

CITY *of* CALABASAS
2030 General Plan

VIII – Noise Element



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VIII. NOISE ELEMENT

The purpose of the Noise Element is to limit the exposure of the community to excessive noise level. The Noise Element is to be used to guide decisions concerning land use and the location of common sources of excessive noise levels. To that end, the Noise Element identifies and addresses noise sources and establishes projected noise levels for significant noise generators.

Vehicle traffic, especially along the Ventura Freeway corridor, is by far the greatest source of noise affecting Calabasas residents. Other sources include traffic on arterial roadways, such as Las Virgenes Road, Lost Hills Road, Calabasas Road, Old Topanga Canyon Road, and Mulholland Highway. In particular, truck traffic to and from Calabasas Landfill is a source of noise on Lost Hills Road north of the Ventura Freeway. Residences, schools, hotels, and hospitals are generally considered sensitive receptors where excessive noise can interfere with normal activities.

Noise is generally defined as unwanted sound. Its effects can range from annoyance to nuisances to health problems.

VIII.A Noise Background

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). **Table VIII-1** lists a range of typical noise levels that one may encounter.

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the



VIII. NOISE ELEMENT

Table VIII- 1 Typical Noise Levels	
Noise Source	Noise Level (decibels)
Type of Noise or Environment	Decibels
Recording Studio	20
Soft Whisper; Quiet Bedroom	30
Busy Open-plan Office	55
Normal Conversation	60-65
Automobile at 20 mph 25 ft. away	65
Vacuum Cleaner 10 ft. away	70
Dump Truck at 50 mph 50 ft. away	90
Train Horn 100 ft. away	105
Claw Hammer; Jet Takeoff 200 ft. away	120
Shotgun at shooter's ear	140

human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1–2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40–50 dBA, while noise levels along arterial streets are in the 50–60+ dBA range. Normal conversational levels are in the 60–65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.



VIII. NOISE ELEMENT

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than noise that occurs during the daytime. The Community Noise Equivalent Level (CNEL) recognizes this fact by weighting hourly Leqs over a 24-hour period. Essentially, the CNEL is a 24-hour average noise level that adds 5 dB to evening (7 PM to 10 PM) noise levels and 10 dB to nighttime (10 PM to 7 AM) noise levels to account for the greater sensitivity to noise during those time periods.

Depending on the type of land use that is exposed to such unwanted sounds, noise can have little effect or a substantially adverse effect on the use of land. Land uses that are generally more sensitive to noise are those where people spend considerable time inhabiting a site and would be disturbed by loud single event or continuous noise influences. These uses include residences, schools, parks, hospitals, libraries, hotels/motels, places of worship, and auditoriums. Land uses that are not typically noise sensitive are those that generate noise themselves or that are otherwise resilient to loud noise exposures. Such uses include active recreation centers, offices, commercial retail centers, business parks, utility stations, etc.

Land use types with the greatest sensitivity to noise typically have more stringent noise standard requirements, while non-noise sensitive land uses or uses with reduced noise sensitivity have less restrictive standards. Where the addition of a new noise source has a potential adverse affect on an existing use (particularly a sensitive noise receptor), the new noise and its source will be examined to determine if any noise standards, onsite or offsite, will be exceeded. Where noise standards will be exceeded, mitigation must be included as part of the proposed project to reduce noise levels to below threshold criteria. Some traditional approaches to addressing noise issues, such as sound walls, may not be acceptable in certain circumstances because of conflicts with other community objectives.

VIII.B Noise Levels in Calabasas

Figure VIII-1 shows noise levels measured at 20 locations throughout the City in 2007. **Table VIII-2** identifies those sites measured on **Figure VIII-1**. **Figure VIII-2** displays existing noise contours for Calabasas, which are estimates of noise levels based on the measured levels shown in combination with modeling of roadway noise based on 2007 traffic data. The highest noise levels in Calabasas are generally adjacent to the Ventura Freeway and arterial roadways, while residential neighborhoods generally experience relatively low noise levels.

