

N O I S E F U N D A M E N T A L S

Fundamentals of Noise

NOISE

Noise is most often defined as unwanted sound; whether it is loud, unpleasant, unexpected, or otherwise undesirable. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as “noisiness” or “loudness.”

Noise Descriptors

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound, expressed on a logarithmic scale and with respect to a defined reference sound pressure. The standard reference pressure is 20 micropascals (20 μPa).
- **Vibration Decibel (VdB).** A unitless measure of vibration, expressed on a logarithmic scale and with respect to a defined reference vibration velocity. In the U.S., the standard reference velocity is 1 micro-inch per second (1×10^{-6} in/sec).
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Statistical Sound Level (L_n).** The sound level that is exceeded “n” percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the “median sound level.” The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the “intrusive sound level.” The L_{90} is the sound level exceeded 90 percent of the time and is often considered the “effective background level” or “residual noise level.”

- **Maximum Sound Level ($L_{\max}$).** The highest RMS sound level measured during the measurement period.
- **Root Mean Square Sound Level (RMS).** The square root of the average of the square of the sound pressure over the measurement period.
- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 PM to 10:00 PM and 10 dB from 10:00 PM to 7:00 AM. NOTE: For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive – that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.
- **Peak Particle Velocity (PPV).** The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.
- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

Characteristics of Sound

When an object vibrates, it radiates part of its energy in the form of a pressure wave. Sound is that pressure wave transmitted through the air. Technically, airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure that creates sound waves.

Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). Loudness or amplitude is measured in dB, frequency or pitch is measured in Hertz [Hz] or cycles per second, and duration or time variations is measured in seconds or minutes.

Amplitude

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale. Because of the physical characteristics of noise transmission and perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1 presents the subjective effect of changes in sound pressure levels. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually not discernible (even under ideal conditions). A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernible to most people in an exterior environment, and a 10 dB change is perceived as a doubling (or halving) of the sound.

Table 1 Noise Perceptibility

Change in dB	Noise Level
± 3 dB	Barely perceptible increase
± 5 dB	Readily perceptible increase
± 10 dB	Twice or half as loud
± 20 dB	Four times or one-quarter as loud

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Frequency

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all, but are “felt” more as a vibration. Similarly, though people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz.

When describing sound and its effect on a human population, A-weighted (dBA) sound levels are typically used to approximate the response of the human ear. The A-weighted noise level has been found to correlate well with people’s judgments of the “noisiness” of different sounds and has been used for many years as a measure of community and industrial noise. Although the A-weighted scale and the energy-equivalent metric are commonly used to quantify the range of human response to individual events or general community sound levels, the degree of annoyance or other response also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- General nature of the existing conditions (e.g., quiet rural or busy urban)
- Difference between the magnitude of the sound event level and the ambient condition
- Duration of the sound event
- Number of event occurrences and their repetitiveness
- Time of day that the event occurs

Duration

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time; half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2 , L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour, respectively. These “n” values are typically used to demonstrate compliance for stationary noise sources with many cities’ noise ordinances. Other values typically noted during a noise survey are the L_{min} and L_{max} . These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period, respectively.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and many local jurisdictions use an adjusted 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment (or “penalty”) of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00

PM and 10 dBA for the hours from 10:00 PM to 7:00 AM. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM. Both descriptors give roughly the same 24-hour level, with the CNEL being only slightly more restrictive (i.e., higher). The CNEL or L_{dn} metrics are commonly applied to the assessment of roadway and airport-related noise sources.

Sound Propagation

Sound dissipates exponentially with distance from the noise source. This phenomenon is known as “spreading loss.” For a single-point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source (conservatively neglecting ground attenuation effects, air absorption factors, and barrier shielding). For example, if a backhoe at 50 feet generates 84 dBA, at 100 feet the noise level would be 79 dBA, and at 200 feet it would be 73 dBA. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance over a reflective (“hard site”) surface such as concrete or asphalt. Line source noise in a relatively flat environment with ground-level absorptive vegetation decreases by an additional 1.5 dB for each doubling of distance.

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. Extended periods of noise exposure above 90 dBA results in permanent cell damage, which is the main driver for employee hearing protection regulations in the workplace. For community environments, the ambient or background noise problem is widespread, though generally worse in urban areas than in outlying, less-developed areas. Elevated ambient noise levels can result in noise interference (e.g., speech interruption/masking, sleep disturbance, disturbance of concentration) and cause annoyance. Since most people do not routinely work with decibels or A-weighted sound levels, it is often difficult to appreciate what a given sound pressure level number means. To help relate noise level values to common experience, Table 2 shows typical noise levels from familiar sources.

Table 2 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Vibration Fundamentals

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers. As with noise, vibration can be described by both its amplitude and frequency. Vibration displacement is the distance that a point on a surface moves away from its original static position; velocity is the instantaneous speed that a point on a surface moves; and acceleration is the rate of change of the speed. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During construction, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, receptors may be subject to levels of vibration that can cause annoyance due to noise generated from vibration of a structure or items within a structure.

Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal and RMS is the

square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage and RMS is typically more suitable for evaluating human response.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 3 displays the human response and the effects on buildings resulting from continuous vibration (in terms of various levels of PPV).

Table 3 Human Reaction to Typical Vibration Levels

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of “architectural” (i.e. not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to “architectural” damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage

Source: California Department of Transportation (Caltrans). 2020, April. *Transportation and Construction Vibration Guidance Manual*. Prepared by ICF International.

N O I S E M O N I T O R I N G D A T A

Measurement Report

Report Summary

Meter's File Name	LxT_Data.133.s	Computer's File Name	LxT_0005424-20250805 152112-LxT_Data.133.ldbin						
Meter	LxT1 0005424	Firmware	2.404						
User	AC	Location	LT-3						
Job Description	FHS-0.80 Sonora Band Practice								
Note									
Start Time	2025-08-05 15:21:12	Duration	0:11:39.2						
End Time	2025-08-05 15:32:51	Run Time	0:11:39.2	Pause Time	0:00:00.0				
Pre-Calibration	2025-08-05 14:52:00	Post-Calibration	None	Calibration Deviation	---				

Results

Overall Metrics

LA _{eq}	56.1 dB		
LAE	84.5 dB	SEA	--- dB
EA	31.6 µPa²h		
EA8	1.3 mPa²h		
EA40	6.5 mPa²h		
LA _{Speak}	92.4 dB	2025-08-05 15:31:11	
LA _{Smax}	67.9 dB	2025-08-05 15:28:59	
LA _{Smin}	43.9 dB	2025-08-05 15:23:52	
LA _{eq}	56.1 dB		
LC _{eq}	69.1 dB	LC _{eq} - LA _{eq}	13.0 dB
LA _{Ieq}	61.9 dB	LA _{Ieq} - LA _{eq}	5.8 dB

Exceedances

Count Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight			
--- dB	--- dB	0.0 dB			
LDEN	LDay	LEve	LNight		
--- dB	--- dB	--- dB	--- dB		

Any Data

A			C			Z	
Level	Time Stamp		Level	Time Stamp		Level	Time Stamp
L _{eq}	56.1 dB		--- dB			--- dB	
L _{S(max)}	67.9 dB	2025-08-05 15:28:59	--- dB	None		--- dB	None
L _{S(min)}	43.9 dB	2025-08-05 15:23:52	--- dB	None		--- dB	None
L _{Peak(max)}	92.4 dB	2025-08-05 15:31:11	--- dB	None		--- dB	None

Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 2.0	65.0 dB
LAS 8.0	61.4 dB
LAS 25.0	56.0 dB
LAS 50.0	49.4 dB
LAS 90.0	46.1 dB
LAS 99.0	44.9 dB

Measurement Report

Report Summary

Meter's File Name	LxT_Data.134.s	Computer's File Name	LxT_0005424-20250805 153355-LxT_Data.134.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User	AC	Location	LT-4		
Job Description	FHS-0.80 Sonora Band Practice				
Note					
Start Time	2025-08-05 15:33:55	Duration	0:10:19.2		
End Time	2025-08-05 15:44:15	Run Time	0:10:18.9	Pause Time	0:00:00.3
Pre-Calibration	2025-08-05 14:52:00	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA _{eq}	56.8 dB		
LAE	84.7 dB	SEA	--- dB
EA	32.9 µPa²h		
EA8	1.5 mPa²h		
EA40	7.7 mPa²h		
LA _{Speak}	88.0 dB		2025-08-05 15:39:13
LA _{Smax}	64.7 dB		2025-08-05 15:38:12
LA _{Smin}	42.1 dB		2025-08-05 15:36:54
LA _{eq}	56.8 dB		
LC _{eq}	70.5 dB	LC _{eq} - LA _{eq}	13.7 dB
LA _{Ieq}	62.0 dB	LA _{Ieq} - LA _{eq}	5.2 dB

Exceedances

Count Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	56.8 dB		--- dB		--- dB	
L _{S(max)}	64.7 dB	2025-08-05 15:38:12	--- dB	None	--- dB	None
L _{S(min)}	42.1 dB	2025-08-05 15:36:54	--- dB	None	--- dB	None
L _{Peak(max)}	88.0 dB	2025-08-05 15:39:13	--- dB	None	--- dB	None

Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 2.0	62.6 dB
LAS 8.0	61.5 dB
LAS 25.0	58.8 dB
LAS 50.0	53.5 dB
LAS 90.0	45.3 dB
LAS 99.0	42.6 dB

Measurement Report

Report Summary

Meter's File Name	LxT_Data.137.s	Computer's File Name	LxT_0005424-20250805 155813-LxT_Data.137.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User	AC	Location	LT-6		
Job Description	FHS-0.80 Sonora Band Practice				
Note					
Start Time	2025-08-05 15:58:13	Duration	0:10:07.5		
End Time	2025-08-05 16:08:21	Run Time	0:10:07.5	Pause Time	0:00:00.0
Pre-Calibration	2025-08-05 14:52:00	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA _{eq}	51.1 dB		
LAE	78.9 dB	SEA	--- dB
EA	8.7 µPa²h		
EA8	412.2 µPa²h		
EA40	2.1 mPa²h		
LA _{Speak}	88.9 dB	2025-08-05 16:02:32	
LA _{Smax}	59.7 dB	2025-08-05 16:05:46	
LA _{Smin}	41.7 dB	2025-08-05 16:04:31	
LA _{eq}	51.1 dB		
LC _{eq}	64.0 dB	LC _{eq} - LA _{eq}	12.9 dB
LA _{Ieq}	56.0 dB	LA _{Ieq} - LA _{eq}	4.9 dB

Exceedances

Count Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight		
--- dB	--- dB	0.0 dB		
LDEN	LDay	LEve	LNight	
--- dB	--- dB	--- dB	--- dB	

Any Data

A			C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	51.1 dB		--- dB		--- dB	
L _{S(max)}	59.7 dB	2025-08-05 16:05:46	--- dB	None	--- dB	None
L _{S(min)}	41.7 dB	2025-08-05 16:04:31	--- dB	None	--- dB	None
L _{Peak(max)}	88.9 dB	2025-08-05 16:02:32	--- dB	None	--- dB	None

Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 2.0	57.5 dB
LAS 8.0	55.7 dB
LAS 25.0	53.0 dB
LAS 50.0	46.9 dB
LAS 90.0	43.4 dB
LAS 99.0	42.2 dB

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 4-5, 2025
Site: LT-1

Hour	Leq	Lmax	L50	L90
13:00	74.5	98.3	48.2	44.1
14:00	50.8	81.4	47.3	45.9
15:00	46.4	56.9	46.1	45.0
16:00	46.8	57.1	46.4	44.9
17:00	51.9	72.0	48.6	46.5
18:00	57.4	74.9	55.1	49.5
19:00	55.8	70.8	53.7	51.0
20:00	52.8	70.5	48.8	45.0
21:00	45.9	59.2	45.4	44.2
22:00	47.4	66.5	45.4	44.6
23:00	44.8	52.5	44.6	44.0
0:00	44.8	63.8	44.3	43.7
1:00	44.4	56.6	44.2	43.7
2:00	44.8	56.4	44.5	43.9
3:00	45.3	54.6	44.9	44.3
4:00	45.6	52.2	45.4	44.6
5:00	46.3	57.0	45.9	45.2
6:00	46.2	60.0	45.2	44.3
7:00	46.3	66.1	45.7	45.0
8:00	47.5	61.6	46.4	45.4
9:00	47.1	55.4	46.9	45.5
10:00	47.1	63.7	45.5	44.7
11:00	45.5	57.4	44.3	43.2
12:00	46.1	60.3	45.5	44.4

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	63.9	67.1	47.2	45.3
Evening (7 p.m. - 9 p.m.)	53.1	66.8	49.3	46.7
Nighttime (9 p.m. - 7 a.m.)	45.6	57.7	44.9	44.3

Percentage of Energy	
Daytime	97%
Evening	2%
Nighttime	1%

Calculated CNEL, dBA
61.6

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 5-6, 2025
Site: LT-1

Hour	Leq	Lmax	L50	L90
13:00	48.9	72.0	45.6	44.4
14:00	55.3	72.3	46.5	44.4
15:00	62.0	75.0	54.9	47.9
16:00	57.4	73.5	47.5	45.7
17:00	50.7	66.6	48.3	46.3
18:00	58.1	74.8	55.3	51.6
19:00	55.5	72.1	53.1	50.2
20:00	53.0	69.9	48.9	45.8
21:00	47.1	66.4	45.8	44.9
22:00	46.0	57.6	45.5	44.7
23:00	45.4	53.8	45.0	44.4
0:00	45.6	58.4	45.0	44.4
1:00	45.5	56.8	45.3	44.6
2:00	45.7	57.8	45.3	44.3
3:00	45.3	51.5	45.1	44.3
4:00	45.6	54.2	45.4	44.4
5:00	47.0	58.9	46.6	45.8
6:00	47.7	57.7	47.3	46.4
7:00	50.6	67.6	48.1	47.3
8:00	47.9	56.7	47.5	46.4
9:00	46.2	55.8	45.8	44.8
10:00	44.6	58.8	44.0	43.0
11:00	44.0	50.1	43.7	42.6
12:00	45.0	53.2	44.6	43.4

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	54.8	64.7	47.7	45.7
Evening (7 p.m. - 9 p.m.)	53.1	69.5	49.3	47.0
Nighttime (9 p.m. - 7 a.m.)	46.1	56.3	45.6	44.8

Percentage of Energy	
Daytime	79%
Evening	13%
Nighttime	8%

Calculated CNEL, dBA

55.8

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 4-5, 2025
Site: LT-2

Hour	Leq	Lmax	L50	L90
13:00	54.4	67.6	51.6	49.9
14:00	53.4	65.3	52.2	50.7
15:00	52.1	64.4	51.2	50.1
16:00	51.6	62.8	51.1	49.8
17:00	55.7	71.7	52.5	50.6
18:00	61.2	75.1	59.1	53.6
19:00	61.0	77.0	58.4	55.0
20:00	58.1	80.1	52.2	48.9
21:00	50.0	63.2	49.4	48.3
22:00	50.6	67.7	48.7	48.0
23:00	48.1	57.0	47.8	47.0
0:00	48.3	71.1	47.3	46.8
1:00	47.6	61.4	47.1	46.6
2:00	47.6	55.6	47.2	46.7
3:00	48.3	56.9	48.0	47.1
4:00	49.1	56.8	48.8	47.8
5:00	49.6	59.0	49.1	48.5
6:00	50.0	66.8	49.3	48.4
7:00	50.4	60.2	50.0	49.3
8:00	51.2	66.6	50.4	49.5
9:00	51.3	62.9	51.0	49.7
10:00	51.7	67.0	50.0	49.2
11:00	50.8	69.4	49.5	48.3
12:00	51.1	66.0	50.0	48.9

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	54.3	66.6	51.6	50.0
Evening (7 p.m. - 9 p.m.)	58.2	73.4	53.3	50.7
Nighttime (9 p.m. - 7 a.m.)	48.9	61.4	48.1	47.4

