

2.10 Noise

This section evaluates existing conditions for the ambient noise environment and noise sensitive uses relative to the Project areas addressed in this SEIR, and the potential effects that implementation of the proposed Project may have on these conditions.

2.10.1 Existing Conditions

The adequacy of the existing conditions information for this environmental topic as provided in the General Plan Update Program EIR has been confirmed through re-checking of the references pertaining to this section in Chapter 5.0 of the General Plan Update Program EIR, including all relevant listed persons, plans, policies, and websites. In addition, this information has been confirmed through consultation/interviews with appropriate County or other agency staff, as available, that were involved in the preparation/review of this section of the General Plan Update Program EIR and/or supporting technical studies; all of these sources are listed in Chapter 6.0 of the General Plan Update Program EIR. The existing conditions information for this environmental topic as provided in the General Plan Update Program EIR applies equally to the Project areas addressed in this SEIR, and is therefore not repeated here.

2.10.2 Regulatory Framework

The regulatory framework discussion in the General Plan Update Program EIR as pertains to air quality has not changed since adoption of the General Plan Update in August 2011. Therefore, the regulatory framework applies equally to the Project areas addressed in this SEIR, and is therefore not repeated here.

2.10.3 Analysis of Project Effects and Cumulative Impacts

For the cumulative impact analyses, the geographic scope for each of the issues below would be the same as described and evaluated in the General Plan Update Program EIR, and as updated in Section 1.9 of this SEIR (Cumulative Project Assessment Overview).

2.10.3.1 Excessive Noise Levels

This section describes potential direct and cumulative impacts associated with excessive noise levels as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and County of San Diego Guidelines for Determining Significance, Noise, the proposed Project would have a significant impact if it would result in the exposure of any existing or reasonably foreseeable future noise sensitive land uses to exterior or interior noise, including existing and planned Mobility Element roadways, railroads, and all other noise sources (with the exception of airports, which is discussed in Section 2.10.5), in excess of any of the following:

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a. Exterior Locations:

- Roadways and all other noise sources: 60 or 65 dBA¹ Community Noise Equivalent Level (CNEL) in the Noise Compatibility Guidelines or an increase of 10 dBA (CNEL) over pre-existing noise in areas where the ambient noise level is 49 dBA (CNEL) or less.
- Railroads: 60 dBA (CNEL) or an increase of 10 dBA (CNEL) over pre-existing noise in areas where the ambient noise level is 49 dBA (CNEL) or less.

b. Interior Locations

- 45 dBA (CNEL)

Impact Analysis

The General Plan Update Program EIR determined that buildout under the General Plan Update would result in potentially significant direct and cumulative impacts related to the exposure of sensitive land uses to excessive noise level. These impacts would be reduced to a less than significant level through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and, specific mitigation measures/implementation programs identified in the General Plan Update Program EIR.

Similar direct and cumulative impacts related to excessive noise levels would occur with the proposed Project. Roadway systems are the most predominant source of noise exposure in the County, followed by airport noise and rail operations. Development naturally occurs in proximity to roadways and railroad corridors. As such, future development under the proposed Project located near roadways or railroads would have the greatest potential to expose noise sensitive land uses to excessive noise levels. The greatest increase in traffic associated with the proposed Project, and therefore increases noise levels, would be concentrated in the Community of Alpine; refer to Appendix D, Traffic Impact Assessment, of this SEIR. In order to provide a worst-case scenario, the increase in traffic along the identified deficient roadway segments in Alpine that would affect adjacent existing sensitive receptors are listed in Table 2.10-1, Forecast Project Impacts General Plan Update Amendment (FCI Lands). In addition, the proposed Project would result in the redesignation of former FCI lands that were not previously subject to noise compatibility criteria (i.e. forest land to village residential). Such potentially significant impacts resulting from implementation of the proposed Project would be reduced by the same regulations, implementation programs (General Plan Update goals/policies) and mitigation measures from the General Plan Update Program EIR and repeated in Section 2.10.4.1, below.

¹ Some frequencies of noise are more noticeable than others. To compensate for this, different sound frequencies are weighted more heavily (A-weighted) so that the response of the average human ear is simulated.

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As such, implementation of the proposed Project would result in less than significant direct and cumulative impacts related to excessive noise levels.

