

15.0

NOISE

This chapter provides an evaluation of the potential noise-related effects of implementing the proposed 2035 San Benito County General Plan (2035 General Plan). As established in the Notice of Preparation for the proposed 2035 General Plan (see [Appendix A, Notice of Preparation](#)), urban development and other activities resulting from implementation of the Plan may result in the degradation of the noise environment in San Benito County (County). The following environmental assessment includes a review of the County noise environment potentially affected by the implementation of the 2035 General Plan, including a description of the existing ambient noise conditions, and the effects that could result from urban and other development that would be allowed under the proposed 2035 General Plan.

The existing conditions of the noise environment were determined by noise survey, modeling, and the utilization of existing noise level data as appropriate. Rules and regulations influencing the noise environment were identified by a review of federal, state, and County regulations. Potential impacts related to noise, compiled and analyzed based on CEQA assessment criteria, were determined by comparing potential urban and other development that would likely be constructed under buildout of 2035 General Plan to the existing environment, using design criteria and guidelines adopted by the County.

15.1 SETTING

The County's environmental and regulatory settings with respect to the noise environment described below are based on the General Plan Background Report (San Benito County 2010b). Pursuant to State CEQA Guidelines §15150, this document is incorporated into this RDEIR by reference as though fully set forth herein. Where necessary, information originating from the Report has been updated with the best available and most current data, as previously discussed in Section 4.3. The Background Report is available for download at: www.sanbenitogpu.com/docs.html. Copies of the Background Report may be viewed during

standard business hours (8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m.), Monday through Thursday, at the San Benito County Planning and Building Department, 2301 Technology Parkway, Hollister, California 95023. County offices are closed to the public on Fridays.

15.1.1 Environmental Setting

The ambient noise environment in San Benito County is defined primarily by traffic on U.S. 101 and State Routes 25, 156, 152 (located just north and outside of San Benito County), and 129; major local roads; intermittent Union Pacific Railroad (UPRR) operations; and aircraft operations associated with two public airports. The noise environment in the County is also influenced by mining uses, active recreation areas, and other scattered uses and activities. The County has limited significant industrial noise sources. The ambient noise environment in the County is fairly quiet at locations removed from U.S. 101, major state routes, and railroad tracks.

Noise Sensitive Land Uses

Noise-sensitive land uses are generally defined as locations where people reside, or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise can disrupt these activities.

Transportation-Related Noise Sources

Transportation-related noise sources are the predominant contributor to ambient noise in the County. Existing traffic, railroad, and aircraft noise levels in the County are briefly summarized below. Additional detail on the noise monitoring survey can be found in the Noise Background Report prepared for the 2035 General Plan Update.

Traffic Noise

Traffic is the most significant source of noise affecting sensitive land uses. A number of factors control how traffic noise levels affect nearby sensitive land uses. These include roadway elevation compared to the surrounding grade, any structures or terrain intervening between the roadway and the sensitive receptors, and the distance between the roadway and receptors, the traffic volume on the roadway, the average vehicle speed, and the ratio of trucks (particularly heavy trucks) and buses to automobiles.

U.S. Highway 101 and State Routes 25, 156, 152, and 129 are the most significant sources of traffic noise. Major arterial roadways are also significant sources of traffic noise at land uses adjoining these roadways. Other transportation-related noise sources that contribute to

community noise levels include intermittent operations associated with the UPRR and aircraft. Stationary noise sources include industrial land uses such as rock quarries and recreational vehicle areas.

To assist in the 2035 General Plan Update process, ambient noise monitoring was completed at a variety of locations in San Benito County. Daily noise levels were measured at seven locations throughout the County in September 2009 and in March 2010. No changes in the existing noise setting have occurred since that time that would affect the noise measurements. Six locations were selected along major roadways traversing the County, and one location was selected along the Gilroy-Hollister UPRR Spur. Short-term noise measurements were taken adjacent to major roadways. Of the ten short-term measurements, five locations represented noise levels along state highways, three represented noise levels along heavily traveled arterial roadways, and two represented noise levels along lightly traveled collector roadways. The results of these measurements are presented and discussed under impact analysis NSE-1 in this chapter.

Railroad Noise

Railroad trains along the Gilroy-Hollister and Gilroy-Watsonville UPRR tracks are sources of intermittent, high-level noise.

Aircraft Noise

Hollister Municipal Airport and Frazier Lake Airpark operations are significant contributors to ambient noise levels in their immediate vicinities. Aircraft noise levels in the parts of the County not in the immediate vicinity of the Hollister Municipal Airport and Frazier Lake Airpark are generally compatible with noise-sensitive land uses.

Stationary Noise Sources

Existing stationary noise sources can generate noise levels that are not compatible with adjacent sensitive land uses. The County has several stationary noise sources, which are discussed below.

Hollister Hills State Vehicular Recreation Area is located southwest of the City of Hollister, approximately 1.25 miles south of Union Road, and consists of two areas that combined total 3,200-acres in the Gabilan Mountains. The Off-Highway Motor Vehicle Recreation division of California State Parks operates the Hollister Hills State Vehicular Recreation Area and offers recreation for motorcyclists, 4x4s, picnickers, and campers. The operation of off-highway vehicles is only permitted between sunrise and sunset.

A.R. Wilson Quarry is located at the end of Quarry Road in northwest San Benito County. Noise generated by this quarry includes the sounds of heavy equipment used in mineral resource extraction, processing operations, and the loading and operation of trucks and rail cars. Truck

traffic to and from the quarry is a substantial contributor to traffic noise levels along roadways serving the site.

Agricultural uses, industrial uses, and service commercial uses such as automotive repair facilities, wrecking yards, tire installation centers, car washes, transfer yards, and loading docks, are found at various locations throughout the County. Industrial and manufacturing facilities within the County involve mobile and stationary noise sources that may affect adjacent noise-sensitive land uses. Industrial processes such as fabricating and grinding can create relatively high levels of noise within their immediate operating environments. In addition, truck movements and deliveries generate noise along the local roadway network. The scope and degree of noise generated by industrial uses depends on various factors, including the type of industrial activity, hours of operation, and the site's location relative to other land uses, and are therefore difficult to quantify precisely.

Other existing sources of noise include noise from commercial, recreational, and school uses. Noise sources associated with commercial uses include mechanical equipment, as well as activities associated with parking lots, loading docks, and drive-thrus. Mechanical equipment is used extensively in buildings to provide heating, cooling, air circulation, and water supply. Mechanical equipment that produces noise includes motors, pumps, and fans. Although noise levels are generally low from these sources at nearby properties, such sources may operate continuously, and may include pure tones that make them audible and sources of annoyance at a substantial distance.

Noise generating activities associated with schools include children at play, bells, and public address systems. High schools may include stadiums for day and evening athletic events, and public address/loudspeaker systems.

Intermittent or temporary noise sources include portable power equipment such as leaf blowers, lawn mowers, portable generators, electric saws and drills, and other similar equipment. Although these noise sources are typically short in duration, they are often loud and can be major sources of annoyance.

Construction Noise

Construction can be another significant, although typically short-term, source of noise. Construction is typically of most concern when it takes place near sensitive land uses, or occurs at night or in early morning hours. The dominant construction equipment noise source is usually diesel engines of heavy construction equipment. In a few cases, however, such as impact pile driving or pavement breaking, "process noise" related to specific activities dominates. Stationary equipment operates in one location for one or more days at a time, with either a continuous operation (e.g., pumps, generators, compressors) or a variable operation (e.g., pile drivers,

pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion (e.g., bulldozers, loaders) or to and from the site (e.g., trucks). Construction-related noise levels generally fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of barriers between the noise source and receptor.

15.1.2 Regulatory Setting

This section describes the relevant guidelines, policies, and standards established by federal and state agencies, and San Benito County.

