

Chapter

7

PUBLIC HEALTH AND SAFETY, AND NOISE ELEMENT



PUBLIC HEALTH AND SAFETY, AND NOISE ELEMENT

INTRODUCTION

This Public Health and Safety Element has been prepared in compliance with the California State legislative requirements for the mandatory Safety and Noise elements of the General Plan.

As summarized in OPR's latest General Plan Guidelines, the goal of the Safety Element is to reduce the potential short- and long-term risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, droughts, earthquakes, landslides, climate change, and hazards. Other locally relevant safety issues, such as airport land use, emergency response, hazardous materials spills, and crime reduction, may also be included.

State of California Government Code Section 65302(g)(1) requires that the Safety Element analyze risk and include policies for “the protection of the community from any unreasonable risks associated with the effects seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence; liquefaction; and other seismic hazards [...] flooding; and wildland and urban fires. In addition to policies that address relevant hazards, State law requires mapping of these hazards, including “mapping of known seismic and other geologic hazards.” Policies in a safety element should identify hazards and emergency response priorities, as well as mitigation through avoidance of hazards by new projects and reduction of risk in developed areas. The Safety Element must also assess the risks associated with climate change and develop resiliency and adaptation measures to reduce the risks associated with climate change impacts (Section 65302[g][4]).

This Element also addresses noise issues. Government Code Section 65302(f) requires that a Noise Element be prepared as part of a community's General Plan to

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identify and appraise noise problems in the community. The Government Code includes the following requirements for a Noise Element:

- > The element shall recognize State guidelines regarding noise control and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for roads, railroads, and other vehicular sources. It shall also evaluate stationary noise sources, including those associated with industrial and commercial operations.
- > Noise contours shall be shown and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be used as a guide for establishing a pattern of land uses in the Land Use Element that minimizes the exposure of community residents to excessive noise.

This Element is designed to identify and assess local and regional safety and noise considerations, and use that information to inform goal and policy guidance necessary to assist the Town of Loomis in achieving balanced planning decisions. It recognizes the importance of the public safety and the need to integrate natural and human-induced safety concerns, including noise concerns, with other local planning considerations. Safety and noise issues addressed in this Element directly relate to topics in the Land Use, Conservation and Natural Resources, and Circulation elements, as these planning decisions must also account for public health and safety considerations. OPR's General Plan Guidelines identify requirements for open space to address public health and safety for clean air and water, recreational and natural spaces, farms, ranches, and open spaces conducive to active transportation and healthy lifestyles to foster health benefits for communities. Noise contours are provided in Volume III, Section 7, "Safety & Noise," of this General Plan.

SAFETY

The Safety portion of this Element addresses the major safety issues of concern in Loomis, including seismic and geologic risks, flooding, wildland and urban fire risks, hazardous materials, evacuation routes, and climate change adaptation and resilience. In preparing this Public Health and Safety Element, the Town's planning efforts have encompassed a variety of natural and man-made hazards to life and

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property. California is a seismically active state. In addition to seismic hazards, a variety of geologic hazards such as steep slopes and soil properties can affect building site development and the potential for future property damage.

As population increases and development expands into previously undeveloped areas, more "wildland-urban interface" is created with a corresponding risk from loss of life and property damage from wildland fires. Flooding is a natural function of every river and stream. There are ecological benefits to maintaining connections between the river and its floodplain. Land use decisions directly influence the function of floodplains and may either reduce or increase potential flood hazards. Climate change may worsen the hazards from wildland fires and flooding. Adverse human health and ecological effects can occur from exposure to hazardous materials.

This Public Health and Safety Element contains goals, objectives, policies, and implementation measures that are designed to help provide a safe living and working environment for Town residents by preparing for and reducing the risks associated with hazards from seismic and geologic conditions, fires, flooding, and hazardous materials, and incorporating resiliency and adaptation to climate change along with emergency preparedness planning. These goals, objectives, policies and implementation measures reflect legislative requirements of a Safety Element, per State of California Government Code Section 65302(g), and are informed by the identification and assessment of hazards relevant to the Town of Loomis, as detailed in the Setting and Background Report for Safety and Noise, found in Volume III, Section 7, of this General Plan Update.

Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (Assembly Bill 2140). In 2006, the state adopted Assembly Bill (AB) 2140, which added provisions specifying what is to be included in a Local Hazard Mitigation Plan (LHMP) and requiring a linkage between a local jurisdiction's LHMP and the safety element of their general plan. AB 2140 requires a jurisdiction to adopt the LHMP into the safety element of the general plan in order to be fully eligible for disaster relief funding under the California Disaster Assistance Act. AB 2140 can be met by either including the LHMP language specific to AB 2140 as part of the safety element or to incorporate the LHMP by reference into the safety element of the general plan.

The Town of Loomis has a current LHMP (General Plan Volume II), which includes an assessment of the Town's risk and vulnerability related to natural and other identified hazards and a comprehensive mitigation strategy that includes actions and projects designed to mitigate or reduce the impacts of those hazards and to increase community resiliency. This LHMP was formally adopted and is incorporated by reference into the Safety Element of the General Plan via a City Council resolution.

To further meet the requirements of AB 2140, the Town of Loomis adopts and incorporates by reference the most current LHMP as part of this Public Health and Safety Element to the General Plan, which should be consulted when addressing known hazards to ensure the general health and safety of people within the Town of Loomis. The most recent plan can be found on the Town's website and in Volume II of the General Plan.

Goals, Objectives, Policies, and Implementation Measures

Goals

Goal PHS-1:

Minimize risk of adverse effects associated with geologic or seismic instability.

Goal PHS-2:

Reduce risks associated with wildland and urban fires.

Goal PHS-3:

Reduce the potential for and damage resulting from storm flooding hazards.

Goal PHS-4:

Create a community that is resilient to climate change effects.

Goal PHS-5:

Reduce risks associated with releases of hazardous materials and hazardous waste.

Goal PHS-6:

Effectively respond to public health and safety emergencies.

Objectives, Policies, and Implementation Measures**Geologic and Seismic Hazards**

There are no seismic hazard zones or major faults within or immediately adjacent to the Town. Nevertheless, California is a seismically active state, and earthquakes on more distant faults, along with various underlying geologic and soil conditions in the Town, could result in damage to buildings and infrastructure without proper engineering and design. Policies in this section are intended to prevent structural damage and potential loss of life from seismic and geologic hazards.

Objective PHS-1.1:

Avoid risks to life and property through appropriate site design and compliance with local, State, and Federal seismic and geologic safety programs.

Policy PHS-1.1.1:

Support efforts by federal, State, and local jurisdictions to investigate local seismic and geologic hazards and support those programs that effectively mitigate these hazards.

Policy PHS-1.1.2:

Require an engineering analysis of new development proposals in areas with possible soil instability, flooding, or seismic hazards, and require new development to include project features that minimize these risks.

Policy PHS-1.1.3:

Discourage grading activities during the rainy season, unless adequately mitigated, to avoid erosion, drainage to riparian areas, and sedimentation of creeks.

Implementation Measure PHS-1.1.3.1:

The Town will maintain and update its Grading, Erosion, and Sediment Control Ordinance and apply conditions, as necessary, to minimize potential damage to structures and public safety concerns, as well as protect water quality and sensitive habitat.

Policy PHS-1.1.4:

Limit vegetation clearance, ground disturbance, and any new development in areas with slopes that exceed 30 percent.

Policy PHS-1.1.5:

The Town shall support opportunities to retrofit existing unreinforced masonry buildings to bring such buildings into compliance with State requirements for seismic safety.

Implementation Measure PHS-1.1.5.1:

Implement a program to retrofit unreinforced masonry buildings. To effectively implement this program, the Town will:

- pursue funding to retrofit unreinforced masonry buildings, as feasible, with funding priorities that include publicly owned and nonprofit buildings, as well as significant historic buildings.
- incorporate concepts and provisions of the State Code for historic buildings, to provide additional flexibility for preservation of historic buildings, while protecting them from significant earthquake damage.
- consider appropriate means of economic incentives and relief for nonprofit and privately held historic buildings that are constructed of unreinforced masonry, such as preservation of non-conforming zoning rights for in-kind replacement of such buildings.

