

This section of the EIR discusses the existing noise environment in the project vicinity, and identifies potential noise impacts and mitigation measures related to development of the proposed project. Specifically, this section analyzes potential noise impacts due to construction activities and operation of the proposed project (e.g. increased vehicle trips to the project site). These impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment.

### **3.11.1 ENVIRONMENTAL SETTING**

#### BACKGROUND

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough, 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, called Hertz (Hz). Additional acoustical terms used to describe sound are defined in **Table 3.11-1, Acoustical Terminology**.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. As a result, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sound is dependent upon 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 the A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level ( $L_{eq}$ ), which is the sound level corresponding to a steady-state A-weighted sound level in decibels (dB) containing the same total energy as a time-varying signal over a given time period (usually one hour). The  $L_{eq}$  is the foundation of the composite noise descriptors such as  $L_{dn}$  and CNEL, and shows very good correlation with community response to noise.

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**TABLE 3.11-1  
ACOUSTICAL TERMINOLOGY**

<b>Acoustical Term</b>	<b>Definition</b>
<b>Acoustics</b>	The science of sound.
<b>Ambient Noise</b>	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
<b>Attenuation</b>	The reduction of an acoustic signal.
<b>A-Weighting</b>	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
<b>Decibel or dB</b>	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
<b>CNEL</b>	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
<b>Frequency</b>	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
<b>L<sub>dn</sub></b>	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
<b>L<sub>eq</sub></b>	Equivalent or energy-averaged sound level.
<b>L<sub>max</sub></b>	The highest root-mean-square (RMS) sound level measured over a given period of time.
<b>Loudness</b>	A subjective term for the sensation of the magnitude of sound.
<b>Masking</b>	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
<b>Noise</b>	Unwanted sound.
<b>Peak Noise</b>	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.
<b>RT60</b>	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
<b>Sabin</b>	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
<b>SEL</b>	A rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy of the event into a 1-s time period.
<b>Threshold of Hearing</b>	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
<b>Threshold of Pain</b>	Approximately 120 dB above the threshold of hearing.

Two composite noise descriptors are in common use today:  $L_{dn}$  and CNEL. The  $L_{dn}$  (Day-Night Average Level) is based upon the average hourly  $L_{eq}$  over a 24-hour day, with a +10 decibel weighting applied during the nighttime (10:00 P.M. to 7:00 A.M.)  $L_{eq}$  values. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were subjected twice as loud as daytime exposures. The CNEL (Community Noise Equivalent Level), like  $L_{dn}$ , is based upon the weighted average hourly  $L_{eq}$  over a 24-hour day, except that an additional 4.77 decibel penalty increase is applied to evening (7:00 P.M. to 10:00 P.M.) hourly  $L_{eq}$  values. Measured  $L_{dn}$  and CNEL values are generally within 1 dB of one another.

The CNEL was developed for the California Airport Noise Regulations, and is normally applied to airport/aircraft noise assessments. The  $L_{dn}$  descriptor is a simplification of the CNEL concept, but the two will usually agree, for a given situation, within 1 dB. Like the  $L_{eq}$ , these descriptors are also averages and tend to disguise short-term variations in the noise environment. Because they presume increased evening or nighttime sensitivity, these descriptors are best applied as criteria for land uses where nighttime noise exposures are critical to the acceptability of the noise environment, such as residential developments. For the purposes of this analysis, the CNEL and  $L_{dn}$  noise level descriptors are considered interchangeable.

#### EXISTING NOISE ENVIRONMENT

##### **Existing Noise Sensitive Land Use**

Some groups of people are more affected by noise than others. These groups of people are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

Sensitive receptors in the vicinity of the project site include a school and rural residences. San Benancio Middle School is located at 43 San Benancio Road approximately one mile from the entrance to the project site and approximately 3,000 feet from Lots #1, #3, #7 and #9. The closest residence is approximately 1,200 feet from Lot #17.

##### **Existing Noise Sources**

Existing noise levels in the vicinity of the project site are generally low except where sensitive receptors are located in close proximity to roadways. Occasional light aircraft, birds, or wind noise are audible, but are considered minor noises that are only audible due to the low baseline levels. Within the *Toro Area Plan* planning area the major source of noise is from traffic on the local streets and from State Route 68. Portions of the project site are located approximately 2,000 feet from State Route 68. However, the existing vegetation and topography provide a natural barrier for noise generated along State Route 68. The project site is located on the eastern most portion of the *Toro Area Plan* planning area and is not likely to experience noise intrusion from Laguna Seca Recreation Area.