Federal

- **Department of Housing and Urban Development (HUD).** HUD environmental criteria and standards are presented in 24 CFR Part 51. New residential construction qualifying for HUD financing proposed in high noise areas (exceeding 65 dBA L_{dn}) must incorporate noise attenuation features to maintain acceptable interior noise levels. A goal of 45 dBA L_{dn} is set forth for interior noise levels, and attenuation requirements are geared toward achieving that goal. It is assumed that with standard construction, any building will provide sufficient attenuation to achieve an interior level of 45 dBA L_{dn} or less if the exterior level is 65 dBA L_{dn} or less. Approvals in a “normally unacceptable noise zone” (exceeding 65 decibels but not exceeding 75 decibels) require a minimum of five decibels additional noise attenuation for buildings if the day-night average is greater than 65 decibels but does not exceed 70 decibels, or a minimum of 10 decibels of additional noise attenuation if the day-night average is greater than 70 decibels but does not exceed 75 decibels.
- **Federal Highway Administration (FHWA).** Proposed federal or federal-aid highway construction projects on a new location, or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes, requires an assessment of noise and consideration of noise abatement per Title 23 of the Code of Federal Regulations, Part 772 (23 CFR Part 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. FHWA considers noise abatement for sensitive receivers such as picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals when “worst-hour” noise levels approach or exceed 67 dBA L_{eq} . Caltrans has further defined the definition of approaching the noise abatement criteria noise abatement criteria to be 1 dBA below the noise abatement criteria (e.g., 66 dBA L_{eq} is considered approaching the noise abatement criteria for Category B activity areas).

- **Federal Transit Administration (FTA).** This analysis uses the FTA's vibration impact criteria for sensitive buildings, residences, and institutional land uses near railroads. The thresholds for residences and buildings where people normally sleep (e.g., nearby residences) are 72 VdB for frequent events (more than 70 events of the same source per day), 75 VdB for occasional events (30 to 70 vibration events of the same source per day), and 80 VdB for infrequent events (less than 30 vibration events of the same source per day).

State

- **California Government Code §65302(f).** California Government Code §65302(f) requires that all general plans include a noise element to address noise problems in the community. The State Office of Planning and Research has established guidelines for the content of the noise element. State law requires that current and future noise level contours be developed and stated in terms of community noise equivalent level or day-night average level on the basis of noise monitoring or generally accepted noise modeling techniques for the following sources:
 - Highways and freeways.
 - Primary arterials and major local streets.
 - Passenger and freight on-line railroad operations and ground rapid transit systems.
 - Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine tests stands and all other ground facilities and maintenance functions related to airport operation.
 - Local industrial plants, including, but not limited to, railroad classification yards.
 - Other ground stationary noise sources, including, but not limited to, military installations identified by local agencies as contributing to the community noise environment.

The noise contours shall be used as a guide for establishing a pattern of land uses in the Land Use Element to minimize residents' exposure to excessive noise. The Noise Element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any, and shall serve as a guideline for compliance with the State's noise insulation standards.

- **California Building Code - Noise Insulation Standards.** The State of California establishes exterior sound transmission control standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings as set forth in the 2010 California Building Code (Chapter 12, §1207.11). Interior noise levels attributable to exterior environmental noise sources shall not exceed 45 dBA

L_{dn} /CNEL in any habitable room. When exterior noise levels (the higher of existing or future) where residential structures are to be located exceed 60 dBA L_{dn} /CNEL, an acoustical analysis report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the allowable interior noise level.

- **Division of Aeronautics Noise Standards.** Title 21 of the California Code of Regulations sets forth the state's airport noise standards under Public Works Division 2.5, Chapter 6, Article 1. In the findings described in §5006, the airport noise standard as defined in §5012 is set at a CNEL of 65 dB. The standard states the following:

A level of noise acceptable to a reasonable person residing in the vicinity of an airport is established as a CNEL value of 65 dB for purposes of these regulations. This criterion level has been chosen for reasonable persons residing in urban residential areas where houses are of typical California construction and may have windows partially open. It has been selected with reference to speech, sleep, and community reaction.

- **California Department of Transportation – Construction Vibration.** California Department of Transportation (Caltrans) has adopted guidance for construction vibrations, and this guidance is used in this analysis to address construction vibrations. Caltrans uses a vibration limit of 0.5 inches/sec peak particle velocity (PPV) for new residential structures and modern industrial/commercial buildings that are structurally sound and designed to modern engineering standards. A conservative vibration limit of 0.3 inches/sec PPV is used for older residential buildings that are found to be structurally sound. For historic buildings and some old buildings, a conservative limit of 0.25 inches/sec PPV is used. A limit of 0.08 inches/sec PPV is used to provide the highest level of protection for extremely fragile historic buildings, ruins, and ancient monuments. All of these limits have been used successfully, and compliance to these limits has not been known to result in appreciable structural damage. All vibration limits referred to herein apply on the ground level, and take into account the response of structural elements (i.e., walls and floors) to ground-borne excitation.

County

- **Noise Element of the 1980 General Plan (as amended through August, 1984).** The current Noise Element includes land use compatibility standards for noise, measured in decibels. The General Plan's noise standards are based on L_{dn} or CNEL. Noise and land use compatibility standards are presented in [Table 15-1](#). The County summarized the policies included in the Noise Element of the 1980 General Plan as follows:

Table 15-1 General Plan Land Use Compatibility Guidelines for Community Noise Environments

Land Use Category	Community Noise Exposure Ldn/CNEL, dB					
	55	60	65	70	75	80
Residential – Low Density Single Family, Duplex, Mobile Homes						
Residential – Multi Family						
Transient Lodging – Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arenas, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Course, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing Utilities, Agriculture						
CLEARLY ACCEPTABLE The noise exposure is such that the activities associated with the land use may be carried out with essentially no interference from aircraft noise. (Residential areas: both indoor and outdoor noise environments are pleasant.)						
NORMALLY ACCEPTABLE The noise exposure is great enough to be of some concern, but common building construction will make the indoor environment acceptable, even for sleeping quarters.						
NORMALLY UNACCEPTABLE The noise exposure is significantly more severe so that unusual and costly building construction is necessary to insure adequate performance of activities. (Residential areas: barriers must be created between the site and prominent noise sources to make the outdoor environment tolerable.)						
CLEARLY UNACCEPTABLE The noise exposure is so severe that construction costs to make the indoor environment acceptable for performance of activities would be prohibitive. (Residential areas: the outdoor environment would be intolerable for normal residential use.)						

Source: San Benito County 1992, Figure 10-1.

- **1.1 Airport Compatible Land Use.** To ensure that County land near airports, particularly land lying within future clear zones, will be reserved for only those uses deemed to be compatible with the high noise levels associated with an airport. Such uses might include open space, agriculture, cemetery, golf course, or appropriate industrial uses.
- **1.2 Airport Noise.** To work with the City of Hollister to establish flight patterns which minimize noise impacts on existing and anticipated residential and commercial areas.
- **1.3 Airport Land Use Commission.** To encourage the establishment of an Airport Land Use Commission and to encourage the adoption of a noise abatement program by the Airport Commission consistent with FFA standards and California Noise Regulation for Airports.
- **2.1 Noise Sensitive Areas.** To route heavily traveled transportation routes to ensure minimum noise encroachment upon residential and other noise sensitive uses.
- **2.2 Vehicle/Equipment Maintenance.** The County vehicles and equipment should be maintained in such condition so as to ensure minimum noise emissions.
- **2.3 Vehicle Noise.** To provide for the enforcement of existing statewide vehicle noise regulations by local authorities, specifically those sections of the California Vehicle Code which pertains to illegal or faulty exhaust systems, speed laws and operation of vehicles in such a manner as to produce excessive noise.
- **2.4 Truck Noise.** To keep the number of truck routes in the County at a minimum and locate said routes in such a manner as to avoid impacts on those areas identified as noise sensitive. Wherever possible, trucks should be routed onto freeways and non-residential arterials, even where such routing is not the shortest distance between points.
- **2.5 Off Road Vehicle Limits.** To limit the use of off road recreational motor vehicles to those areas specifically designated for that purpose (i.e., Clear Creek and Hollister Hills State Vehicular Recreation Area) and to maintain land surrounding those areas in open space and agricultural use as a means of providing a noise buffer zone.
- **2.6 New Roadway Noise Levels.** To encourage County Road Department and California Department of Transportation to utilize noise attenuation features in the design of new County roadways.