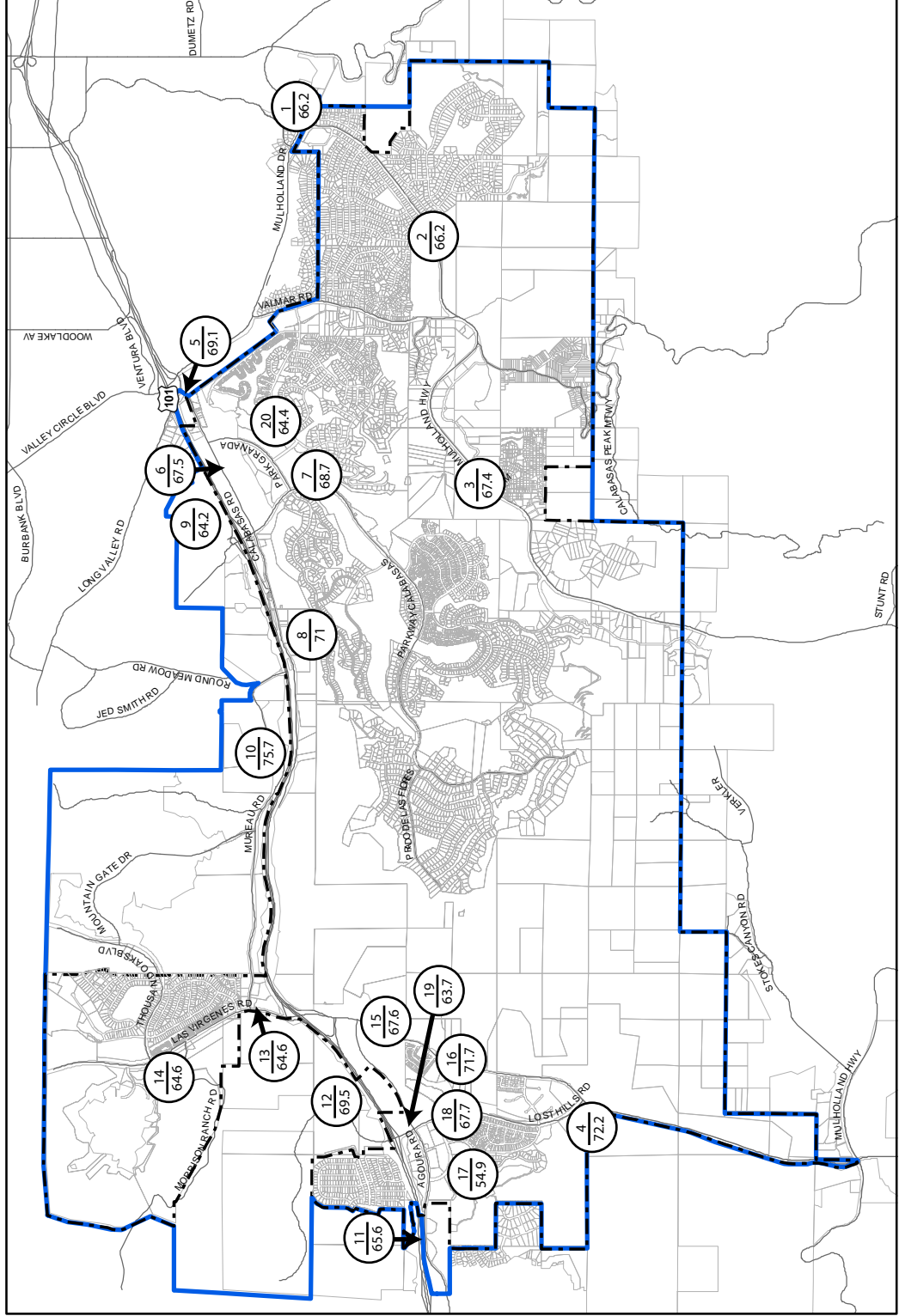


VIII. NOISE ELEMENT

Table VIII- 2 Measured Noise Levels *				
Site No.	Location	Leq	Leq Min.	Leq Max
1	Mulholland Dr. near Mulholland Hwy Intersection	66.2	45.9	93
2	Mulholland Hwy near Calabasas High School	66.2	44.3	79.8
3	Mulholland Hwy near Viewpoint School	67.4	43.2	86.5
4	Las Virgenes Road-south of Lost Hills Rd.	72.2	48.7	90.3
5	Old Town Calabasas on Calabasas Road	69.1	55.1	93.8
6	Calabasas Rd. east of Parkway Calabasas	67.5	54.4	83.1
7	Parkway Calabasas--south of Park Granada	68.7	50.4	87.8
8	Calabasas Rd. west of Parkway Calabasas	71	59.1	86.7
9	Craftsman Rd. --north side of 101	64.2	55.9	83.7
10	Mureau Road north side of 101	75.7	68.1	87.5
11	Canwood St. along north side of 101	65.6	59.8	73.4
12	Lost Hills Rd. North side of 101--entrance road to Landfill	69.5	55.6	87
13	Las Virgenes Road-south of Mureau Road	64.6	52.7	81.3
14	Las Virgenes Road-south of Thousand Oaks Blvd.	64.6	48.8	80
15	Las Virgenes Road-- just south of Agoura Road	67.6	48.4	87.9
16	Las Virgenes Road at A.C Stelle Middle School	71.7	45.4	87
17	Calabasas Hills Road near Malibu Hills Rd.	54.9	40.2	76.5
18	Lost Hills Road near Malibu Hills Road intersection	67.7	50.9	83.7
19	Agoura Road East of Lost Hills Road intersection	63.7	47.7	82.2
20	Park Sienna at Park Alisal	64.4	40.2	80.8

* See Figure VIII-1 for noise measurement locations.





Source: City of Calabasas and Rincon Consultants, 2008. Updated March 2014.

