

9. NOISE ELEMENT



Noise in Colusa County is generated by a variety of sources, including, but not limited to: vehicle traffic, airport operations, agricultural activities, and industrial operations. The overall purpose of the Noise Element is to limit and minimize the exposure of County residents to excessive noise. The Noise Element is a mandatory component of the General Plan.

This Noise Element contains goals, objectives, policies and action items that seek to reduce community exposure to excessive noise levels through the establishment of noise level standards for a variety of land uses. Background information related to this Element is contained in the Colusa County General Plan Background Report.

Goal N-1: Protect people from the harmful and annoying effects of exposure to excessive noise.

Objective N 1-A: Ensure that Existing and Planned Land Uses are Compatible with the Current and Projected Noise Environment

Policy N 1-1: New proposed stationary noise sources shall not result in noise levels that exceed the standards of Table N-1, as measured immediately within the property line of lands designated for noise-sensitive uses.

Policy N 1-2: Ensure that noise sources do not interfere with sleep by applying an interior maximum noise level criterion (L_{max}) of 45 dBA in sleeping areas, for sensitive receptors.

Policy N 1-3: Prohibit development of new noise-sensitive land uses in areas exposed to existing or projected noise levels that exceed the levels specified in Table N-2. An exception to this policy is provided when the project design demonstrates attenuated noise levels that meet the criteria specified in Table N-2.

Policy N 1-4: Noise created by new mobile sources near existing noise-sensitive land uses shall not exceed noise levels specified in Table N-2.

Policy N 1-5: The following criteria shall be used to determine the significance, for projects required by the California Environmental Quality Act to analyze noise impacts, of roadway noise impacts for roadway improvement, development, and other projects that increase roadway noise:

- Where existing traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +5 dB L_{dn} increase in roadway noise levels will be considered significant; and
- Where existing traffic noise levels range between 60 and 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in roadway noise levels will be considered significant; and
- Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB L_{dn} increase in roadway noise levels will be considered significant.

Policy N 1-6: Require new land use development proposals to address potential stationary and mobile noise impacts and land use incompatibilities from aircraft noise, train travel, and truck travel.

Policy N 1-7: Enforce state and federal laws which prohibit the operation of vehicles equipped with illegal or faulty exhaust systems.

A-weighted decibels, abbreviated dBA, are an expression of the relative loudness of sounds in air as perceived by the human ear. Average noise exposure over a 24-hour period is presented as a day-night average sound level, or Ldn.

Policy N 1-8: Require new development projects and long-term planning projects to conform with the County’s Airport Safety and Noise land use criteria, as identified in the Colusa County Airport Comprehensive Land Use Plan (CLUP).

Action N 1-A: Review and update Chapter 13 of the Colusa County Code to ensure consistency with the maximum noise levels identified in Tables N-1 and N-2, for new development, roadway, and other planning projects. The revisions to Chapter 13 of the County Code shall include procedures to ensure that new development projects or changes to existing projects adhere to the noise standards contained in the Noise Element. The revisions to Chapter 13 of the County Code shall identify specific methods of reducing noise, as discussed in Policies N-1 through N-17 and Action N 1-B.

Action N 1-B: Update the County’s Zoning Ordinance to require new residential or noise-sensitive development to be designed to minimize noise exposure to noise sensitive users through incorporation of site planning and architectural techniques such as:

- Locating dwellings as far back from noise generators as possible.
- Locating noise sensitive interior spaces, such as bedrooms, away from noise generators.
- Orienting buildings to shield noise sensitive outdoor spaces from noise generators.
- Sound walls should be avoided or minimized, through berms, setbacks, or other measures, to the maximum extent feasible and appropriate.

Action N 1-C: Continue to enforce the State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code).

Action N 1-D: Review new development and long-term planning projects, including the Zoning Code Update, for conformity with the County’s Airport Safety and Noise land use criteria, as identified in the Colusa County Airport Comprehensive Land Use Plan (CLUP).

Action N 1-E: Collaborate with Caltrans, the California Public Utilities Commission and railroad operators to improve at-grade railroad crossings in and/or near communities to reduce the necessity for train whistle blasting.

Action N 1-F: To the extent feasible, plan and maintain designated truck travel routes to minimize impacts on noise sensitive land uses.

Action N 1-G: Design roadway improvement projects to use noise attenuating road surfacing materials near noise sensitive residential areas, when practical and economically feasible.