- **2.7 New Development Noise Levels.** To require the installation of noise attenuation features when new residential developments are located adjacent to freeways, highways, arterials, railroad rights of way, and other noise generating uses.
- **2.8 Noise Emission Regulations.** That as a part of the noise ordinance, noise emission regulations will be established which specifically apply to off road recreational vehicles.
- **2.9 Railroad Noise.** To provide for non-noise sensitive land uses in areas near railroads and encourage compliance with Federal Rail Noise Standards by interstate rail carriers.
- **3.1 Health and Noise Compatibility.** That the State Department of Health and Noise Compatibility Standards will be adhered to by County Planning staff and officials in reviewing applications for proposed industrial developments and in monitoring noise levels from existing industrial developments.
- **3.2 Noise Standards.** The County Zoning Ordinance will be amended to include industrial noise standards, which reflect current state standards.
- **3.3 Noise Ordinance.** That the County will encourage provision of a one-year grace period in the County Noise Ordinance to allow existing industries time to prepare noise abatement plans in order to comply with the Noise Ordinance.
- **3.4 Noise Insulation Requirements.** The County Building Code noise insulation requirements for industrial buildings should reflect current state standards.
- **3.5 Industrial Noise.** That new industrial developments shall not be permitted in areas designated as noise sensitive unless it can be demonstrated that they will not result in an appreciable increase in the ambient noise levels.
- **4.1 Construction Related Noise.** It will be the County's continuing policy to control the operation of construction equipment at specific sound intensities and frequencies during specified hours.
- **4.2 High Noise Emission.** The County will encourage the use of barriers or enclosures for equipment having high noise emission.

- **4.3 Equipment EPA Noise Standards.** The County will encourage use of the Environmental Protection Agency Equipment Noise Standards as specifications for the modification of old County equipment and the purchase of new equipment.
- **San Benito County Code, Title 19, Chapter 19.39.** Article IV, Sound Level Restrictions, limits received noise generated by any source at any property line as shown in [Table 15-2](#). Section 19.39.030, Maximum Permissible Sound Pressure Levels, states no person shall operate, or permit to be operated, on private property any source of sound in such a manner as to create:
 - (A) A sound pressure level which exceeds the limits set forth for the receiving land use category in Table 1 (Table 15-2 of this RDEIR) which may be measured at or within the real property boundary of the receiving land use, or its vertical extension;
 - (B) A sound pressure level which exceeds the limits set forth for the receiving land use category in Table 1 (Table 15-2 of this RDEIR) for more than 15 minutes in 60 minutes which may be measured at or within the real property boundary of the receiving land use, or its vertical extension; or
 - (C) An equivalent A-weighted sound level that exceeds the limits set forth for the receiving land use category in Table 1 (Table 15-2 of this RDEIR) which may be measured at or within the real property boundary of the receiving land use or its vertical extension.
 - (D) A sound level that exceeds the ambient sound level by 5 dB which may be measured at or within the real property boundary of the receiving land use or its vertical extension.

Table 15-2 Hourly Average Noise Level Limits at the Property Line

Land Use Designations	Noise Level (dBA)	
	Day	Night
Ag Rangeland, Ag Productive, Rural, Rural Transitional, Rural Residential	45	35
Single-Family Residential, Residential Multiple, Planned Unit Development	50	40
Commercial Thoroughfare and Neighborhood Commercial	65	55
Controlled Manufacturing, Light Industrial, Heavy Industrial	70	60

Source: San Benito County 2013a, §19.39.030, Table 1.

15.2 ENVIRONMENTAL EFFECTS

15.2.1 *Significance Criteria*

As set forth in Appendix G to the State CEQA Guidelines, Section XII, Noise, the following criteria have been established to quantify the level of significance of an adverse effect being evaluated pursuant to CEQA. The numeration of each criterion below corresponds to the questions in the checklist in Appendix G of the CEQA Guidelines (e.g., XII.a, XII.b). The 2035 General Plan would result in a significant noise impact if it would:

- Expose people to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (XII.a)
- Expose people to or generate excessive groundborne vibration or groundborne noise levels. (XII.b)
- Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (XII.c)
- Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. (XII.d)
- 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, would expose people residing or working in the project area to excessive noise levels. (XII.e)
- For a project within the vicinity of a private airstrip, would expose people residing or working in the project area to excessive noise levels. (XII.f)

15.2.2 *Analysis Methodology*

Because this RDEIR considers the impacts associated with adoption of the 2035 General Plan, including new noise policies and standards, and the development of both noise sensitive and noise-generating land uses, the following methodology is employed. Noise impacts are identified for the following based on the thresholds in Appendix G:

- New noise-sensitive developments located within areas impacted by existing or future aircraft, traffic, rail, industrial, or other significant noise sources.
- Noise-producing projects proposed near existing or proposed noise-sensitive areas.
- Areas where implementation of the proposed 2035 General Plan policies pertaining to noise would themselves result in the exposure of people to excessive noise levels.

As discussed in Section 4.5.7, Potential Growth Scenarios, the EIR analysis considers two potential growth scenarios: Scenario 1 and Scenario 2. For this programmatic level of analysis, the analysis assumes that there will be no difference in the noise impacts that would result from different growth scenarios because the County would apply the 2035 General Plan policies, including additional policies from mitigation measures contained in the certified EIR, addressing potential noise impacts equally in approving development, regardless of location. In addition to the programmatic review provided in this analysis, it is anticipated that site specific analysis of noise impacts, including a project-level environmental review, would be required for particular development proposals under the 2035 General Plan that may be considered in the future.

Noise impacts are evaluated by projecting traffic noise generation of the proposed 2035 General Plan roadways under buildout conditions. To evaluate the potential effects of transportation-generated noise, existing and future traffic noise levels throughout San Benito County were modeled to determine the anticipated traffic noise levels along major roadways in the County. A computer model, SoundPLAN Version V7.0, was used to calculate traffic noise levels throughout the County. The model is a three-dimensional ray-tracing program, which takes into account the source of noise (traffic), the frequency spectra, and the topography of the area. The geometric data used to create the model were based on GIS information provided by the County. SoundPLAN was used to model traffic noise for land use Scenario 1 and for Scenario 2. The results showed no significant difference between the two scenarios relative to their future traffic noise related effects.

Existing peak-hour traffic conditions provided by the Council of San Benito County Governments and observed vehicle mix data and travel speeds were also input into the model. Traffic noise projections were dependent on traffic volumes and lane configurations, estimated traffic speeds based on roadway classifications, and estimated truck percentages based on traffic volume counts by vehicle type conducted by Illingworth & Rodkin, Inc. along some roadways simultaneous with noise measurements. The predicted noise levels were then compared to measured noise levels for calibration purposes, and adjustments were made as necessary to ensure accurate results.

Figure 15-1 shows the noise contours for existing conditions. Figure 15-2 displays the projected 2035 traffic noise contours in the County for major roadways. These noise contours have been developed and incorporated into the 2035 General Plan Land Use and Health and Safety Elements. The Health and Safety Element also contains projected noise levels for highways, freeways, primary arterials and major local streets, passenger and freight railroad operations, commercial aviation and heliports, military airport operations, industrial plants, and other ground stationary noise sources.

Noise contours are shown for all these noise sources and are stated in terms of the community noise equivalent level and day-high average level. The noise contours are used as a guide for establishing a pattern of land uses that minimizes the exposure of community residents to excessive noise.

15.2.3 Environmental Impacts

The following discussion examines the potential impacts of the proposed project based on the impact threshold criteria described above. Table 15-3 summarizes 2035 General Plan policies that would mitigate environmental impacts associated with noise, including an explanation of how the policy would avoid or reduce impacts.