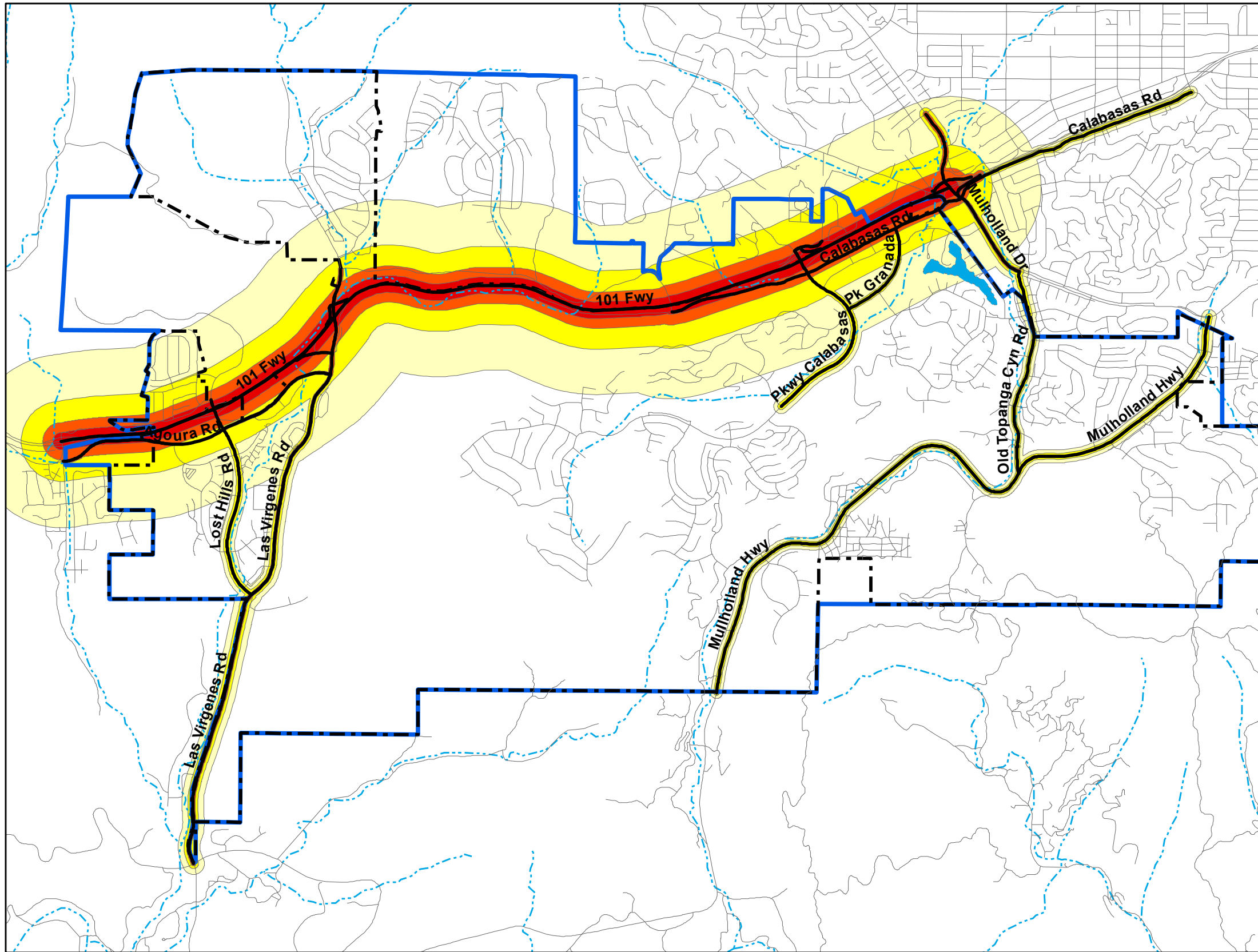
Figure VIII-1
Existing Noise Levels



VIII. NOISE ELEMENT

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- LEGEND**
- Major Roads
 - - - Calabasas City Boundary
 - ▭ Plan Area Boundary
 - Existing 75 dBA Contour
 - Existing 70 dBA Contour
 - Existing 65 dBA Contour
 - Existing 60 dBA Contour

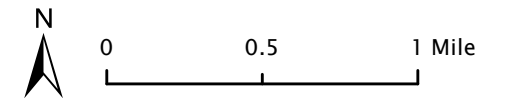


Figure VIII-2
Existing Noise Contours

Source: City of Calabasas, 2007, and Rincon Consultants, 2007. CNEL contour values (above 5000 ADT) based on traffic volumes from Associated Traffic Engineers, September, 2007. Updated March 2014.



VIII. NOISE ELEMENT

Open space, hillside management, and low density residential areas in Calabasas are areas where ambient noise levels are low. Such areas allow retreat from urban activities by providing tranquility and a sense of peacefulness. These areas also contain biological resources and diversity that are important environmental considerations to the Calabasas community. Wildlife moves between plant communities or habitats and open space areas along corridor systems. Generally absent from open space areas is urban noise encroachment.

VIII.C Noise Objective and Policies

Objective

Achieve and maintain noise compatible land use relationships consistent with the nature and character of individual land uses.

General Plan Approach

The Noise Element establishes noise compatible land use performance standards for the range of uses present in and around Calabasas. These standards were used in creating the General Plan Land Use Map to promote an appropriate pattern of land uses that preserves a quiet environment where such an environment is desired. Uses where a quiet environment is particularly desirable include residences, schools, medical facilities, and hotels.

The Land Use Compatibility for Community Noise Environments matrix (**Figure VIII-3**) establishes noise levels that are compatible with new uses proposed in the City. This matrix will be used to determine whether a proposed new use would be compatible with the ambient noise environment in which it is proposed as well as whether or not the proposed new use would create noise compatibility conflicts with established uses.

