
SECTION 4 - NOISE

INTRODUCTION

The Noise Element of the General Plan is a planning document, which is intended to provide a policy framework within which potential noise impacts may be addressed in the project review and long range planning processes. It is intended that this Element be the adopted Noise Element of the Tulare County General Plan, in conformance with Section 65302 (f) of the California Government Code.

It is intended that the noise exposure information developed during the preparation of the Noise Element be utilized by Tulare County to implement the requirements of California Administrative Code (CAC) Title 24 by providing a basis for determining where noise-related land use conflicts presently exist or may occur in the future. It is also intended that the noise exposure information developed for the Noise Element be used to provide baseline levels for use in the development and enforcement of a local noise control ordinance should the County determine that adoption of such an ordinance is appropriate at some point. A local noise control ordinance may be used to address noise levels generated by local industrial, commercial, agricultural and residential uses, which are not regulated by federal or state noise level standards. The regulation of noise sources such as traffic on public roadways, railroad operations and aircraft operations is preempted by existing federal and/or state regulations, meaning that such sources generally may not be addressed by a local noise control ordinance.

The Noise Element is a pro-active document, which is directed at minimizing future noise conflicts, whereas a noise ordinance is a reactive document, which is directed at resolving existing noise conflicts. The adopted policies of the Noise Element should generally be consistent with the noise level standards of a local noise control ordinance (if one is adopted) to achieve consistency in the implementation of noise control programs, and to provide local industry with design criteria for future development or expansion.

This Noise Element supersedes the previous Noise Element adopted by Tulare County in 1975. In order to provide for an integrated approach to the noise-related aspects of land use compatibility planning countywide, a coordinated approach to implementing the policies of the Noise Element must be carried out by the County. This will be especially important in areas of the County, which are located within the urban area boundaries of incorporated cities.

The Noise Element is most related to the Land Use and Circulation Elements of the General Plan. Its relationship to the Land Use Element is direct, in that the implementation of either element has the potential to result in the creation or elimination of noise conflicts between land uses. The Land Use Element and the Noise Element should be consistent in order to discourage the development of incompatible adjacent land uses, thereby preventing impacts upon noise-sensitive uses and encroachment upon existing noise-generating facilities.

The Circulation Element is linked to the Noise Element in that traffic routing and volume directly affect community noise exposure. For example, increased traffic volume may produce increased noise in a residential area so that noise control measures are required to provide an acceptable

noise environment. Similarly, re-routing traffic from a noise-impacted neighborhood may provide significant noise relief to that area.

A separate Technical Reference Document has been prepared in support of this Noise Element, which provides discussions of the fundamentals of noise assessment, the effects of noise on people, criteria for acceptable noise exposure and the techniques available for noise control. It is intended that the Technical Reference Document serve as a reference for Tulare County during the review of documents or proposals, which refer to the measurement, and effects of noise.

According to the Government Code requirements for Noise Elements and to the California Office of Noise Control (ONC) Guidelines, noise exposure information should be developed for-the following major noise sources:

1. Highways and freeways
2. Primary arterials and major local streets
3. Railroad operations
4. Aircraft and airport operations
5. Local industrial facilities
6. Other stationary sources

Noise-sensitive areas to be considered during the development of noise exposure information should include areas containing the following noise-sensitive land uses:

1. Residential development
2. Schools
3. Hospitals, rest homes and Long-term medical or mental care facilities
4. Churches
5. Other uses deemed noise sensitive by the local jurisdiction

The contents of a Noise Element and the methods used in its preparation have been determined by the requirements of Section 65302 (f) of the California Government Code and by the “Guidelines for the Preparation and Content of Noise Elements of the General Plan” adopted and published by the California Office of Noise Control (ONC) in 1976. The ONC Guidelines require that certain major noise sources and areas containing noise-sensitive land uses be identified and quantified by preparing generalized noise exposure contours for current and projected conditions within the community. Contours may be prepared in terms of either the Community Noise Equivalent Level (CNEL) or the Day-Night Average Level (Ldn), which are descriptors of total noise exposure at a given location for an annual average day. CNEL and Ldn are generally considered to be equivalent descriptors of the community noise environment within plus or minus 1.0 Db.