Percentage of Energy	
Daytime	55%
Evening	34%
Nighttime	12%

Calculated CNEL, dBA
58.3

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 5-6, 2025
Site: LT-2

Hour	Leq	Lmax	L50	L90
13:00	55.0	76.8	50.9	49.6
14:00	62.4	79.9	52.3	49.7
15:00	69.2	82.2	61.4	52.9
16:00	64.8	81.5	51.9	50.3
17:00	56.7	74.2	53.0	50.9
18:00	63.6	83.0	59.3	55.7
19:00	60.7	78.0	57.9	54.4
20:00	56.2	72.3	53.7	50.0
21:00	51.4	68.6	49.6	48.7
22:00	49.8	60.1	49.1	48.4
23:00	49.0	58.1	48.4	47.5
0:00	49.3	61.8	48.2	47.6
1:00	48.9	60.1	48.4	47.8
2:00	49.5	60.3	49.0	47.8
3:00	49.0	55.2	48.7	47.8
4:00	49.1	58.4	48.9	47.8
5:00	50.8	62.1	50.5	49.6
6:00	51.7	60.5	51.3	50.5
7:00	53.8	67.2	52.2	51.4
8:00	52.4	71.1	51.7	50.6
9:00	50.8	61.4	50.3	49.5
10:00	49.8	63.1	49.1	48.0
11:00	49.0	61.1	48.4	47.5
12:00	50.8	66.7	49.6	48.4

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	61.5	72.4	52.5	50.4
Evening (7 p.m. - 9 p.m.)	57.6	73.0	53.7	51.0
Nighttime (9 p.m. - 7 a.m.)	49.8	59.6	49.2	48.3

Percentage of Energy	
Daytime	87%
Evening	9%
Nighttime	4%

Calculated CNEL, dBA
61.1

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 4-5, 2025
Site: LT-3

Hour	Leq	Lmax	L50	L90
13:00	44.7	56.9	43.9	43.1
14:00	47.7	60.0	46.7	44.4
15:00	46.2	56.0	45.6	43.9
16:00	46.6	63.4	45.8	44.1
17:00	49.2	63.1	47.7	46.1
18:00	55.9	76.5	52.6	48.2
19:00	55.7	70.8	53.2	50.1
20:00	52.9	71.5	48.3	44.5
21:00	46.1	63.7	45.0	44.0
22:00	47.4	67.9	44.6	43.7
23:00	44.2	56.4	43.6	43.0
0:00	43.8	60.5	43.1	42.3
1:00	47.4	52.3	47.4	46.9
2:00	46.9	51.5	46.9	45.5
3:00	46.9	55.1	46.9	45.2
4:00	44.9	55.3	44.6	43.8
5:00	46.2	60.0	45.7	44.5
6:00	45.8	59.7	45.4	44.4
7:00	46.5	55.6	46.1	45.4
8:00	46.6	59.2	46.1	45.2
9:00	46.2	53.8	45.9	45.0
10:00	47.7	67.0	45.1	44.2
11:00	44.6	59.9	43.6	42.7
12:00	44.5	65.1	43.9	43.0

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	48.7	61.4	46.1	44.6
Evening (7 p.m. - 9 p.m.)	53.1	68.7	48.8	46.2
Nighttime (9 p.m. - 7 a.m.)	46.1	57.6	45.4	44.4

Percentage of Energy	
Daytime	48%
Evening	32%
Nighttime	20%

Calculated CNEL, dBA

54.3

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 5-6, 2025
Site: LT-3

Hour	Leq	Lmax	L50	L90
13:00	49.9	76.7	44.0	43.2
14:00	50.8	68.6	45.0	43.3
15:00	58.6	72.7	52.1	46.7
16:00	54.7	71.6	46.8	45.2
17:00	50.9	69.4	47.4	45.5
18:00	57.6	77.3	53.5	50.1
19:00	57.6	82.9	53.0	49.7
20:00	51.2	64.1	49.3	45.6
21:00	46.6	62.6	45.5	44.5
22:00	46.2	57.6	45.2	43.9
23:00	45.7	58.4	45.3	43.5
0:00	45.8	52.1	45.3	43.4
1:00	44.5	56.2	43.9	42.8
2:00	45.6	56.0	45.4	44.6
3:00	45.9	62.3	45.5	44.5
4:00	45.3	55.9	45.2	43.7
5:00	46.2	54.0	45.9	44.8
6:00	48.2	54.6	47.8	46.9
7:00	49.4	64.1	48.3	47.4
8:00	47.6	54.4	47.0	45.8
9:00	47.6	59.3	46.3	45.3
10:00	46.2	58.8	44.1	42.6
11:00	44.0	53.0	43.4	42.4
12:00	44.9	58.5	43.9	42.8

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	52.7	65.4	46.8	45.0
Evening (7 p.m. - 9 p.m.)	54.0	69.9	49.3	46.6
Nighttime (9 p.m. - 7 a.m.)	46.0	56.3	45.5	44.2

Percentage of Energy	
Daytime	67%
Evening	22%
Nighttime	11%

Calculated CNEL, dBA
55.3

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 4-5, 2025
Site: LT-4

Hour	Leq	Lmax	L50	L90
13:00	65.2	91.9	41.7	40.5
14:00	44.8	61.8	42.9	41.3
15:00	43.3	59.8	41.6	40.5
16:00	42.5	54.0	41.8	40.7
17:00	44.3	59.1	42.6	41.5
18:00	49.4	67.7	46.8	43.2
19:00	52.0	73.1	48.2	45.1
20:00	47.8	66.1	44.6	43.3
21:00	43.3	58.3	42.4	41.1
22:00	45.0	64.0	42.5	41.4
23:00	44.2	52.7	43.5	41.7
0:00	42.2	50.3	41.8	40.7
1:00	42.8	45.9	42.2	41.6
2:00	42.6	50.1	42.2	40.8
3:00	42.2	51.8	42.0	40.8
4:00	42.2	47.7	42.0	41.2
5:00	42.9	53.3	42.3	41.6
6:00	43.9	59.6	42.8	41.8
7:00	44.1	56.0	43.4	42.7
8:00	44.1	58.9	43.0	42.2
9:00	44.3	58.8	43.3	42.4
10:00	45.1	63.3	42.2	41.3
11:00	44.2	61.9	41.3	40.2
12:00	44.1	61.9	41.2	40.2

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	54.8	62.9	42.7	41.4
Evening (7 p.m. - 9 p.m.)	49.0	65.8	45.1	43.2
Nighttime (9 p.m. - 7 a.m.)	43.2	52.8	42.4	41.3

Percentage of Energy	
Daytime	89%
Evening	6%
Nighttime	5%

Calculated CNEL, dBA
54.2

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 5-6, 2025
Site: LT-4

Hour	Leq	Lmax	L50	L90
13:00	48.5	74.4	41.3	40.4
14:00	46.5	65.4	42.6	40.5
15:00	52.7	65.7	46.8	42.4
16:00	49.7	66.1	43.2	41.4
17:00	44.1	61.4	42.5	41.3
18:00	51.2	69.2	47.5	44.5
19:00	49.7	68.3	46.5	43.7
20:00	46.2	58.9	45.3	41.4
21:00	43.3	59.8	42.0	41.0
22:00	43.4	52.2	43.3	41.2
23:00	42.0	50.5	41.5	40.7
0:00	42.5	50.8	42.1	41.3
1:00	41.5	53.0	41.2	40.6
2:00	41.5	52.7	41.0	40.5
3:00	43.1	59.1	42.7	42.0
4:00	43.1	53.3	43.0	42.2
5:00	43.4	48.1	43.3	42.3
6:00	45.4	58.3	44.4	43.6
7:00	45.9	61.2	44.7	43.6
8:00	44.6	58.9	43.8	42.5
9:00	48.9	62.9	44.1	41.9
10:00	45.9	60.1	41.0	40.0
11:00	41.2	54.2	40.2	39.6
12:00	43.9	61.5	41.0	39.9

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	48.1	63.4	43.2	41.5
Evening (7 p.m. - 9 p.m.)	47.2	62.3	44.6	42.0
Nighttime (9 p.m. - 7 a.m.)	43.0	53.1	42.5	41.6

Percentage of Energy	
Daytime	70%
Evening	14%
Nighttime	16%

Calculated CNEL, dBA
51.0

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 4-5, 2025
Site: LT-5

Hour	Leq	Lmax	L50	L90
13:00	70.5	95.9	45.7	44.4
14:00	47.2	60.4	46.4	45.1
15:00	47.8	67.6	45.4	44.3
16:00	46.3	65.5	45.4	44.4
17:00	47.8	63.2	45.9	44.5
18:00	51.1	74.7	47.7	45.8
19:00	54.7	76.0	48.8	46.7
20:00	48.9	68.2	46.0	44.2
21:00	46.6	65.9	45.1	44.2
22:00	47.7	69.3	44.6	43.9
23:00	44.2	60.2	43.5	43.0
0:00	43.7	58.7	43.2	42.7
1:00	43.4	52.0	43.0	42.7
2:00	44.2	60.3	43.7	42.9
3:00	44.3	60.6	43.8	43.1
4:00	44.7	51.8	44.3	43.5
5:00	45.5	55.2	45.0	44.4
6:00	46.2	59.0	45.6	44.8
7:00	48.2	69.9	46.2	45.4
8:00	56.7	83.9	46.1	45.2
9:00	48.8	67.2	46.4	45.5
10:00	48.5	68.6	45.3	44.6
11:00	51.2	64.6	45.3	43.9
12:00	52.6	69.5	45.1	43.9

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	60.2	70.9	45.9	44.8
Evening (7 p.m. - 9 p.m.)	51.4	70.0	46.6	45.0
Nighttime (9 p.m. - 7 a.m.)	45.1	58.6	44.1	43.4

Percentage of Energy	
Daytime	95%
Evening	3%
Nighttime	2%

Calculated CNEL, dBA
58.4

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 5-6, 2025
Site: LT-5

Hour	Leq	Lmax	L50	L90
13:00	52.6	77.7	44.9	44.0
14:00	49.7	66.1	45.7	44.0
15:00	52.7	64.4	48.9	45.5
16:00	50.5	73.4	45.8	44.4
17:00	47.6	66.0	45.7	44.3
18:00	55.3	71.8	51.5	48.0
19:00	50.4	70.8	47.6	46.0
20:00	47.8	59.3	47.0	45.0
21:00	46.2	62.3	44.8	44.0
22:00	45.4	58.1	44.6	43.6
23:00	44.6	53.0	43.9	43.3
0:00	44.1	54.7	43.3	42.8
1:00	43.4	52.7	43.0	42.5
2:00	44.4	62.6	43.6	43.1
3:00	45.2	66.0	44.1	43.2
4:00	45.2	59.4	44.6	43.6
5:00	46.4	55.1	45.9	44.8
6:00	51.2	75.5	47.3	46.3
7:00	60.2	91.6	48.3	46.4
8:00	49.8	68.5	46.7	45.0
9:00	47.0	61.6	45.6	44.6
10:00	45.6	61.9	44.2	43.4
11:00	52.8	74.2	46.4	43.6
12:00	50.5	71.2	45.3	43.8

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	53.2	70.7	46.6	44.8
Evening (7 p.m. - 9 p.m.)	48.5	64.1	46.5	45.0
Nighttime (9 p.m. - 7 a.m.)	46.3	59.7	44.5	43.7

Percentage of Energy	
Daytime	81%
Evening	7%
Nighttime	12%

Calculated CNEL, dBA
54.6

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: July 29-30, 2025
Site: LT-6

Hour	Leq	Lmax	L50	L90
13:00	72.8	99.0	45.5	44.1
14:00	47.8	58.2	47.2	45.1
15:00	47.2	64.8	46.5	44.7
16:00	50.8	75.2	46.8	44.8
17:00	48.8	66.4	47.0	45.5
18:00	51.5	68.8	49.6	47.6
19:00	53.4	71.1	50.8	48.6
20:00	55.1	82.0	48.6	45.6
21:00	47.2	61.0	46.5	45.3
22:00	49.8	73.8	45.5	44.6
23:00	45.1	55.7	44.6	43.9
0:00	44.5	56.7	44.3	43.1
1:00	45.1	50.8	44.9	43.7
2:00	45.4	54.6	44.9	43.8
3:00	45.5	53.3	45.4	44.4
4:00	46.2	52.9	45.9	45.0
5:00	47.5	62.0	47.0	46.1
6:00	48.1	56.8	47.8	46.7
7:00	50.1	71.5	48.7	47.9
8:00	50.8	70.2	49.0	47.9
9:00	49.6	59.8	48.7	47.7
10:00	50.5	73.3	47.5	46.4
11:00	46.7	58.4	46.0	44.8
12:00	46.4	55.4	45.7	44.5

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	62.2	68.4	47.4	45.9
Evening (7 p.m. - 9 p.m.)	53.0	71.4	48.6	46.5
Nighttime (9 p.m. - 7 a.m.)	46.7	57.4	45.6	44.6

Percentage of Energy	
Daytime	95%
Evening	3%
Nighttime	2%

Calculated CNEL, dBA
60.4

Long-Term 24 Hour Continuous Noise Monitoring Calculation Input Sheet

Project: FHS-08.0 Sonora
Date: August 5-6, 2025
Site: LT-6

Hour	Leq	Lmax	L50	L90
13:00	52.5	78.5	45.6	44.4
14:00	48.0	60.7	45.9	44.0
15:00	52.0	62.8	49.4	46.5
16:00	49.1	60.9	46.6	45.1
17:00	48.6	63.1	47.1	44.7
18:00	59.0	73.7	56.1	51.2
19:00	54.1	74.6	50.9	48.3
20:00	52.7	68.7	51.3	48.9
21:00	50.2	62.9	49.6	47.0
22:00	47.2	56.1	46.6	45.4
23:00	46.6	64.3	45.5	44.3
0:00	45.8	53.7	44.3	43.4
1:00	44.1	51.3	43.7	43.1
2:00	45.8	59.2	45.0	44.4
3:00	47.0	58.7	46.6	45.6
4:00	46.7	59.1	46.3	45.5
5:00	48.2	55.7	48.0	46.6
6:00	50.2	61.2	49.6	48.8
7:00	51.1	65.0	50.4	49.6
8:00	51.0	71.2	48.9	47.5
9:00	48.5	71.3	47.6	46.2
10:00	48.2	74.3	45.6	44.1
11:00	51.5	73.5	44.9	43.7
12:00	45.9	56.6	45.1	43.7

Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	52.0	67.6	47.8	45.9
Evening (7 p.m. - 9 p.m.)	52.6	68.7	50.6	48.1
Nighttime (9 p.m. - 7 a.m.)	47.2	57.7	46.2	45.2