In addition to addressing the potential noise impacts associated with new development, the City intends to proactively address existing noise issues and those that could arise between existing developments. To this end, the City intends to identify and, where possible, mitigate the effects of existing noise sources, such as the Ventura Freeway. As part of the Development Code update, the City will also establish a noise ordinance that governs allowable noise levels on private properties in Calabasas.

As noted above, noise encroachment into open space, hillside mountainous, and low density residential areas can potentially destroy the tranquility associated with open



LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE							
	Ldn or CNEL, dBA							
	55	60	65	70	75	80	85	
RESIDENTIAL - LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES	[Blue bar from 55 to 60]		[Yellow bar from 60 to 70]			[Orange bar from 70 to 75]		[Red bar from 75 to 85]
RESIDENTIAL - MULTI-FAMILY	[Blue bar from 55 to 65]			[Yellow bar from 65 to 70]		[Orange bar from 70 to 75]		[Red bar from 75 to 85]
TRANSIENT LODGING - MOTELS, HOTELS	[Blue bar from 55 to 65]			[Yellow bar from 65 to 70]		[Orange bar from 70 to 80]		[Red bar from 80 to 85]
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES	[Blue bar from 55 to 65]			[Yellow bar from 65 to 70]		[Orange bar from 70 to 80]		[Red bar from 80 to 85]
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES	[Yellow bar from 55 to 70]			[Orange bar from 70 to 85]				
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS	[Yellow bar from 55 to 75]			[Orange bar from 75 to 85]				
PLAYGROUNDS, NEIGHBORHOOD PARKS	[Blue bar from 55 to 70]				[Orange bar from 70 to 75]		[Red bar from 75 to 85]	
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES	[Blue bar from 55 to 75]				[Orange bar from 75 to 80]		[Red bar from 80 to 85]	
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL	[Blue bar from 55 to 70]				[Yellow bar from 70 to 75]		[Orange bar from 75 to 85]	
INDUSTRIAL, MANUFACTURING, UTILITIES, AGRICULTURE	[Blue bar from 55 to 75]				[Yellow bar from 75 to 80]		[Orange bar from 80 to 85]	

NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

Source: Guidelines for the Preparation and Content of Noise Elements of the General Plan, California Office of Planning and Research, 1998.

Figure VIII-3
Land Use Compatibility for Community Noise Environments



VIII. NOISE ELEMENT

space (including the ability to retreat from the stress of urban activity) and cause wildlife displacement where urban noises and influences exceed the tolerance levels of certain species. It is the desire of the City to prohibit the encroachment of urban noise into these areas, thereby retaining the tranquility of open space and low density residential areas as well as the wildlife movement and biological diversity that is present in such areas. Consequently, projects that cause a significant adverse effect on open space, hillside management, or low density residential areas that cannot be mitigated will not be allowed.

Policies

VIII-1 Use the Land Use Compatibility for Community Noise Environments matrix (**Figure VIII-3**) to determine the compatibility of land use when evaluating proposed new land uses in the City. The matrix shall be used as a guide to assist in determining the acceptability of noise for existing or proposed land use.

In this matrix, the degree of acceptability is categorized by noise exposures that are normally acceptable, conditionally acceptable, normally unacceptable and clearly unacceptable. Action on proposed projects shall be guided according to the degree of land use/noise acceptability as follows.

- ***Normally Acceptable:*** *The potential for project approval should not be encumbered by land use/noise compatibility issues*
- ***Conditionally Acceptable:*** *The potential for project approval should not be encumbered by land use/noise compatibility issues, provided the applicant has included measures or conditions that are acceptable to the Planning Commission or appropriate planning authority and ultimately result in land use/noise compatibility.*
- ***Normally Unacceptable:*** *The potential for project denial will be considered likely as a result of land use/noise incompatibility, unless extraordinary circumstances are present that do not involve adjacent properties or uses. Overriding project benefits cannot be utilized to justify extraordinary circumstances.*
- ***Clearly Unacceptable:*** *If a project falls into this category, it shall not be approved due to land use/noise compatibility issues.*



VIII. NOISE ELEMENT

- VIII-2** If a proposed development project that will create or affect existing noise sensitive land uses is proposed in a location that is within a 60 dBA or greater CNEL noise contour, as determined by independent experts or consultants hired by the City, require that the project applicant demonstrate that, unless mitigation is available: (1) the project will not generate noise exceeding the “normally acceptable” range for existing uses on adjacent properties; and (2) adjacent influences will not generate ambient noise on the project site that exceeds the “normally acceptable” range for the proposed use.
- VIII-3** Locate and design noise-sensitive land uses and noise generators in such a manner that noise objectives will be maintained.
- VIII-4** Emphasize the following as the City's preferred noise management strategies, and as higher priorities than construction of noise barriers:
- *Avoiding placement of noise-sensitive uses within noisy areas*
 - *Increased setbacks from noise sources*
 - *Building orientation that shields noise sensitive portions of a project from noise sources*
 - *Use of sound attenuating architectural design and building features*
- VIII-5** Incorporate noise considerations into the design of transportation systems and ensure that noise impacts associated with roadway extensions and capacity enhancement projects are mitigated to acceptable levels.
- VIII-6** Incorporate consideration of noise impacts to significant wildlife habitats into the development/environmental review process.
- VIII-7** Prohibit the creation of helicopter pads, except where needed for emergency services.
- VIII-8** Use noise standards in the review of proposed developments to determine whether the proposal promotes acceptable noise compatible land uses both during construction and subsequently.
- VIII-9** Pro-actively address noise along the Ventura Freeway and other major corridors.



VIII. NOISE ELEMENT

- VIII-10** Develop a noise ordinance that establishes maximum allowable noise levels on private property within Calabasas, including specific standards for mixed use developments.



VIII. NOISE ELEMENT

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