2.10.3.2 Excessive Groundborne Vibration

This section describes potential direct and cumulative impacts associated with the excessive groundborne vibration as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and County of San Diego Guidelines for Determining Significance, Noise, the proposed Project would have a significant impact if it would result in the exposure of vibration sensitive uses to ground-borne vibration and noise equal to or in excess of the levels shown in Table 2.10-2, Groundborne Vibration and Noise Standards, or if new sensitive land uses would be located in the vicinity of ground-borne vibration inducing land uses such as railroads or mining operations. The groundborne vibration and noise standards identify the following three land use categories with increasing sensitivity to groundborne vibration and noise impacts:

- a. Category 1: Buildings where low ambient vibration is essential for interior operations (research & manufacturing facilities with special vibration constraints)
- b. Category 2: Residences and buildings where people normally sleep (hotels, hospitals, residences, & other sleeping facilities)
- c. Category 3: Institutional land uses with primarily daytime use (schools, churches, libraries, other institutions, & quiet offices)

The proposed Project would result in a significant impact if frequent events would exceed 0.0018 in/sec root mean square (RMS) for Category 1 land uses, 0.004 in/sec RMS for Category 2, and 0.0056 in/sec RMS for Category 3. Occasional or infrequent events (fewer than 70 vibration events per day) would be considered a significant impact if they would exceed 0.0018 in/sec RMS for Category 1 land uses, 0.010 in/sec RMS for Category 2, and 0.014 in/sec RMS for Category 3.

Impact Analysis

The General Plan Update Program EIR determined that buildout under the General Plan would result in potentially significant direct and cumulative impacts related to excessive groundborne vibration. These impacts would be reduced to a less than significant level through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and, specific mitigation measures/ implementation programs identified in the General Plan Update Program EIR.

Similar direct and cumulative impacts related to excessive groundborne vibration would occur with the proposed Project. Future development under the proposed Project in the buildout

scenario would result in potential development subject to excessive groundborne vibration associated with construction projects and siting in proximity to mining/mineral extraction or railroad activities. Such potentially significant impacts resulting from implementation of the proposed Project would be reduced by the same regulations, implementation programs (General Plan Update goals/policies) and mitigation measures from the General Plan Update Program EIR and repeated in Section 2.10.4.2, below. As such, implementation of the proposed Project would result in less than significant direct and cumulative impacts related to excessive groundborne vibration.

2.10.3.3 Permanent Increase in Ambient Noise Levels

This section describes potential direct and cumulative impacts associated with the permanent increase in ambient noise levels as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Noise, the proposed Project would have a significant impact if it would result in a substantial permanent increase in ambient noise which would exceed the sound level limits specified in San Diego County Code Section 36.404, Sound Level Limits, at the property line of the property on which the noise is produced or at any location on a property that is receiving the noise.

If the measured ambient level exceeds the applicable limit due to a specific noise violation source, the allowable one hour average sound level would be the one-hour average ambient sound level, plus three decibels. The ambient noise level shall be measured when the alleged noise violation source is not operating. The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts. The one-hour average sound level limit applicable to extractive industries, including borrow pits and mines, shall be 75 decibels at the property line regardless of the zone where the extractive industry is located. Proposed extractive facilities would be subject to the noise standards within the Noise Element at the proposed site and adjacent uses. Fixed-location public utility distribution or transmission facilities located on or adjacent to a property line shall be subject to the sound level limits identified in this section, measured at or beyond six feet from the boundary of the easement upon which the equipment is located; however, some uses are exempt from the Noise Ordinance. Exemptions are listed in Section 36.417 and apply to certain instances of emergency work, school activities, public events, emergency generators, agricultural operations, and property maintenance. Additionally, existing extractive operations are not restricted by the zonal standards in Section 36.404 because of Section 36.404(e). Section 36.404 (e) of the Noise Ordinance defines the sound limit level at a location on a boundary between two zones as the arithmetic mean of the respective limits for the two zones. The one-hour average sound level limit applicable to extractive industries, including but not limited to borrow pits and mines, is

defined as 75 decibels at the property line regardless of the zone in which the extractive industry is located.

Permanent traffic noise impacts would be significant if the proposed Project would raise the noise levels above the County of San Diego Guidelines for Determining Significance of 60 dBA (CNEL). In areas where the existing noise level without the project is above 60 dBA but below 65 dBA, the proposed project would result in a significant impact if it would result in an increase of more than three decibels, in accordance with the Federal Transit Administration (FTA) noise impact criteria. Where the existing noise exposure is between 65 dBA and 70 dBA, a significant impact would occur if the proposed project would exceed the existing noise level by more than one decibel. Where the existing noise exposure exceeds 70 dBA, any increase in the noise level would be considered significant.

Impact Analysis

The General Plan Update Program EIR determined that buildout under the General Plan would result in potentially significant direct and cumulative impacts related to permanent increases in ambient noise levels. These impacts would be reduced through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and, specific mitigation measures/ implementation programs identified in the General Plan Update Program EIR; however, even with these programs in place, the impacts would not be reduced to below a level of significance because future development would permanently increase ambient noise along roadways and permanent noise increases would remain significant and unavoidable.