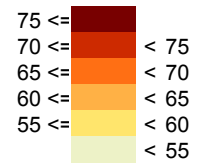
Impact NSE-1: Existing noise levels and future noise levels at the locations of proposed noise sensitive developments allowed for under the 2035 General Plan could expose people to or generate noise levels that exceed the County's noise thresholds of acceptability, established in the current General Plan or Noise Ordinance, or applicable standards of other agencies (e.g., City of Hollister General Plan) (XII.a).

Significance of Impact: Significant and unavoidable.

Potential development of sensitive uses with implementation of the 2035 General Plan could be exposed to transportation noise sources that could exceed the County's noise thresholds of acceptability. This would be a potentially significant impact.

Residential development facilitated by the 2035 General Plan would be sensitive to community noise both outdoors and indoors. Single-family residential development, schools, libraries, hospitals, convalescent homes, and places of worship are considered the most noise-sensitive land uses. High-density/mixed-use residential, commercial, and industrial development is less noise-sensitive because uses are primarily indoors, and mitigated with building design and construction. However, noise exposure adjacent to many roadways in the County could exceed acceptable levels for these uses.

**Noise Level
Ldn dB(A)**



not to scale

Source: EMC Planning Group 2014, Illingworth & Rodkin, Inc. 2012

Figure 15-1

Existing Traffic Noise Contours in Northern San Benito County

2035 San Benito County General Plan Revised DEIR

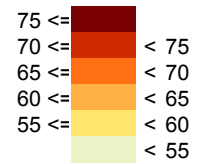
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**Noise Level
Ldn dB(A)**



not to scale

Source: EMC Planning Group 2014, Illingworth & Rodkin, Inc. 2012

Figure 15-2

2035 Traffic Noise Contours in Northern San Benito County

2035 San Benito County General Plan Revised DEIR

E

M

C

Table 15-3 2035 General Plan Goals and Policies that Mitigate Noise Impacts

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact NSE-#
Health and Safety Element		
Goal HS-8: Noise To protect the health, safety and welfare of County residents through the elimination of annoying or harmful noise levels.	States the overall goal of the County to protect the overall welfare of County residents by protecting them from adverse levels of noise and vibration.	1,3,4,6
Policy HS-8.1: Project Design The County shall require new development to comply with the noise standards shown in Tables 9-1 and 9-2 (of the General Plan) through proper site and building design, such as building orientation, setbacks, barriers (e.g., earthen berms), and building construction practices. The County shall only consider the use of soundwalls after all design-related noise mitigation measures have been evaluated or integrated into the project or found infeasible.	Establishes maximum acceptable noise levels for both transportation and non- transportation noise sources, and requires mitigation where noise levels exceed levels deemed acceptable.	1
Policy HS-8.2: Acoustical Analysis The County shall require an acoustical analysis to be performed prior to development approval where proposed land uses may produce or be exposed to noise levels exceeding the “normally acceptable” criteria (e.g. “conditionally acceptable”, “normally unacceptable”) shown in Table 9-2. Land uses should be prohibited from locating, or required to mitigate in areas with a noise environment within the “unacceptable” range.	Requires the preparation of an acoustical analysis for new noise generating uses.	1
Policy HS-8.3: Construction Noise The County shall control the operation of construction equipment at specific sound intensities and frequencies during day time hours between 7:00 am and 6:00 pm on weekdays and 8:00 am and 5:00 pm on weekends.	Protects sensitive uses from adverse levels of construction noise by limiting such noise to time periods when sensitivity is lowest.	4,6

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact NSE-#
Policy HS-8.5: Aircraft Noise The County shall prohibit new noise-sensitive development within the projected future 60 dB Ldn noise contour of any public or private airports.	Minimizes impacts to noise- sensitive uses by prohibiting new noise-sensitive development near public and private airports.	6
Policy HS-8.6: Vibration Screening Distances The County shall require new residential and commercial uses located adjacent to major freeways or railroad tracks to follow the Federal Transit Administration (FTA) screening distance criteria.	Protects future sensitive uses from adverse levels of vibration.	3

Sources: San Benito County 2012, 2014; EMC Planning Group 2014; Planning Partners 2012.

Existing and future traffic noise levels throughout the County were modeled to determine the anticipated traffic noise levels along major roadways in the County. A computer model, SoundPLAN Version V7.0, was used to calculate traffic noise levels throughout San Benito County. The model is a three-dimensional ray-tracing program, which takes into account the source of noise (traffic), the frequency spectra, and the topography of the area. The geometric data used to create the model were based on GIS information provided by San Benito County. The resulting noise information for both existing and 2035 conditions is presented in [Table 15-4](#).

Where exterior noise levels exceed 60 dBA L_{dn} in new residential development, interior levels may exceed 45 dBA L_{dn} . Interior noise levels within residential units would be 20-25 decibels lower than exterior noise levels with the windows closed, assuming typical state construction methods. Where exterior day-night average noise levels are 60 to 70 dBA L_{dn} , interior noise levels can typically be maintained below 45 dBA L_{dn} with the incorporation of an adequate forced air mechanical ventilation system in the residential units to allow residents the option of controlling noise by keeping the windows closed. In areas exceeding 70 dBA L_{dn} , the inclusion of windows and doors with high sound transmission class ratings, and the incorporation of forced-air mechanical ventilation systems, may be necessary to meet 45 dBA L_{dn} .

The Health and Safety Element of the 2035 General Plan contains one goal and two policies that focus on the protection of sensitive uses from adverse levels of noise. The Health and Safety Element goals and policies also provide standards for noise generating and receiving uses. These policies would protect those uses that are sensitive to noise from high noise levels and noise generating uses by limiting such uses in areas of high noise levels. [Table 15-3](#) includes goals and policies from the 2035 General Plan that communicate the County's intention to regulate the noise environment to accomplish these purposes.

Table 15-4 Existing and Future L_{dn} Noise Levels Along San Benito County Roadways

Roadway	Segment	L _{dn} at 100 feet from Roadway Centerline (dBA)			L _{dn} Noise Increase (dBA) ¹	
		Existing	2035		Scenario1	Scenario2
			Scenario1	Scenario2		
Cienega Rd.	Union Rd. to Hospital Rd.	56	57	57	1	1
Fairview Rd.	Union Rd ext. to Airline Highway	63	68	67	5	4
Fairview Rd.	Hillcrest Rd. to Sunnyslope Rd.	64	70	67	6	3
Fairview Rd.	Meridian St. to Hillcrest Rd.	65	71	69	6	4
Fairview Rd.	McCloskey Rd. to Santa Ana Rd.	65	71	67	6	2
Fairview Rd.	Fallon Rd. to McCloskey Rd.	65	66	65	1	0
Fairview Rd.	Highway 156 to Orchard Rd.	64	65	65	1	1
Fairview Rd.	San Felipe Rd. to Highway 156	65	66	67	1	2
Fallon Rd.	San Felipe Rd. to Fairview Rd.	65	64	67	-1	2
Frazier Lake Rd.	Bloomfield Av. to Pacheco Pass Hwy (152)	62	63	63	1	1
Frazier Lake Rd.	Shore Rd. to Bloomfield Av.	63	64	64	1	1
Hillcrest Rd.	San Benito St. to Clearview Dr.	58	62	61	4	3
Hillcrest Rd.	Clearview Dr. to Fairview Rd.	55	57	57	2	2
John Smith Rd.	Fairview Rd. to Best Rd.	62	64	64	2	2
Ladd Ln.	Southside Rd. to Nash Rd.	58	69	63	11	5
McCloskey Rd.	San Felipe Rd. to Fairview Rd.	63	64	64	1	1
Nash Rd.	San Benito St. to Airline Highway	61	64	63	3	2
North St.	Western terminus to San Felipe Rd.	61	63	63	2	2
Ridgemark Dr.	Airline Highway to Joes Ln.	59	61	60	2	1
Salinas Rd	Highway 156 to San Juan Hollister Rd.	58	59	57	1	-1
San Benito St.	Nash Rd. to Union Rd.	59	61	60	2	1
San Benito St.	Nash Rd. to 4th St.	66	69	69	3	3
San Benito St.	4th St. to Santa Ana Rd.	68	70	71	2	3
San Felipe Rd.	Santa Ana Rd. to Hwy 25 Bypass	68	73	70	5	2
San Felipe Rd.	Wright Rd./McCloskey Rd. to	65	66	66	1	1