Wildland and Urban Fires

Portions of the Town have been identified as moderate or high wildfire risk areas. The region's hot, dry summers create an annual wildfire threat. Policies in this section are intended to provide improved protection from and minimize the risk of wildland fires and fires along the Town's urban edge. Fire responses are also addressed in the Public Facilities and Services Element.

Objective PHS-2.1:

Minimize the potential for property damage and loss of life from wildland and urban edge fires.

Policy PHS-2.1.1:

Enforce building codes, fire codes, and other Town ordinances related to fire hazards and fire protection.

Policy PHS-2.1.2:

Maintain adequate street widths and turning radii to accommodate fire protection equipment.

Policy PHS-2.1.3:

Require that new residential subdivisions provide for adequate water supply and pressure, fire hydrants, and appropriate access to structures by firefighting equipment and personnel.

Policy PHS-2.1.4:

Cooperate with the prevailing fire districts to reduce fire hazards, assist in fire suppression, and ensure efficient emergency medical response.

Implementation Measure PHS-2.1.4.1:

The Town will collaborate with the prevailing fire districts on fire prevention programs, including those that increase awareness of home fire prevention measures, reduce fire hazards, and promote communication, plan review, and coordination for efficient and effective emergency response.

Implementation Measure PHS-2.1.4.2:

Provide a link on the Town's website to the South Placer Fire District for information regarding approved burn days and burn permits.

Policy PHS-2.1.5:

Require new projects in Moderate and High Fire Hazard Severity Zones, as designated by the Town of Loomis, to demonstrate compliance with State and local regulations to maintain defensible space.

Implementation Measure PHS-2.1.5.1:

The Town will require that new development includes a wildland fire protection plan showing how vegetation clearance will be maintained around structures while preserving oak trees, in application materials for residential subdivisions proposed within or near oak woodlands.

Implementation Measure PHS-2.1.6.2:

The Town shall actively seek certification as a Fire Wise Community and new subdivisions of five or more lots shall prepare and maintain a Fire Safe Plan. Target date: Short-term and ongoing. (Implementation Measure PSF-1.2.1.1)

Flooding

The Town is bisected by several streams that are part of the Dry Creek Watershed. These streams create an environment where flooding is a possibility. Policies in this section are intended to reduce and minimize the flooding risk to residents and property.

Objective PHS-3.1:

Reduce the potential for flooding and resultant property damage.

Policy PHS-3.1.1:

Support efforts by the Federal Emergency Management Agency and the Placer County Flood Control District to reduce the potential for flooding

along major streams in the Town, including Antelope Creek, Sucker Ravine, Secret Ravine, and their tributaries.

Policy PHS-3.1.2:

Prohibit new structures or additions to existing structures in areas identified by the federal Flood Insurance Rate Maps (FIRMs) or the Town Engineer as being subject to inundation in a 100-year or more frequent flood event. Exceptions may be granted for public utilities, where necessary.

Policy PHS-3.1.3:

Locate new essential public facilities (including hospitals and health care facilities, emergency shelters, fire and law enforcement stations, emergency command centers, and emergency communications facilities) outside of 100-year flood hazard zones.

Policy PHS-3.1.4:

Require that new development adhere to Placer County Flood Control District policies and the Dry Creek Watershed Flood Control Plan.

Policy PHS-3.1.5:

Prohibit new projects that would result in new or increased stormwater runoff unless it can be shown that existing drainage facilities would be improved or new drainage facilities would be constructed to mitigate the potential for flooding on adjoining and downstream parcels.

Policy PHS-3.1.6:

Maintain drainage facilities to ensure their proper operation during storms.

Implementation Measure PHS-3.1.6.1:

The Town will continue to participate in the National Flood Insurance Program and will maintain and update the Town's Floodplain Management Ordinance, as necessary, to reduce future flood damage.

Implementation Measure PHS-3.1.6.2:

The Town will maintain and update, as needed, the Drainage Master Plan and apply recommendations contained therein to future development projects.