Percentage of Energy	
Daytime	65%
Evening	19%
Nighttime	16%

Calculated CNEL, dBA
55.4

Project: FHS-08.0 Sonora

User: AC

Location: LT-1

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/4/2025	1:00 PM	2:00 PM	1:00	74.5	98.3	41.8	87.7	84.3	79.3	75.7	74.6	66.6	48.2	44.1	43.3	42.6
2	8/4/2025	2:00 PM	3:00 PM	1:00	50.8	81.4	44.4	59.4	55.6	51.1	49.8	49.4	48.1	47.3	45.9	45.6	45.1
3	8/4/2025	3:00 PM	4:00 PM	1:00	46.4	56.9	43.7	49.6	48.9	48.1	47.7	47.5	46.8	46.1	45.0	44.8	44.3
4	8/4/2025	4:00 PM	5:00 PM	1:00	46.8	57.1	43.4	51.4	50.3	49.1	48.5	48.2	47.3	46.4	44.9	44.6	44.2
5	8/4/2025	5:00 PM	6:00 PM	1:00	51.9	72.0	44.6	61.6	59.6	56.8	55.3	54.6	51.0	48.6	46.5	46.2	45.5
6	8/4/2025	6:00 PM	7:00 PM	1:00	57.4	74.9	46.3	65.9	64.3	62.2	61.0	60.4	57.8	55.1	49.5	48.5	47.3
7	8/4/2025	7:00 PM	8:00 PM	1:00	55.8	70.8	48.3	64.3	62.7	60.4	59.0	58.4	55.8	53.7	51.0	50.4	49.5
8	8/4/2025	8:00 PM	9:00 PM	1:00	52.8	70.5	43.7	61.9	60.3	57.4	56.1	55.6	53.2	48.8	45.0	44.6	44.1
9	8/4/2025	9:00 PM	10:00 PM	1:00	45.9	59.2	42.7	51.5	49.6	47.6	47.0	46.8	46.1	45.4	44.2	43.9	43.2
10	8/4/2025	10:00 PM	11:00 PM	1:00	47.4	66.5	43.9	55.2	51.2	47.5	46.8	46.5	45.8	45.4	44.6	44.4	44.2
11	8/4/2025	11:00 PM	12:00 AM	1:00	44.8	52.5	43.3	47.4	46.4	45.8	45.6	45.5	45.0	44.6	44.0	43.9	43.7
12	8/5/2025	12:00 AM	1:00 AM	1:00	44.8	63.8	43.3	49.0	46.7	45.6	45.3	45.2	44.7	44.3	43.7	43.6	43.5
13	8/5/2025	1:00 AM	2:00 AM	1:00	44.4	56.6	43.1	46.6	46.1	45.6	45.3	45.1	44.6	44.2	43.7	43.6	43.4
14	8/5/2025	2:00 AM	3:00 AM	1:00	44.8	56.4	43.3	47.7	47.3	46.2	45.6	45.4	44.8	44.5	43.9	43.8	43.7
15	8/5/2025	3:00 AM	4:00 AM	1:00	45.3	54.6	43.5	48.9	48.0	46.8	46.3	46.1	45.4	44.9	44.3	44.2	43.9
16	8/5/2025	4:00 AM	5:00 AM	1:00	45.6	52.2	43.8	48.2	47.7	47.0	46.7	46.6	45.9	45.4	44.6	44.4	44.1
17	8/5/2025	5:00 AM	6:00 AM	1:00	46.3	57.0	44.5	50.5	48.7	47.7	47.4	47.2	46.4	45.9	45.2	45.0	44.8
18	8/5/2025	6:00 AM	7:00 AM	1:00	46.2	60.0	43.3	54.1	52.1	48.6	47.4	46.9	45.8	45.2	44.3	44.1	43.7
19	8/5/2025	7:00 AM	8:00 AM	1:00	46.3	66.1	44.1	49.9	49.0	47.7	47.2	47.0	46.3	45.7	45.0	44.8	44.5
20	8/5/2025	8:00 AM	9:00 AM	1:00	47.5	61.6	44.3	54.0	52.2	50.5	49.5	49.1	47.5	46.4	45.4	45.2	44.8
21	8/5/2025	9:00 AM	10:00 AM	1:00	47.1	55.4	44.1	50.7	49.8	48.8	48.4	48.2	47.5	46.9	45.5	45.1	44.6
22	8/5/2025	10:00 AM	11:00 AM	1:00	47.1	63.7	43.6	56.6	53.0	48.5	47.7	47.3	46.2	45.5	44.7	44.4	44.1
23	8/5/2025	11:00 AM	12:00 PM	1:00	45.5	57.4	42.1	52.7	51.3	48.2	47.1	46.7	45.5	44.3	43.2	43.0	42.7
24	8/5/2025	12:00 PM	1:00 PM	1:00	46.1	60.3	42.8	51.0	49.9	48.4	47.6	47.3	46.3	45.5	44.4	44.2	43.7

Project: FHS-08.0 Sonora

User: AC

Location: LT-1

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/5/2025	1:00 PM	2:00 PM	1:00	48.9	72.0	43.1	54.1	49.8	47.8	47.2	47.0	46.2	45.6	44.4	44.1	43.6
2	8/5/2025	2:00 PM	3:00 PM	1:00	55.3	72.3	42.2	70.2	66.2	59.1	56.7	55.7	49.3	46.5	44.4	43.9	43.0
3	8/5/2025	3:00 PM	4:00 PM	1:00	62.0	75.0	45.0	70.9	70.3	68.6	67.5	66.9	62.8	54.9	47.9	46.9	45.8
4	8/5/2025	4:00 PM	5:00 PM	1:00	57.4	73.5	43.7	69.7	68.7	64.7	61.4	60.2	53.3	47.5	45.7	45.4	44.6
5	8/5/2025	5:00 PM	6:00 PM	1:00	50.7	66.6	44.6	59.2	57.5	55.3	53.9	53.3	50.5	48.3	46.3	45.8	45.2
6	8/5/2025	6:00 PM	7:00 PM	1:00	58.1	74.8	47.0	67.6	65.4	63.0	61.7	60.8	57.5	55.3	51.6	50.9	49.2
7	8/5/2025	7:00 PM	8:00 PM	1:00	55.5	72.1	46.9	64.3	62.7	60.4	59.0	58.3	55.5	53.1	50.2	49.6	48.6
8	8/5/2025	8:00 PM	9:00 PM	1:00	53.0	69.9	44.4	61.6	60.1	58.3	57.5	57.0	53.3	48.9	45.8	45.5	44.8
9	8/5/2025	9:00 PM	10:00 PM	1:00	47.1	66.4	44.1	54.0	50.5	48.3	47.6	47.3	46.4	45.8	44.9	44.7	44.4
10	8/5/2025	10:00 PM	11:00 PM	1:00	46.0	57.6	43.9	50.9	49.5	47.9	47.1	46.9	46.0	45.5	44.7	44.5	44.2
11	8/5/2025	11:00 PM	12:00 AM	1:00	45.4	53.8	43.7	49.2	48.2	47.0	46.6	46.3	45.5	45.0	44.4	44.3	44.1
12	8/6/2025	12:00 AM	1:00 AM	1:00	45.6	58.4	43.7	49.4	48.7	47.6	47.1	46.9	45.7	45.0	44.4	44.3	44.0
13	8/6/2025	1:00 AM	2:00 AM	1:00	45.5	56.8	43.7	48.0	47.0	46.4	46.3	46.2	45.7	45.3	44.6	44.2	44.0
14	8/6/2025	2:00 AM	3:00 AM	1:00	45.7	57.8	43.6	49.0	48.2	47.3	47.0	46.8	46.2	45.3	44.3	44.1	43.9
15	8/6/2025	3:00 AM	4:00 AM	1:00	45.3	51.5	43.5	47.5	47.1	46.6	46.3	46.2	45.6	45.1	44.3	44.1	43.9
16	8/6/2025	4:00 AM	5:00 AM	1:00	45.6	54.2	43.7	48.6	47.4	46.8	46.5	46.4	45.9	45.4	44.4	44.2	44.0
17	8/6/2025	5:00 AM	6:00 AM	1:00	47.0	58.9	44.9	50.1	49.0	48.3	48.0	47.9	47.3	46.6	45.8	45.6	45.3
18	8/6/2025	6:00 AM	7:00 AM	1:00	47.7	57.7	45.4	51.7	50.8	49.7	49.1	48.8	47.9	47.3	46.4	46.2	45.8
19	8/6/2025	7:00 AM	8:00 AM	1:00	50.6	67.6	46.2	61.6	60.7	52.7	51.1	50.5	48.8	48.1	47.3	47.0	46.6
20	8/6/2025	8:00 AM	9:00 AM	1:00	47.9	56.7	45.6	50.9	50.3	49.8	49.5	49.4	48.6	47.5	46.4	46.2	46.0
21	8/6/2025	9:00 AM	10:00 AM	1:00	46.2	55.8	44.0	51.2	49.1	47.9	47.3	47.0	46.4	45.8	44.8	44.6	44.3
22	8/6/2025	10:00 AM	11:00 AM	1:00	44.6	58.8	42.4	50.1	47.4	46.4	45.9	45.7	44.7	44.0	43.0	42.8	42.6
23	8/6/2025	11:00 AM	12:00 PM	1:00	44.0	50.1	41.6	47.6	46.9	45.7	45.3	45.1	44.4	43.7	42.6	42.3	41.9
24	8/6/2025	12:00 PM	1:00 PM	1:00	45.0	53.2	42.3	50.0	49.0	46.9	46.3	46.0	45.3	44.6	43.4	43.1	42.7

Project: FHS-08.0 Sonora

User: AC

Location: LT-2

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/4/2025	1:00 PM	2:00 PM	1:00	54.4	67.6	48.8	64.2	62.3	59.7	57.8	57.1	53.6	51.6	49.9	49.5	49.1
2	8/4/2025	2:00 PM	3:00 PM	1:00	53.4	65.3	49.6	60.6	59.1	56.5	55.6	55.1	53.4	52.2	50.7	50.4	49.9
3	8/4/2025	3:00 PM	4:00 PM	1:00	52.1	64.4	48.8	58.6	57.0	54.9	53.8	53.4	52.0	51.2	50.1	49.8	49.3
4	8/4/2025	4:00 PM	5:00 PM	1:00	51.6	62.8	48.4	56.5	55.3	53.8	53.1	52.8	51.9	51.1	49.8	49.5	48.9
5	8/4/2025	5:00 PM	6:00 PM	1:00	55.7	71.7	48.9	65.6	63.1	60.6	59.1	58.3	54.8	52.5	50.6	50.3	49.7
6	8/4/2025	6:00 PM	7:00 PM	1:00	61.2	75.1	50.4	68.8	67.7	66.1	65.2	64.7	62.1	59.1	53.6	52.5	51.6
7	8/4/2025	7:00 PM	8:00 PM	1:00	61.0	77.0	52.2	70.0	68.0	65.5	64.3	63.8	61.0	58.4	55.0	54.4	53.5
8	8/4/2025	8:00 PM	9:00 PM	1:00	58.1	80.1	47.7	67.8	65.8	62.5	60.6	59.8	57.4	52.2	48.9	48.7	48.2
9	8/4/2025	9:00 PM	10:00 PM	1:00	50.0	63.2	47.2	55.8	53.1	51.5	51.0	50.8	50.0	49.4	48.3	48.1	47.5
10	8/4/2025	10:00 PM	11:00 PM	1:00	50.6	67.7	47.3	59.2	56.2	51.4	50.3	50.0	49.2	48.7	48.0	47.8	47.5
11	8/4/2025	11:00 PM	12:00 AM	1:00	48.1	57.0	46.6	50.8	49.9	49.2	48.9	48.8	48.2	47.8	47.0	46.9	46.7
12	8/5/2025	12:00 AM	1:00 AM	1:00	48.3	71.1	46.6	52.8	49.7	48.7	48.4	48.2	47.7	47.3	46.8	46.7	46.6
13	8/5/2025	1:00 AM	2:00 AM	1:00	47.6	61.4	46.2	50.5	49.8	48.9	48.5	48.3	47.6	47.1	46.6	46.5	46.3
14	8/5/2025	2:00 AM	3:00 AM	1:00	47.6	55.6	46.2	51.0	50.3	49.2	48.6	48.4	47.6	47.2	46.7	46.6	46.4
15	8/5/2025	3:00 AM	4:00 AM	1:00	48.3	56.9	46.2	51.8	51.1	49.9	49.2	49.0	48.4	48.0	47.1	46.9	46.4
16	8/5/2025	4:00 AM	5:00 AM	1:00	49.1	56.8	47.1	51.9	51.4	50.6	50.2	50.1	49.3	48.8	47.8	47.6	47.3
17	8/5/2025	5:00 AM	6:00 AM	1:00	49.6	59.0	48.0	53.0	51.6	50.8	50.5	50.4	49.7	49.1	48.5	48.4	48.2
18	8/5/2025	6:00 AM	7:00 AM	1:00	50.0	66.8	47.6	56.3	54.9	51.7	51.1	50.9	49.9	49.3	48.4	48.2	47.9
19	8/5/2025	7:00 AM	8:00 AM	1:00	50.4	60.2	48.5	54.3	53.0	51.8	51.4	51.2	50.5	50.0	49.3	49.1	48.9
20	8/5/2025	8:00 AM	9:00 AM	1:00	51.2	66.6	48.6	59.1	56.0	53.0	52.2	51.9	51.0	50.4	49.5	49.3	49.0
21	8/5/2025	9:00 AM	10:00 AM	1:00	51.3	62.9	48.6	55.5	54.4	53.0	52.5	52.3	51.5	51.0	49.7	49.4	49.0
22	8/5/2025	10:00 AM	11:00 AM	1:00	51.7	67.0	48.2	62.3	59.6	52.9	51.8	51.5	50.7	50.0	49.2	49.0	48.6
23	8/5/2025	11:00 AM	12:00 PM	1:00	50.8	69.4	47.2	58.0	56.6	54.1	52.5	51.9	50.5	49.5	48.3	48.0	47.5
24	8/5/2025	12:00 PM	1:00 PM	1:00	51.1	66.0	47.5	58.2	56.4	53.8	52.7	52.3	51.0	50.0	48.9	48.7	48.2

Project: FHS-08.0 Sonora

User: AC

Location: LT-2

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/5/2025	1:00 PM	2:00 PM	1:00	55.0	76.8	48.4	63.7	61.0	57.6	55.8	55.2	52.3	50.9	49.6	49.3	48.7
2	8/5/2025	2:00 PM	3:00 PM	1:00	62.4	79.9	47.4	77.8	72.5	65.9	63.2	62.0	57.2	52.3	49.7	49.3	48.4
3	8/5/2025	3:00 PM	4:00 PM	1:00	69.2	82.2	50.0	78.4	77.9	75.8	74.6	74.0	70.2	61.4	52.9	51.9	50.8
4	8/5/2025	4:00 PM	5:00 PM	1:00	64.8	81.5	49.0	77.3	76.1	72.4	68.8	67.5	59.6	51.9	50.3	50.1	49.5
5	8/5/2025	5:00 PM	6:00 PM	1:00	56.7	74.2	49.5	65.9	64.6	62.2	60.8	60.0	56.2	53.0	50.9	50.5	50.0
6	8/5/2025	6:00 PM	7:00 PM	1:00	63.6	83.0	50.9	75.0	72.2	68.6	66.2	65.4	62.0	59.3	55.7	54.8	52.9
7	8/5/2025	7:00 PM	8:00 PM	1:00	60.7	78.0	51.1	70.0	67.9	65.4	64.1	63.5	60.7	57.9	54.4	53.8	52.7
8	8/5/2025	8:00 PM	9:00 PM	1:00	56.2	72.3	48.5	63.9	62.8	61.1	60.1	59.6	57.0	53.7	50.0	49.7	49.0
9	8/5/2025	9:00 PM	10:00 PM	1:00	51.4	68.6	48.0	60.1	57.6	54.5	52.5	51.9	50.4	49.6	48.7	48.6	48.3
10	8/5/2025	10:00 PM	11:00 PM	1:00	49.8	60.1	47.8	55.6	53.3	51.4	50.8	50.5	49.6	49.1	48.4	48.2	48.0
11	8/5/2025	11:00 PM	12:00 AM	1:00	49.0	58.1	46.9	53.5	52.4	50.9	50.3	50.1	49.0	48.4	47.5	47.3	47.0
12	8/6/2025	12:00 AM	1:00 AM	1:00	49.3	61.8	47.3	54.0	53.4	52.4	51.7	51.4	49.3	48.2	47.6	47.6	47.4
13	8/6/2025	1:00 AM	2:00 AM	1:00	48.9	60.1	47.2	51.6	50.8	50.0	49.7	49.7	49.0	48.4	47.8	47.6	47.4
14	8/6/2025	2:00 AM	3:00 AM	1:00	49.5	60.3	47.1	53.9	52.7	51.2	50.7	50.4	49.7	49.0	47.8	47.4	47.2
15	8/6/2025	3:00 AM	4:00 AM	1:00	49.0	55.2	47.2	51.8	51.2	50.6	50.2	50.0	49.3	48.7	47.8	47.5	47.3
16	8/6/2025	4:00 AM	5:00 AM	1:00	49.1	58.4	47.2	51.6	50.7	50.2	50.0	49.9	49.3	48.9	47.8	47.6	47.4
17	8/6/2025	5:00 AM	6:00 AM	1:00	50.8	62.1	48.9	53.6	53.0	52.1	51.8	51.7	51.0	50.5	49.6	49.5	49.2
18	8/6/2025	6:00 AM	7:00 AM	1:00	51.7	60.5	50.0	55.4	54.5	53.4	53.0	52.7	51.9	51.3	50.5	50.4	50.1
19	8/6/2025	7:00 AM	8:00 AM	1:00	53.8	67.2	50.3	63.9	62.4	55.7	54.2	53.8	52.7	52.2	51.4	51.2	50.8
20	8/6/2025	8:00 AM	9:00 AM	1:00	52.4	71.1	49.8	57.2	55.4	54.0	53.6	53.4	52.7	51.7	50.6	50.4	50.1
21	8/6/2025	9:00 AM	10:00 AM	1:00	50.8	61.4	48.7	56.9	53.9	52.4	51.9	51.7	50.8	50.3	49.5	49.3	49.1
22	8/6/2025	10:00 AM	11:00 AM	1:00	49.8	63.1	47.3	54.6	53.3	51.6	51.1	50.8	49.7	49.1	48.0	47.8	47.5
23	8/6/2025	11:00 AM	12:00 PM	1:00	49.0	61.1	46.5	53.4	51.9	50.8	50.2	49.9	49.1	48.4	47.5	47.3	46.9
24	8/6/2025	12:00 PM	1:00 PM	1:00	50.8	66.7	47.1	57.3	55.9	53.9	52.7	52.1	50.5	49.6	48.4	48.1	47.6