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### 3.11.2 REGULATORY SETTING

#### U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

In 1974, the EPA developed "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety" to provide a basis for State and local governments' judgments in setting standards. The EPA also identified factors that should be used in conjunction with the standards which include the balance between costs and benefits associated with setting standards at particular noise levels, the nature of the existing or projected noise problems in any particular area, the local aspirations and the means available to control environmental noise.

#### CALIFORNIA BUILDING STANDARDS CODE

The State Building Code addresses noise intrusion in new hotels, motels, dormitories, apartment houses and dwellings other than detached single-family dwellings. California Building Code, Chapter 12, Section 1208A.8, states that indoor noise levels attributable to exterior sources shall not exceed an  $L_{dn}$  of 45 dBA in any habitable room if outdoor levels are in excess of an  $L_{dn}$  of 60 dBA. Furthermore, if windows must be closed to meet the goal, then an alternate means of providing fresh air such as mechanical ventilation or air-conditioning must be included in the design. The ventilation system must not compromise the noise reduction provided by the façade. Evidence of compliance consists of an acoustical analysis report that is submitted with the application for building permit.

#### CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires the analysis of potential noise impacts from certain projects. The noise impacts are to be assessed with respect to applicable standards and significant noise increases. The state and county noise standards can be used as thresholds of significance in the CEQA impact analysis. However, neither the State of California nor the County of Monterey has standards for increase in noise. California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it "increases substantially the ambient noise levels for adjoining areas".

According to **Table 3.11-2, Significance of Changes in Cumulative Noise Exposure** an increase in traffic noise levels of 5 dB or more would be significant where the ambient level is less than 60 dB, an increase of 3 dB or more would be significant where the ambient level is between 60 and 65 dB, and 1.5 dB or more would be a significant increase where the ambient noise level exceeds 65 dB  $L_{dn}$ . The rationale for the **Table 3.11-2, Significance of Changes in Cumulative Noise Exposure** criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant annoyance.

**TABLE 3.11-2  
SIGNIFICANCE OF CHANGES IN CUMULATIVE NOISE EXPOSURE**

<b>Ambient Noise Level Without Project, L<sub>dn</sub></b>	<b>Increase Required for Significant Impact</b>
< 60 dB	+ 5.0 dB or more
60-65 dB	+ 3.0 dB or more
> 65 dB	+ 1.5 dB or more

#### MODEL COMMUNITY NOISE CONTROL ORDINANCE

The County's 60 dB CNEL exterior noise level standard is based upon a composite 24-hour average noise level. As previously discussed, the CNEL descriptor applies a +4.77 dB penalty to noise levels occurring in the evening hours (7:00 P.M. - 10:00 P.M.) and a +10 dB penalty to noise levels which occur during the nighttime period (10:00 P.M. – 7:00 A.M.). This descriptor is typically considered to provide good correlation with annoyance due to transportation related noise sources (i.e. roadway traffic, aircraft operations, and to a lesser extent railroad operations).

Generally, the CNEL/L<sub>dn</sub> descriptors are not considered to be the most appropriate for evaluating noise impacts associated with stationary or fixed noise sources that do not operate 24 hours a day. For instance, Mazda Raceway Laguna Seca activities do not take place 24 hours a day, but are limited to the daytime hours. If one applies the CNEL/L<sub>dn</sub> descriptors to this noise source, the noise levels due to raceway activities will be averaged over 24 hours, and the potential impact or potential for annoyance will be artificially discounted.

The State of California "Model Community Noise Control Ordinance" contains hourly noise level criteria that may be more appropriate to use in the evaluation of stationary or fixed noise sources, such as the raceway. According to this Noise Control Ordinance, the proposed "suburban" residential uses should not be exposed at any time to maximum noise levels in excess of 75 dB during the daytime hours (7:00 A.M. – 10:00 P.M.), or 65 dB during the nighttime hours (10:00 P.M. – 7:00 A.M.). Therefore, this analysis will focus on achieving compliance with the County's 60 dB L<sub>dn</sub> 24-hour average standard, as well as the State of California suggested daytime and nighttime maximum noise level standards of 75 dB and 65 dB, respectively.