Similar direct and cumulative impacts related to permanent increases in ambient noise levels would occur with the proposed Project. Future development under the proposed Project in the buildout scenario would result in a permanent increase in ambient noise along roadways. Therefore, the proposed project would result in a potentially significant impact. Additionally, the proposed Project would result in a cumulatively considerable contribution to a potentially significant cumulative impact. Such potentially significant impacts resulting from implementation of the proposed Project would be reduced by the same regulations, implementation programs (General Plan Update goals/policies) and mitigation measures from the General Plan Update Program EIR and repeated in Section 2.10.4.3, below; however, even with these programs in place, the impacts would not be reduced to below a level of significance due to the infeasibility of mitigation measures as discussed in Section 2.10.4.3, below. As such, implementation of the proposed Project would result in significant and unavoidable direct and cumulative impacts related to permanent increases in ambient noise levels.

2.10.3.4 *Temporary Increase in Ambient Noise Levels*

This section describes potential direct and cumulative impacts with the temporary increase in ambient noise levels as pertains to the Project areas addressed in this SEIR.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Noise, the proposed Project would have a significant impact if it would result in a substantial temporary or periodic increase in ambient noise levels during construction which, together with noise from all sources, would exceed the standards listed in San Diego County Code Sections 36.408 and 36.409, Construction Equipment. Sections 36.408 and 36.409 state that, except for emergency work, it shall be unlawful for any person to operate or cause to be operated, construction equipment:

- a. Between the hours of 7:00 p.m. and 7:00 a.m.
- b. On a Sunday or a holiday. For the purposes of this section a holiday means January 1st, the last Monday in May, July 4th, the first Monday in September, December 25th and any day appointed by the President as a special national holiday or the Governor of the State as a special State holiday. A person may, however, operate construction equipment on a Sunday or holiday between the hours of 10:00 a.m. and 5:00 p.m. at the person's residence or for the purpose of constructing a residence for himself or herself, provided that the operation of construction equipment is not carried out for financial consideration or other consideration of any kind and does not violate the limitations in Sections 36.409 and 36.410.
- c. That exceeds an average sound level of 75 decibels for an eight hour period, between 7:00 a.m. and 7:00 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

The County Noise Ordinance also includes standards for other sources of temporary and nuisance noise. Section 36.410, Sound Level Limitations on Impulsive Noise, states that except for emergency work, no person shall produce or cause to be produced an impulsive noise that exceeds the following standards when measured at the boundary line of or on any occupied property for 25 percent of the minutes in the measurement period:

- 82 dBA at an occupied residential, village zoning, or civic use, or 85 dBA at an occupied agricultural, commercial, or industrial use; or
- 85 dBA at an occupied residential, village zoning, or civic use, or 90 dBA at an occupied agricultural, commercial, or industrial use for a public road project.

The minimum measurement period for any measurements conducted under this section shall be one hour. During the measurement period a measurement shall be conducted every minute from a fixed location on an occupied property. The measurements shall measure the maximum sound level during each minute of the measurement period. If the sound level caused by construction equipment or the producer of the impulsive noise exceeds the maximum sound level for any portion of any minute it will be deemed that the maximum sound level was exceeded during that minute.

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Section 36.413, Multiple Family Dwelling Units, states that, notwithstanding any other provisions of the Noise Ordinance, it shall be unlawful for any person to create, maintain or cause to be maintained any sound within the interior of any multiple family dwelling unit which causes the noise level to exceed 45 dBA between 10:00 p.m. and 7:00 a.m. and 55 dBA between 7:00 a.m. and 10:00 p.m. Additionally, it shall be unlawful for any person to generate an interior noise level to exceed 40 dBA for one minute in one hour or 35 dBA for five minutes in one hour between the hours of 10:00 p.m. and 7:00 a.m., or to exceed 50 dBA for one minute in one hour or 35 dBA for five minutes in one hour between the hours of 7:00 a.m. and 10:00 p.m.

Section 36.414, General Noise Regulations of the County of San Diego Noise Ordinance includes additional noise standards for disturbing, excessive or offensive noise. Generally, this section states that it shall be unlawful for any person to make, continue, or cause to be made or continued, any disturbing, excessive or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity residing in the area.

Section 36.416, Noise from Off-Road Recreational Vehicles, states that no person shall operate or allow the operation of an off-road recreational vehicle on private property that produces a noise when measured at the boundary line of or on any occupied property that at any time exceeds the following maximum sound levels: 82 decibels between the hours of 7:00 a.m. and 7:00 p.m., 77 decibels between the hours of 7:00 p.m. and 10:00 p.m., and 55 decibels between the hours of 10:00 p.m. and 7:00 a.m.