Goal 4.A. Protect the citizens of Tulare County from the harmful effects of exposure to excessive noise.

Policies:

- 4.A.1. Areas within Tulare County shall be designated as noise-impacted if exposed to existing or projected future noise levels at the exterior of buildings which exceed 60 dB L_{dn} (or CNEL).
- 4.A.2. New development of residential or other noise-sensitive land uses which require discretionary approval under the Tulare County Zoning Ordinance of the Tulare County Subdivision Ordinance (e.g. use permits, zone changes, subdivision maps, parcel maps) will not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the specific design of such projects to reduce noise levels to 60 dB L_{dn} (or CNEL) or less within outdoor activity areas and 45 dB L_{dn} (or CNEL) or less within interior living spaces. No noise-sensitive land uses which require approval under the Tulare County Zoning Ordinance or the Tulare County subdivision Ordinance shall be permitted within the 60 CNEL contour of the public use airports identified in this Plan. Where it is not possible to reduce exterior noise level of up to reduce exterior noise levels within outdoor activity areas to 60 dB L_{dn} (or CNEL) or less after the practical application of the best available noise reduction technology, an exterior noise level of up to 65 dB L_{dn} (or CNEL) will be allowed. Under no circumstances will an interior noise level exceeding 45 dB L_{dn} be allowed with the windows and doors closed. It should be noted that in instances where the windows and doors must remain closed to achieve the required acoustical isolation, mechanical ventilation or air conditioning must be provided.
- 4.A.3. Noise level criteria applied to land uses other than residential or other noise-sensitive uses shall be consistent with the recommendations of the California Office of Noise Control.
- Tulare County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code (UBC). Title 24 requires that interior noise levels not exceed 45 dB L_{dn} (or CNEL) with the windows and doors closed within new developments of multi-family dwellings, condominiums, hotels or motels. UBC Chapter 35 requires that common wall and floor/ceiling assemblies within multi-family dwellings comply with minimum standards concerning the transmission of airborne sound and structure-borne impact noise. Title 24 requires that conformance with the above-described standards be documented by the submission of an acoustical analysis whenever new multi-family dwellings, condominiums, hotels or motels are proposed for areas within the 60 dB L_{dn} (or CNEL) contour of a major noise source as determined by the local jurisdiction.
- 4.A.4. In conformance with the directives of State planning law, the County shall ensure that the Noise Element is consistent with and does not conflict with other elements of the County's General Plan.

Implementation Programs:

- 4.AI.1 Tulare County shall review all relevant development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance with the policy framework outlined in this Noise Element.
- 4.AI.2 Tulare County shall encourage the California Highway Patrol, and Sheriff's office and local police departments to actively enforce existing sections of the California Vehicle Code relating to adequate vehicle mufflers and modified exhaust systems.
- 4.AI.7 The Noise Element of the Tulare County General Plan shall periodically be reviewed and updated to ensure that noise exposure information, goals and policies are consistent with changing conditions and/or standards.

Goal 4.B. Protect the economic base of Tulare County by preventing the encroachment of incompatible land uses near known noise-producing industries, railroads, airports and other sources.**Policies:**

- 4.B.1. New development of industrial, commercial or other noise-generating land uses will not be permitted if resulting noise levels will exceed 60 dB L_{dn} (or CNEL) at the boundary of areas planned and zoned for residential or other noise-sensitive land uses, unless determined to be necessary to promote the public health, safety and welfare of the County.
- 4.B.2. For areas designated by Tulare County as being within Foothill and Mountain Planning Areas and outside Foothill Development Corridors, the hourly L_{eq} resulting from the development of new noise-sensitive land uses or new noise-generating sources shall not exceed 50 dB(A) during the day (7:00 a.m. - 10:00 p.m.) or 40 dB(A) during the night (10:00 p.m. - 7:00 a.m.) when measured at the boundary of areas containing or planned and zoned for residential or other noise-sensitive land uses. For these same areas and under the same circumstances, the maximum A-weighted noise level (L_{max}) shall not exceed 70 dB(A) during the day or 60 dB(A) during the night.
- 4.B.3. When purchasing new equipment and vehicles, Tulare County shall strive to purchase equipment which complies with noise level performance standards set forth in this Noise Element.