Action N 1-H: Coordinate with Caltrans to maintain highway noise level standards for both new and existing projects to comply with Table N-2.

Note: For the purposes of the Noise Element, mobile noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are presumed to be subject to local regulations, such as a noise control ordinance. Stationary noise sources may include industrial operations, outdoor recreation facilities, HVAC units, loading docks, etc.

9. NOISE ELEMENT

Objective N 1-B: *Protect the County's Economic Base by Preventing Incompatible Land Uses from Encroaching upon Existing or Planned Noise-Producing Agriculture, Industries, Farmland, Airports, and Other Sources*

Policy N 1-9: Recognizing that existing and future traffic noise along the Interstate 5 corridor is an area of potential land use conflict for existing and future land uses, the County will allow reasonable use of this land, with an exterior noise exposure level not exceeding 65 dB L_{dn}/CNEL. Design of new development of noise sensitive uses, such as residential development, along this corridor should incorporate noise attenuation measures such as: larger setbacks from the highway, landscaped berms, and construction that emphasizes noise attenuation to reduce interior noise levels to those identified in Table N-2. Application of this noise standard is intended to provide for reasonable exterior noise levels while discouraging the use of excessively tall and unattractive sound walls.

Policy N 1-10: New development of noise-sensitive uses shall not be allowed where the noise level due to stationary noise sources will exceed the exterior noise level standards of Table N-1 unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table N-1.

Policy N 1-11: Recognizing that the economic base of the county depends on agricultural operations that are characterized by increased noise levels from the use of tractors, heavy equipment, crop dusting, bird deflection devices, agricultural products processing, and other supporting equipment and activities, new noise sensitive land uses that interface with agricultural lands must acknowledge and accept these increased noise levels as part of the County's rural lifestyle; that the noise from these operations cannot reasonably be mitigated so as to comply with the noise level criteria in this Noise Element. Consequently, any noise sensitive new use/development located next to or near agricultural lands or operations shall indemnify adjoining and nearby farmers from increased noise levels resulting from these agricultural operations (refer to Action N 1-I).

Action N 1-I: As a condition of project approval, require new uses and development that introduce sensitive noise receptors near agricultural lands or operations to acknowledge, indemnify, and hold the farmers and the County harmless from reasonable nuisances caused by farming activities that generate noise, dust, vibration and odors through a covenant, easement or other legal property disclosure approved by the County, (See Article 4 of the County Code).

Objective N 1-C: *Encourage the Application of State of the Art Land Use Planning Methodologies in Areas of Potential Noise and Vibration Conflicts*

Policy N 1-12: Where noise mitigation measures are required to achieve the standards of Tables N-1 or N-2, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been considered and integrated into the project. Landscaped berms shall be considered as a preferred mitigation option over sound walls (refer to Action N 1-B).

Policy N 1-13: An acoustical analysis shall be prepared and submitted to the County according to the requirements of Table N-3 when:

- Noise sensitive land uses are proposed in areas exposed to existing or projected noise levels exceeding the Table N-1 (stationary) or Table N-2 (mobile) noise level standards.
- A proposed project has the potential to create new noise levels exceeding the noise level standards of Table N-1 or Table N-2.

Policy N 1-14: Require new multiple occupancy dwellings such as hotels, apartments, and condominiums to comply with the Sound Transmission Control Standards of the California Building Code.

Policy N 1-15: As part of the review of new development projects, consider vibration impacts and require mitigation to reduce any significant adverse impacts to the maximum extent feasible and practical.

Policy N 1-16: In making a determination of impact under the California Environmental Quality Act (CEQA), a significant impact will occur if the project results in an exceedance of the noise level standards contained in this Noise Element, or the project will result in an increase in ambient noise levels by more than 3 dB.

Policy N 1-17: Require use of site design measures, such as the use of building design and orientation, buffer space, use of berms, and noise attenuation measures applied to the noise source, to reduce impacts to the maximum extent feasible and practical before mitigating noise impacts through use of sound walls. The use of sound walls or noise barriers to attenuate noise from existing noise sources is discouraged, but may be allowed if the wall is architecturally incorporated into the project design, blends into the natural landscape, and does not adversely affect significant public view corridors.

Action N 1-J: As part of the project review and approval process, require that all acoustical studies be prepared in accordance with Table N-3.