Project: FHS-08.0 Sonora

User: AC

Location: LT-3

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/4/2025	1:00 PM	2:00 PM	1:00	44.7	56.9	42.3	50.1	48.7	47.1	46.4	46.0	44.7	43.9	43.1	42.9	42.6
2	8/4/2025	2:00 PM	3:00 PM	1:00	47.7	60.0	42.9	53.6	52.6	51.1	50.3	49.9	48.1	46.7	44.4	44.0	43.5
3	8/4/2025	3:00 PM	4:00 PM	1:00	46.2	56.0	43.0	50.9	49.8	48.8	48.1	47.8	46.8	45.6	43.9	43.7	43.3
4	8/4/2025	4:00 PM	5:00 PM	1:00	46.6	63.4	43.2	51.5	50.4	49.2	48.5	48.3	47.1	45.8	44.1	43.9	43.5
5	8/4/2025	5:00 PM	6:00 PM	1:00	49.2	63.1	44.5	57.3	55.4	52.9	51.8	51.2	49.0	47.7	46.1	45.7	45.1
6	8/4/2025	6:00 PM	7:00 PM	1:00	55.9	76.5	45.5	65.1	63.2	60.8	59.5	58.8	55.7	52.6	48.2	47.5	46.7
7	8/4/2025	7:00 PM	8:00 PM	1:00	55.7	70.8	47.2	64.5	63.0	60.6	59.2	58.6	55.7	53.2	50.1	49.5	48.6
8	8/4/2025	8:00 PM	9:00 PM	1:00	52.9	71.5	43.1	62.3	60.8	58.0	56.4	55.7	52.5	48.3	44.5	44.1	43.6
9	8/4/2025	9:00 PM	10:00 PM	1:00	46.1	63.7	43.1	52.6	48.9	47.5	47.0	46.7	45.8	45.0	44.0	43.7	43.4
10	8/4/2025	10:00 PM	11:00 PM	1:00	47.4	67.9	42.7	55.1	52.2	47.3	46.4	46.1	45.3	44.6	43.7	43.4	42.9
11	8/4/2025	11:00 PM	12:00 AM	1:00	44.2	56.4	42.4	47.8	46.7	45.7	45.2	45.0	44.2	43.6	43.0	42.9	42.6
12	8/5/2025	12:00 AM	1:00 AM	1:00	43.8	60.5	41.8	47.8	47.1	46.2	45.4	44.8	43.6	43.1	42.3	42.2	42.0
13	8/5/2025	1:00 AM	2:00 AM	1:00	47.4	52.3	42.2	49.0	48.7	48.2	48.0	48.0	47.7	47.4	46.9	46.6	42.8
14	8/5/2025	2:00 AM	3:00 AM	1:00	46.9	51.5	42.7	48.6	48.3	48.0	47.8	47.7	47.4	46.9	45.5	44.3	43.1
15	8/5/2025	3:00 AM	4:00 AM	1:00	46.9	55.1	43.0	49.3	48.4	47.9	47.7	47.7	47.4	46.9	45.2	44.8	43.9
16	8/5/2025	4:00 AM	5:00 AM	1:00	44.9	55.3	43.0	47.4	47.0	46.5	46.2	46.0	45.2	44.6	43.8	43.7	43.2
17	8/5/2025	5:00 AM	6:00 AM	1:00	46.2	60.0	43.8	50.2	48.7	47.9	47.6	47.4	46.4	45.7	44.5	44.3	44.1
18	8/5/2025	6:00 AM	7:00 AM	1:00	45.8	59.7	43.6	49.5	48.8	47.8	47.3	46.9	46.0	45.4	44.4	44.2	43.9
19	8/5/2025	7:00 AM	8:00 AM	1:00	46.5	55.6	44.7	50.0	49.1	48.3	47.8	47.6	46.7	46.1	45.4	45.3	45.1
20	8/5/2025	8:00 AM	9:00 AM	1:00	46.6	59.2	44.5	50.6	49.5	48.5	48.0	47.8	46.9	46.1	45.2	45.0	44.8
21	8/5/2025	9:00 AM	10:00 AM	1:00	46.2	53.8	43.9	49.9	49.2	48.1	47.5	47.3	46.5	45.9	45.0	44.7	44.3
22	8/5/2025	10:00 AM	11:00 AM	1:00	47.7	67.0	43.2	58.3	54.9	48.6	47.9	47.6	46.2	45.1	44.2	43.9	43.5
23	8/5/2025	11:00 AM	12:00 PM	1:00	44.6	59.9	42.3	50.6	48.6	46.9	46.2	45.8	44.6	43.6	42.7	42.6	42.4
24	8/5/2025	12:00 PM	1:00 PM	1:00	44.5	65.1	42.2	47.8	47.3	46.2	45.7	45.5	44.6	43.9	43.0	42.8	42.5

Project: FHS-08.0 Sonora

User: AC

Location: LT-3

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/5/2025	1:00 PM	2:00 PM	1:00	49.9	76.7	42.5	54.2	48.0	46.4	45.9	45.6	44.7	44.0	43.2	43.1	42.8
2	8/5/2025	2:00 PM	3:00 PM	1:00	50.8	68.6	42.4	64.6	61.0	54.7	52.2	51.3	47.9	45.0	43.3	43.0	42.7
3	8/5/2025	3:00 PM	4:00 PM	1:00	58.6	72.7	44.4	67.2	66.3	65.0	64.0	63.5	59.3	52.1	46.7	45.9	45.0
4	8/5/2025	4:00 PM	5:00 PM	1:00	54.7	71.6	43.7	66.6	65.1	61.5	59.0	57.8	51.2	46.8	45.2	44.9	44.4
5	8/5/2025	5:00 PM	6:00 PM	1:00	50.9	69.4	44.2	61.4	58.7	55.1	53.4	52.7	49.5	47.4	45.5	45.0	44.5
6	8/5/2025	6:00 PM	7:00 PM	1:00	57.6	77.3	47.3	68.3	66.4	62.9	61.1	60.1	56.5	53.5	50.1	49.5	48.5
7	8/5/2025	7:00 PM	8:00 PM	1:00	57.6	82.9	45.9	66.0	63.5	60.9	59.5	58.9	55.7	53.0	49.7	49.0	47.9
8	8/5/2025	8:00 PM	9:00 PM	1:00	51.2	64.1	44.0	58.5	57.4	55.8	55.0	54.5	52.0	49.3	45.6	45.1	44.4
9	8/5/2025	9:00 PM	10:00 PM	1:00	46.6	62.6	43.5	53.5	51.3	49.1	48.2	47.8	46.4	45.5	44.5	44.2	43.9
10	8/5/2025	10:00 PM	11:00 PM	1:00	46.2	57.6	42.6	52.3	50.6	49.6	49.2	48.8	46.1	45.2	43.9	43.5	43.0
11	8/5/2025	11:00 PM	12:00 AM	1:00	45.7	58.4	42.5	49.6	48.9	47.7	47.2	47.0	46.3	45.3	43.5	43.2	42.8
12	8/6/2025	12:00 AM	1:00 AM	1:00	45.8	52.1	42.4	49.8	49.4	48.5	47.9	47.7	46.4	45.3	43.4	43.2	42.8
13	8/6/2025	1:00 AM	2:00 AM	1:00	44.5	56.2	42.1	49.0	47.7	46.1	45.5	45.4	44.7	43.9	42.8	42.6	42.4
14	8/6/2025	2:00 AM	3:00 AM	1:00	45.6	56.0	44.0	49.9	47.9	46.6	46.3	46.3	45.8	45.4	44.6	44.3	44.1
15	8/6/2025	3:00 AM	4:00 AM	1:00	45.9	62.3	43.6	49.3	48.3	47.2	46.8	46.7	46.1	45.5	44.5	44.2	43.8
16	8/6/2025	4:00 AM	5:00 AM	1:00	45.3	55.9	42.5	48.2	47.4	46.7	46.4	46.3	45.7	45.2	43.7	43.1	42.9
17	8/6/2025	5:00 AM	6:00 AM	1:00	46.2	54.0	44.0	49.8	48.8	47.9	47.4	47.2	46.5	45.9	44.8	44.6	44.2
18	8/6/2025	6:00 AM	7:00 AM	1:00	48.2	54.6	45.9	52.3	51.3	50.1	49.6	49.4	48.4	47.8	46.9	46.6	46.3
19	8/6/2025	7:00 AM	8:00 AM	1:00	49.4	64.1	46.6	55.9	54.3	52.1	51.1	50.6	49.2	48.3	47.4	47.2	46.9
20	8/6/2025	8:00 AM	9:00 AM	1:00	47.6	54.4	45.1	51.0	50.4	49.7	49.4	49.2	48.3	47.0	45.8	45.6	45.3
21	8/6/2025	9:00 AM	10:00 AM	1:00	47.6	59.3	44.2	55.4	53.5	50.6	49.5	49.1	47.5	46.3	45.3	45.1	44.6
22	8/6/2025	10:00 AM	11:00 AM	1:00	46.2	58.8	42.0	54.3	52.8	50.6	49.3	48.6	46.2	44.1	42.6	42.5	42.3
23	8/6/2025	11:00 AM	12:00 PM	1:00	44.0	53.0	41.8	48.6	47.1	45.8	45.3	45.1	44.1	43.4	42.4	42.3	42.0
24	8/6/2025	12:00 PM	1:00 PM	1:00	44.9	58.5	41.9	51.5	49.7	47.6	46.7	46.2	44.8	43.9	42.8	42.5	42.2

Project: FHS-08.0 Sonora

User: AC

Location: LT-5

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/4/2025	1:00 PM	2:00 PM	1:00	65.2	91.9	39.5	79.4	72.2	58.7	49.8	47.4	43.6	41.7	40.5	40.3	39.9
2	8/4/2025	2:00 PM	3:00 PM	1:00	44.8	61.8	40.2	54.3	51.1	47.8	46.7	46.2	44.3	42.9	41.3	40.9	40.5
3	8/4/2025	3:00 PM	4:00 PM	1:00	43.3	59.8	40.0	52.8	50.0	45.9	44.6	44.2	42.7	41.6	40.5	40.3	40.2
4	8/4/2025	4:00 PM	5:00 PM	1:00	42.5	54.0	40.1	46.9	45.8	44.7	44.1	43.9	42.7	41.8	40.7	40.5	40.2
5	8/4/2025	5:00 PM	6:00 PM	1:00	44.3	59.1	40.3	53.7	51.1	47.5	46.1	45.6	43.6	42.6	41.5	41.2	40.8
6	8/4/2025	6:00 PM	7:00 PM	1:00	49.4	67.7	41.0	58.3	56.4	54.1	52.8	52.2	49.4	46.8	43.2	42.6	41.9
7	8/4/2025	7:00 PM	8:00 PM	1:00	52.0	73.1	42.8	61.5	58.9	56.2	54.7	54.1	50.9	48.2	45.1	44.5	43.6
8	8/4/2025	8:00 PM	9:00 PM	1:00	47.8	66.1	41.5	59.0	55.6	51.5	49.8	49.1	46.6	44.6	43.3	43.1	42.6
9	8/4/2025	9:00 PM	10:00 PM	1:00	43.3	58.3	40.4	48.9	46.1	44.8	44.4	44.3	43.5	42.4	41.1	40.9	40.7
10	8/4/2025	10:00 PM	11:00 PM	1:00	45.0	64.0	40.7	52.8	48.8	45.4	45.1	45.0	44.4	42.5	41.4	41.2	40.9
11	8/4/2025	11:00 PM	12:00 AM	1:00	44.2	52.7	40.3	46.9	46.6	46.3	46.2	46.2	45.3	43.5	41.7	41.5	40.9
12	8/5/2025	12:00 AM	1:00 AM	1:00	42.2	50.3	39.6	44.1	44.0	43.5	43.4	43.3	43.0	41.8	40.7	40.4	39.8
13	8/5/2025	1:00 AM	2:00 AM	1:00	42.8	45.9	40.1	45.2	45.1	44.9	44.8	44.8	42.8	42.2	41.6	41.5	40.5
14	8/5/2025	2:00 AM	3:00 AM	1:00	42.6	50.1	39.8	45.5	45.1	44.7	44.4	44.3	43.0	42.2	40.8	40.5	40.2
15	8/5/2025	3:00 AM	4:00 AM	1:00	42.2	51.8	40.1	44.8	44.0	43.3	43.1	43.0	42.6	42.0	40.8	40.5	40.2
16	8/5/2025	4:00 AM	5:00 AM	1:00	42.2	47.7	40.0	44.1	43.8	43.3	43.1	42.9	42.4	42.0	41.2	41.0	40.4
17	8/5/2025	5:00 AM	6:00 AM	1:00	42.9	53.3	41.0	48.0	46.7	45.2	44.5	44.1	42.9	42.3	41.6	41.4	41.2
18	8/5/2025	6:00 AM	7:00 AM	1:00	43.9	59.6	41.0	51.1	49.3	46.7	45.3	44.8	43.6	42.8	41.8	41.6	41.2
19	8/5/2025	7:00 AM	8:00 AM	1:00	44.1	56.0	42.2	50.0	48.1	46.0	45.3	45.1	44.1	43.4	42.7	42.5	42.3
20	8/5/2025	8:00 AM	9:00 AM	1:00	44.1	58.9	41.8	50.9	49.7	47.7	46.0	45.4	43.7	43.0	42.2	42.1	42.0
21	8/5/2025	9:00 AM	10:00 AM	1:00	44.3	58.8	41.5	50.8	49.5	47.3	46.0	45.6	44.2	43.3	42.4	42.1	41.8
22	8/5/2025	10:00 AM	11:00 AM	1:00	45.1	63.3	40.4	57.6	53.6	45.8	44.6	44.2	43.0	42.2	41.3	41.1	40.7
23	8/5/2025	11:00 AM	12:00 PM	1:00	44.2	61.9	39.5	54.4	52.3	49.0	46.9	46.0	42.7	41.3	40.2	40.0	39.8
24	8/5/2025	12:00 PM	1:00 PM	1:00	44.1	61.9	39.5	54.2	52.3	48.6	46.6	45.5	42.5	41.2	40.2	40.0	39.8