Implementation Programs:

- 4.BI.1. Prior to the approval of a discretionary permit (i.e. zone change, use permit or division of lane) for a proposed development of residential or other noise-sensitive land uses in a noise-impacted area, or the development of an industrial,

commercial or other noise-generating land use in or near an area planned and zoned for residential or other noise-sensitive land uses, an acoustical analysis shall be required. In addition, the County shall investigate the feasibility of establishing performance standards for new noise-generating land uses in the Tulare County Zoning Ordinance, for application at the building permit stage, within areas planned and zoned for residential or other noise-sensitive land uses.

At the discretion of the reviewing agency, the requirement for an acoustical analysis may be waived provided that all of the following conditions exist:

- a. The proposed development is not subject to the provisions of California Administrative Code Title 24.
- b. The existing or projected future noise exposure at the exterior of buildings which will contain noise-sensitive uses or within proposed outdoor activity areas (patios, decks, backyards, pool areas, recreation areas, etc.) does not exceed 65 dB L_{dn} (or CNEL).
- c. The topography in the project area is flat, and the noise source and receiving land use are at the same grade.
- d. Effective noise mitigation, as determined by the reviewing agency, is incorporated into the project design to reduce noise exposure to the levels specified by the policies of the Noise Element. Such measures may include the use of building setbacks, building orientation and noise barriers. If a noise barrier is required for mitigation of exterior noise levels, it should be constructed of tight-fitting, massive materials (one inch thick wood, stucco, masonry, etc.) and should be sufficient height to interrupt line-of-sight between the source and receiver. Line-of sight- should be determined by drawing a straight line between the effective heights of the noise source and receiver. For traffic noise, and in instances where the number of heavy trucks exceeds five (5) percent of the Average Daily Traffic (ADT), an effective source height of at least eight (8) feet above the crown of the roadway should be used. For all other roadways, an effective height of two (2) feet above the roadway should be used. For railroad noise, an effective height of ten (10) feet above the rails should be used for locomotive and car noise, and an effective height of fifteen (15) feet above the rails should be used for horn noise. For industrial, commercial or other stationary noise sources, or for aircraft noise, a detailed evaluation of noise source spectra and effective height(s) should be conducted. Receiver height should be assumed to be five (5) feet above project grade for outdoor activity areas such as backyards. The receiver height for small patios or upper floor decks should be assumed to be four (4) feet above the finished floor elevation. Interior noise levels may be assumed to be in compliance with the 45 dB L_{dn} (or CNEL) standard as long as the building construction complies with today's more stringent thermal insulation requirements, and exterior noise

levels do not exceed the standards of the Noise Element, and windows and doors may remain closed. This will require the installation of air conditioning or mechanical ventilation.

When the above-described conditions do not exist and an acoustical analysis is required, it should:

- a. Be the responsibility of the applicant.
- b. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
- c. Include estimated noise levels in terms of L_{dn} (or CNEL) for existing and projected future (ten to 20 years hence) conditions, with the comparison made to the adopted policies of the Noise Element.
- d. Include recommendations for appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.
- e. Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.

Industrial uses are defined as the types of light manufacturing establishments and manufacturing and industrial uses requiring a special use permit set forth in the “M-1” Light Manufacturing Zone, and the types of heavy manufacturing and industrial uses and uses requiring a special use permit set forth in the “M-2” Heavy Manufacturing Zone. Commercial uses are defined as the types of businesses or services (but not including retail stores) and use requiring a special use permit set forth in the “C-2” General Commercial Zone, and the types of service commercial establishments and use requiring a special use permit set forth in the “C-3” Service Commercial Zone, all as contained in the Tulare County Zoning Ordinance.

- 4.BI.2. Tulare County shall develop and implement procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are implemented as part of the project permitting process. The appropriate time for requiring an acoustical analysis would be as early in the project review or permitting process as possible, so that noise mitigation may be an integral part of the project design rather than an afterthought.
- 4.BI.3. The standards set forth in the Noise Element shall be incorporated into the zoning ordinance of Tulare County as appropriate.

- 4.BI.4. The Land Use and Circulation Elements of the Tulare County General Plan shall be reviewed and amended if necessary, to ensure consistency with the findings and policies of the Noise Element as they relate to the prevention of future noise conflicts.