Impact Analysis

The General Plan Update Program EIR determined that buildout under the General Plan would result in potentially significant direct and less than significant cumulative impacts from the temporary increase in ambient noise levels. These impacts would be reduced to a less than significant level through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and, specific mitigation measures/implementation programs identified in the General Plan Update Program EIR.

Similar direct and cumulative impacts related to temporary increase in ambient noise levels would occur with the proposed Project. Future development under the proposed Project in the buildout scenario would result in temporary increases in ambient noise levels due to construction of new land uses and infrastructure, as well as an increase in nuisance noise in areas where development would be concentrated (i.e. Alpine). Such potentially significant impacts resulting from implementation of the proposed Project would be reduced by the same regulations, implementation programs (General Plan Update goals/policies) and mitigation measures from the General Plan Update Program EIR and repeated in Section 2.10.4.4, below. As such, implementation of the proposed Project would result in less than significant direct and cumulative impacts related to temporary increases in ambient noise levels.

2.10.3.5 Excessive Noise Exposure from a Public or Private Airport

This section describes potential direct and cumulative impacts excessive noise exposure from a public or private airport as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and the California Airport Land Use Planning Handbook, the proposed Project would have a significant impact if it would expose people residing or working in the Project area to excessive noise levels from a public airport. The level of noise acceptable to new development in the vicinity of proposed new airports, active military airports being converted to civilian use, and existing civilian airports is established as an annual CNEL of 60 dBA.

Impact Analysis

The General Plan Update Program EIR determined that buildout under the General Plan would result in potentially significant direct and cumulative impacts from the excessive noise exposure from a public or private airport. These impacts would be reduced to a less than significant impact through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and, specific mitigation measures/ implementation programs identified in the General Plan Update Program EIR.

Similar direct and cumulative impacts related to excessive noise exposure from a public or private airport would occur with the proposed Project. Future development under the proposed Project in the buildout scenario would result in excessive noise exposure from a public or private airport due to construction of new land uses and infrastructure in areas subject to public or private noise exposure. Such potentially significant impacts resulting from implementation of the proposed Project would be reduced to a less than significant level by the same regulations, implementation programs (General Plan Update goals/policies) and mitigation measures from the General Plan Update Program EIR and repeated in Section 2.10.4.5, below. As such, implementation of the proposed Project would result in less than significant direct and cumulative impacts related to excessive noise exposure from a public or private airport.

2.10.4 Mitigation for Noise

2.10.4.1 Excessive Noise Levels

Direct and cumulative impacts associated with excessive noise levels would be reduced to a less than significant level with implementation of the same applicable General Plan Update policies and mitigation measures as identified in the General Plan Update Program EIR, and repeated below.

General Plan Update Policies

Policy LU-2.8: Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

Policy M-1.3: Treatment of High-Volume Roadways. To avoid bisecting communities or town centers, consider narrower rights-of-way, flexibility in design standards, and lower design speeds in areas planned for substantial development. Reduce noise, air, and visual impacts of new freeways, regional arterials, and Mobility Element roads, through landscaping, design, and/or careful location of facilities.

Policy M-2.4: Roadway Noise Buffers. Incorporate buffers or other noise reduction measures consistent with standards established in the Noise Element into the siting and design of roads located next to sensitive noise-receptors to minimize adverse impacts from traffic noise. Consider reduction measures such as alternative road design, reduced speeds, alternative paving, and setbacks or buffers, prior to berms and walls.

Policy N-1.4: Adjacent Jurisdiction Noise Standards. Incorporate the noise standards of an adjacent jurisdiction into the evaluation of a proposed project when it has the potential to impact the noise environment of that jurisdiction.

Policy N-1.5: Regional Noise Impacts. Work with local and regional transit agencies and/or other jurisdictions, as appropriate, to provide services or facilities to minimize regional traffic noise and other sources of noise in the County.

Policy N-2.1: Development Impacts to Noise Sensitive Land Uses. Require an acoustical study to identify inappropriate noise levels where development may directly result in any existing or future noise sensitive land uses being subject to noise levels equal to or greater than 60 CNEL and require mitigation for sensitive uses in compliance with the noise standards listed in Table N-2 in the Noise Element.

Policy N-2.2: Balconies and Patios. Assure that in developments where the exterior noise level on patios or balconies for multi-family residences or mixed-use developments exceed 65 CNEL, a solid noise barrier is incorporated into the building design of the balconies and patios while still maintaining the openness of the patio or balcony.

Policy N-4.1: Traffic Noise. Require that projects proposing General Plan amendments that increase the average daily traffic beyond what is anticipated in this General Plan do not increase cumulative traffic noise to off-site noise sensitive land uses beyond acceptable levels.