Project: FHS-08.0 Sonora

User: AC

Location: LT-5

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/5/2025	1:00 PM	2:00 PM	1:00	48.5	74.4	39.7	57.2	52.3	45.8	44.6	44.1	42.3	41.3	40.4	40.2	40.0
2	8/5/2025	2:00 PM	3:00 PM	1:00	46.5	65.4	39.7	58.6	56.3	51.0	49.2	48.2	44.9	42.6	40.5	40.3	40.0
3	8/5/2025	3:00 PM	4:00 PM	1:00	52.7	65.7	40.9	61.4	60.3	58.8	57.8	57.3	53.5	46.8	42.4	41.9	41.3
4	8/5/2025	4:00 PM	5:00 PM	1:00	49.7	66.1	40.6	60.6	59.6	56.5	54.2	53.1	47.6	43.2	41.4	41.2	40.8
5	8/5/2025	5:00 PM	6:00 PM	1:00	44.1	61.4	40.6	52.5	50.2	47.1	46.0	45.5	43.7	42.5	41.3	41.0	40.7
6	8/5/2025	6:00 PM	7:00 PM	1:00	51.2	69.2	42.4	60.6	58.4	55.7	54.2	53.5	50.2	47.5	44.5	44.1	43.4
7	8/5/2025	7:00 PM	8:00 PM	1:00	49.7	68.3	41.7	59.4	57.5	55.0	53.3	52.4	48.9	46.5	43.7	43.3	42.6
8	8/5/2025	8:00 PM	9:00 PM	1:00	46.2	58.9	40.4	52.5	51.3	49.9	49.1	48.8	47.1	45.3	41.4	41.2	40.7
9	8/5/2025	9:00 PM	10:00 PM	1:00	43.3	59.8	40.4	50.8	48.4	45.6	44.9	44.6	43.3	42.0	41.0	40.8	40.6
10	8/5/2025	10:00 PM	11:00 PM	1:00	43.4	52.2	40.3	47.0	46.3	45.1	44.7	44.4	43.8	43.3	41.2	40.8	40.4
11	8/5/2025	11:00 PM	12:00 AM	1:00	42.0	50.5	40.2	44.9	44.4	43.7	43.3	43.1	42.3	41.5	40.7	40.5	40.3
12	8/6/2025	12:00 AM	1:00 AM	1:00	42.5	50.8	40.4	45.9	45.3	44.4	43.8	43.5	42.7	42.1	41.3	41.1	40.6
13	8/6/2025	1:00 AM	2:00 AM	1:00	41.5	53.0	40.2	44.1	43.7	42.9	42.4	42.2	41.6	41.2	40.6	40.5	40.3
14	8/6/2025	2:00 AM	3:00 AM	1:00	41.5	52.7	39.8	45.7	44.1	42.8	42.4	42.2	41.5	41.0	40.5	40.4	40.2
15	8/6/2025	3:00 AM	4:00 AM	1:00	43.1	59.1	41.4	45.7	44.7	43.9	43.6	43.5	43.0	42.7	42.0	41.8	41.6
16	8/6/2025	4:00 AM	5:00 AM	1:00	43.1	53.3	40.7	45.4	44.8	44.3	44.0	43.8	43.4	43.0	42.2	41.9	41.6
17	8/6/2025	5:00 AM	6:00 AM	1:00	43.4	48.1	41.6	46.3	45.5	44.8	44.5	44.4	43.8	43.3	42.3	42.0	41.7
18	8/6/2025	6:00 AM	7:00 AM	1:00	45.4	58.3	42.7	52.5	50.7	48.1	47.1	46.6	45.1	44.4	43.6	43.4	43.0
19	8/6/2025	7:00 AM	8:00 AM	1:00	45.9	61.2	42.8	52.9	51.6	48.8	47.6	47.2	45.7	44.7	43.6	43.4	43.1
20	8/6/2025	8:00 AM	9:00 AM	1:00	44.6	58.9	41.7	50.5	48.9	47.1	46.4	46.0	45.0	43.8	42.5	42.3	42.0
21	8/6/2025	9:00 AM	10:00 AM	1:00	48.9	62.9	41.2	57.8	56.8	55.3	54.1	53.4	48.6	44.1	41.9	41.8	41.5
22	8/6/2025	10:00 AM	11:00 AM	1:00	45.9	60.1	39.4	55.7	54.9	52.8	50.9	49.9	43.7	41.0	40.0	39.9	39.6
23	8/6/2025	11:00 AM	12:00 PM	1:00	41.2	54.2	39.2	47.8	46.2	43.7	42.7	42.2	40.8	40.2	39.6	39.5	39.3
24	8/6/2025	12:00 PM	1:00 PM	1:00	43.9	61.5	39.5	53.1	51.6	49.1	47.6	46.7	42.7	41.0	39.9	39.8	39.6

Project: FHS-08.0 Sonora

User: AC

Location: LT-6

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/4/2025	1:00 PM	2:00 PM	1:00	70.5	95.9	43.6	84.3	81.1	72.6	62.1	54.8	47.2	45.7	44.4	44.2	43.9
2	8/4/2025	2:00 PM	3:00 PM	1:00	47.2	60.4	44.0	53.0	51.5	49.8	48.9	48.6	47.5	46.4	45.1	44.8	44.4
3	8/4/2025	3:00 PM	4:00 PM	1:00	47.8	67.6	43.6	58.6	54.8	49.7	48.5	48.0	46.4	45.4	44.3	44.1	43.8
4	8/4/2025	4:00 PM	5:00 PM	1:00	46.3	65.5	43.7	50.6	49.5	48.3	47.6	47.3	46.2	45.4	44.4	44.1	43.8
5	8/4/2025	5:00 PM	6:00 PM	1:00	47.8	63.2	43.1	56.8	54.8	52.0	50.4	49.7	47.2	45.9	44.5	44.3	43.7
6	8/4/2025	6:00 PM	7:00 PM	1:00	51.1	74.7	44.0	60.6	57.5	53.7	52.2	51.5	49.2	47.7	45.8	45.3	44.7
7	8/4/2025	7:00 PM	8:00 PM	1:00	54.7	76.0	45.0	67.0	64.4	59.1	56.3	55.1	51.1	48.8	46.7	46.3	45.6
8	8/4/2025	8:00 PM	9:00 PM	1:00	48.9	68.2	43.3	60.0	55.9	52.2	50.9	50.3	48.1	46.0	44.2	44.0	43.6
9	8/4/2025	9:00 PM	10:00 PM	1:00	46.6	65.9	43.3	55.2	51.3	48.3	47.5	47.2	46.0	45.1	44.2	44.0	43.7
10	8/4/2025	10:00 PM	11:00 PM	1:00	47.7	69.3	43.2	57.2	52.9	47.4	46.4	46.1	45.1	44.6	43.9	43.7	43.4
11	8/4/2025	11:00 PM	12:00 AM	1:00	44.2	60.2	42.6	47.1	46.4	45.7	45.3	45.0	44.1	43.5	43.0	42.9	42.7
12	8/5/2025	12:00 AM	1:00 AM	1:00	43.7	58.7	42.4	47.2	45.8	45.0	44.5	44.3	43.6	43.2	42.7	42.7	42.5
13	8/5/2025	1:00 AM	2:00 AM	1:00	43.4	52.0	42.4	46.0	45.2	44.4	44.0	43.8	43.3	43.0	42.7	42.6	42.4
14	8/5/2025	2:00 AM	3:00 AM	1:00	44.2	60.3	42.4	47.2	46.1	44.9	44.7	44.6	44.1	43.7	42.9	42.7	42.5
15	8/5/2025	3:00 AM	4:00 AM	1:00	44.3	60.6	42.5	47.2	45.8	45.0	44.7	44.6	44.2	43.8	43.1	43.0	42.7
16	8/5/2025	4:00 AM	5:00 AM	1:00	44.7	51.8	42.9	48.1	47.2	46.0	45.7	45.5	44.8	44.3	43.5	43.4	43.1
17	8/5/2025	5:00 AM	6:00 AM	1:00	45.5	55.2	43.9	49.3	48.1	47.1	46.6	46.4	45.5	45.0	44.4	44.3	44.1
18	8/5/2025	6:00 AM	7:00 AM	1:00	46.2	59.0	44.0	49.8	48.9	47.9	47.4	47.2	46.3	45.6	44.8	44.5	44.2
19	8/5/2025	7:00 AM	8:00 AM	1:00	48.2	69.9	44.9	56.4	53.5	50.0	48.7	48.3	47.0	46.2	45.4	45.3	45.1
20	8/5/2025	8:00 AM	9:00 AM	1:00	56.7	83.9	44.6	67.5	64.7	59.7	55.8	54.2	47.9	46.1	45.2	45.0	44.8
21	8/5/2025	9:00 AM	10:00 AM	1:00	48.8	67.2	44.5	58.8	56.2	51.7	49.7	49.0	47.2	46.4	45.5	45.2	44.8
22	8/5/2025	10:00 AM	11:00 AM	1:00	48.5	68.6	43.9	60.7	57.1	49.7	48.0	47.5	46.0	45.3	44.6	44.5	44.2
23	8/5/2025	11:00 AM	12:00 PM	1:00	51.2	64.6	43.4	63.6	62.8	54.7	53.8	53.5	51.1	45.3	43.9	43.8	43.5
24	8/5/2025	12:00 PM	1:00 PM	1:00	52.6	69.5	43.4	65.5	64.9	57.0	52.7	51.2	47.1	45.1	43.9	43.7	43.5

Project: FHS-08.0 Sonora

User: AC

Location: LT-6

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/5/2025	1:00 PM	2:00 PM	1:00	52.6	77.7	43.4	64.5	56.3	50.2	48.7	48.2	46.1	44.9	44.0	43.8	43.6
2	8/5/2025	2:00 PM	3:00 PM	1:00	49.7	66.1	43.4	60.0	58.7	56.2	53.5	52.1	47.7	45.7	44.0	43.8	43.6
3	8/5/2025	3:00 PM	4:00 PM	1:00	52.7	64.4	44.2	60.4	59.7	58.6	57.6	57.0	53.6	48.9	45.5	45.1	44.7
4	8/5/2025	4:00 PM	5:00 PM	1:00	50.5	73.4	43.3	60.5	59.1	56.6	54.1	53.0	48.3	45.8	44.4	44.2	43.6
5	8/5/2025	5:00 PM	6:00 PM	1:00	47.6	66.0	43.4	56.6	53.7	49.9	48.8	48.4	46.8	45.7	44.3	44.0	43.6
6	8/5/2025	6:00 PM	7:00 PM	1:00	55.3	71.8	45.2	65.3	63.1	60.4	58.8	58.0	54.5	51.5	48.0	47.3	45.9
7	8/5/2025	7:00 PM	8:00 PM	1:00	50.4	70.8	44.5	60.0	57.8	54.4	52.8	52.1	49.6	47.6	46.0	45.7	45.2
8	8/5/2025	8:00 PM	9:00 PM	1:00	47.8	59.3	43.7	53.4	52.5	51.1	50.2	49.8	48.2	47.0	45.0	44.6	44.0
9	8/5/2025	9:00 PM	10:00 PM	1:00	46.2	62.3	43.5	52.7	50.9	48.8	47.9	47.4	45.8	44.8	44.0	43.9	43.6
10	8/5/2025	10:00 PM	11:00 PM	1:00	45.4	58.1	43.0	50.4	49.0	47.4	46.7	46.4	45.3	44.6	43.6	43.4	43.2
11	8/5/2025	11:00 PM	12:00 AM	1:00	44.6	53.0	43.0	48.1	47.7	46.8	46.3	46.0	44.5	43.9	43.3	43.2	43.0
12	8/6/2025	12:00 AM	1:00 AM	1:00	44.1	54.7	42.4	48.2	47.7	46.2	45.5	45.2	44.1	43.3	42.8	42.7	42.5
13	8/6/2025	1:00 AM	2:00 AM	1:00	43.4	52.7	42.2	46.6	46.1	44.8	44.2	44.0	43.5	43.0	42.5	42.4	42.3
14	8/6/2025	2:00 AM	3:00 AM	1:00	44.4	62.6	42.3	49.7	47.5	46.0	45.4	45.1	44.1	43.6	43.1	42.9	42.6
15	8/6/2025	3:00 AM	4:00 AM	1:00	45.2	66.0	42.3	49.9	47.8	46.0	45.5	45.2	44.6	44.1	43.2	42.7	42.4
16	8/6/2025	4:00 AM	5:00 AM	1:00	45.2	59.4	43.0	50.1	48.1	46.4	46.0	45.9	45.4	44.6	43.6	43.3	43.1
17	8/6/2025	5:00 AM	6:00 AM	1:00	46.4	55.1	44.0	50.1	49.0	48.1	47.7	47.4	46.7	45.9	44.8	44.6	44.3
18	8/6/2025	6:00 AM	7:00 AM	1:00	51.2	75.5	45.5	61.2	58.4	54.2	52.0	51.2	48.6	47.3	46.3	46.1	45.7
19	8/6/2025	7:00 AM	8:00 AM	1:00	60.2	91.6	45.7	69.8	66.5	60.3	57.5	56.2	51.1	48.3	46.4	46.2	45.9
20	8/6/2025	8:00 AM	9:00 AM	1:00	49.8	68.5	44.1	59.3	57.6	54.8	52.9	51.9	48.2	46.7	45.0	44.7	44.4
21	8/6/2025	9:00 AM	10:00 AM	1:00	47.0	61.6	43.9	55.2	53.2	49.9	48.7	48.2	46.6	45.6	44.6	44.4	44.2
22	8/6/2025	10:00 AM	11:00 AM	1:00	45.6	61.9	43.0	52.1	49.9	48.0	47.2	46.8	45.3	44.2	43.4	43.2	43.1
23	8/6/2025	11:00 AM	12:00 PM	1:00	52.8	74.2	43.0	65.3	62.8	58.2	55.3	53.9	49.6	46.4	43.6	43.4	43.1
24	8/6/2025	12:00 PM	1:00 PM	1:00	50.5	71.2	43.2	61.3	59.7	56.4	54.2	53.1	48.6	45.3	43.8	43.6	43.3

Project: FHS-08.0 Sonora

User: AC

Location: LT-6

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/4/2025	1:00 PM	2:00 PM	1:00	72.8	99.0	43.2	86.1	82.7	74.7	65.1	60.7	48.5	45.5	44.1	43.9	43.5
2	8/4/2025	2:00 PM	3:00 PM	1:00	47.8	58.2	44.0	52.3	51.6	50.7	50.1	49.8	48.5	47.2	45.1	44.8	44.3
3	8/4/2025	3:00 PM	4:00 PM	1:00	47.2	64.8	43.5	52.0	51.0	49.8	49.2	48.9	47.7	46.5	44.7	44.4	43.9
4	8/4/2025	4:00 PM	5:00 PM	1:00	50.8	75.2	43.4	59.8	55.0	51.3	50.3	49.9	48.3	46.8	44.8	44.5	43.9
5	8/4/2025	5:00 PM	6:00 PM	1:00	48.8	66.4	44.5	58.6	55.9	51.8	50.4	49.9	48.1	47.0	45.5	45.2	44.7
6	8/4/2025	6:00 PM	7:00 PM	1:00	51.5	68.8	45.5	60.4	58.0	55.1	54.0	53.5	51.2	49.6	47.6	47.1	46.4
7	8/4/2025	7:00 PM	8:00 PM	1:00	53.4	71.1	46.2	62.9	60.8	57.5	55.9	55.2	52.7	50.8	48.6	48.2	47.5
8	8/4/2025	8:00 PM	9:00 PM	1:00	55.1	82.0	44.1	63.2	61.7	59.1	57.3	56.4	52.8	48.6	45.6	45.3	44.7
9	8/4/2025	9:00 PM	10:00 PM	1:00	47.2	61.0	44.2	52.0	50.1	48.7	48.2	48.0	47.3	46.5	45.3	45.0	44.6
10	8/4/2025	10:00 PM	11:00 PM	1:00	49.8	73.8	43.8	57.0	51.8	48.2	47.2	46.9	46.0	45.5	44.6	44.3	44.1
11	8/4/2025	11:00 PM	12:00 AM	1:00	45.1	55.7	43.0	48.6	47.2	46.4	46.0	45.8	45.1	44.6	43.9	43.7	43.4
12	8/5/2025	12:00 AM	1:00 AM	1:00	44.5	56.7	42.7	47.1	46.2	45.7	45.5	45.4	45.0	44.3	43.1	43.0	42.8
13	8/5/2025	1:00 AM	2:00 AM	1:00	45.1	50.8	43.2	47.2	46.7	46.2	45.9	45.8	45.4	44.9	43.7	43.6	43.4
14	8/5/2025	2:00 AM	3:00 AM	1:00	45.4	54.6	43.1	49.5	47.3	46.6	46.3	46.2	45.7	44.9	43.8	43.6	43.4
15	8/5/2025	3:00 AM	4:00 AM	1:00	45.5	53.3	43.4	48.5	47.6	46.8	46.5	46.4	45.9	45.4	44.4	44.1	43.6
16	8/5/2025	4:00 AM	5:00 AM	1:00	46.2	52.9	44.3	49.4	48.8	47.9	47.4	47.1	46.4	45.9	45.0	44.8	44.6
17	8/5/2025	5:00 AM	6:00 AM	1:00	47.5	62.0	45.4	51.9	50.5	48.9	48.4	48.2	47.5	47.0	46.1	45.9	45.6
18	8/5/2025	6:00 AM	7:00 AM	1:00	48.1	56.8	45.4	51.5	50.6	49.8	49.4	49.2	48.4	47.8	46.7	46.3	45.9
19	8/5/2025	7:00 AM	8:00 AM	1:00	50.1	71.5	47.0	55.6	53.1	51.3	50.5	50.3	49.3	48.7	47.9	47.7	47.4
20	8/5/2025	8:00 AM	9:00 AM	1:00	50.8	70.2	46.8	60.5	56.9	52.4	51.5	51.1	49.8	49.0	47.9	47.6	47.2
21	8/5/2025	9:00 AM	10:00 AM	1:00	49.6	59.8	46.5	55.8	54.3	52.4	51.6	51.2	49.7	48.7	47.7	47.5	47.2
22	8/5/2025	10:00 AM	11:00 AM	1:00	50.5	73.3	45.3	60.9	56.6	50.9	49.9	49.5	48.4	47.5	46.4	46.1	45.7
23	8/5/2025	11:00 AM	12:00 PM	1:00	46.7	58.4	43.9	51.6	50.8	49.3	48.4	48.1	46.9	46.0	44.8	44.6	44.1
24	8/5/2025	12:00 PM	1:00 PM	1:00	46.4	55.4	43.6	51.7	51.1	49.2	48.2	47.8	46.6	45.7	44.5	44.3	43.9

