NOISE	**54.4**	52.8	48.5	44.2	53.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Gallatin Road - Eagle Lake	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	240			PK HR VOL	24
SPEED	35				
PK HR %	10				
DIST CTL	30				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		29.8
DIST WALL	0		MED TRUCK SLE DIST		29.5
DIST W/OB	30		HVY TRUCK SLE DIST		29.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	43.0	41.1	39.3	33.3	42.5
MEDIUM TRUCKS	24.5	23.1	16.8	13.7	23.2
HEAVY TRUCKS	30.3	29.0	20.1	19.8	29.0
VEHICULAR NOISE	**43.3**	41.4	39.3	33.5	42.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Gallatin Road - Eagle Lake	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	240			PK HR VOL	24
SPEED	35				
PK HR %	10				
DIST CTL	30				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		29.8
DIST WALL	0		MED TRUCK SLE DIST		29.5
DIST W/OB	30		HVY TRUCK SLE DIST		29.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	43.0	41.1	39.3	33.3	42.5
MEDIUM TRUCKS	24.5	23.1	16.8	13.7	23.2
HEAVY TRUCKS	30.3	29.0	20.1	19.8	29.0
VEHICULAR NOISE	**43.3**	41.4	39.3	33.5	42.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Gallatin Road - Eagle Lake	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	229			PK HR VOL	23
SPEED	35				
PK HR %	10				
DIST CTL	30				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		29.8
DIST WALL	0		MED TRUCK SLE DIST		29.5
DIST W/OB	30		HVY TRUCK SLE DIST		29.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	42.8	40.9	39.1	33.1	42.3
MEDIUM TRUCKS	24.3	22.9	16.6	13.5	23.0
HEAVY TRUCKS	30.1	28.8	19.9	19.6	28.8
VEHICULAR NOISE	**43.1**	41.2	39.1	33.3	42.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	North Mooney Road - Westwood	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	240			PK HR VOL	24
SPEED	55				
PK HR %	10				
DIST CTL	30				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		29.8
DIST WALL	0		MED TRUCK SLE DIST		29.5
DIST W/OB	30		HVY TRUCK SLE DIST		29.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9980
MEDIUM TRUCKS	0.874	0.051	0.075	0.0010
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.0	51.1	49.3	43.3	52.5
MEDIUM TRUCKS	33.7	32.4	26.0	22.9	32.4
HEAVY TRUCKS	37.7	36.4	27.5	27.2	36.4
VEHICULAR NOISE	**53.2**	51.3	49.3	43.5	52.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	North Mooney Road - Westwood	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	234			PK HR VOL	23
SPEED	55				
PK HR %	10				
DIST CTL	18				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.7
DIST WALL	0		MED TRUCK SLE DIST		17.2
DIST W/OB	18		HVY TRUCK SLE DIST		17.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6800
MEDIUM TRUCKS	0.874	0.051	0.075	0.1500
HEAVY TRUCKS	0.891	0.028	0.081	0.1700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	54.7	52.7	50.9	44.9	54.1
MEDIUM TRUCKS	58.9	57.5	51.2	48.1	57.6
HEAVY TRUCKS	63.4	62.1	53.2	52.9	62.1
VEHICULAR NOISE	**65.1**	63.8	56.6	54.7	63.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	North Mooney Road - Westwood	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	223			PK HR VOL	22
SPEED	55				
PK HR %	10				
DIST CTL	18				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.7
DIST WALL	0		MED TRUCK SLE DIST		17.2
DIST W/OB	18		HVY TRUCK SLE DIST		17.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6800
MEDIUM TRUCKS	0.874	0.051	0.075	0.1500
HEAVY TRUCKS	0.891	0.028	0.081	0.1700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	54.4	52.5	50.7	44.7	53.9
MEDIUM TRUCKS	58.7	57.3	51.0	47.9	57.4
HEAVY TRUCKS	63.2	61.9	53.0	52.7	61.9
VEHICULAR NOISE	**64.9**	63.6	56.4	54.5	63.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 36	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	1,320		PK HR VOL	132
SPEED	50			
PK HR %	10			
DIST CTL	20			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	10.0
DIST WALL	0		MED TRUCK SLE DIST	9.1
DIST W/OB	20		HVY TRUCK SLE DIST	9.2
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.3600
MEDIUM TRUCKS	0.874	0.051	0.075	0.5800
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.0	53.1	51.3	45.3	54.5
MEDIUM TRUCKS	68.3	67.0	60.6	57.6	67.0
HEAVY TRUCKS	62.8	61.5	52.6	52.3	61.5
VEHICULAR NOISE	**69.6**	68.2	61.6	58.9	68.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 36	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	2,450			PK HR VOL	245
SPEED	50				
PK HR %	10				
DIST CTL	21				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		11.9
DIST WALL	0		MED TRUCK SLE DIST		11.1
DIST W/OB	21		HVY TRUCK SLE DIST		11.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0500