Objective PHS-3.2:

Preserve floodplain functions and values.

Policy PHS-3.2.1:

Design new development near stream channels so that reduced stream capacity, stream bank erosion, or adverse impacts on habitat values are avoided.

Policy PHS-3.2.2:

Reduce erosion and flooding and protect natural habitat values.

Implementation Measure PHS-3.2.2.1:

The Town will maintain and implement the Town's Waterway Setback Ordinance (Municipal Code Section 13.56.040[A]), which establishes required setbacks for proposed structures based on the height and location of the adjacent stream bank, and will maintain and implement the Grading, Erosion, and Sediment Control Ordinance, which includes standards for setbacks from riparian vegetation.

Policy PHS-3.2.3:

Discourage further channelization and/or banking of creeks or streams within the Planning Area, unless no other alternative is available to minimize flood risk. Setbacks from flood sources shall be the preferred method of avoiding impacts.

Climate Change Resiliency

California Government Code Section 65302(g)(4) requires cities and counties to address the potential effects from climate change as part of the public safety

element of their respective general plans. Ongoing climate change may increase the potential for and the severity of hazards from fires and flooding, resulting from longer and drier summer and fall seasons, and from winter precipitation that occurs as rainfall rather than snow. Policies in this section, and elsewhere throughout the General Plan, are intended to help the Town adapt to future climate change effects. The Town is a participant in the Placer County Local Hazard Mitigation Plan, which is incorporated by reference into this General Plan and which addresses climate change adaptation and resiliency from a regional collaborative perspective. In addition, climate change resilience and adaptation are considered as a part of overall planning efforts for all resource areas and are addressed throughout the General Plan, particularly in the fire, flooding, and emergency response and preparedness subsections of this Public Health, Safety and Noise Element.

Objective PHS-4.1:

Address climate change to improve future quality of life for Town residents and workers.

Policy PHS-4.1.1:

Encourage tree planting efforts throughout the Town to provide shade and reduce heat-island effects.

Policy PHS-4.1.2:

Continue to partner with relevant organizations and agencies to coordinate provision of designated emergency shelters and services. Provide community notifications as to the locations and times when such shelters are available.

Implementation Measure PHS-4.1.2.1:

The Town will collaborate with Placer County and other participating agencies in updating and maintaining the Placer County Local Hazard Mitigation Plan, and shall adopt and implement climate change resiliency and adaptation recommendations from this Plan in conditions for new development and through the Town's investments and public facilities planning.

Implementation Measure PHS-4.1.2.2:

The Town will establish an emergency preparedness committee responsible for working with the County Emergency Operations Division, County Sherriff's Office, South Placer Fire District and other emergency response agencies to identify emergency shelters, maintain community notifications in times of emergency, and track implementation of climate change resiliency and adaptation recommendations of the Placer County Local Hazard Mitigation Plan. The committee shall track available emergency preparedness resources, such as those made available through Placer County, the Red Cross, and the Federal Emergency Management Agency (FEMA). The committee shall also reach out to schools and other establishments in Loomis that have spaces that could appropriately serve as emergency shelters and establish memoranda of understanding with such entities to streamline emergency response when needed.

Policy PHS-4.1.3:

Collaborate with local utility and service providers to ensure that new critical facilities, including communication towers, are built to withstand severe weather such as heavy rains, lightning, hail, and high winds.

Policy PHS-4.1.4:

Coordinate with Placer County Water Agency to promote water conservation measures and public education, particularly during and leading up to anticipated drought conditions to conserve regional water supplies, to the extent feasible.

Hazardous Materials

Hazardous materials include a wide variety of substances, such as chemicals used in industrial and manufacturing processes; oils, fuels, and lubricants used at gasoline stations and auto repair shops; and household paints and cleaning products. Hazardous materials and waste are thoroughly regulated at the State and federal level with much of the implementation by the local CUPA, Placer County

Environmental Health. Policies in this section are not intended to reiterate or be duplicative of what is required by law. However, in addition to regulatory compliance, thoughtful siting of land uses, along with proper handling, storage, and disposal of hazardous materials, is important to prevent accidental releases that could affect public health or the environment. Policies and implementation measures in this section are intended to provide for the safety of the public and the environment related to hazardous materials and waste.