Project: FHS-08.0 Sonora

User: AC

Location: LT-6

No.	Start Date	Start Time	End Time	Duration	Leg	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	8/5/2025	1:00 PM	2:00 PM	1:00	52.5	78.5	43.5	55.7	50.3	48.6	48.1	47.8	46.7	45.6	44.4	44.1	43.8
2	8/5/2025	2:00 PM	3:00 PM	1:00	48.0	60.7	43.3	58.7	56.7	51.4	49.9	49.4	47.5	45.9	44.0	43.8	43.6
3	8/5/2025	3:00 PM	4:00 PM	1:00	52.0	62.8	44.5	60.8	59.1	57.0	56.0	55.5	52.4	49.4	46.5	46.0	45.3
4	8/5/2025	4:00 PM	5:00 PM	1:00	49.1	60.9	43.5	57.9	56.9	54.7	52.7	51.7	48.2	46.6	45.1	44.8	44.2
5	8/5/2025	5:00 PM	6:00 PM	1:00	48.6	63.1	43.6	56.6	54.6	52.2	51.2	50.7	48.8	47.1	44.7	44.4	44.0
6	8/5/2025	6:00 PM	7:00 PM	1:00	59.0	73.7	47.5	68.5	67.1	64.2	62.8	62.1	59.0	56.1	51.2	50.2	49.0
7	8/5/2025	7:00 PM	8:00 PM	1:00	54.1	74.6	46.2	63.2	61.4	59.0	57.7	57.0	53.5	50.9	48.3	47.8	47.1
8	8/5/2025	8:00 PM	9:00 PM	1:00	52.7	68.7	46.2	59.9	58.5	56.4	55.3	54.9	52.9	51.3	48.9	48.2	47.0
9	8/5/2025	9:00 PM	10:00 PM	1:00	50.2	62.9	45.1	55.6	54.4	53.1	52.4	52.1	50.8	49.6	47.0	46.4	45.8
10	8/5/2025	10:00 PM	11:00 PM	1:00	47.2	56.1	44.4	52.9	51.4	49.4	48.7	48.4	47.3	46.6	45.4	45.1	44.6
11	8/5/2025	11:00 PM	12:00 AM	1:00	46.6	64.3	43.5	51.7	51.0	50.0	49.1	48.5	46.7	45.5	44.3	44.1	43.8
12	8/6/2025	12:00 AM	1:00 AM	1:00	45.8	53.7	42.7	51.6	50.9	49.6	49.0	48.6	46.2	44.3	43.4	43.3	43.0
13	8/6/2025	1:00 AM	2:00 AM	1:00	44.1	51.3	42.7	46.5	46.1	45.5	45.1	44.9	44.2	43.7	43.1	43.0	42.9
14	8/6/2025	2:00 AM	3:00 AM	1:00	45.8	59.2	43.8	52.6	50.5	48.0	46.8	46.4	45.5	45.0	44.4	44.3	44.1
15	8/6/2025	3:00 AM	4:00 AM	1:00	47.0	58.7	44.7	51.7	50.1	48.7	48.2	48.0	47.1	46.6	45.6	45.3	44.9
16	8/6/2025	4:00 AM	5:00 AM	1:00	46.7	59.1	44.3	52.7	49.6	48.1	47.7	47.4	46.8	46.3	45.5	45.3	44.7
17	8/6/2025	5:00 AM	6:00 AM	1:00	48.2	55.7	45.7	51.5	50.7	49.8	49.5	49.3	48.7	48.0	46.6	46.3	46.0
18	8/6/2025	6:00 AM	7:00 AM	1:00	50.2	61.2	47.4	54.9	53.7	52.3	51.6	51.3	50.3	49.6	48.8	48.5	48.1
19	8/6/2025	7:00 AM	8:00 AM	1:00	51.1	65.0	48.2	56.4	54.9	53.4	52.5	52.2	51.1	50.4	49.6	49.4	49.0
20	8/6/2025	8:00 AM	9:00 AM	1:00	51.0	71.2	46.2	59.1	55.7	52.8	51.9	51.6	50.6	48.9	47.5	47.2	46.8
21	8/6/2025	9:00 AM	10:00 AM	1:00	48.5	71.3	45.1	53.2	52.1	50.5	49.8	49.5	48.4	47.6	46.2	46.0	45.5
22	8/6/2025	10:00 AM	11:00 AM	1:00	48.2	74.3	43.4	57.6	54.4	50.2	48.7	48.3	46.8	45.6	44.1	43.9	43.6
23	8/6/2025	11:00 AM	12:00 PM	1:00	51.5	73.5	42.8	66.2	59.1	52.2	49.2	48.5	46.3	44.9	43.7	43.5	43.2
24	8/6/2025	12:00 PM	1:00 PM	1:00	45.9	56.6	42.9	52.7	51.4	48.9	47.7	47.1	45.9	45.1	43.7	43.6	43.2

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Manhattan, NY
38 °F Sunny [\(/weather/us/ny/manhattan/40\)](/weather/us/ny/manhattan/40)

Elev **95** ft, **33.93** °N, **117.94** °W

ErnaStation - KCALAHAB65

FORECAST FOR LA HABRA, CA (/WEATHER/US/CA/LA-HABRA/KCALAHAB65)

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Station Summary

Online(updated 25 seconds ago)

CURRENT CONDITIONS

MAP



68.2

Feels Like
68.2 °



WIND & GUST
3.8 / 4.5 mph

DEWPOINT
52.0 ° F

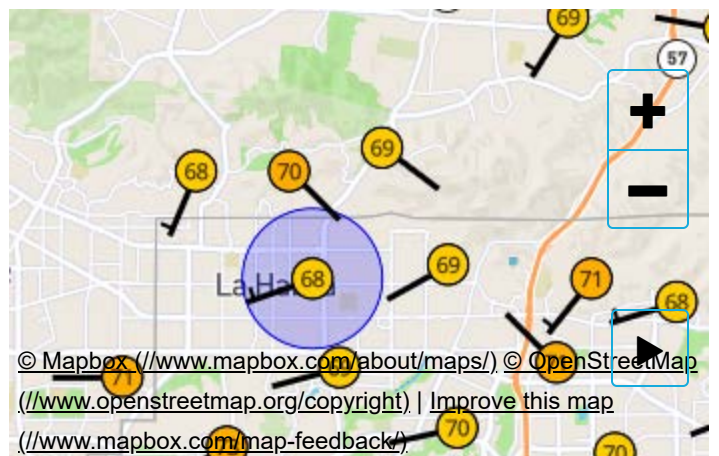
PRECIP RATE
0.00 in/hr

PRESSURE
29.72 in

HUMIDITY
56 %

PRECIP ACCUM
0.00 in

UV
--



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[lat=33.942333133139556&lon=-117.90049387882732&z=](https://www.wunderground.com/weather/hq/country/us/ca/la-habra/kcalahab65)

PWS CURRENT CONDITIONS

TEMPERATURE



WIND



PRESSURE



CURRENT
68°

DEWPOINT
52.0 °F
HUMIDITY
56 %



WIND
FROM
SSE
GUST
4.5 mph



CURRENT
29.72 In

PRECIPITATION



UV



PRECIP
RATE
0.00 in/hr
PRECIP
TOTAL
0.00 in



Weather History for KCALAHAB65

Daily Mode

August

5

2025

Previous

View

Next

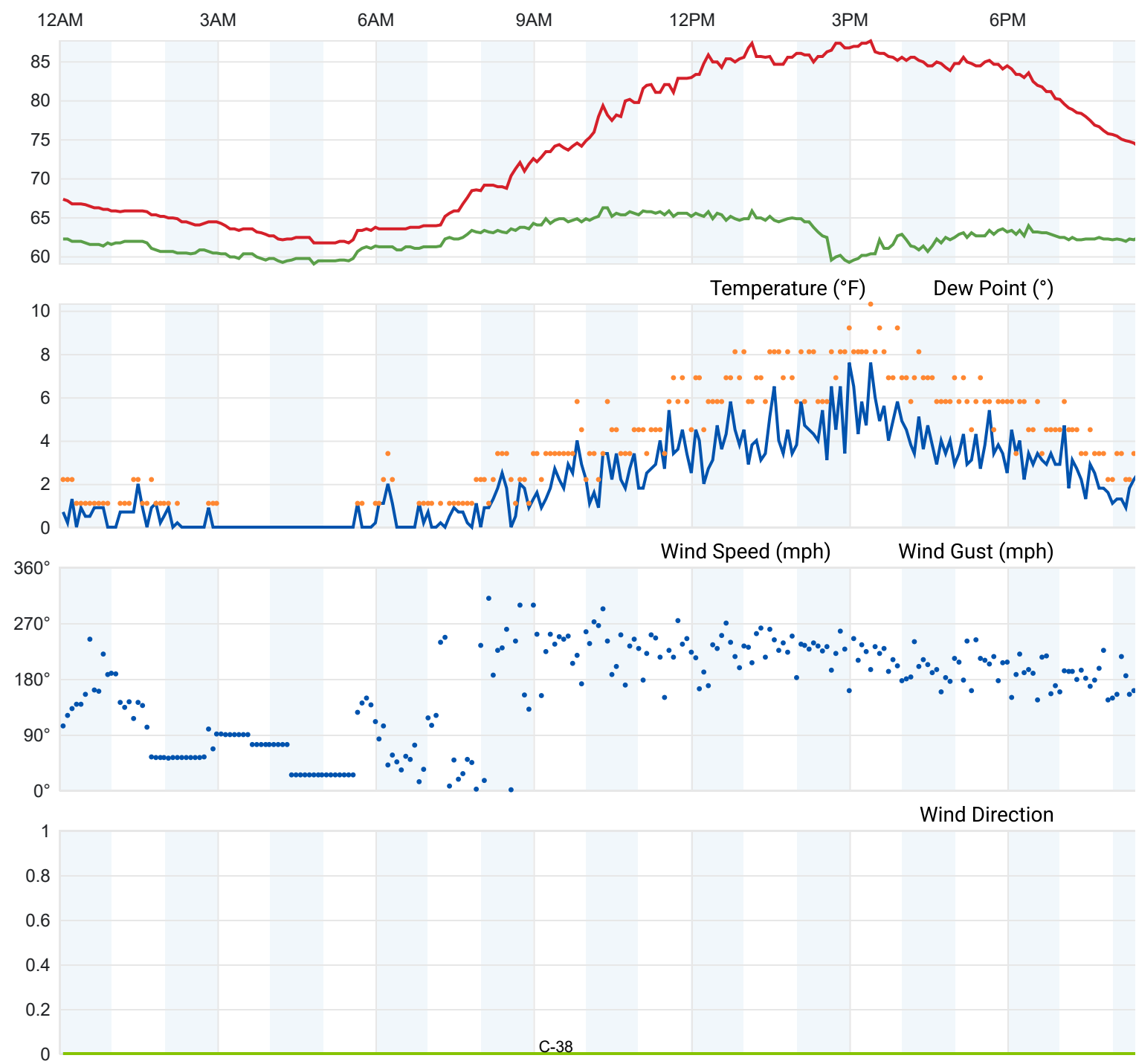
Summary August 5, 2025

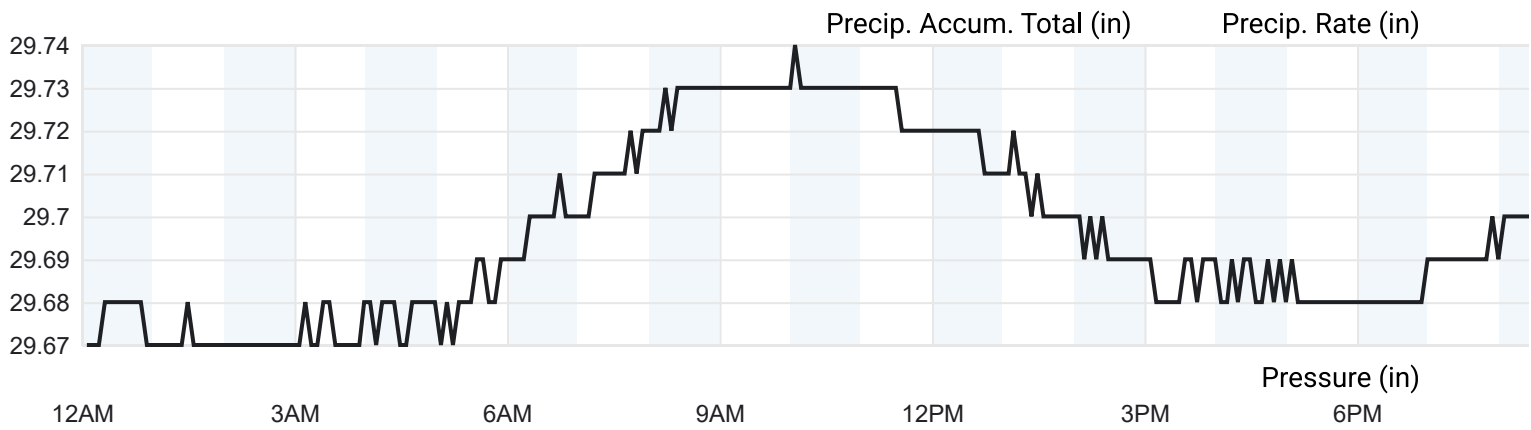
	High	Low	Average
Temperature	87.6 °F	61.3 °F	73.8 °F
Dew Point	66.2 °F	57.7 °F	62.3 °F
Humidity	92 %	38 %	70 %
Precipitation	0.00 in	--	--

	High	Low	Average
Wind Speed	7.6 mph	0.0 mph	1.2 mph
Wind Gust	10.3 mph	--	2.6 mph
Wind Direction	--	--	South
Pressure	29.74 in	29.66 in	--

Graph	Table
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August 5, 2025





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[utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_c](https://www.essentialaccessibility.com/the-weather-channel?utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_c)

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55 °F Mostly Cloudy

Manhattan, NY
38 °F Sunny [\(/weather/us/ny/manhattan/40\)](/weather/us/ny/manhattan/40)

Elev **95** ft, **33.93** °N, **117.94** °W

ErnaStation - KCALAHAB65

[FORECAST FOR LA HABRA, CA \(/WEATHER/US/CA/LA-HABRA/KCALAHAB65\)](/WEATHER/US/CA/LA-HABRA/KCALAHAB65)

We're building a [brand-new Weather Underground \(https://preview.wunderground.com/\)](https://preview.wunderground.com/) — be among the first to check it out!