Roadway	Segment	Ldn at 100 feet from Roadway Centerline (dBA)			Ldn Noise Increase (dBA) ¹	
		Existing	2035		Scenario1	Scenario2
			Scenario1	Scenario2		
	Highway 25					
San Felipe Rd.	Fallon Rd. to Wright Rd./McCloskey Rd.	63	64	63	1	0
San Felipe Rd.	Highway 156 to Fallon Rd.	60	61	63	1	3
San Felipe Rd.	Shore Rd./Fairview Rd. to Highway 156	60	64	62	4	2
San Felipe Rd.	Highway 152 to Shore Rd./Fairview Rd.	57	66	58	9	1
Santa Ana Rd.	San Felipe Rd. to Fairview Rd.	60	62	66	2	6
Santa Ana Valley Rd.	Fairview Rd. to Quien Sabe Rd.	60	62	64	2	4
Shore Rd.	Frazier Lake Rd. to San Felipe Rd.	57	57	57	0	0
Shore Rd.	Highway 25 to Frazier Lake Rd.	62	62	62	0	0
Southside Rd.	Thomas Rd. to Airline Highway	62	62	62	0	0
Southside Rd.	Enterprise Rd. to Blossom Ln.	61	63	63	2	2
Southside Rd.	Union Rd. to Enterprise Rd.	63	64	64	1	1
Southside Rd.	Ladd Ln. to Union Rd.	63	65	64	2	1
Sunnyslope Rd.	Airline Highway to Fairview Rd.	62	64	63	2	1
The Alameda (SJB)1	Highway 156 to San Juan Hollister Rd.	62	65	65	3	3
The Alameda (SJB)2	Franklin St. to Highway 156	66	69	68	3	2
Union Rd.	Airline Highway to Valley View Rd.	65	67	66	2	1
Union Rd.	Southside Rd. to Airline Highway	65	67	66	2	1
Union Rd.	San Benito St. to Southside Rd.	64	66	65	2	1
Union Rd.	Cienega Rd. to San Benito St.	65	69	69	4	4
Union Rd.	Nothing Rd. to Cienega Rd.	62	71	65	9	3
Union Rd.	Highway 156 to Nothing Rd.	63	73	66	10	3
Wright Rd.	Highway 25 to San Felipe Rd.	56	57	57	1	1

Roadway	Segment	Ldn at 100 feet from Roadway Centerline (dBA)			Ldn Noise Increase (dBA) ¹	
		Existing	2035		Scenario1	Scenario2
			Scenario1	Scenario2		
Wright Rd.	Buena Vista Rd. to Highway 25	63	68	67	5	4

Source: Illingworth & Rodkin, Inc. 2012, EMC Planning Group 2014.

Note: ¹Substantial noise level increases (i.e., 3 dBA Ldn or greater) are indicated in ***bold italicized*** font.

The implementation of Policies HS-8.1 and HS-8.2 as set forth in the 2035 General Plan would require new development to comply with the County's noise standards and would require new sensitive development proposed in areas with high noise levels to have an acoustical analysis prepared. Within the 2035 General Plan, Table 9-1, *Non-Transportation Noise Level Performance Standards for Noise-Sensitive Uses* (see Table 15-5 on the following page) and Table 9-2, *Land Use Compatibility Guidelines for Community Noise Environments* (see Table 15-1 above) are to be used to determine where noise levels in the community are acceptable or unacceptable.

Table 15-5 2035 General Plan Non-Transportation Noise Level Performance Standards for Noise-Sensitive Uses

Noise Level Descriptor	Daytime (7:00 am – 10:00 pm)	Nighttime (10:00 pm – 7:00 am)
Hourly Leq dB	55	45
Maximum Level, dB	70	65

Source: San Benito County 2014a.

Note: These standards apply to new or existing residential areas affected by new or existing non-transportation sources.

The policies and implementing actions, however, do not establish an acceptable interior noise level threshold. At a minimum, the interior noise limits set forth in the State Building Code (45 dBA L_{dn}) should be extended to all sensitive residential land uses in the County.

Mitigation Measure:

NSE-1. Add the following policy to the 2035 General Plan Health and Safety Element:

Policy HS-8.9 Interior Noise Standards

Adopt the State of California Code of Regulations' (Title 24) minimum noise insulation interior performance standard of 45 dBA Ldn for all new residential construction including hotels, motels, dormitories, apartment houses, and single-family dwellings.

Because this mitigation measure would result in additional protection against significant and adverse levels of noise arising from the development of urban and other uses and infrastructure identified in the 2035 General Plan, there would be no additional impacts to sensitive uses on private property beyond those identified for such development in Chapters 5 through 22 of this RDEIR. The proposed policies, in combination with the mitigation measures described above, would reduce potential impacts associated with noise and land use compatibility to a less-than-significant level for sensitive land uses on private property and surrounded by private property within the unincorporated portion of the County. According to County Code Chapter 19.39.051, some land uses and activities are exempt from the 2035 General Plan goals and policies and the County noise ordinance. Because the existing and proposed 2035 General Plan goals and policies and the County noise ordinance do not apply to certain agricultural operations, park and school facilities, state highways, or to commercial and industrial activities and other exempt uses, noise-generating uses may still impact sensitive uses. This impact would remain significant and unavoidable.

Impact NSE-2: New noise-producing land uses could expose persons or generate noise levels that would exceed the County's noise thresholds of acceptability established in the current General Plan or Noise Ordinance, or applicable standards of other agencies (e.g., City of Hollister General Plan) (XII.a).

Significance of Impact: Significant and unavoidable.

Potential development of noise generating land uses with implementation of the 2035 General Plan could expose existing sensitive uses to noise levels that could exceed the County's noise thresholds of acceptability. Mixed-use development projects often include residential uses located above or in proximity to commercial uses, and are located in areas served by rail and bus transit along major roadways and the railroad corridor.

The most significant source of noise associated with intermittent railroad trains is a train's warning whistle. Unless a "quiet zone" has been established, trains that travel at a speed less than 45 mph are required to sound their warning whistle at all public grade crossings for at least 15 seconds, but not more than 20 seconds prior to entering a crossing to warn pedestrians and motorists of the oncoming train. These warning whistles can produce maximum noise levels up to 110 dBA $L_{\max}$ at 50 feet (dBA $L_{\max}$ is the most common unit used for measuring environmental sound levels (dBA) at the maximum level of noise measured during a given measurement period ($L_{\max}$)).

Trains also result in groundborne vibration. Assuming a travel speed of 30 to 35 mph, groundborne vibration levels would be expected to reach the Federal Transit Administration threshold level of 80 VdB for infrequent events within approximately 50 to 75 feet from the centerline of the railroad track.

Also, new office, commercial, retail, or other noise-generating uses developed under the 2035 General Plan could substantially increase noise levels at noise-sensitive land uses, or could expose receivers to noise levels that exceed the County noise control regulation limits.

Future operations at existing and proposed noise-producing land uses are dependent on many variables, and information is unavailable that would allow meaningful projections of noise. Noise conflicts may be caused by noise sources such as outdoor dining areas or bars, mechanical equipment, outdoor maintenance areas, truck loading docks and delivery activities, public address systems, and parking lots (e.g., opening and closing of vehicle doors, people talking, car alarms). Development under the proposed 2035 General Plan would introduce new noise-generating sources adjacent to existing noise-sensitive areas, and new noise-sensitive uses adjacent to existing noise sources.