Objective PHS-5.1:

Reduce the potential for hazardous materials releases and the resulting health and environmental risks.

Policy PHS-5.1.1:

Work with public agencies and private companies to identify and reduce public and environmental hazards from releases of hazardous materials.

Policy PHS-5.1.2:

Require compliance with the Placer County Environmental Health Division and the State Regional Water Quality Control Board policies and requirements for the use, storage, and transportation of hazardous materials, and the installation and operation of underground and above ground storage tanks.

Implementation Measure 5.1.2.1:

Prior to the approval of a building or occupancy permit, applicants for discretionary development projects that will use, store, or transport hazardous materials or generate hazardous wastes shall submit a detailed plan for hazardous materials and waste management. When meeting the requirements of the Placer County Environmental Health Division, such a plan will be in the form of a Hazardous Materials Business Plan for review and approval by Placer County Environmental Health.

Policy PHS-5.1.3:

Require land uses that may produce, store or process hazardous or toxic materials to provide a buffer zone between the materials and the property boundaries, sufficient to protect public safety.

Implementation Measure 5.1.3.1:

For projects involving demolition or renovation that could disturb asbestos- or lead-containing materials, such as in older structures, the Town will require a hazardous building assessment to determine if any such materials are present and could pose a risk during demolition, renovation or other construction activities. If determined to be present, the Town will require the project demonstrate how the handling and removal of materials shall be conducted in compliance with EPA, California Occupational Safety and Health Administration standards and Placer County Air Pollution Control District rules and regulations.

Implementation Measure 5.1.3.2:

The Town will provide opportunities for businesses and the public to obtain information related to hazardous materials use, storage, and disposal opportunities by developing a new page on the Town's website that includes the following:

- provide a brief summary of the role of the local Certified Unified Program Agency (CUPA), identify the agency name, and include a link to the agency's website;
- provide a brief summary of the Hazardous Materials Business Plan Program requirements, and a link to the local CUPA requirements for the program;
- provide a brief summary of the requirements related to above ground and underground storage tanks.

Emergency Preparedness and Response

The potential exists for a variety of natural and made-man hazardous situations and emergencies that require a coordinated effort for effective response, stabilization, and community restoration. Policies in this section are intended to provide for ongoing emergency preparedness planning, training, and coordination.

Objective PHS-6.1:

Improve emergency preparedness and response.

Policy PHS-6.1.1:

Continue to participate in and provide updates to the Placer County Local Hazard Mitigation Plan, Loomis Annex.

Policy PHS-6.1.2:

Coordinate with emergency response agencies, school districts, and utility providers to carry out a coordinated response for recovery from an emergency or natural disaster.

Implementation Measure PHS-6.1.2.1:

The Town will work with local and regional emergency response agencies to implement and update a Local Emergency Operations Plan to address life and safety protection, incident response, evacuation, evacuation routes, training, medical care, mutual aid agreements, temporary housing, and communications.

Objective PHS-6.2:

Improve access to emergency evacuation routes.

Policy PHS-6.2.1:

Discourage the creation of new streets that have only one point of ingress and egress (i.e., “dead-end streets”) in areas prone to elevated fire or flood risk.

Policy PHS-6.2.2:

Establish designated emergency evacuation routes throughout the Planning Area for different disaster scenarios and a system to communicate evacuation directions to the public.

Implementation Measure PHS-6.2.2.1:

The Town will participate in updates to, and implementation of the Placer County Local Hazard Mitigation Plan, including strategies to ensure adequacy and reliability of emergency access and evacuation routes and a strong mutual aid support system. The Town will collaborate with the other participating agencies in the Local Hazard Mitigation Plan to ensure appropriate consideration of potential access and evacuation limitations associated with the Union Pacific Railroad. The Town will establish and at least annually confirm key points of contact with Union Pacific to ensure quick and effective action in the case of an emergency involving the railroad or access across the railroad.

