



# 10

## NOISE ELEMENT

### 10.1 NOISE

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### GOAL

- Consider existing and future exterior noise levels when planning and designing developments with noise sensitive uses to avoid or attenuate excessive noise levels.

### INTRODUCTION

Old Town San Diego is a community with a mix of commercial and residential land uses and historical and cultural attractions, which is adjacent to major transportation facilities. The General Plan provides goals and policies to guide compatible land uses and the incorporation of noise attenuation measures for new uses that will protect people living and working in the City from an excessive noise environment. The policies in the Community Plan focus on specific noise-related land uses compatibility issues relevant to Old Town. Noise sensitive land uses include residential and schools for children. The Land Use Element provides policies and recommendations for future development to incorporate a mix of residential and commercial uses. The Urban Design Element addresses building and site design, which can help avoid and attenuate noise from uses that could affect nearby sensitive receptor uses.

Areas in the community near freeways and rail corridors experience higher ambient noise levels. Figure 10-1 illustrates the future noise contours from freeways and rail lines. The noise contours do not reflect changes in noise levels due to topography such as the freeway elevation above ground level or other physical barriers including vegetation, walls, or buildings.

Community Noise Equivalent Level, or CNEL, is the noise rating scale used for land use compatibility. The CNEL rating represents the average of equivalent noise levels, measured in A-weighted decibels (dBA), at a location for a 24-hour period, with upward adjustments added

to account for increased noise sensitivity in the evening and night periods. The A-weighted filter places a greater emphasis on frequencies within the range of the human ear. The General Plan provides compatibility guidelines for evaluating land uses based on noise levels. The General Plan specifies that noise levels at or below 70 dBA are conditionally compatible for multi-family residential uses if sound attenuation measures are included to reduce the interior noise levels to 45 dB. Typical attenuation measures are addressed in the General Plan and include air conditioning or mechanical ventilation systems, double-paned windows, and noise-reducing building insulation and building materials.



*The periphery of Old Town experiences high ambient noise due to its proximity to the I-5 and I-8.*



*The Mobility Element supports roadway-rail grade separation that will improve safety and eliminate the need for bells and horns at the existing grade crossing, reducing the noise level.*

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### COMMERCIAL ACTIVITY NOISE

Where residential and other sensitive receptor uses are present or proposed in a mixed use area, it is important to evaluate the potential for noise impacts from nearby commercial activities, such as deliveries during late night and early morning hours, that can generate noise. Site planning and integrating noise attenuation measures in new buildings that will reduce interior sound levels can reduce the effects of commercial activity noise.

### MOTOR VEHICLE TRAFFIC NOISE

Vehicle traffic noise is directly related to the traffic volume, speed, and mix of vehicles. Major roadways that include I-8, I-5, Pacific Highway, and Taylor Street are the primary sources of motor vehicle noise within the community. The Jefferson and Hortensia Sub-Districts have existing and planned residential uses adjacent to I-5. Noise from delivery trucks and coach buses driving within, or parked and idling along roads in the community can also be a source of annoyance for noise sensitive uses. Refer to General Plan policies NE.B.1 through NE. B.8.

### RAIL NOISE

Freight trains, intercity rail (Amtrak), commuter rail (Coaster), and light rail transit (Trolley) can generate high, relatively brief, intermittent noise events within the community in the vicinity of at-grade rail crossings where horns and crossing bells are sounded. Federal regulations require trains to sound their horns at all roadway-rail grade crossings. Horns, whistles and bells on the moving trolley vehicles, and horns from freight trains, combined with stationary bells at grade crossings can generate excessive noise levels that can affect noise sensitive land uses. To minimize excess train horn noise, the federal government allows the establishment of train horn “quiet zones.” This requires the implementation of safety measures to compensate for the loss of the train horn usage. Additionally, the Mobility Element supports roadway-rail grade separation since this will eliminate the need for bells and horns at the existing grade crossing which will reduce the noise level.



*Rail transportation noise can be minimized by implementation of grade-separated rail crossings.*

### POLICIES

- NE-1.1** Support the establishment of a train horn “quiet zone” at the Taylor Street at-grade rail crossing as an interim measure to roadway-rail grade separation.
- NE-1.2** Encourage any future residential and other noise-sensitive land uses adjacent to I-5 and I-8 adequately attenuate freeway noise.
- NE-1.3** Encourage private open space provided for residential and other noise-sensitive land uses, such as balconies or patios, in areas with exterior noise exposure of 65 dBA CNEL or greater, to be shielded from noise sources through careful site planning and/or other measures.
- NE-1.4** Encourage commercial loading zones to be carefully located to minimize noise impacts to sensitive receptors.
- NE-1.5** Encourage Caltrans and/or adjacent property owners to install noise barriers along I-5 right-of-way in the Jefferson Sub-District.

FIGURE 10-1: NOISE CONTOURS