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.0	59.1	57.3	51.3	60.5
MEDIUM TRUCKS	58.5	57.2	50.8	47.8	57.3
HEAVY TRUCKS	63.9	62.6	53.6	53.4	62.6
VEHICULAR NOISE	66.4	65.0	59.5	56.1	**65.4**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 36	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	3,888			PK HR VOL	389
SPEED	50				
PK HR %	10				
DIST CTL	28				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		22.0
DIST WALL	0		MED TRUCK SLE DIST		21.6
DIST W/OB	28		HVY TRUCK SLE DIST		21.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0500

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.4	58.4	56.6	50.6	59.8
MEDIUM TRUCKS	57.7	56.3	49.9	46.9	56.4
HEAVY TRUCKS	63.0	61.7	52.8	52.5	61.7
VEHICULAR NOISE	65.6	64.2	58.7	55.4	**64.6**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	South Mooney Road (3rd) - Westwood	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	560			PK HR VOL	56
SPEED	45				
PK HR %	10				
DIST CTL	25				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		24.8
DIST WALL	0		MED TRUCK SLE DIST		24.4
DIST W/OB	25		HVY TRUCK SLE DIST		24.5
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2900
MEDIUM TRUCKS	0.874	0.051	0.075	0.6400
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	50.1	48.2	46.4	40.4	49.6
MEDIUM TRUCKS	64.6	63.2	56.9	53.8	63.3
HEAVY TRUCKS	59.8	58.5	49.6	49.3	58.5
VEHICULAR NOISE	**66.0**	64.6	57.9	55.3	64.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	South Mooney Road (3rd) - Westwood	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,094			PK HR VOL	109
SPEED	45				
PK HR %	10				
DIST CTL	40				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		39.9
DIST WALL	0		MED TRUCK SLE DIST		39.6
DIST W/OB	40		HVY TRUCK SLE DIST		39.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2900
MEDIUM TRUCKS	0.874	0.051	0.075	0.6400
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.9	48.0	46.2	40.2	49.4
MEDIUM TRUCKS	64.4	63.0	56.6	53.6	63.1
HEAVY TRUCKS	59.6	58.3	49.3	49.1	58.3
VEHICULAR NOISE	65.7	64.4	57.7	55.1	**64.5**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	South Mooney Road (3rd) - Westwood	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	1,043			PK HR VOL	104
SPEED	45				
PK HR %	10				
DIST CTL	40				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		39.9
DIST WALL	0		MED TRUCK SLE DIST		39.6
DIST W/OB	40		HVY TRUCK SLE DIST		39.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.2900
MEDIUM TRUCKS	0.874	0.051	0.075	0.6400
HEAVY TRUCKS	0.891	0.028	0.081	0.0700

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	49.7	47.8	46.0	40.0	49.2
MEDIUM TRUCKS	64.2	62.8	56.4	53.4	62.9
HEAVY TRUCKS	59.4	58.1	49.1	48.9	58.1
VEHICULAR NOISE	65.5	64.2	57.5	54.8	**64.3**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Garnier Road - Herlong	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	960			PK HR VOL	96
SPEED	65				
PK HR %	10				
DIST CTL	32				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		31.8
DIST WALL	0		MED TRUCK SLE DIST		31.5
DIST W/OB	32		HVY TRUCK SLE DIST		31.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5400
MEDIUM TRUCKS	0.874	0.051	0.075	0.3800
HEAVY TRUCKS	0.891	0.028	0.081	0.0800