As shown in [Table 15-3](#), the implementation of Policy HS-8.1 would require new development to comply with the County's noise standards. New noise-generating projects would be subject to the County's non-transportation noise level performance standards for noise-sensitive uses (see [Table 15-5](#)) and the County's noise control regulation ordinance, so existing residences and other noise-sensitive land uses should not be exposed to excessive noise. Policy HS-8.2 requires an acoustical analysis to be performed prior to development approval where proposed land uses may produce noise levels exceeding the "normally acceptable" criteria (e.g., "conditionally acceptable," "normally unacceptable") shown in [Table 15-1](#). With the implementation of the proposed 2035 General Plan policies, the impact resulting from the generation of noise levels in excess of standards established in any applicable plan or noise ordinance that occur on private property within the unincorporated portion of the County would be considered less than significant for those uses subject to General Plan and County Code requirements.

However, according to County Code Chapter 19.39.051, several land uses and activities are exempt from general plan goals and policies and the County noise ordinance. Because the existing and proposed 2035 General Plan goals and policies and the County noise ordinance do not apply to certain agricultural operations, park and school facilities, state highways, or to commercial and industrial activities, and other exempt uses, the potential development of new noise generating land uses that are exempt from the noise ordinance may expose existing sensitive uses to noise levels that exceed the County's noise thresholds of acceptability. Impacts would remain significant and unavoidable.

Impact NSE-3: Expose people to or generate excessive groundborne vibration or groundborne noise levels. (XII.b)

Level of Significance: Less than significant, no mitigation required.

The 2035 General Plan could facilitate the construction of sensitive land uses within portions of the County where known vibration sources exist or are currently planned, primarily along the existing active railroad corridors or where groundborne noise levels exceed County noise standards. Because proposed County policies would evaluate and avoid this potential effect, this impact would be less than significant.

Ground vibration from railroad trains passing through the County could exceed the guidelines set forth by the FTA if new buildings are constructed within approximately 100 feet of the tracks. The proposed locations of buildings and their specific sensitivity to vibration are not known at this time; however, such uses located in these areas could be exposed to ground vibration or groundborne noise levels exceeding FTA guidelines. Sensitive land uses could also be constructed within portions of the County where groundborne noise levels currently exceed County noise standards or could exceed County noise standards in the future, which would expose sensitive land uses to excessive groundborne noise. Groundborne noise levels could be exceeded in or generated in areas near major transportation corridors, major arterials, and heavily used local roadways.

The protection of sensitive uses from adverse levels of vibration and groundborne noise is addressed by the 2035 General Plan. The Health and Safety Element includes a goal and policy that provide standards for acceptable levels of vibration and groundborne noise that would protect new uses that are sensitive to vibration from high vibration levels. [Table 15-3](#) includes the goal and policy from the 2035 General Plan that communicate the County's intention to regulate the vibration and noise environment to accomplish these purposes.

Policy HS-8.6 of the 2035 General Plan requires new residential and commercial uses to follow FTA vibration impact criteria. Pursuant to this policy, the County would require that individual development projects undergo project-level environmental review. The FTA vibration impact criteria would be used to evaluate the land use compatibility of sensitive uses proposed along the railroad corridor using the best available information, or site-specific measurements and analyses (assuming active railroad operations). Developers of sensitive uses would be required to demonstrate that the potential impacts of existing or potential vibration and groundborne noise have been minimized to the maximum feasible extent. The implementation of this policy would reduce the impact to a less-than-significant level.

Impact NSE-4: The anticipated increase in vehicular traffic and other sound-generating activities resulting from development under the 2035 General Plan would result in a permanent increase in ambient noise levels above levels existing without the 2035 General Plan, and in some cases, the increases would be substantial (XII.c).

Level of Significance: Significant and unavoidable.

Implementation of the 2035 General Plan could lead to increases in transportation-generated noise levels along existing streets and highways. Increased noise levels could exceed noise levels deemed acceptable by the County for existing sensitive uses. This would be a potentially significant impact.

Increases in traffic noise gradually degrade the environment in areas sensitive to noise. According to CEQA, “a substantial increase” is necessary to cause a significant environmental impact. An increase of three dBA L_{dn} is considered substantial in noise sensitive areas along roadways analyzed in San Benito County.

Vehicular traffic on roadways in the County would increase as development occurs and the County’s population increases. These projected increases in traffic would occur over time, and would increase noise levels throughout the County. Traffic noise levels throughout the County were projected for 2035 General Plan build-out to determine how changes in vehicular traffic volumes would affect traffic noise levels. Noise impacts resulting from buildout of the 2035 General Plan were assessed by comparing projected noise levels to existing conditions.

Growth expected by 2035, in and around San Benito County, would increase traffic noise levels on U.S. Highway 101 and State Routes 25, 129, and 156. Traffic noise levels along U.S. Highway 101 are calculated to increase by two dBA L_{dn} by 2035. Traffic noise levels along State Route 25 are expected to increase by one to five dBA L_{dn} overall, with substantial noise increases (i.e., 3 dBA L_{dn} or greater) expected northwest of the City of Hollister between Shore Road and San Felipe Road, and southeast of the City of Hollister along segments south of Sunnyslope Road. Along State Route 129, traffic noise levels are calculated to increase by three dBA L_{dn} . Traffic noise levels along State Route 156 are expected to increase by zero to two dBA L_{dn} . The relative increase in traffic noise along other major County roadway segments are summarized in [Table 15-4](#).

Traffic noise increases of three dBA L_{dn} or more would be considered substantial at noise sensitive areas adjoining identified segments of State Routes 25 and 129. Additional roadway segments along Fairview Road, Frazier Lake Road, Hillcrest Road, McCloskey Road, North Street, Salinas Road, Santa Ana Road, Santa Ana Valley Road, Shore Road, Southside Road, The Alameda, Union Road, and Wright Road would also experience a substantial increase in noise as a result of growth facilitated by the 2035 General Plan. The largest relative traffic noise

increases are expected in rural areas with low existing traffic volumes. Because increased levels of traffic that would occur with implementation of the 2035 General Plan would result in adverse noise levels at existing sensitive uses, this impact would be potentially significant.

Case studies have shown that the replacement of dense grade asphalt (standard type) with open-grade or rubberized asphalt can reduce traffic noise levels along local roadways by two to three dBA L_{dn} . A possible noise reduction of two dBA would be expected using conservative engineering assumptions, and future traffic noise increases could be mitigated to a less-than-significant level by repaving roadways with “quieter pavements.” To be a permanent mitigation, subsequent repaving would also have to use “quieter” pavements.

Under the 2035 General Plan, future development of new noise-generating land uses could occur within areas containing noise-sensitive land uses. However, the 2035 General Plan includes policies that would ensure that no noise-sensitive land uses would be exposed to noise levels generated by new noise-producing uses in excess of County standards as shown in [Tables 15-2 and 15-5](#), to the extent such standards applied and were not exempted under the applicable standards. Under the 2035 General Plan, future development of noise-generating uses (e.g., industries, commercial loading docks, automotive maintenance facilities, recreational areas, wastewater treatment plants, etc.) in areas containing noise-sensitive land uses (e.g., residential dwellings, schools, hospitals, parks, hotels, places of worship, libraries) could cause noise levels to exceed acceptable limits as described above.

As shown in [Table 15-3](#), 2035 General Plan Policies HS-8.1 and HS-8.2 require use of project-specific noise mitigation measures (completion of acoustical studies, use of buffering, and implementation of other noise abatement measures, as necessary) to mitigate this impact. Implementation of the 2035 General Plan policies as described above would reduce, but not avoid, the potential for noise levels generated by new noise-producing land uses to exceed the standards since there are no specific policies in the 2035 General Plan that address new stationary sources of noise adjacent to existing sensitive land uses.

According to the County Code Chapter 19.39.051, several land uses and activities are exempt from the 2035 General Plan goals and policies and the County noise ordinance. Because the existing and proposed general plan goals and policies and the County noise ordinance do not apply to certain agricultural operations, park and school facilities, state highways, or to commercial and industrial activities, and other exempt uses, the potential development of new noise generating land uses that are exempt from the County’s noise ordinance may expose existing and future sensitive uses to noise levels that exceed the County’s noise thresholds of acceptability.