Policy N-4.2: Traffic Calming. Include traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle traffic noise in development that may impact noise sensitive land uses.

Policy N-4.3: Jurisdictional Coordination. Coordinate with California Department of Transportation (Caltrans), the City of San Diego, and other adjacent jurisdictions, as appropriate, for early review of proposed new and expanded State freeways, highways, and road improvement projects within or affecting the unincorporated County to: 1) locate facilities where the impacts to noise sensitive land uses would be minimized; and, 2) develop and include noise abatement measures in the projects to minimize and/or avoid the impacts to noise sensitive land uses.

Policy N-4.5: Roadway Location. Locate new or expanded roads designated in the Mobility Element in areas where the impact to noise sensitive land uses would be minimized.

Policy N-4.7: Railway Jurisdictional Coordination. Work with the San Diego Association of Governments (SANDAG), Caltrans, Metropolitan Transit System (MTS), California High-Speed Rail Authority, and passenger and freight train operators as appropriate to install noise attenuation features to minimize impacts to adjacent residential or other noise sensitive uses from railroad operations.

Policy N-4.8: Train Horn Noise. Establish train horn “quiet zones” with new rail projects consistent with federal regulations, where applicable. Promote community programs for existing at-grade crossings by working with rail operators.

Mitigation Measures

- Noi-1.1** Require an acoustical analysis whenever a new development may result in any existing or future noise sensitive land uses being subject to on-site noise levels of 60 dBA (CNEL) or greater, or other land uses that may result in noise levels exceeding the “Acceptable” standard in the Noise Compatibility Guidelines (Table N-1 in the Noise Element).
- Noi-1.2** Revise the Guidelines for Determining Significance for new developments where the exterior noise level on patios or balconies for multi-family residences or mixed-use development exceeds 65 dBA (CNEL), a solid noise barrier is incorporated into the building design of balconies and patios for units that exceed 65 dBA (CNEL) while still maintaining the openness of the patio or balcony.
- Noi-1.3** Require an acoustical study for projects proposing amendments to the County General Plan Land Use Element and/or Mobility Element that propose a significant increase to the average daily traffic due to trips associated with the project beyond those anticipated in the General Plan.
- Noi-1.4** Edit the Guidelines for Determining Significance standard mitigation and project design considerations to promote traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle traffic noise.

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- Noi-1.5** Coordinate with Caltrans and SANDAG as appropriate to identify and analyze appropriate route alternatives that may minimize noise impacts to noise sensitive land uses within the unincorporated areas of San Diego County.
- Noi-1.6** Coordinate with SANDAG, MTS, California High-Speed Rail Authority as appropriate, and passenger and freight train operators to install noise attenuation features to minimize impacts to adjacent residential or other noise sensitive land uses.
- Noi-1.7** Work with project applicants during the scoping phase of proposed projects to take into consideration impacts resulting from on-site noise generation to noise sensitive land uses located outside the County's jurisdictional authority. The County will notify and coordinate with the appropriate jurisdiction(s) to determine appropriate project design techniques and/or mitigation.
- Noi-1.8** Implement and/or establish procedures (or cooperative agreements) with Caltrans, the City of San Diego, and other jurisdictions as appropriate to ensure that a public participation process or forum is available for the affected community to participate and discuss issues regarding transportation generated noise impacts for new or expanded roadway projects that may affect noise sensitive land uses within the unincorporated areas of San Diego County.
- Noi-1.9** Coordinate with Caltrans and the Planning and Development Services Landscape Architect, and receive input from community representatives as appropriate (e.g., Planning or Sponsor Group) to determine the appropriate noise mitigation measure (planted berms, noise attenuation barriers or a combination of the two) to be required as a part of the proposals for roadway improvement projects and ensure that the County's Five Year Capital Improvement Program and Preliminary Engineering Reports address noise impacts and appropriate mitigation measures for road improvement projects within or affecting the unincorporated area of the County.

2.10.4.2 Excessive Groundborne Vibration

Direct and cumulative impacts associated with excessive groundborne vibration would be reduced to a less than significant level with implementation of the same applicable General Plan Update policies and mitigation measures as identified in the General Plan Update Program EIR, and repeated below.

General Plan Update Policies

Policy N-3.1: Groundborne Vibration. Use the Federal Transit Administration and Federal Railroad Administration guidelines, where appropriate, to limit the extent of exposure that sensitive uses may have to groundborne vibration from trains, construction equipment, and other sources.