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	53.6	51.7	49.9	43.9	53.1
MEDIUM TRUCKS	62.4	61.1	54.7	51.7	61.2
HEAVY TRUCKS	59.0	57.7	48.8	48.5	57.7
VEHICULAR NOISE	**64.4**	63.0	56.7	53.8	63.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Garnier Road - Herlong	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,166			PK HR VOL	117
SPEED	65				
PK HR %	10				
DIST CTL	12				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		11.5
DIST WALL	0		MED TRUCK SLE DIST		10.7
DIST W/OB	12		HVY TRUCK SLE DIST		10.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.3	59.4	57.5	51.6	60.8
MEDIUM TRUCKS	56.9	55.6	49.2	46.2	55.7
HEAVY TRUCKS	60.2	58.9	50.0	49.8	59.0
VEHICULAR NOISE	64.6	63.0	58.8	54.5	**63.7**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Garnier Road - Herlong	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	1,112			PK HR VOL	111
SPEED	65				
PK HR %	10				
DIST CTL	12				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		11.5
DIST WALL	0		MED TRUCK SLE DIST		10.7
DIST W/OB	12		HVY TRUCK SLE DIST		10.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.1	59.1	57.3	51.4	60.6
MEDIUM TRUCKS	56.7	55.4	49.0	46.0	55.5
HEAVY TRUCKS	60.0	58.7	49.8	49.5	58.7
VEHICULAR NOISE	64.4	62.8	58.6	54.2	**63.5**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Herlong Access Road	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	1,040		PK HR VOL	104
SPEED	55			
PK HR %	10			
DIST CTL	27			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	26.8
DIST WALL	0		MED TRUCK SLE DIST	26.5
DIST W/OB	27		HVY TRUCK SLE DIST	26.5
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6500
MEDIUM TRUCKS	0.874	0.051	0.075	0.3490
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.2	56.3	54.5	48.5	57.7
MEDIUM TRUCKS	66.2	64.9	58.5	55.5	65.0
HEAVY TRUCKS	44.8	43.5	34.6	34.3	43.5
VEHICULAR NOISE	**66.9**	65.5	60.0	56.3	65.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Herlong Access Road	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	852		PK HR VOL	85
SPEED	55			
PK HR %	10			
DIST CTL	27			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	26.8
DIST WALL	0		MED TRUCK SLE DIST	26.5
DIST W/OB	27		HVY TRUCK SLE DIST	26.5
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7200
MEDIUM TRUCKS	0.874	0.051	0.075	0.2300
HEAVY TRUCKS	0.891	0.028	0.081	0.0500

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.8	55.9	54.1	48.1	57.3
MEDIUM TRUCKS	63.6	62.2	55.8	52.8	62.3
HEAVY TRUCKS	60.9	59.6	50.7	50.4	59.6
VEHICULAR NOISE	66.1	64.7	58.8	55.6	**65.0**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Herlong Access Road	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	852		PK HR VOL	85
SPEED	55			
PK HR %	10			
DIST CTL	27			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	26.8
DIST WALL	0		MED TRUCK SLE DIST	26.5
DIST W/OB	27		HVY TRUCK SLE DIST	26.5
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS: (15=HARD SITE, 10=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	0.0	AUTOMOBILES =	0.00	
ROAD	0.0	MEDIUM TRUCKS=	2.30	
		HEAVY TRUCKS =	8.01	
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.7200
MEDIUM TRUCKS	0.874	0.051	0.075	0.2300
HEAVY TRUCKS	0.891	0.028	0.081	0.0500

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.8	55.9	54.1	48.1	57.3
MEDIUM TRUCKS	63.6	62.2	55.8	52.8	62.3
HEAVY TRUCKS	60.9	59.6	50.7	50.4	59.6
VEHICULAR NOISE	66.1	64.7	58.8	55.6	**65.0**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 70	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	2,080		PK HR VOL	208
SPEED	65			
PK HR %	10			
DIST CTL	36			
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	31.6
DIST WALL	0		MED TRUCK SLE DIST	31.3
DIST W/OB	36		HVY TRUCK SLE DIST	31.3
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5000
MEDIUM TRUCKS	0.874	0.051	0.075	0.4200
HEAVY TRUCKS	0.891	0.028	0.081	0.0800