Station Summary

Online(updated 40 seconds ago)

CURRENT CONDITIONS

MAP



68.2

Feels Like
68.2 °



WIND & GUST
3.8 / 4.5 mph

DEWPOINT
52.0 ° F

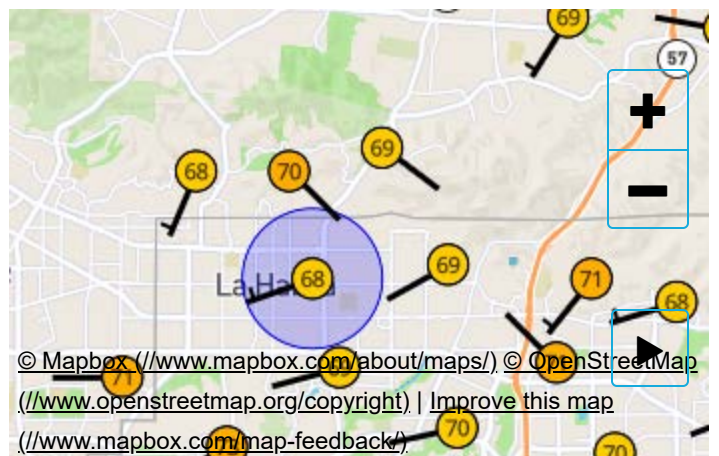
PRECIP RATE
0.00 in/hr

PRESSURE
29.72 in

HUMIDITY
56 %

PRECIP ACCUM
0.00 in

UV
--



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[lat=33.942333133139556&lon=-117.90049387882732&z=12](https://www.wunderground.com/maps/lat=33.942333133139556&lon=-117.90049387882732&z=12)

PWS CURRENT CONDITIONS

TEMPERATURE



WIND



PRESSURE



CURRENT
68°

DEWPOINT
52.0 °F
HUMIDITY
56 %



WIND
FROM
SSE
GUST
4.5 mph



CURRENT
29.72 In

PRECIPITATION



UV



PRECIP
RATE
0.00 in/hr
PRECIP
TOTAL
0.00 in



Weather History for KCALAHAB65

Daily Mode

August

6

2025

Previous

View

Next

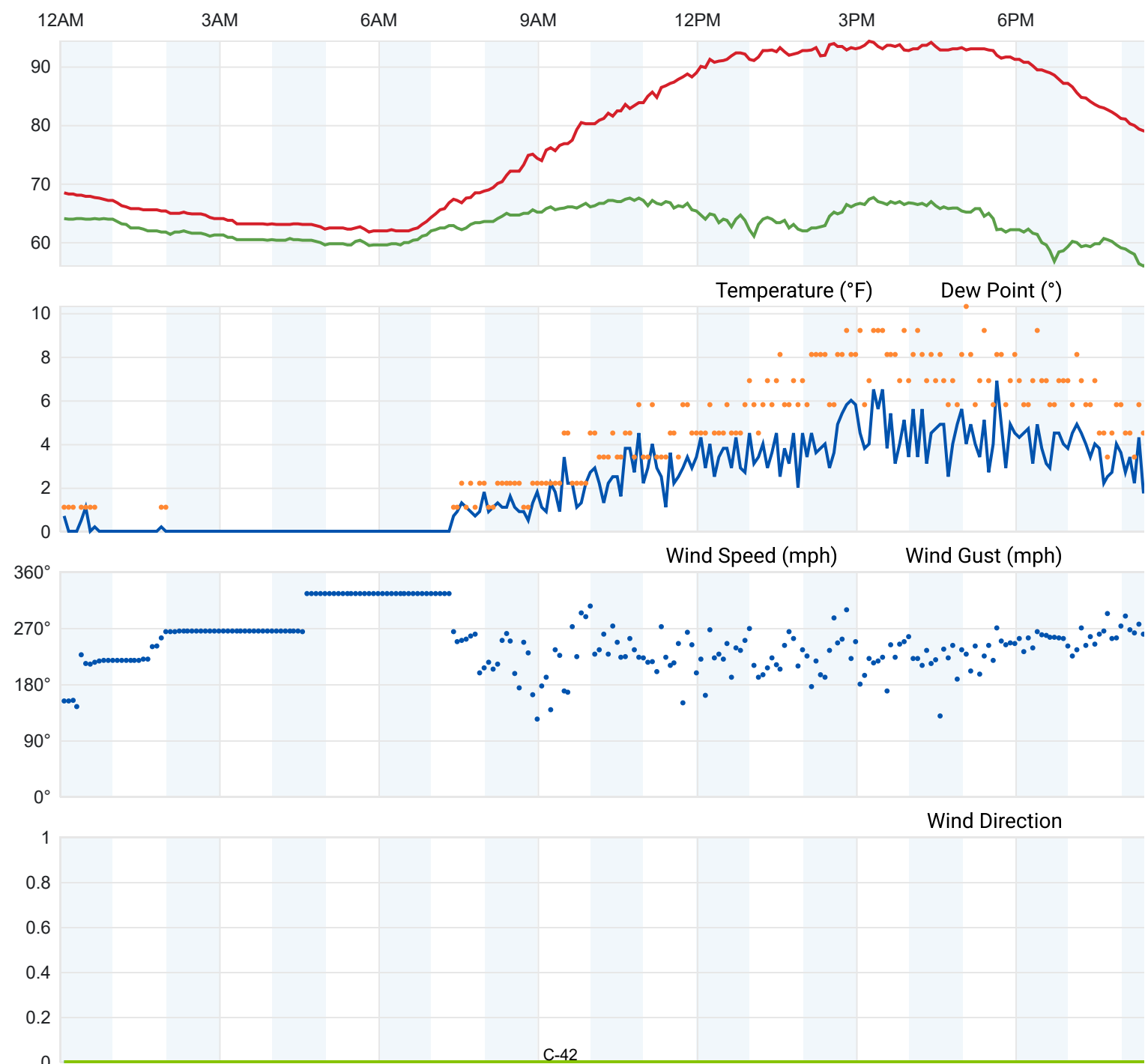
Summary
August 6, 2025

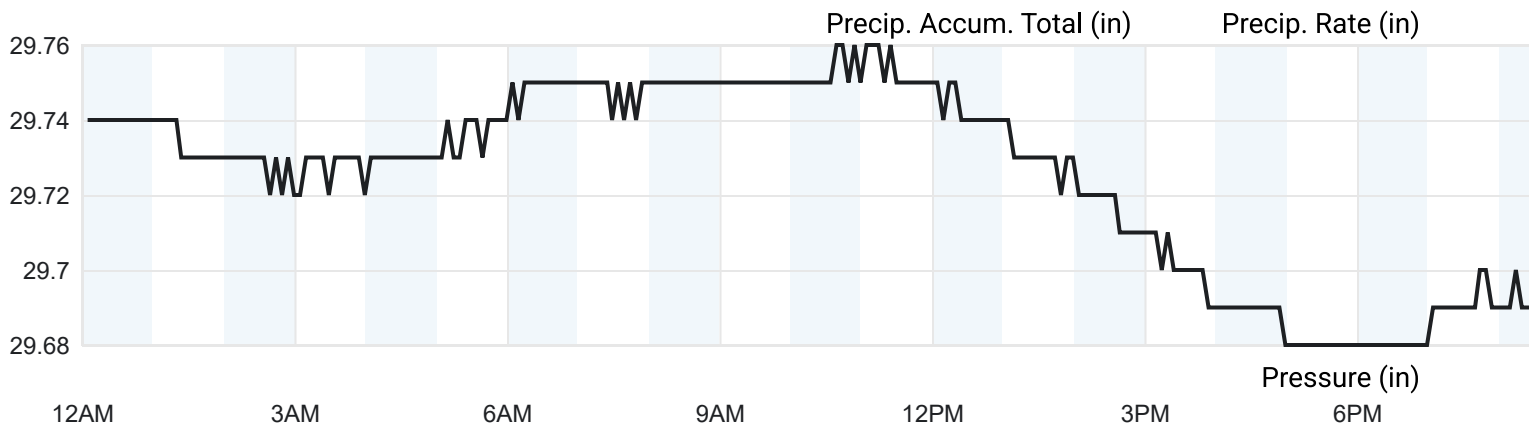
	High	Low	Average
Temperature	94.3 °F	61.5 °F	77.4 °F
Dew Point	67.6 °F	55.0 °F	61.8 °F
Humidity	93 %	33 %	63 %
Precipitation	0.00 in	--	--

	High	Low	Average
Wind Speed	6.9 mph	0.0 mph	1.2 mph
Wind Gust	10.3 mph	--	2.6 mph
Wind Direction	--	--	SW
Pressure	29.76 in	29.67 in	--

Graph	Table
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August 6, 2025





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C O N S T R U C T I O N M O D E L I N G R E S U L T S

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/13/2026
Case Description: FHS-08.0 Sonora Demolition

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Receptor at 50 feet	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0

Results

Equipment	Noise Limits (dBA)									Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Day		Evening		Night			Day		Evening		Night	
	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	84.6	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/13/2026
Case Description: FHS-08.0 Sonora Site Preparation

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Receptor at 50 feet	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0

Results

Equipment	Noise Limits (dBA)									Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Day		Evening		Night			Day		Evening		Night	
	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A
Total	81.7	80.6	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/13/2026
Case Description: FHS-08.0 Sonora Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Receptor at 50 feet	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0

Results

Equipment		Noise Limits (dBA)								Noise Limit Exceedance (dBA)					
		Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe		77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader		85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	85.0	83.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/13/2026
Case Description: FHS-08.0 Sonora Building Construction

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Receptor at 50 feet	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Generator	No	50		80.6	50.0	0.0
Welder / Torch	No	40		74.0	50.0	0.0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74.0	70.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.6	79.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/13/2026
Case Description: FHS-08.0 Sonora Architectural Coating

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Receptor at 50 feet	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0
Compressor (air)	No	40		77.7	50.0	0.0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/13/2026
Case Description: FHS-08.0 Sonora Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Receptor at 50 feet	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Equipment		
				Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	50.0	0.0
Roller	No	20		80.0	50.0	0.0
Drum Mixer	No	50		80.0	50.0	0.0

Results

Equipment		Noise Limits (dBA)								Noise Limit Exceedance (dBA)					
		Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver		77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drum Mixer		80.0	77.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		80.0	79.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/13/2026
Case Description: FHS-08.0 Sonora Light Pole Installation

**** Receptor #1 ****

Description		Baselines (dBA)			
		Land Use	Daytime	Evening	Night
-----		-----	-----	-----	-----
Reference Distance	Receptor at 50 ft	Residential	65.0	55.0	50.0

Description		Equipment				
		Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
-----		-----	-----	-----	-----	-----
Crane		No	16		80.6	50.0
Auger Drill Rig		No	20		84.4	50.0
Backhoe		No	40		77.6	50.0

Results

Equipment		Noise Limits (dBA)								Noise Limit Exceedance (dBA)					
		Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
-----		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Crane		75.6	67.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Auger Drill Rig		79.4	72.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		72.6	68.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		79.4	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FHS-08.0 Sonora - Construction Noise Modeling Attenuation Calculations				
Levels in dBA Leq				
Phase	RCNM Reference			
	Noise Level	Receptor to North ¹	Receptor to East	Receptor to West
<i>Distance in feet</i>	50	150	760	135
Demolition	85	72	61	76
Site Prep	81	68	57	72
Grading	83	70	59	74
<i>Distance in feet</i>	50	860	720	555
Building Construction	79	51	56	58
Architectural Coating	77	49	54	56
<i>Distance in feet</i>	50	250	680	125
Paving	80	63	57	72
<i>Distance in feet</i>	50	45	650	40
Light Pole Installation	75	73	53	77
Attenuation calculated through Inverse Square Law: $L_p(R2) = L_p(R1) - 20\text{Log}(R2/R1)$ ¹ -3 dBA applied to account for existing property line CMU wall				

FHS-08.0 Sonora - Vibration Damage Attenuation Calculations				
Levels, PPV (in/sec)				
	Vibration Reference Level	Receptor to North	Receptor to East	Receptor to West
<i>Distance in feet</i>	<i>at 25 feet</i>	<i>45</i>	<i>655</i>	<i>40</i>
Vibratory Roller	0.21	0.087	0.002	0.104
Hoe Ram	0.089	0.037	0.001	0.044
Large Bulldozer	0.089	0.037	0.001	0.044
Caisson Drilling	0.089	0.037	0.001	0.044
Loaded Trucks	0.076	0.031	0.001	0.038
Jackhammer	0.035	0.014	0.000	0.017
Small Bulldozer	0.003	0.001	0.000	0.001

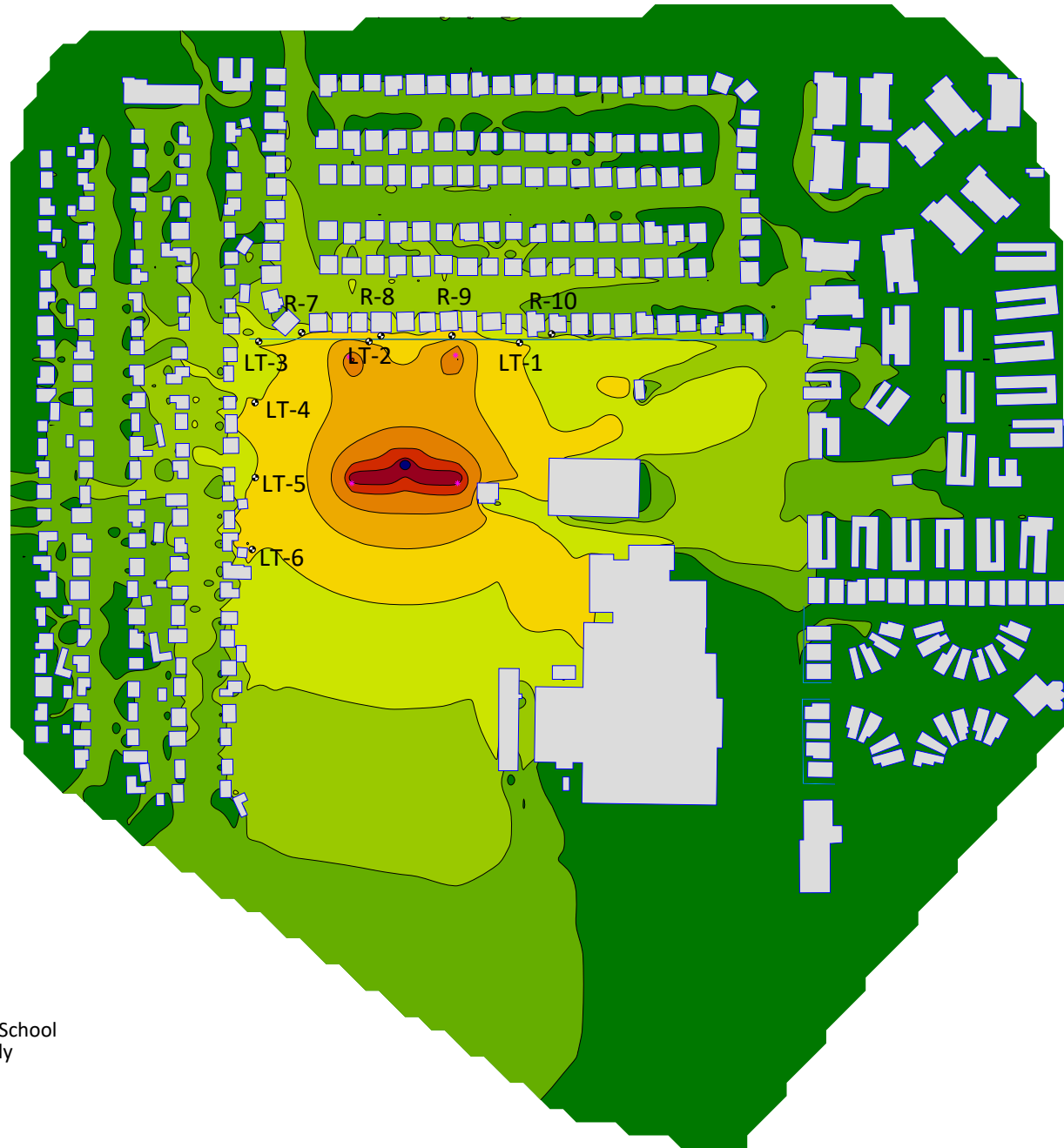
S O U N D P L A N R E S U L T S

Noise level
Leq,d
in dB(A)

<= 45	
45 <	<= 50
50 <	<= 55
55 <	<= 60
60 <	<= 65
65 <	<= 70
70 <	<= 75
75 <	<= 80
80 <	<= 85
85 <	

Signs and symbols

- Point source
- Area source
- Main building
- Wall
- Receiver



FHS-08.0 Sonora High School
Future School Assembly

Sonora FJUHSD

Assessed receiver levels

Sonora Assembly

2

Receiver	Usage	FI	Leq,d dB(A)	Leq,n dB(A)	
LT-1	SCR	G	61.4	61.4	
LT-2	SCR	G	66.3	66.3	
LT-3	SCR	G	61.1	61.1	
LT-4	SCR	G	59.7	59.7	
LT-5	SCR	G	60.3	60.3	
LT-6	SCR	G	59.2	59.2	
R-7	SCR	G	59.5	59.5	
R-8	SCR	G	60.9	60.9	
R-9	SCR	G	61.8	61.8	
R-10	SCR	G	54.3	54.3	

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Sonora FJUHS Contribution level - Sonora Assembly

