# 1.0

# NOISE ELEMENT

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## *Introduction*

Noise levels within the community of Avenal affect the quality of life of people living and working in the City. The most significant noise levels within the community are associated with roadways and the Avenal Regional Landfill. High noise levels associated with these and other activities can create stress and irritation. The Noise Element addresses the physiological, psychological and economic effects of noise by providing effective strategies to reduce excessive noise and limit community exposure to loud noise sources.

## *Purpose of the Noise Element*

Government Code § 65302 (F) states that a City's General Plan must include "*A noise element which shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:*

1. *Highways and freeways.*
2. *Primary arterials and major local streets.*
3. *Passenger and freight on-line railroad operations and ground rapid transit systems.*
4. *Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.*
5. *Local industrial plants, including, but not limited to, railroad classification yards.*
6. *Other ground stationary noise sources identified by local agencies as contributing to the community noise environment."*

## *Scope and Content of the Noise Element*

The State of California recognizes the relationship between noise and noise-sensitive uses and has adopted State Guidelines for Noise Elements. This Noise Element satisfies the requirements of State planning law and is a mandated component of the General Plan. Government Code Section 65302 (f) establishes the

required components of the Noise Element. The Element also complies with California Health and Safety Code Section 56050.1 guidelines for Noise Elements.

Future noise conditions from short- and long-term growth are quantified and identified as noise exposure contours. This noise information serves as the basis for developing guidelines for identifying compatible land uses; identifying the proper distribution of land uses on the General Plan Land Use Map; and establishing proper development standards.

The Noise Element comprises four sections: the Introduction; Purpose of the Noise Element; Scope and Content of the Noise Element; and the Goals, Objectives and Policies. In the Goals, Objectives, and Policies section, major issues pertaining to noise sources are identified and related policies are established. The objectives are statements of the City's desires, and comprise broad statements of purpose and direction. The policies and standards serve as guides for reducing or avoiding adverse noise impacts on the population.

**Objectives**

A. To protect the citizens of the City from the harmful and annoying effects of exposure to excessive noise.

B. To protect the economic base of the City by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.

C. To preserve the tranquility of residential areas by preventing noise producing uses from encroaching upon existing or planned noise-sensitive uses.

D. To educate the citizens of the City concerning the effects of exposure to excessive noise and the methods available for minimizing such exposure.

**Policies and Standards**

1. Areas shall be recognized as noise impacted if exposed to existing or projected future noise levels at the exterior of buildings exceeds 65 dB Ldn (or CNEL).

2. Noise sensitive land uses should be discouraged in noise impacted areas unless effective mitigation measures are incorporated into the specific design of such projects to reduce exterior noise levels to 65 dB Ldn (or CNEL) or less and 45 dB Ldn (or CNEL) or less within interior living spaces. Noise sensitive land uses include hospitals, residences, schools, churches, and other uses of a similar nature as determined by the Community Development Director.

3. Industrial, commercial or other noise generating land uses should be discouraged if resulting noise levels will exceed 65 dB Ldn (or CNEL) at the boundary areas of planned or existing noise sensitive land uses. Noise sensitive land uses should not be located near roadways or railways that exceed 65 dB Ldn (or CNEL).

4. The City shall enforce applicable State Noise Insulation Standards (California Administrative Code, Title 24) and Uniform Building Code (UBC noise requirements).

5. New equipment and vehicles purchased by the City should comply with noise level performance standards consistent with the best available noise reduction technology.

6. The preferred method of noise control used is thoughtful site design. Secondarily, noise control should be achieved through the use of artificial noise barriers. Site and building design guidelines may include:

   a. Noise sensitive land uses should not front onto the primary noise source. Where this is not possible, the narrow portion of the building should face the primary noise source, and the interior layout should locate the most sensitive areas away from the noise source by placing garages, storage facilities, carports or other such areas nearest the noise source.

   b. Site design should permit noise to pass around or through a development. This can be achieved by placing the narrow or convex portion of the structure toward the primary noise source.

   c. Commercial and industrial structures should be designed so that any noise generated from the interior of the building is focused away from noise sensitive land uses.

   d. Two-story residential construction should be avoided, where possible, immediately adjacent to arterials or collectors unless an adequate combination of noise attenuation procedures are used.

   e. When possible, new residential cul-de-sacs should be perpendicular to adjacent arterials or collectors.

   f. Loading and unloading activities for future commercial uses over 20,000 square feet in size should be conducted in an enclosed loading dock where feasible, preferably with a positive seal between the loading dock and trucks.

7. The City shall review all relevant development plans, programs and proposals to ensure their conformance with the policy framework outlined in this Noise Element.

8. Prior to the approval of a proposed development in a noise impacted area, or the development of an industrial, commercial or other noise generating land use in or near an area containing existing or planned noise sensitive land uses, an acoustical analysis may be required if all of the following findings are made:

   a. 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.) exceeds 65 dB Ldn (or CNEL).

b. Interior residential noise levels resulting from offsite noise are estimated to exceed 45 dB(A).

c. Estimated or projected noise levels cannot be reduced to the noise exposure limitations specified in this Noise Element by the application of Standard Noise Reduction Methods.

When noise studies are necessary they should:

a. Be the responsibility of the applicant.

b. Be prepared by an individual or firm with demonstrable experience 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.

d. Include estimated noise levels in terms of dB Ldn (or CNEL) for existing and projected future conditions, with a comparison made to the adopted policies of the Noise Element.

e. Include recommendations for appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.

f. 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.

g. The acoustical analysis should be prepared as early in the project review or permitting process as possible, so that noise mitigation measures may be an integral part of the project design rather than an afterthought.

9. Noise created by temporary activities necessary to provide construction or required services should be permitted for the shortest duration possible and limited to time periods that will have the least possible adverse impact on surrounding land uses.