In situations where private outdoor use areas are located adjacent to the roadway or new noise generating land use, new or larger noise barriers could be constructed to provide the additional

necessary noise attenuation in private use areas. Typically, increasing the height of an existing barrier results in approximately 1 dBA of attenuation per one foot of additional barrier height.

It is anticipated that the design of such noise barriers would occur in connection with specific development projects to ensure a site-specific approach to inclusion of a noise barrier that could successfully reduce noise levels to below applicable standards. Traffic calming could also be implemented in certain locations to reduce noise levels expected with the project. Each 5 mph reduction in average speed provides approximately 1 dBA of noise reduction on an average basis (L_{eq}/C_{NEL}). Traffic calming measures that regulate speed improve the noise environment by smoothing out noise levels.

Residences could also be provided with sound insulation treatments if interior noise levels within the affected residential units would exceed 45 dBA L_{dn} as a result of the projected increase in traffic noise. Treatments to the homes may include the replacement of existing windows and doors with sound-rated windows and doors, and the provision of a suitable form of forced-air mechanical ventilation to allow the occupants the option of controlling noise by closing the windows. The specific treatments for each affected residential unit would be identified on a case-by-case basis.

Each of these measures involves other non-acoustical considerations. Other engineering issues may dictate continued use of dense grade asphalt. Noise barriers and sound insulation treatments must be implemented on private property, necessitating agreements with each property owner.

Mitigation Measure:

NSE-4. Add the following policies to the 2035 General Plan Health and Safety Element:

Policy HS-8.10 Reduction in Noise Levels at Existing Land Uses

Reduce traffic noise levels where expected to significantly impact sensitive receptors through the installation of noise control measures such as quiet pavement surfaces, noise barriers, traffic calming measures, and interior sound insulation treatments.

Policy HS-8.11 New Project Noise Mitigation Requirements

Require new projects to include appropriate noise mitigation measures to reduce noise levels in compliance with the Table 9-1 and 9-2 standards within sensitive areas. If a project includes the creation of new non-transportation noise sources, require the noise generation of those sources to be mitigated so they do not exceed the interior and exterior noise level standards of Table 9-2 at existing noise- sensitive areas in the project vicinity, unless an exception is made by the County on a case-by-case basis. However, if a noise-generating use is proposed adjacent to lands zoned for residential uses, then the noise generating use shall be responsible for mitigating its noise generation to a state of

compliance with the standards shown in Table 9-2 at the property line of the generating use in anticipation of the future residential development, unless an exception is made by the County on a case-by-case basis.

Because these mitigation measures could result in the construction of noise barriers, a project-level evaluation of visual impacts and traffic hazards in connection with the specific development proposal would likely be required on a case-by-case basis to ensure that barrier design does not conflict with pertinent 2035 General Plan policies and otherwise to ensure that all environmental impacts are evaluated. In addition, traffic calming could cause changes in traffic circulation that could inadvertently shift a potential noise impact to another noise-sensitive location.

The 2035 General Plan policies and Mitigation Measure NSE-4, used individually or collectively, could result in a reduction of traffic noise levels at affected sensitive receptor locations. Nonetheless, despite the implementation of such a noise abatement program, it is not possible to ensure that all affected existing residential uses would not be exposed to future traffic noise levels exceeding the County's noise standards, or significantly exceeding the levels they are exposed to today. For example, it may not be possible to construct a noise barrier at an existing residence due to engineering constraints (utility easements or driveway openings), and building façade sound insulation would only benefit interior spaces, so outdoor activity areas may still be affected. In addition, busy streets tend to also serve commercial uses, so restricting trucks on the busier streets may be impractical or illegal.

Although a combination of the listed measures could be highly effective in reducing traffic noise levels on a countywide basis, it is not possible to state with absolute certainty that it would be possible to mitigate this impact at every noise-sensitive use within the County. Additionally, existing County regulations exempt a wide range of future noise generating activities from the 2035 General Plan and Noise ordinance standards. As a result, this impact would remain significant and unavoidable.

Impact NSE-5: Construction noise could cause a temporary or periodic increase in noise exposure above ambient levels existing without the 2035 General Plan, which could be substantial (XII.d).

Level of Significance After Mitigation: Less than significant with mitigation.

The 2035 General Plan would facilitate the construction of new projects within the County. Residences and businesses located adjacent to proposed development sites could be affected at times by construction noise. This would be a potentially significant impact.

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction noise impacts

primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time. For the purposes of this assessment, noise levels exceeding 60 dBA L_{eq} and the ambient noise environment by 5 dBA L_{eq} or more at nearby noise-sensitive land uses (e.g., residential land uses) for a period of more than one construction season would be considered significant. Where noise from construction activities exceeds 70 dBA L_{eq} and the ambient noise environment by 5 dBA L_{eq} or more at sensitive industrial, office, or commercial land uses for a period of more than one construction season, the impact would also be considered significant.

Major noise-generating construction activities associated with new projects would include removal of existing pavement and structures, site grading and excavation, the installation of utilities, the construction of building cores and shells, paving, and landscaping. The highest construction noise levels would be generated during grading and excavation because of the use of heavy equipment, with lower noise levels occurring during building construction activities when activities move indoors, and less heavy equipment is required. Construction equipment would typically include, but would not be limited to, earth-moving equipment and trucks, pile driving rigs, mobile cranes, compressors, pumps, generators, paving equipment, and pneumatic, hydraulic, and electric tools. [Table 15-6](#) presents the typical range of hourly average noise levels generated by different phases of construction, measured at a distance of 50 feet.

Hourly average noise levels generated by demolition and construction are about 77 dBA to 89 dBA L_{eq} measured at a distance of 50 feet from the center of a busy construction site. Large pieces of earth-moving equipment, such as graders, scrapers, and bulldozers, generate maximum noise levels of 85 to 90 dBA L_{max} at a distance of 50 feet. Typical hourly average construction-generated noise levels are about 81 to 89 dBA L_{eq} measured at a distance of 50 feet from the site during busy construction periods. During each stage of development, there would be a different mix of equipment operating, and noise levels would vary based on the amount of equipment in operation and the location of the activity.

These noise levels decline at a rate of about 6 dBA per doubling of distance between the noise source and receptor. Intervening structures or terrain would result in lower noise levels. The protection of sensitive uses from construction noise is a focus of the 2035 General Plan. The Health and Safety Element includes a goal and policy that provide standards for construction noise that would help reduce construction-related impacts to existing uses. [Table 15-3](#) includes the goal and policy from the 2035 General Plan that communicate the County's regulation of construction noise.

Table 15-6 Typical Ranges of Noise Levels at 50 Feet from Construction Sites (dBA, L_{eq})

	A		B		C		D	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

Source: USEPA 1973.

Notes: I = All pertinent equipment present at site; II = Minimum required equipment present at site; A = Domestic Housing, B = Office Building, Hotel, Hospital, School, Public Works; C = Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station; D = Public Works Roads & Highways, Sewers, and Trenches.

Policy HS-8.3 limits construction activities to between the hours of 7:00 a.m. to 6:00 p.m. on weekdays, and within the hours of 8:00 a.m. to 5:00 p.m. on weekends. [Table 9-1](#) in the 2035 General Plan Health and Safety Element limits non-transportation noise level performance standards for noise-sensitive land uses, see [Table 15-5](#). Table 9-2 in the 2035 General Plan Health and Safety Element outlines land use compatibility guidelines for community noise environments, see [Table 15-1](#). SBC Code §19.39.030 limits received noise generated by any source at a property line, see [Table 15-2](#). SBC Code §19.39.051(H) exempts temporary construction, demolition or maintenance of structures from the noise level standards provided that activities are limited to between the hours of 7:00 a.m. and 7:00 p.m., except on Sundays and federal holidays.