Policy N-4.7: Railway Jurisdictional Coordination. Work with the San Diego Association of Governments (SANDAG), Caltrans, Metropolitan Transit System (MTS), California High-Speed Rail Authority, and passenger and freight train operators as appropriate to install noise attenuation features to minimize impacts to adjacent residential or other noise sensitive uses from railroad operations.

Policy N-5.2: Noise-Generating Industrial Facilities. Locate noise-generating industrial facilities at the maximum practical distance from residential zones. Use setbacks between noise generating equipment and noise sensitive uses and limit the operation of noise generating activities to daytime hours as appropriate where such activities may affect residential uses.

Policy N-6.3: High-Noise Equipment. Require development to limit the frequency of use of motorized landscaping equipment, parking lot sweepers, and other high-noise equipment if their activity will result in noise that affects residential zones.

Policy N-6.4: Hours of Construction. Require development to limit the hours of operation as appropriate for non-emergency construction and maintenance, trash collection, and parking lot sweeper activity near noise sensitive land uses.

Mitigation Measures

Mitigation measure Noi-1.7 as described above is applicable to this issue and is incorporated here by reference. In addition, the following measures would further reduce impacts associated with excessive groundborne vibration.

- Noi-2.1** For Land Use Designations defined in Table 2.11-14, a ground-borne vibration technical study shall be required for proposed land uses within the following distances from the Sprinter Rail Line right-of-way and the property line: 600 feet of a Category 1 Land Use, 200 feet of a Category 2 Land Use, and 120 feet of a Category 3 Land Use. If necessary, mitigation shall be required for land uses in compliance with the standards listed in Tables 2 and 3 of the County of San Diego Guidelines for Determining Significance - Noise.
- Noi-2.2** Revise the County CEQA determinations of significance to reflect limits in the Noise Compatibility Guidelines and Noise Standards [Policy N-3.1]. Periodically review the Guidelines for Determining Significance to incorporate standards for minimizing effects of groundborne vibration during project operation or construction.
- Noi-2.3** Review project applications for industrial facilities to ensure they are located in areas that would minimize impacts to noise-sensitive land uses. Revise CEQA Guidelines for Determining Significance to incorporate appropriate noise attenuation measures for minimizing industrial-related noise.
- Noi-2.4** Require an acoustical study whenever a proposed extractive land use facility may result in a significant noise impact to existing noise sensitive land uses, or when a

proposed noise sensitive land use may be significantly affected by an existing extractive land use facility. The results of the acoustical study may require a “buffer zone” to be identified on all Major Use Permit applications for extractive facilities whenever a potential for a noise impact to noise sensitive land uses may occur.

2.10.4.3 Permanent Increase in Ambient Noise Levels

Direct and cumulative impacts associated the permanent increase in ambient noise levels would be reduced with implementation of the same applicable General Plan Update policies and mitigation measures as identified in the General Plan Update Program EIR, and repeated below; however, not to a level below a level of significance. The County determined that implementation of the additional measures listed below would be infeasible for the following reasons:

Infeasible Mitigation Measures

The following measure was considered in attempting to reduce impacts associated with permanent increases in ambient noise levels to below a level of significance; however, the County has determined that this measure would be infeasible, as described below. Therefore, this mitigation measure would not be implemented.

- Prohibit new roadways or roadway improvements that would result in a significant increase in the ambient noise level. The measure would prohibit the construction of many roadway projects proposed in the Circulation Element because they would result in increases in ambient noise. This measure is infeasible because it would restrict future development in areas identified for increased growth under the General Plan Update because new roadways to serve this growth would not be constructed. Additionally, this mitigation measure would conflict with the project objective to provide and support a multi-modal transportation network that enhances connectivity and supports community development patterns because it would prohibit the development of new roadways.

Because the measures listed above have been found to be infeasible, impacts would remain significant and unavoidable.

General Plan Update Policies

The following policies would reduce impacts associated with permanent increases in ambient noise level, but not to below a significant level.

Policy LU-2.8: Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

Policy M-1.3: Treatment of High-Volume Roadways. To avoid bisecting communities or town centers, consider narrower rights-of-way, flexibility in design standards, and lower design speeds

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in areas planned for substantial development. Reduce noise, air, and visual impacts of new freeways, regional arterials, and Mobility Element roads, through landscaping, design, and/or careful location of facilities.

Policy M-2.4: Roadway Noise Buffers. Incorporate buffers or other noise reduction measures consistent with standards established in the Noise Element into the siting and design of roads located next to sensitive noise-receptors to minimize adverse impacts from traffic noise. Consider reduction measures such as alternative road design, reduced speeds, alternative paving, and setbacks or buffers, prior to berms and walls.

Policy N-1.5: Regional Noise Impacts. Work with local and regional transit agencies and/or other jurisdictions, as appropriate, to provide services or facilities to minimize regional traffic noise and other sources of noise in the County.