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	56.7	54.7	52.9	47.0	56.2
MEDIUM TRUCKS	66.3	64.9	58.5	55.5	65.0
HEAVY TRUCKS	62.4	61.1	52.2	51.9	61.1
VEHICULAR NOISE	**68.1**	66.7	60.3	57.5	66.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 70	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	4,400			PK HR VOL	440
SPEED	65				
PK HR %	10				
DIST CTL	35				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		30.4
DIST WALL	0		MED TRUCK SLE DIST		30.1
DIST W/OB	35		HVY TRUCK SLE DIST		30.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.9	61.0	59.2	53.2	62.4
MEDIUM TRUCKS	56.5	55.1	48.7	45.7	55.2
HEAVY TRUCKS	59.8	58.5	49.5	49.3	58.5
VEHICULAR NOISE	65.3	63.6	60.0	55.2	**64.4**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	SR 70	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	8,425			PK HR VOL	843
SPEED	65				
PK HR %	10				
DIST CTL	50				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		46.9
DIST WALL	0		MED TRUCK SLE DIST		46.7
DIST W/OB	50		HVY TRUCK SLE DIST		46.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0200
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.9	61.9	60.1	54.1	63.3
MEDIUM TRUCKS	57.4	56.0	49.6	46.6	56.1
HEAVY TRUCKS	60.7	59.4	50.5	50.2	59.4
VEHICULAR NOISE	66.2	64.5	60.9	56.1	**65.4**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Skyline Road	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	1,520			PK HR VOL	152
SPEED	65				
PK HR %	10				
DIST CTL	32				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		31.8
DIST WALL	0		MED TRUCK SLE DIST		31.5
DIST W/OB	32		HVY TRUCK SLE DIST		31.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.5300
MEDIUM TRUCKS	0.874	0.051	0.075	0.4500
HEAVY TRUCKS	0.891	0.028	0.081	0.0300

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	59.9	58.0	56.2	50.2	59.4
MEDIUM TRUCKS	69.6	68.2	61.8	58.8	68.3
HEAVY TRUCKS	61.1	59.8	50.9	50.6	59.8
VEHICULAR NOISE	**70.5**	69.1	63.1	59.9	69.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Skyline Road	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	3,099			PK HR VOL	310
SPEED	65				
PK HR %	10				
DIST CTL	55				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		54.9
DIST WALL	0		MED TRUCK SLE DIST		54.7
DIST W/OB	60		HVY TRUCK SLE DIST		54.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8700
MEDIUM TRUCKS	0.874	0.051	0.075	0.1100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.6	59.7	57.9	51.9	61.1
MEDIUM TRUCKS	63.0	61.6	55.2	52.2	61.7
HEAVY TRUCKS	58.9	57.6	48.6	48.4	57.6
VEHICULAR NOISE	66.2	64.7	60.1	55.9	**65.2**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Skyline Road	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	2,956			PK HR VOL	296
SPEED	65				
PK HR %	10				
DIST CTL	55				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		54.9
DIST WALL	0		MED TRUCK SLE DIST		54.7
DIST W/OB	60		HVY TRUCK SLE DIST		54.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.8700
MEDIUM TRUCKS	0.874	0.051	0.075	0.1100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.4	59.5	57.7	51.7	60.9
MEDIUM TRUCKS	62.8	61.4	55.0	52.0	61.5
HEAVY TRUCKS	58.7	57.4	48.4	48.2	57.4
VEHICULAR NOISE	66.0	64.5	59.9	55.7	**65.0**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Standish-Buntingville Road	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	760		PK HR VOL	76
SPEED	55			
PK HR %	10			
DIST CTL	27			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	26.8
DIST WALL	0		MED TRUCK SLE DIST	26.5
DIST W/OB	27		HVY TRUCK SLE DIST	26.5
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS: (15=HARD SITE, 10=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	0.0	AUTOMOBILES =	0.00	
ROAD	0.0	MEDIUM TRUCKS=	2.30	
		HEAVY TRUCKS =	8.01	
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.4700
MEDIUM TRUCKS	0.874	0.051	0.075	0.5290
HEAVY TRUCKS	0.891	0.028	0.081	0.0010