Large construction projects facilitated by the 2035 General Plan may result in a substantial temporary noise increase at adjacent noise-sensitive land uses outside the hours of 7:00 a.m. and 7:00 p.m. As a result, noise levels from these projects could exceed 60 dBA L_{eq} and the ambient noise environment by 5 dBA L_{eq} or more, and last over one year in duration. Thus, the development of a mitigation measure would be required in addition to the new 2035 General Plan policies to ensure that construction noise impacts are reduced to a less-than-significant level.

Mitigation Measures:

NSE-5a. Amend the following policy in the 2035 General Plan Health and Safety Element to achieve consistency with §19.39.051 of the San Benito County Code:

Policy HS-8.3 Construction Noise

The County shall control the operation of construction equipment at specific sound intensities and frequencies during day time hours between 7:00 a.m. and 6:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on ~~weekends~~ Saturdays. No construction shall be allowed on Sundays or federal holidays.

NSE-5b. Revise San Benito County Code §19.39.051 (H) of the San Benito County Code of Ordinances to achieve internal consistency with 2035 General Plan Policy HS-8.3. The revised Ordinance should limit, limiting noise generating construction activities to between the hours of 7:00 a.m. to 6:00 p.m. on weekdays and 8:00 am and 5:00 pm on Saturdays. No construction shall be allowed on Sundays or federal holidays.

NSE-5c. Add the following policies to the 2035 General Plan Health and Safety Element:

Policy HS-8.12: Construction Noise Control Plans

Require all construction projects to be constructed within 500 feet of sensitive receptors to develop and implement construction noise control plans that consider the following available controls in order to reduce construction noise levels as low as practical:

- Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists;*
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;*
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;*
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;*
- Prohibit all unnecessary idling of internal combustion engines;*
- Notify all abutting land uses of the construction schedule in writing; and*
- Designate a "disturbance coordinator" (e.g. contractor foreman or authorized representative) who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.*

Because these mitigation measures would result in additional protection against adverse levels of noise arising from the construction of urban uses and infrastructure identified in the 2035

General Plan, there would be no additional impacts beyond those identified for such development in Chapters 5 through 22 of this RDEIR.

The potential short-term noise impacts associated with construction facilitated by the 2035 General Plan would be mitigated by the adoption and implementation of the above policies that require reasonable noise reduction measures be incorporated into the construction plan and implemented during all phases of construction activity to minimize the exposure of neighboring properties. This measure, in combination with the amended limitations on hours set forth in the 2035 General Plan and County Code, would reduce the impact to a less-than-significant level.

Impact NSE-6: Development under the 2035 General Plan within the Hollister Municipal Airport or the Frazier Lake Airpark airport land use compatibility plan areas, or a private airstrip could expose people living or working within the plan area to excessive noise levels (XII.e, XII.f).

Level of Significance: Less than significant with mitigation.

Implementation of the 2035 General Plan could lead to the development of sensitive land uses in areas that would be subject to adverse noise levels from aircraft operations and introduce new uses within the airport land use compatibility plan areas that could expose existing sensitive land uses to additional excessive noise levels not from aircraft. This would be a potentially significant impact.

Aircraft noise in California is described in terms of the community noise equivalent level (CNEL), which is approximately equivalent to the day/night average noise level (L_{dn}), but includes a 5 dB weighting factor for the evening hours (7:00 p.m. to 10:00 p.m.). The 65 dBA CNEL noise contours generated by Hollister Municipal Airport and the Frazier Lake Airpark are generally limited to the airport boundaries. Sixty-five dBA CNEL is considered the maximum allowable noise level that would be compatible with noise-sensitive land uses.

The San Benito County ALUC has jurisdiction over the compatibility of new land uses in the vicinity of airports. The ALUC promotes compatible land uses around the Hollister Municipal Airport and the Frazier Lake Airpark through the implementation of the comprehensive land use plans for the airport/airpark, and establishes 55 dBA CNEL as the “Noise Restriction Area.” Within the 55 dBA CNEL Noise Restriction Area, an acoustical analysis is required by the County demonstrating how dwelling units have been designed to meet an interior noise level of 45 dBA CNEL. However, the ALUC and its airport land use compatibility plan areas do not prevail over the County’s land use authority. Instead, the ALUC makes compatibility findings and recommendations, and the County can ignore or override the land use inconsistencies with findings.

The 2035 General Plan Land Use Diagram indicates that only non-noise sensitive agricultural land uses, light industrial land uses, and heavy industrial land uses would be sited in the vicinity of the Hollister Municipal Airport and the Frazier Lake Airpark. Noise from aircraft would not be excessive at these non-noise sensitive land uses. This minimizes the potential that the 2035 General Plan would introduce new uses within the airport land use compatibility plan areas that could expose sensitive land uses to new and additional excessive noise levels. Further, the County would require that any individual development projects within noise-impacted areas, including development projects near existing private airstrips undergo project-level environmental review, and if significant project-level aircraft and other sources of excessive noise impacts or impacts from the projects themselves are identified, specific mitigation measures would be required under CEQA.

The protection of sensitive uses from aircraft noise is addressed by the 2035 San Benito County General Plan. The Health and Safety Element includes a goal and policy that provide standards for construction noise that would protect existing uses. [Table 15-3](#) includes the goal and policy from the 2035 San Benito County General Plan that communicate the County's policies with respect to aircraft noise.

Policy HS-8.3 protects sensitive uses by limiting construction equipment noise to certain times during the day. HS-8.5 prohibits new noise-sensitive development within the projected future 60 dB L_{dn} noise contours of any public or private airports. This policy is consistent with the *Hollister Municipal Airport Land Use Compatibility Plan*. Under the compatibility plan's basic compatibility criteria, policy 3.2.5 outlines restricted development uses according to maximum acceptable exterior noise levels. Policy 3.2.5(a) minimizes noise-sensitive development in noisy areas around the airport by prohibiting new residential development and the creation of new residential lots or increased density on existing lots within the airport-related 60 dB CNEL contour. Although policy 1.4.5 of the compatibility plan lists exceptions to policy 3.2.5, these exceptions are limited to residential and family day care home development within safety zone 1 and the CNEL 65 dB contour. Currently policy 4.3.1 the Frazier Lake Airpark comprehensive land use plan states the maximum CNEL considered acceptable for residential uses in the vicinity of the airport is 55 dB CNEL contour. This standard is slightly more restrictive than the maximum noise level allowed under proposed 2035 General Plan, which limits residential development within the 60 dB CNEL contour.

Mitigation Measure:

NSE-6. Amend the following policy in the 2035 General Plan Health and safety element:

Policy HS-8.5 Aircraft Noise

The County shall prohibit new noise-sensitive development within the projected future 60 dB L_{dn} noise contour of any public or private airports and private airstrips, and require that new noise-

sensitive development within the projected future 55-60 dB CNEL complete an acoustical analysis demonstrating how residential units have been designed to meet an interior noise level of 45 dB CNEL.

Because this mitigation measure would result in additional protection against adverse levels of noise arising from the siting of potential uses adjacent to airports and private airstrips as identified in the 2035 General Plan, there would be no additional impacts beyond those identified for such development in Chapters 5 through 22 of this RDEIR.

With the incorporation of mitigation, the County would require that individual development projects undergo project-level environmental review, and if significant project-level aircraft noise impacts from both public and private airports and private airstrips are identified, specific mitigation measures would be required under CEQA. Further, because the 2035 General Plan limits development within airport land use compatibility plan areas to non-noise sensitive land uses, the Plan would not introduce new noise-generating uses within the airport land use compatibility plan areas that could expose existing sensitive land uses to new and additional excessive noise levels. Also, by ensuring compliance with local airports comprehensive land use plans, the *Hollister Municipal Airport Land Use Compatibility Plan*, the County's acceptable noise level standards, and not allowing new uses within airport land use compatibility plan areas that would produce excessive noise levels, implementation of these policies would effectively reduce potential program-level aircraft noise impacts to a less-than-significant level.