Action N 1-K: As part of the project review and approval process, require construction projects and new development anticipated to generate a significant amount of ground borne vibration to ensure acceptable interior vibration levels at nearby noise-sensitive uses based on Federal Transit Administration criteria.

9. NOISE ELEMENT

TABLE N-1
EXTERIOR AND INTERIOR NOISE LEVEL PERFORMANCE STANDARDS FOR PROJECTS
AFFECTED BY OR INCLUDING NON-TRANSPORTATION NOISE SOURCES

| TYPE OF USE | INTERIOR NOISE LEVEL STANDARD | EXTERIOR NOISE LEVEL, LEQ 1 | |
|--|-------------------------------|--------------------------------|----------------------------------|
| | | DAYTIME (7 A.M. TO 10 P.M.) | NIGHTTIME (10 P.M. TO 7 A.M.) |
| All sensitive land uses | 45 dB L _{max} | 55 dB | 45 dB |
| New residential affected by existing seasonal agricultural noise | 40 dB L _{dn} | NA | NA |

¹ Exterior noise level standard to be applied at the property line of the receiving land use or at a designated outdoor activity area (at the discretion of the Planning Director) of the new development. For mixed-use type projects, the exterior noise level standard may be waived (at the discretion of the Planning Director) if the project does not include a designated activity area and mitigation of property line noise is not practical. In this case, the interior standard would still apply.

Each of the exterior noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises (e.g., humming sounds, outdoor speaker systems). These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards that are more restrictive than those specified above based upon determination of existing low ambient noise levels.

Notes:

Fixed noise sources which are typically of concern include, but are not limited to the following:

- | | |
|---------------------------------------|------------------|
| Air Compressors | Generators |
| Blowers | Grinders |
| Boilers | Heavy Equipment |
| Cooling Towers/Evaporative Condensers | Lift Stations |
| Conveyor Systems | Outdoor Speakers |
| Cutting Equipment | Pile Drivers |
| Drill Rigs | Pump Stations |
| Emergency Generators | Rice Dryers |
| HVAC Systems | Steam Turbines |
| Fans | Steam Valves |
| Gas or Diesel Motors | Transformers |
| Gas Wells | Welders |

The types of uses which may typically produce the noise sources described above include but are not limited to: various industrial and agricultural facilities, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

TABLE N-2
MAXIMUM ALLOWABLE NOISE EXPOSURE
TRANSPORTATION NOISE SOURCES

| LAND USE | OUTDOOR ACTIVITY AREAS ¹ LDN / CNEL, DB | INTERIOR SPACES | |
|---------------------------------------|---|-----------------|----------|
| | | LDN / CNEL, DB | LEQ, DB2 |
| Residential | 60 ³ | 45 | -- |
| Residential – Interstate 5 corridor | 65 | 45 | -- |
| Transient Lodging | 60 ⁴ | 45 | -- |
| Hospitals, Nursing Homes | 60 ³ | 45 | -- |
| Theaters, Auditoriums, Music Halls | -- | -- | 35 |
| Churches, Meeting Halls | 60 ³ | -- | 40 |
| Office Buildings | -- | -- | 45 |
| Schools, Libraries, Museums | -- | -- | 45 |
| Playgrounds, Neighborhood Parks | 70 | -- | -- |

¹ Outdoor activity areas for residential developments are considered to be the back yard patios or decks of single family dwellings, and the patios or common areas where people generally congregate for multi-family development.

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 or at a distance of 100 feet from an existing or proposed building envelope.

² As determined for a typical worst-case hour during periods of use.

³ Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

⁴ In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

Note: Where a proposed use is not specifically listed on this table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the Planning Department. Commercial and industrial uses have not been listed because such uses are not considered to be particularly sensitive to noise exposure.

TABLE N-3
REQUIREMENTS FOR AN ACOUSTICAL ANALYSIS

An acoustical analysis prepared pursuant to the Noise Element shall:

- A. Be the financial responsibility of the applicant.
- B. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
- C. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
- D. Estimate existing and projected cumulative (20 years) noise levels in terms of L_{dn} or CNEL and/or the standards of Table N-1, and compare those levels to the adopted policies of the Noise Element.
- E. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses.
- F. Estimate noise exposure after the prescribed mitigation measures have been implemented.
- G. Describe a post-project assessment program that could be used to evaluate the effectiveness of the proposed mitigation measures.