Implementation Measure PHS-6.2.2.2:

The Town will evaluate public bridges and culverts and seek funding to improve bridges to minimum standards and maintain waterways clear of debris in order to ensure clear passage of flood flows. All private entitlement applications involving privately owned bridges or culverts shall comply with all relevant agency standards.

NOISE

The Noise Element Guidelines provided by the State of California Governor's Office of Planning and Research require that major noise sources be identified and quantified through the preparation of generalized noise contours for current and projected conditions. Vibration is also addressed in this Element. Significant noise sources in the Loomis area include traffic and railroad operations. Industrial operations are an additional, but less intrusive, noise source in Loomis, except for

those residents located near the few such operations. There are no airports in the area that could be a source of noise.

Goals, Objectives, Policies, and Implementation Measures

Goals

Goal Noise 1:

To protect Town residents and workers from the harmful and annoying effects of noise and vibration.

Objectives, Policies, and Implementation Measures

Objective Noise-1.1:

To mitigate the effects of noise created by roadway traffic and non-residential land uses while discouraging the construction of sound walls.

Policy Noise-1.1.1:

New commercial and industrial development in the Town shall be sited and designed to minimize the potential for harmful or annoying noise that would create conflict with existing noise-sensitive land uses.

Policy Noise-1.1.2:

Loomis shall encourage strategies to reduce noise and vibration impacts associated with new developments.

Policy Noise-1.1.3:

The Town will require feasible site design, buffers, use of insulation, and other appropriate strategies to reduce noise impacts to acceptable levels.

Policy Noise-1.1.4:

Loomis shall discourage the construction of noise barriers to address noise impacts unless it is the only feasible alternative. New noise-

sensitive land uses shall not be permitted if the only feasible noise reduction strategy for noise impacts is a noise barrier.

Policy Noise-1.1.5:

Noise reduction strategies should focus on site planning and project design solutions rather than noise barriers. When needed to achieve the Town's acceptable noise levels, the following noise reduction strategies shall be considered, and preference shall be given, where feasible, in the following order: (1) site layout, including setbacks, open space separation and shielding of noise-sensitive land uses with non-noise-sensitive uses; (2) acoustical treatment of buildings; and (3) structural measures: construction of earthen berms and/or wood or concrete barriers.

Policy Noise -1.1.6:

Provide for alternative transportation modes such as bicycle paths and pedestrian walkways to minimize the number of automobile trips.

Policy Noise-1.1.7:

Require that new equipment and vehicles purchased by the Town comply with noise performance standards consistent with the best available noise reduction technology.

Policy Noise-1.1.8:

Consider the use of rubberized asphalt paving material, where feasible, for future road paving and re-paving.

Policy Noise-1.1.9:

Consider the use of traffic calming devices to reduce traffic noise in residential areas, when supported by the residential community in question.

Policy Noise-1.1.10:

Require that automobile and truck access to industrial and commercial properties proposed adjacent to residential or other noise-sensitive land

uses be located at the maximum practical distance from outdoor activity areas at the noise-sensitive land uses.

Policy Noise-1.1.11:

Require that when no other feasible location for industrial or commercial use parking exists other than adjacent to residential uses, the parking shall be buffered from the residential uses by barriers.

Policy Noise-1.1.12:

Limit the use of leaf blowers, motorized lawn mowers, parking lot sweepers, or other high-noise equipment on commercial properties if their activity will result in noise which adversely affects noise-sensitive land uses.

Policy Noise-1.1.13:

Require that the hours of truck deliveries to industrial and commercial properties adjacent to residential uses be limited to daytime hours unless there is no feasible alternative or there are overriding transportation benefits by scheduling deliveries at night.

Policy Noise-1.1.14:

Require that construction activities adjacent to noise-sensitive land uses be limited as necessary to prevent adverse noise impacts.

Policy Noise-1.1.15:

Future industrial or commercial development in areas determined to be near noise-sensitive land uses shall be subject to an acoustical analysis to determine the potential for stationary source noise impacts to neighboring noise-sensitive land uses.