#### COUNTY OF MONTEREY

#### **Monterey County General Plan**

The *Monterey County General Plan* Noise Element establishes exterior noise levels of 60 dB CNEL/L<sub>dn</sub> or less as being "normally acceptable" for single-family residential uses, such as the proposed project. In addition, Monterey County maintains an interior noise level

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standard of 45 dB CNEL/L<sub>dn</sub> for residential uses. The following goals and policies help achieve these thresholds.

Goal 22 To maintain an overall healthy and quiet environment by trying to achieve living and working conditions free from annoying and harmful sounds.

#### Policies

22.2.1 The County shall require new development to conform to the established noise parameters established by Table 6 (or Table 3.11- on next page), Land Use Compatibility for Exterior Community Noise Environments.

22.2.2 The County shall require the appropriate standards of soundproofing construction in all multiple-residential structures as specified in the Building Code.

22.2.3 The County shall require environmental review of all proposed new development, expansion of industrial facilities, and quarry excavation and processing activities which may increase the noise level in surrounding areas or generate noise levels greater than those specified in **Table 3.11-3, Surrounding Land Use Noise Generation Levels.**

**TABLE 3.11-3  
SURROUNDING LAND USE NOISE GENERATION LEVELS**

Land Use Category	Noise Ranges (Ldn or CNEL) dB			
	I	II	III	IV
Passively used open spaces	50	50-55	55-70	70+
Auditoriums, concert halls, amphitheaters	45-50	50-65	65-70	70+
Residential – low density, Single family, duplex, mobile homes	50-55	55-70	70-75	75+
Residential – multi-family	50-60	60-70	70-75	75+
Transient lodging - motels, hotels	50-60	60-70	70-80	80+
Schools, libraries, churches, hospitals, nursing homes	50-60	60-70	70-80	80+
Actively used open spaces-playgrounds, neighborhood parks	50-67	--	67-73	73+
Golf courses, riding stables, water recreation, cemeteries	50-70	--	70-80	80+

Land Use Category		Noise Ranges (Ldn or CNEL) dB			
		I	II	III	IV
Office buildings, business commercial and professional		50-67	67-75	75+	
Industrial, manufacturing, utilities, agriculture		50-70	70-75	75+	
Noise Range I	Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.				
Noise Range II	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction but with closed windows and fresh air supply systems or air conditioning will normally suffice.				
Noise Range III	Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation feature included in the design.				
Noise Range IV	Clearly Unacceptable: New construction or development should generally not be undertaken.				

Source: Monterey County General Plan 1982

- 22.2.5 The County, in accordance with **Table 3.11-3, Surrounding Land Use Noise Generation Levels** should require ambient sound levels to be less at night (10:00 P.M. to 7:00 A.M.) than during the day.
- 22.2.6 The County shall make available to the public methods and existing noise data, which can be employed to reduce unwanted noise from the environment.
- 22.3.1 The County shall develop cooperative working relationships between those uses that produce noise and those that are sensitive to noise to mitigate existing noise problems.
- 22.3.3 The County shall work with the California Department of Transportation to mitigate the effects of existing highway noise and to avoid future noise problems through careful analysis at the design stage of all new highway improvements.

### Toro Area Plan

According to the *Toro Area Plan*, noise becomes a problem when it exceeds 60 decibels on an A-weighted scale (60dBA). Noise at 60dBA is equivalent to normal conversation at a distance of 12 feet.

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### Monterey County Noise Control Ordinance

In addition to the noise standards and policies identified in the *Monterey County General Plan*, Monterey County has also adopted a noise control ordinance (Monterey County Code, Title 10, Chapter 10.60.) The noise ordinance applies to existing stationary noise sources, which are defined in the ordinance as “any machine, mechanism, device, or contrivance.” Stationary noise sources are limited to a maximum noise level of 85 dBA at 50 feet. The noise metric (e.g., CNEL,  $L_{eq}$ ,  $L_{max}$ ) or time period to be applied with this standard is not specified in the ordinance. This standard does not apply to aircraft or stationary sources located in excess of 2,500 feet from any occupied dwelling unit.