9

Source	Source group	Source type	Leq,d dB(A)	Leq,n dB(A)	
Receiver LT-1 FI G Leq,d 61.4 dB(A) Leq,n 61.4 dB(A)					
Band	Band	Area	54.6	54.6	
Home Bleachers	Crowd Noise	Area	54.1	54.1	
Away Bleachers	Crowd Noise	Area	56.4	56.4	
F3	Speakers	Point	50.4	50.4	
F1	Speakers	Point	46.2	46.2	
F4	Speakers	Point	49.5	49.5	
F2	Speakers	Point	52.2	52.2	
Receiver LT-2 FI G Leq,d 66.3 dB(A) Leq,n 66.3 dB(A)					
Band	Band	Area	57.1	57.1	
Home Bleachers	Crowd Noise	Area	57.7	57.7	
Away Bleachers	Crowd Noise	Area	56.6	56.6	
F3	Speakers	Point	53.3	53.3	
F1	Speakers	Point	63.2	63.2	
F4	Speakers	Point	54.3	54.3	
F2	Speakers	Point	52.0	52.0	
Receiver LT-3 FI G Leq,d 61.1 dB(A) Leq,n 61.1 dB(A)					
Band	Band	Area	54.9	54.9	
Home Bleachers	Crowd Noise	Area	56.2	56.2	
Away Bleachers	Crowd Noise	Area	54.3	54.3	
F3	Speakers	Point	50.2	50.2	
F1	Speakers	Point	48.6	48.6	
F4	Speakers	Point	50.0	50.0	
F2	Speakers	Point	44.0	44.0	
Receiver LT-4 FI G Leq,d 59.7 dB(A) Leq,n 59.7 dB(A)					
Band	Band	Area	53.4	53.4	
Home Bleachers	Crowd Noise	Area	55.1	55.1	
Away Bleachers	Crowd Noise	Area	51.9	51.9	
F3	Speakers	Point	46.5	46.5	
F1	Speakers	Point	48.3	48.3	
F4	Speakers	Point	48.0	48.0	
F2	Speakers	Point	46.8	46.8	
Receiver LT-5 FI G Leq,d 60.3 dB(A) Leq,n 60.3 dB(A)					
Band	Band	Area	52.5	52.5	
Home Bleachers	Crowd Noise	Area	56.9	56.9	

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1

Sonora FJUHS Contribution level - Sonora Assembly

9

Source	Source group	Source type	Leq,d dB(A)	Leq,n dB(A)	
Away Bleachers	Crowd Noise	Area	52.6	52.6	
F3 Speakers		Point	46.3	46.3	
F1 Speakers		Point	46.9	46.9	
F4 Speakers		Point	48.8	48.8	
F2 Speakers		Point	47.4	47.4	
Receiver LT-6 FI G Leq,d 59.2 dB(A) Leq,n 59.2 dB(A)					
Band	Band	Area	52.5	52.5	
Home Bleachers	Crowd Noise	Area	55.4	55.4	
Away Bleachers	Crowd Noise	Area	52.8	52.8	
F3 Speakers		Point	42.3	42.3	
F1 Speakers		Point	44.8	44.8	
F4 Speakers		Point	45.2	45.2	
F2 Speakers		Point	46.9	46.9	
Receiver R-7 FI G Leq,d 59.5 dB(A) Leq,n 59.5 dB(A)					
Band	Band	Area	51.7	51.7	
Home Bleachers	Crowd Noise	Area	53.4	53.4	
Away Bleachers	Crowd Noise	Area	51.5	51.5	
F3 Speakers		Point	48.0	48.0	
F1 Speakers		Point	53.4	53.4	
F4 Speakers		Point	48.3	48.3	
F2 Speakers		Point	44.2	44.2	
Receiver R-8 FI G Leq,d 60.9 dB(A) Leq,n 60.9 dB(A)					
Band	Band	Area	50.6	50.6	
Home Bleachers	Crowd Noise	Area	51.7	51.7	
Away Bleachers	Crowd Noise	Area	51.1	51.1	
F3 Speakers		Point	48.1	48.1	
F1 Speakers		Point	57.3	57.3	
F4 Speakers		Point	49.0	49.0	
F2 Speakers		Point	51.8	51.8	
Receiver R-9 FI G Leq,d 61.8 dB(A) Leq,n 61.8 dB(A)					
Band	Band	Area	50.3	50.3	
Home Bleachers	Crowd Noise	Area	51.0	51.0	
Away Bleachers	Crowd Noise	Area	51.6	51.6	
F3 Speakers		Point	48.0	48.0	
F1 Speakers		Point	48.3	48.3	

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2

9 |

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Sonora FJUHSD

Octave spectra of the sources in dB(A) - Sonora Assembly

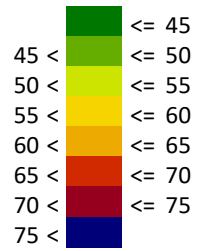
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Name	Source type	I or A m,m²	L'w dB(A)	Lw dB(A)	KI dB	KT dB	DO-Wall dB	Day histogram	Emission spectrum	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)	16kHz dB(A)	
Away Bleachers	Area	310.85	93.7	118.6	0.0	0.0	0	School Assembly	American Football, Spectators's area		92.6	107.7	115.5	111.5	111.2	104.8	95.7		
Band	Area	27.76	100.6	115.0	0.0	0.0	0	Band during Game 20% = 12 minutes	Live bands (Pop, Rock, Metal)	100.5	100.0	104.6	109.5	110.3	106.9	102.2	94.7	76.6	
F1	Point		110.0	110.0	0.0	0.0	0	Speaker Assembly	Average Spectrum from 2022-10-07 Survey	81.7	96.3	99.1	104.7	105.4	102.2	97.0	90.7	69.3	
F2	Point		110.0	110.0	0.0	0.0	0	Speaker Assembly	Average Spectrum from 2022-10-07 Survey	81.7	96.3	99.1	104.7	105.4	102.2	97.0	90.7	69.3	
F3	Point		110.0	110.0	0.0	0.0	0	Speaker Assembly	Average Spectrum from 2022-10-07 Survey	81.7	96.3	99.1	104.7	105.4	102.2	97.0	90.7	69.3	
F4	Point		110.0	110.0	0.0	0.0	0	Speaker Assembly	Average Spectrum from 2022-10-07 Survey	81.7	96.3	99.1	104.7	105.4	102.2	97.0	90.7	69.3	
Home Bleachers	Area	310.96	93.7	118.6	0.0	0.0	0	School Assembly	American Football, Spectators's area		92.6	107.7	115.5	111.5	111.2	104.8	95.7		

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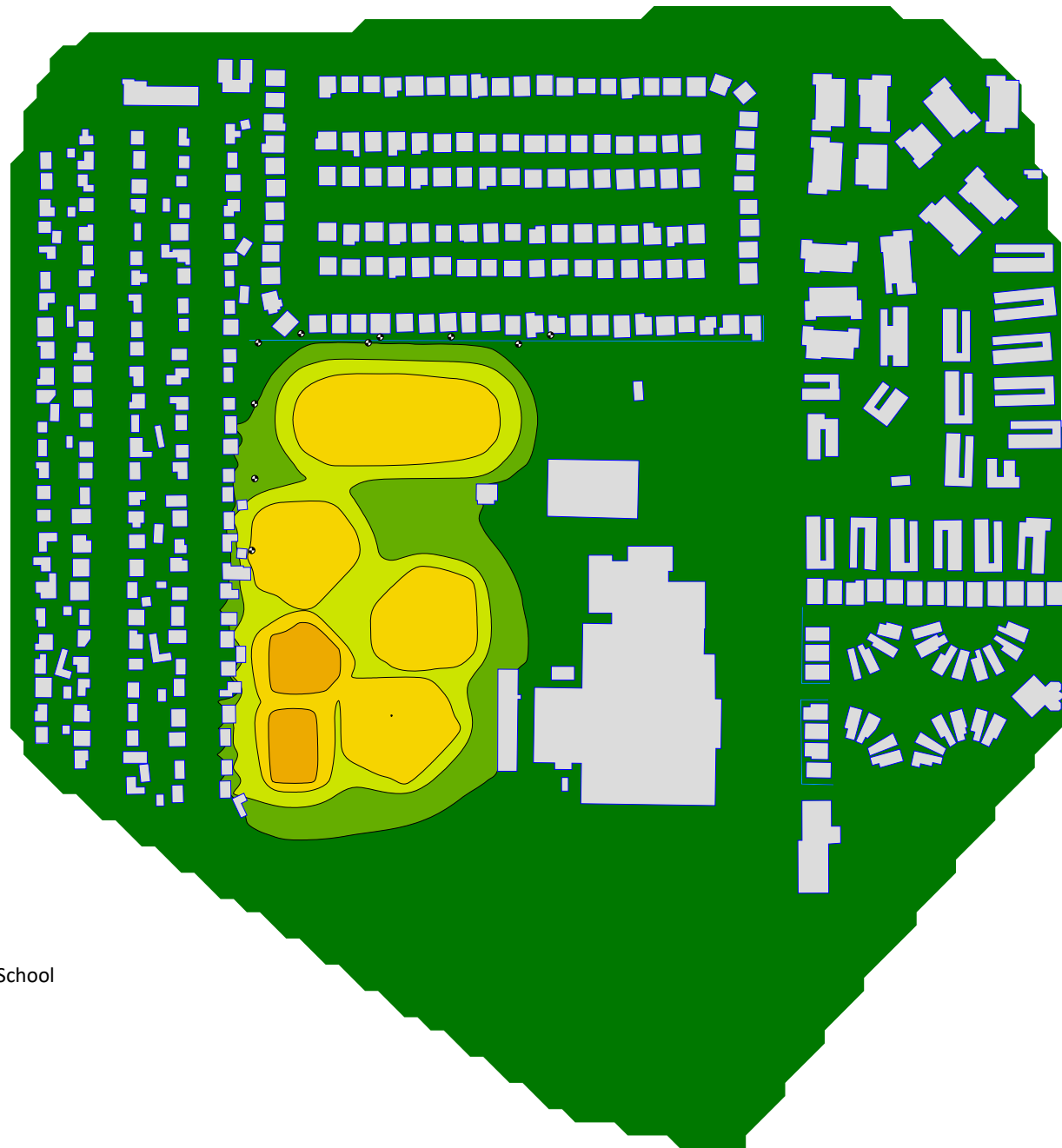
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Noise level
Leq,d
in dB(A)



Signs and symbols

-  Area source
-  Main building
-  Wall
-  Receiver



FHS-08.0 Sonora High School
Practice Fields

Sonora FJUHSD

Assessed receiver levels

Practice Fields

2

Receiver	Usage	FI	Leq,d dB(A)	Leq,n dB(A)	
LT-1	SCR	G	44.3	44.3	
LT-2	SCR	G	47.9	47.9	
LT-3	SCR	G	43.8	43.8	
LT-4	SCR	G	44.9	44.9	
LT-5	SCR	G	46.7	46.7	
LT-6	SCR	G	55.7	55.7	
R-7	SCR	G	43.5	43.5	
R-8	SCR	G	42.8	42.8	
R-9	SCR	G	42.1	42.1	
R-10	SCR	G	38.1	38.1	

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Sonora FJUHS Contribution level - Practice Fields

9

Source	Source group	Source type	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	
Receiver LT-1 FI G Leq,d 44.3 dB(A) Leq,n 44.3 dB(A)						
Auxiliary Field	Playfield	Area	36.0	29.6	29.6	
Softball Field	Playfield	Area	37.2	30.8	30.8	
Softball Field	Playfield	Area	39.7	33.3	33.3	
Softball Field	Playfield	Area	40.2	33.8	33.8	
Playfield	Playfield	Area	49.2	42.7	42.7	
Softball Field	Playfield	Area	37.7	31.3	31.3	
Receiver LT-2 FI G Leq,d 47.9 dB(A) Leq,n 47.9 dB(A)						
Auxiliary Field	Playfield	Area	36.9	30.5	30.5	
Softball Field	Playfield	Area	37.4	31.0	31.0	
Softball Field	Playfield	Area	40.4	34.0	34.0	
Softball Field	Playfield	Area	42.9	36.5	36.5	
Playfield	Playfield	Area	53.4	47.0	47.0	
Softball Field	Playfield	Area	39.1	32.7	32.7	
Receiver LT-3 FI G Leq,d 43.8 dB(A) Leq,n 43.8 dB(A)						
Auxiliary Field	Playfield	Area	37.0	30.6	30.6	
Softball Field	Playfield	Area	36.9	30.5	30.5	
Softball Field	Playfield	Area	39.0	32.6	32.6	
Softball Field	Playfield	Area	43.1	36.6	36.6	
Playfield	Playfield	Area	47.6	41.2	41.2	
Softball Field	Playfield	Area	39.1	32.7	32.7	
Receiver LT-4 FI G Leq,d 44.9 dB(A) Leq,n 44.9 dB(A)						
Auxiliary Field	Playfield	Area	35.9	29.5	29.5	
Softball Field	Playfield	Area	35.7	29.3	29.3	
Softball Field	Playfield	Area	37.9	31.5	31.5	
Softball Field	Playfield	Area	43.5	37.1	37.1	

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1

Sonora FJUHS Contribution level - Practice Fields

9

Source	Source group	Source type	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	
Playfield	Playfield	Area	49.6	43.2	43.2	
Softball Field	Playfield	Area	38.4	32.0	32.0	
Receiver LT-5 FI G Leq,d 46.7 dB(A) Leq,n 46.7 dB(A)						
Auxiliary Field	Playfield	Area	38.3	31.9	31.9	
Softball Field	Playfield	Area	37.7	31.3	31.3	
Softball Field	Playfield	Area	40.0	33.6	33.6	
Softball Field	Playfield	Area	50.9	44.5	44.5	
Playfield	Playfield	Area	46.3	39.9	39.9	
Softball Field	Playfield	Area	41.7	35.3	35.3	
Receiver LT-6 FI G Leq,d 55.7 dB(A) Leq,n 55.7 dB(A)						
Auxiliary Field	Playfield	Area	41.3	34.8	34.8	
Softball Field	Playfield	Area	42.3	35.9	35.9	
Softball Field	Playfield	Area	44.1	37.7	37.7	
Softball Field	Playfield	Area	61.7	55.3	55.3	
Playfield	Playfield	Area	42.7	36.3	36.3	
Softball Field	Playfield	Area	47.7	41.3	41.3	
Receiver R-7 FI G Leq,d 43.5 dB(A) Leq,n 43.5 dB(A)						
Auxiliary Field	Playfield	Area	36.3	29.9	29.9	
Softball Field	Playfield	Area	36.4	30.0	30.0	
Softball Field	Playfield	Area	38.8	32.3	32.3	
Softball Field	Playfield	Area	41.9	35.5	35.5	
Playfield	Playfield	Area	47.7	41.3	41.3	
Softball Field	Playfield	Area	38.3	31.9	31.9	
Receiver R-8 FI G Leq,d 42.8 dB(A) Leq,n 42.8 dB(A)						
Auxiliary Field	Playfield	Area	35.0	28.6	28.6	
Softball Field	Playfield	Area	35.5	29.1	29.1	

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2

Sonora FJUHSD

Contribution level - Practice Fields

9

Source	Source group	Source type	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	
Softball Field	Playfield	Area	37.9	31.5	31.5	
Softball Field	Playfield	Area	40.0	33.6	33.6	
Playfield	Playfield	Area	47.5	41.0	41.0	
Softball Field	Playfield	Area	36.8	30.4	30.4	
Receiver R-9 FI G Leq,d 42.1 dB(A) Leq,n 42.1 dB(A)						
Auxillary Field	Playfield	Area	35.1	28.7	28.7	
Softball Field	Playfield	Area	35.8	29.4	29.4	
Softball Field	Playfield	Area	38.3	31.9	31.9	
Softball Field	Playfield	Area	39.2	32.8	32.8	
Playfield	Playfield	Area	46.5	40.1	40.1	
Softball Field	Playfield	Area	36.7	30.3	30.3	
Receiver R-10 FI G Leq,d 38.1 dB(A) Leq,n 38.1 dB(A)						
Auxillary Field	Playfield	Area	33.1	26.7	26.7	
Softball Field	Playfield	Area	31.7	25.3	25.3	
Softball Field	Playfield	Area	34.5	28.0	28.0	
Softball Field	Playfield	Area	36.0	29.6	29.6	
Playfield	Playfield	Area	41.8	35.4	35.4	
Softball Field	Playfield	Area	34.6	28.2	28.2	

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3

Sonora FJUHSD Octave spectra of the sources in dB(A) - Practice Fields	3
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Sonora FJUHSD Octave spectra of the sources in dB(A) - Practice Fields	3
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Name	Source type	L'w dB(A)	Lw dB(A)	KI dB	KT dB	Day histogram	Emission spectrum	500Hz dB(A)	
Auxiliary Field	Area	59.9	94.0	0.0	0.0	Playfield 30 Min	Soccer, Players	94.0	
Playfield	Area	52.6	94.0	0.0	0.0	Playfield 30 Min	American Football, Players	94.0	
Softball Field	Area	58.9	94.0	0.0	0.0	Playfield 30 Min	Soccer, Players	94.0	
Softball Field	Area	57.2	94.0	0.0	0.0	Playfield 30 Min	Soccer, Players	94.0	
Softball Field	Area	57.2	94.0	0.0	0.0	Playfield 30 Min	Soccer, Players	94.0	
Softball Field	Area	57.2	94.0	0.0	0.0	Playfield 30 Min	Soccer, Players	94.0	

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