Policy Noise-1.1.16:

Consider the use of temporary noise barriers, limited hours, and limiting times of year for construction near schools to reduce construction-related noise.

Policy Noise-1.1.17:

Public events, such as school sporting events, Town festivals, and similar community and temporary events, and noise associated with emergency vehicles, alarms, or signals are exempt from the Town's noise standards.

Implementation Noise-1.1.17.1:

The Town will review new developments and improvements to vehicular transportation facilities and employ feasible strategies with the goal of achieving the acceptable noise levels identified in Tables 8-3 and 8-4. Acoustical analysis, where required, shall be included in environmental review. Such analysis shall include identification of noise impacts and potential noise reduction strategies. Analysis should generally be the responsibility of the applicant for private development projects; be prepared by a qualified professional; include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources; estimate existing and plus-project noise levels; and recommend appropriate mitigation, if needed. Analyses shall include an assessment of potential construction noise impacts, as needed. Where the noise source in question consists of intermittent single events, the report should address effects related to possible sleep disturbance. The analysis should also show the effectiveness of proposed noise reduction strategies relative to the Town's guidance. The analysis may be waived at the discretion of the Planning Director if the subject project would clearly be consistent with the Town's acceptable noise levels due to the small scale of the subject project, the relevant noise sources, the availability of environmental noise data, and/or the incorporation of noise reducing design features.

Implementation Noise-1.1.17.2:

The Town will maintain Municipal Code standards that protect inhabitants from impacts of exterior noise, prevent the transference of interior noise to the outside, prevent transference of noise between residential units and individual businesses in multi-tenant buildings,

and prevent transference of noise between commercial and residential uses in mixed structures. Standards for insulation, windows, building materials, walls, and roofs shall be included.

Implementation Noise-1.1.17.3:

The Town will maintain Municipal Code standards and requirements for parking structures and lots to prevent noise effects on-site and on adjacent noise-sensitive land uses. These could include the use of buffers containing landscape and/or sound walls, use of sound absorbing materials to minimize sound amplification and transmission, enclosure of the facade of parking structures facing a residence, limitation of the hours of operation of surrounding surface parking lots, and other appropriate techniques.

Implementation Noise-1.1.17.4:

The Town will review the street layout of proposed residential subdivisions with the objective of reducing vehicular traffic as a means to reduce noise levels. The use of road dips, diagonal parking, one-way streets, and other traffic controls and traffic calming devices will be considered to reduce vehicular travel and speed, provided that engineering and safety standards are met. If determined to be feasible, rubberized asphalt paving material may be required for new roads.

Implementation Noise-1.1.17.5:

In consideration of legal constraints, the Town will set speed limits based on circulation needs, pedestrian and bicycle safety, and transportation noise exposure for noise-sensitive land uses along roadways.

Implementation Noise-1.1.17.6:

To reduce noise associated with truck traffic, the Town shall implement the following noise reduction strategies:

- a. Encourage the use of established designated truck routes that avoid residential areas and confine truck traffic to major thoroughfares. Designated truck routes must be followed.
- b. Post designated areas and times to prohibit the use of jake brakes along established truck routes adjacent to noise-sensitive land uses.

Objective Noise-1.2:

Apply criteria for acceptable noise increases in the Town's environmental review.

Policy Noise-1.2.1:

Review proposed projects for potential impacts associated with noise and vibration, in accordance with the California Environmental Quality Act.

Implementation Measure Noise-1.2.1.1:

The Town will use the following guidance in making a determination of impact under the California Environmental Quality Act. Generally, a 3 dB increase in noise levels is barely perceptible, and a 5 dB increase in noise levels is clearly perceptible. Therefore, increases in noise levels shall be considered substantial when the following occurs:

- When existing noise levels are less than 60 dB, a 5-dB increase in noise will be considered substantial.
- When existing noise levels are between 60 dB and 65 dB, a 3-dB increase in noise will be considered substantial.
- When existing noise levels exceed 65 dB, a 1.5-dB increase in noise will be considered substantial.
- Additional or alternative criteria can be used for determining a substantial increase in noise levels. For instance, if the overall increase in noise levels occurs where no noise-sensitive land uses are located, then the Town may discretion in determining the presence of any impact. The following factors may be used for

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determining a substantial increase in noise levels; the resulting noise levels; the duration and frequency of the noise; the number of people affected; the presence of conforming or non-conforming land uses; the land use designation of the affected receptor sites; public testimony; and prior California Environmental Quality Act determinations by other agencies specific to the subject project.