#### 3.11.3 IMPACTS AND MITIGATION MEASURES

##### STANDARDS OF SIGNIFICANCE

The following thresholds for measuring a project’s environmental impacts are based on CEQA Guidelines and standards used by the County of Monterey. For the purposes of this EIR, impacts are considered significant if the following could result from implementation of the proposed project:

1. Exposure of persons to or generation of noise levels in excess of standards established in the *Monterey County General Plan*;
2. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels;
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. A substantial increase is defined by **Table 3.11-2, Significance of Changes in Cumulative Noise Exposure**;
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. A substantial increase is defined by **Table 3.11-2, Significance of Changes in Cumulative Noise Exposure**;
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, where the project would expose people residing or working in the area to excessive noise levels; or
6. For a project within the vicinity of a private airstrip, where the project would expose people residing or working in the project site to excessive noise levels.

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These



standards state that a noise impact may be considered significant if it would generate noise that would conflict with local planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

#### METHODOLOGY

Available information pertaining to noise within the project vicinity was reviewed for the noise analysis, including, but not limited to, the *Monterey County General Plan* (Monterey County 1982) and the *Toro Area Plan* (Monterey County 1983). Project-related noise components that were identified include both short-term construction noise and long-term operational impacts from increased traffic to the project site. Sensitive receptors (e.g. residential homes and schools) in the vicinity of the project site were identified.

#### PROJECT IMPACTS AND MITIGATION MEASURES

##### Long-Term Operational Noise Impacts – Increase in Traffic Noise

**Impact 3.11-1** Implementation of the proposed project would include the construction of 17 residential units that would generate approximately 163 daily trips on the local roadway network that would subsequently increase traffic noise levels. The trips generated by the proposed project are not expected to double the existing trip rates on San Benancio Road or State Route 68, but may double the number of trips on Meyer Road, which may increase noise levels by approximately 3dB. However, this is not considered a significant increase in traffic noise. In addition, the topography and distance between the sensitive receptors to Meyer Road would decrease the traffic noise levels associated with the proposed project. Therefore, this would be considered a **less than significant impact**.

Implementation of the proposed project would include development of 17 residential units that would generate an estimated 163 daily trips, with 13 trips during the AM peak hour and 17 trips during the PM peak hour. This increase in traffic volume will primarily occur along Meyer Road, San Benancio Road, and State Route 68. The increase in traffic noise levels associated with the proposed project may expose existing sensitive receptors located along the roadways to unacceptable increased traffic noise levels. An increase in traffic noise levels of 5 dB or more would be considered unacceptable in an area with a conservative ambient noise level of less than 60 dB, as shown in **Table 3.11-2, Significance of Changes in Cumulative Noise Exposure**.

Doubling the existing traffic volume can cause a 3 dB increase in the average traffic noise. However, traffic noise levels decrease by 6 dB for each doubling of distance from the point noise source to the receptor and by 3dB to 5dB for each doubling of distance from a line source, like a roadway, depending on the ground cover between the source and the sensitive receptor. The trips generated by the proposed project are not expected to double

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the existing trip rates on San Benancio Road or State Route 68, but may double the number of trips on Meyer Road, which may increase noise levels by approximately 3dB. However, this is not considered a significant increase in traffic noise. In addition, the topography and distance between the sensitive receptors to Meyer Road would decrease the traffic noise levels associated with the proposed project. Therefore, the impact associated with the proposed project's increase in traffic noise levels would be considered **less than significant**. No mitigation measures are necessary.

#### **Expose Sensitive Receptors to Unacceptable Noise Levels**

**Impact 3.11-2** Implementation of the proposed project would introduce sensitive residential uses in an area that would be exposed to potentially unacceptable noise levels from roadway traffic and events occurring at Laguna Seca Recreation Area. This would be considered a **less than significant impact**.

Siting sensitive receptors, such as residential units, close to a major noise source, such as State Route 68, can be considered a significant impact if the noise source is greater than 60 dB. The proposed project consists of 17 residential units on a project site that is located within 2,000 feet of State Route 68 and approximately four miles from Laguna Seca Recreation Area.

Although portions of the project site are located approximately 2,000 feet from State Route 68, the closest proposed homesite is located approximately 4,000 feet from State Route 68. Due to the distance and rolling topography with dense vegetation between the future residents and the roadway, the traffic noise levels would not exceed unacceptable levels. Even though the western portion of the Toro planning area experiences noise intrusion from events occurring at Laguna Seca Recreation Area, the project site is located on the eastern portion of the Toro planning area and is not likely to experience significant noise intrusion from Laguna Seca Recreation Area. Therefore, the proposed project would not expose sensitive receptors to unacceptable noise levels and the impact is considered **less than significant**. No mitigation measures are necessary.