Policy N-4.1: Traffic Noise. Require that projects proposing General Plan amendments that increase the average daily traffic beyond what is anticipated in this General Plan do not increase cumulative traffic noise to off-site noise sensitive land uses beyond acceptable levels.

Policy N-4.2: Traffic Calming. Include traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle traffic noise in development that may impact noise sensitive land uses.

Policy N-4.6: Road Improvement Projects. For County road improvement projects, evaluate the proposed project against ambient noise levels to determine whether the project would increase ambient noise levels by more than three decibels. If so, apply the limits in the noise standards listed in Table N-2 for noise sensitive land uses that may be affected by the increased noise levels. For federally funded roadway construction projects, use the limits in the applicable Federal Highway Administration Standards.

Policy N-5.1: Truck Access. Design development so that automobile and truck access to industrial and commercial properties abutting residential properties is located at the maximum practical distance from residential zones.

Policy N-5.2: Noise-Generating Industrial Facilities. Locate noise-generating industrial facilities at the maximum practical distance from residential zones. Use setbacks between noise generating equipment and noise sensitive uses and limit the operation of noise generating activities to daytime hours as appropriate where such activities may affect residential uses.

Mitigation Measures

Mitigation measures Noi-1.3, Noi-1.4, Noi-1.5, Noi-1.8, Noi-2.3, and Noi-2.4 as described above are applicable to this issue and are incorporated here by reference. In addition, the following measures would further reduce impacts associated with permanent increases in ambient noise levels, although not to below a significant level.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

- Noi-3.1** Ensure that for new County road improvement projects either the County's Noise Standards are used to evaluate noise impacts or the project does not exceed 3 decibels over existing noise levels [Policy N-4.6]
- Noi-3.2** Work with the project applicant during the review of either the building permit or discretionary action (whichever is applicable) to determine appropriate noise reduction site design techniques that include:
- Orientation of loading/unloading docks away from noise sensitive land uses
 - Setbacks or buffers to separate noise generating activities from noise sensitive land uses
 - Design on-site ingress and egress access away from noise sensitive land uses [Policy N-5.1]

2.10.4.4 *Temporary Increase in Ambient Noise Levels*

Direct and cumulative impacts associated with the temporary increase in ambient noise levels would be reduced to a less than significant level with implementation of the same applicable General Plan Update policies and mitigation measures as identified in the General Plan Update Program EIR, and repeated below.

General Plan Update Policies

Policy N-6.1: Noise Regulations. Develop and regularly update codes and ordinances as necessary to regulate impacts from point, intermittent, and other disruptive noise sources.

Policy N-6.2: Recurring Intermittent Noise. Minimize impacts from noise in areas where recurring intermittent noise may not exceed the noise standards listed in Table N-2, but can have other adverse effects.

Policy N-6.3: High-Noise Equipment. Require development to limit the frequency of use of motorized landscaping equipment, parking lot sweepers, and other high-noise equipment if their activity will result in noise that affects residential zones.

Policy N-6.4: Hours of Construction. Require development to limit the hours of operation as appropriate for non-emergency construction and maintenance, trash collection, and parking lot sweeper activity near noise sensitive land uses.

Policy N-6.5: Special Events. Schedule special events sponsored by the County that may generate excessive noise levels to daytime hours when feasible.

Policy N-6.6: Code Enforcement. Provide sufficient resources within the County for effective enforcement of County codes and ordinances.

Mitigation Measures

- Noi-4.1** Periodically review and revise the Noise Ordinance and Section 6300 of the Zoning Ordinance as necessary to ensure appropriate restrictions for intermittent, short-term, or other nuisance noise sources.
- Noi-4.2** Augment staff and equipment as appropriate to facilitate enforcement of the Noise Ordinance.

2.10.4.5 Excessive Noise Exposure from a Public or Private Airport

Direct and cumulative impacts associated with excessive noise exposure from a public or private airport would be reduced to a less than significant level with implementation of the same applicable General Plan Update policies and mitigation measures as identified in the General Plan Update Program EIR, and repeated below.

General Plan Update Policies

Policy N-4.9: Airport Compatibility. Assure the noise compatibility of any development projects that may be affected by noise from public or private airports and helipads during project review by coordinating, as appropriate, with appropriate agencies such as the San Diego County Regional Airport Authority (SDCRAA) and the Federal Aviation Administration (FAA).

Policy S-15.1: Land Use Compatibility. Require land uses surrounding airports to be compatible with the operation of each airport.

Policy S-15.2: Airport Operational Plans. Require operational plans for new public/private airports and heliports, as well as future operational changes to existing airports, to be compatible with existing and planned land uses that surround the airport facility.