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.5	53.5	51.7	45.7	54.9
MEDIUM TRUCKS	66.7	65.3	58.9	55.9	65.4
HEAVY TRUCKS	43.4	42.1	33.2	32.9	42.1
VEHICULAR NOISE	**67.0**	65.6	59.7	56.3	65.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Standish-Buntingville Road	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	1,463		PK HR VOL	146
SPEED	55			
PK HR %	10			
DIST CTL	50			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	49.9
DIST WALL	0		MED TRUCK SLE DIST	49.7
DIST W/OB	50		HVY TRUCK SLE DIST	49.7
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS: (15=HARD SITE, 10=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	0.0	AUTOMOBILES =	0.00	
ROAD	0.0	MEDIUM TRUCKS=	2.30	
		HEAVY TRUCKS =	8.01	
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6400
MEDIUM TRUCKS	0.874	0.051	0.075	0.2200
HEAVY TRUCKS	0.891	0.028	0.081	0.1400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.6	53.7	51.9	45.9	55.1
MEDIUM TRUCKS	61.6	60.2	53.9	50.8	60.3
HEAVY TRUCKS	63.6	62.3	53.4	53.2	62.4
VEHICULAR NOISE	66.1	64.8	57.9	55.6	**64.9**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Standish-Buntingville Road	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	1,395		PK HR VOL	140
SPEED	55			
PK HR %	10			
DIST CTL	50			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	49.9
DIST WALL	0		MED TRUCK SLE DIST	49.7
DIST W/OB	50		HVY TRUCK SLE DIST	49.7
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS: (15=HARD SITE, 10=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	0.0	AUTOMOBILES =	0.00	
ROAD	0.0	MEDIUM TRUCKS=	2.30	
		HEAVY TRUCKS =	8.01	
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.6400
MEDIUM TRUCKS	0.874	0.051	0.075	0.2200
HEAVY TRUCKS	0.891	0.028	0.081	0.1400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	55.4	53.5	51.7	45.7	54.9
MEDIUM TRUCKS	61.4	60.0	53.7	50.6	60.1
HEAVY TRUCKS	63.4	62.1	53.2	52.9	62.1
VEHICULAR NOISE	65.9	64.6	57.7	55.4	**64.7**

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Sunnyside Road	DATE:	5/6/2019
Scenario:	**Calibration**	BY:	J. Leech

ADT	440		PK HR VOL	44
SPEED	28			
PK HR %	10			
DIST CTL	27			
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	8.8
DIST WALL	0		MED TRUCK SLE DIST	7.8
DIST W/OB	25		HVY TRUCK SLE DIST	7.9
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.4600
MEDIUM TRUCKS	0.874	0.051	0.075	0.4500
HEAVY TRUCKS	0.891	0.028	0.081	0.0900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	44.8	42.9	41.1	35.1	44.3
MEDIUM TRUCKS	57.1	55.8	49.4	46.4	55.9
HEAVY TRUCKS	56.8	55.5	46.6	46.3	55.5
VEHICULAR NOISE	**60.1**	58.8	51.6	49.5	58.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Sunnyside Road	DATE:	5/6/2019
Scenario:	**Existing**	BY:	J. Leech

ADT	363		PK HR VOL	36
SPEED	28			
PK HR %	10			
DIST CTL	12			
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE	11.5
DIST WALL	0		MED TRUCK SLE DIST	10.7
DIST W/OB	12		HVY TRUCK SLE DIST	10.8
HTH WALL	0.0	********		
HTH OBS	5.0			
AMBIENT	45.0			
ROADWAY VIEW:				
LF ANGLE	-20			
RT ANGLE	20			
DF ANGLE	40			

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.4600
MEDIUM TRUCKS	0.874	0.051	0.075	0.4500
HEAVY TRUCKS	0.891	0.028	0.081	0.0900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	42.8	40.9	39.1	33.1	42.3
MEDIUM TRUCKS	54.9	53.5	47.2	44.1	53.6
HEAVY TRUCKS	54.6	53.3	44.4	44.1	53.3
VEHICULAR NOISE	**57.9**	56.5	49.4	47.3	56.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Lassen County Noise Element Update	JN:	11630
ROADWAY:	Sunnyside Road	DATE:	5/6/2019
Scenario:	**2040**	BY:	J. Leech

ADT	346			PK HR VOL	35
SPEED	28				
PK HR %	10				
DIST CTL	12				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		11.5
DIST WALL	0		MED TRUCK SLE DIST		10.7
DIST W/OB	12		HVY TRUCK SLE DIST		10.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-20				
RT ANGLE	20				
DF ANGLE	40				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	10.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.4600
MEDIUM TRUCKS	0.874	0.051	0.075	0.4500
HEAVY TRUCKS	0.891	0.028	0.081	0.0900

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	42.6	40.7	38.9	32.9	42.1
MEDIUM TRUCKS	54.7	53.3	47.0	43.9	53.4
HEAVY TRUCKS	54.4	53.1	44.1	43.9	53.1
VEHICULAR NOISE	**57.7**	56.3	49.2	47.1	56.4