Implementation Measure Noise-1.2.1.2:

The Town shall require vibration-sensitive projects located adjacent to major freeways, truck routes, hard rail lines, or light rail lines to follow the Federal Transit Authority criteria to ensure that groundborne vibrations to do not exceed acceptable levels.

Table 7-1. Maximum Acceptable Noise Levels – Transportation Noise Sources			
Noise Sensitive Land Use ⁴	Outdoor Activity Areas ^{1,2}	Interior Spaces	
	dBA L _{dn}	dBA L _{dn}	dBA L _{eq} ³
Residential	65	45	--
Transient Lodging	65	45	--
Hospitals, Nursing Homes	65	45	--
Theatres, Auditoriums, Music Halls	--	--	35
Churches, Music Halls	65	--	40
Office Buildings	65	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

- ¹ Outdoor activity areas for residential development are considered to be backyard patios or decks of single-family dwellings, and the common areas where people generally congregate for multi-family developments. Outdoor activity areas for non-residential developments are considered to be those common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
- ² Where it is not feasible to reduce noise in outdoor activity areas to 65 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 70 dB L_{dn}/CNEL may be allowed provided that

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Table 7-1. Maximum Acceptable Noise Levels – Transportation Noise Sources

Noise Sensitive Land Use ⁴	Outdoor Activity Areas ^{1,2}	Interior Spaces	
	dBA L _{dn}	dBA L _{dn}	dBA L _{eq} ³

available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

³ Determined for a typical worst-case hour during periods of use.

⁴ Where a proposed use is not specifically listed on the table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the Town.

CNEL = Community Noise Equivalent Level

dB = decibels

dBA = A-weighted decibel(s)

L_{dn} = Day-Night Average Sound Level

L_{eq} = Equivalent Sound Level

Table 7-2: Maximum Acceptable Noise Levels – Noise-Sensitive Land Uses Affected by Stationary Noise Sources

Noise Level Descriptor	Daytime (7 AM – 10 PM)	Nighttime (10 PM – 7 AM)
Hourly L _{eq} , dB	50	45
Maximum Level, dB	70	65

Notes:

Each of the noise levels specified above should be lowered by five (5) dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels. Where the ambient noise level is already higher than the acceptable noise level, the performance standard becomes the ambient noise level plus 5 dB if the ambient level is 60 dB or less, the ambient noise level plus 3 dB if the ambient level is between 60 dB and 65 dB, and the ambient level plus 1.5 dB if the ambient level is more than 65 dB.

dB = decibels

L_{eq} = Equivalent Sound Level

Objective Noise-1.3:

To minimize the noise effect of railroad and highway operations on residential uses and other noise-sensitive land uses.

Policy Noise-1.3.1:

Take available actions to minimize the noise effect associated with railroad operations through the Town.

Policy Noise-1.3.2:

Support California Department of Transportation and Union Pacific Railroad efforts to install noise attenuation features adjacent to existing residential areas and other noise-sensitive land uses.

Implementation Noise-1.3.2.1:

The Town will communicate with Caltrans and the Union Pacific Railroad to explore solutions for noise impacts resulting from existing and proposed highway and railroad facilities that focus not only on impacts to new development projects, but also on pursuing solutions to reduce impacts on existing development exposed to unacceptable noise levels, including noise barriers, if no feasible alternatives exist.

Implementation Measure Noise-1.3.2.2:

Using guidance developed by the Federal Railroad Administration, the Town will collaborate with Union Pacific Railroad to establish a quiet zone, or a reduced train horn area where locomotive horns are no longer routinely sounded when approaching Loomis crossings with a mutually acceptable approach to installation and maintenance of any required active warning devices.