#### **Short-Term Construction Noise**

**Impact 3.11-3** Construction activities at the project site will result in elevated noise levels in the vicinity of construction. Activities involved in construction will typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet, as indicated in **Table 3.11-4, Construction Equipment Noise**. Construction activities will be temporary in nature and will likely occur during normal daytime working hours. This would be considered a **potentially significant impact**.

During the construction phases of the proposed project, noise would add to the ambient noise environment in the project vicinity. There are sensitive noise receptors in the vicinity

of the project site, including San Benancio Middle School and several residential homes on Meyer Road. San Benancio Middle School is located approximately one mile from the entrance to the project site and approximately 3,000 feet from Lots #1, #3, #7, and #9. The closest residence on Meyer Road is located approximately 1,200 feet from Lot #17. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during the daytime hours.

**TABLE 3.11-4**  
**CONSTRUCTION EQUIPMENT NOISE**

Type of Equipment	Maximum Level, dB at 50 feet
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: *Bollard Acoustical Consultants, Inc. 2006*

The proposed project would involve construction activities which typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet, as indicated in **Table 3.11-4, Construction Equipment Noise**. If construction activities were to occur outside the normal daytime hours, construction related noise could result in sleep interference at existing nearby noise-sensitive residences. This would be considered a **potentially significant impact**. Implementation of the following mitigation measure would reduce this impact.

#### Mitigation Measure

**MM 3.11-3** During the course of construction, Monterey County Planning Department shall require that the project applicant adhere to Monterey County's requirements for construction activities with respect to hours of operation, muffling of internal combustion engines, and other factors which affect construction noise generation and its effects on noise-sensitive land uses. This would include implementing the following measures:

- Limit noise-generating construction operations to between the least noise-sensitive periods of the day (e.g., 7:00 A.M. to 7:00 P.M.) Monday through Saturday; no construction operations on Sundays or holidays;

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- Locate construction equipment and equipment staging areas at the furthest distance possible from nearby noise-sensitive land uses;
- Ensure that construction equipment is properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds should be closed during equipment operation;
- When not in use, motorized construction equipment should not be left idling; and
- Install temporary noise barriers when activities would affect daytime noise-sensitive receptors (e.g., residential uses, schools, and churches).

Implementation of the above mitigation measure would prohibit noise-generating construction activities during the more noise-sensitive daytime hours and would reduce impacts to daytime noise-sensitive receptors. In addition, noise generated by construction activities would be short-term. Therefore, the construction related noise impacts would be reduced to a **less than significant** level.

#### CUMULATIVE IMPACTS AND MITIGATION MEASURES

##### Cumulative Increase in Traffic Noise Levels

**Impact 3.11-4** Build out of the proposed project combined with reasonably foreseeable development would cumulatively increase traffic volumes on the local roadways resulting in a cumulative increase in traffic noise levels. The cumulative increase in traffic would increase the traffic noise levels along State Route 68. However, trips generated by the proposed project, combined with the trips generated by cumulative development in the project vicinity, are not expected to double the existing trip rates on State Route 68. Therefore, the average traffic noise level is not expected to increase by more than 3 dB. This would be considered a **less than significant cumulative impact**.

The increase in traffic associated with the proposed project combined with cumulative project traffic would increase traffic on State Route 68 by approximately 2,707 daily trips, which would result in an increase in traffic noise along the highway. An increase in traffic noise levels of 5 dB or more would be significant where the ambient level is less than 60 dB, an increase of 3 dB or more would be significant where the ambient level is between 60 and 65 dB, and 1.5 dB or more would be a significant increase where the ambient noise level exceeds 65 dB L<sub>dn</sub>. As discussed in **Impact 3.11-1**, doubling of the existing traffic volumes can cause a 3 dB increase in average traffic noise. Topography and the distance between the noise source and the sensitive receptors attenuate the increase in traffic noise.

Trips generated by the proposed project, combined with the trips generated by cumulative development in the project vicinity, are not expected to double the existing trip rates on State Route 68. Therefore, the cumulative increase in traffic noise levels would be considered **less than significant**. No mitigation measures are necessary.

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#### REFERENCES/DOCUMENTATION

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