Policy S-15.4: Private Airstrip and Heliport Location. Locate private airstrips and heliports outside of safety zones and flight paths for existing airports where they are compatible with surrounding established and planned land uses, and in a manner to avoid impacting public roadways and facilities.

Mitigation Measures

- Noi-5.1** Use the applicable Airport Land Use Compatibility Plan's (ALUCP) as guidance/reference during development review of projects that are planned within an Airport Influence Area (AIA). Any projects that are within the AIA shall be submitted to the San Diego County Regional Airport Authority (SDCRAA) for review.
- Noi-5.2** Evaluate noise exposure impacts related to a private airport or heliport use or consistency with the FAA standards.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

- Noi-5.3** Consult with the FAA standards and the County Noise Ordinance as a guide for assessing noise impacts from private airports and helipads.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

TABLE 2.10-1.
FORECAST PROJECT IMPACTS:
GENERAL PLAN UPDATE AMENDMENT (FCI LANDS)

Roadway	Segment Limits	Sensitive Receptors
Alpine Boulevard	Tavern Rd to Boulders Rd	Julian Charter School
		Alpine Community Center
		Alpine Elementary School
		Alpine Anglican Church
		Alpine Community Day School
Alpine Boulevard	Boulders Rd to Alpine Special Treatment Center	Alpine Special Treatment Center
Alpine Boulevard	Alpine Special Treatment Center to W. Victoria Dr.	Alpine County Library
Alpine Boulevard	W. Victoria Dr. to Louise Dr.	Quest Academy
Alpine Boulevard	Louise Dr. to Viejas View Pl	--
Alpine Boulevard	Viejas View Pl to West Willows Rd	--
Alpine Boulevard	West Willows Rd to East Willows Rd	--
South Grade Road	Eltinge Dr. to Olive View Rd	--
Tavern Road	Victoria Park Terrace to Alpine Boulevard	Ayers Lodge
Tavern Road	Arnold Way to Huey Ln/White Oak Dr.	Joan MacQueen Middle School
		Alpine Lutheran Church
		The Church of Jesus Christ of Latter Day Saints
Viejas Casino Rd.	West Willows Rd. to East Willows Rd	--
Willows Road (West)	Alpine Blvd to Otto Ave	--
Willows Road West)	Otto Ave to Viejas Casino Rd	--
Willows Road (East)	Viejas Casino Rd. to I-8 on ramp	--

-- No sensitive receptors identified.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

TABLE 2.10-2.
GROUND-BORNE VIBRATION AND NOISE STANDARDS⁽¹⁾

Land Use Category ⁽²⁾	Definition	Ground-Borne Vibration Impact Levels (inches per second RMS)		Ground-Borne Noise Impact Levels (dB re 20 micro Pascals)	
		Frequent Events ⁽³⁾	Occasional or Infrequent Events ⁽⁴⁾	Frequent Events ⁽³⁾	Occasional or Infrequent Events ⁽⁴⁾
Category 1	Buildings where low ambient vibration is essential for interior operations (research & manufacturing facilities with special vibration constraints).	0.0018 ⁽⁵⁾	0.0018 ⁽⁵⁾	Not Applicable	Not Applicable
Category 2 ⁽⁶⁾	Residences and buildings where people normally sleep (hotels, hospitals, residences, & other sleeping facilities).	0.0040	0.010	35 dBA	43 dBA
Category 3 ⁽⁶⁾	Institutional land uses with primarily daytime use (schools, churches, libraries, other institutions, & quiet offices).	0.0056	0.014	40 dBA	48 dBA

RMS = root mean squared

⁽¹⁾ Vibration-sensitive equipment is not sensitive to ground-borne noise.

⁽²⁾ There are some buildings, such as concert halls, TV and recording studios, and theaters that can be very sensitive to vibration and noise but do not fit into any of the three categories. Refer to Table 3 in the County of San Diego Guidelines for Determining Significance, Noise for acceptable levels of ground-borne vibration and noise for these various types of special uses.

⁽³⁾ "Frequent Events" is defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.

⁽⁴⁾ "Occasional or Infrequent Events" are defined as fewer than 70 vibration events per day. This combined category includes most commuter rail systems.

⁽⁵⁾ This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research will require detailed evaluation to define acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

⁽⁶⁾ For Categories 2 and 3 with occupied facilities, isolated events such as blasting are significant when the peak particle velocity (PPV) exceeds one inch per second. Non-transportation vibration sources such as impact pile drivers or hydraulic breakers are significant when their PPV exceeds 0.1 inch per second.

Source: County of San Diego, Planning & Development Services, 2009c.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

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