
NOISE ELEMENT

I. EXISTING CONDITIONS

Significant noise impacts within the University community are primarily caused by transportation functions. The three transportation noise sources in the community are aircraft from NAS Miramar, vehicles on major roadways and railroad trains along the AT & SF Railroad. The appropriate planning of land use and sensitive project design can minimize noise impacts and provide a more pleasant and productive human environment.

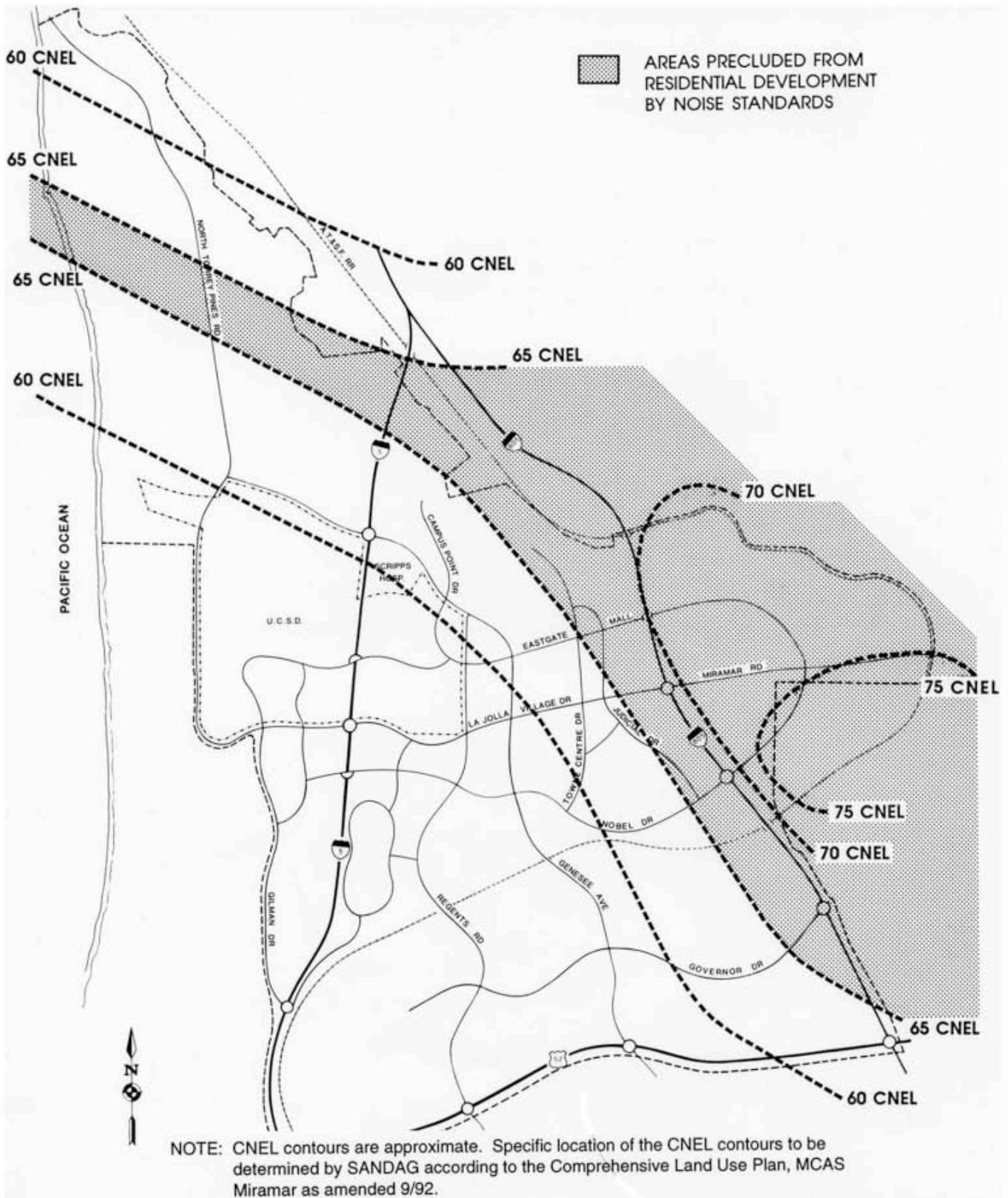
A. Miramar Naval Air Station

Aircraft operations using the Seawolf Departure from NAS Miramar create noise levels within the University community that reach as high as 75 decibels (CNEL). SANDAG, in its authority as the region's Airport Land Use Commission, has derived noise contours and a compatibility matrix for aircraft produced noise impacts (**Figures 26 and 27**). As these figures indicate, noise levels from NAS Miramar exceeding 65 decibels impact the northern and eastern portions of the University community. The most severe noise levels, up to 75 decibels, impact the land along Eastgate Mall and Miramar Road east of I-805.

The land in this area consists of level mesas, partially developed in industrial land uses, and the slopes along Soledad Canyon and Sorrento Valley. The only existing land uses which are incompatible with the SANDAG study are the residential units near the eastern edge of South University and the Torrey Pines Inn. Both of these developments were approved prior to the establishment of SANDAG's noise standards.

B. Surface Vehicular Noise

Vehicular traffic along major roadways in the community also generates noise levels exceeding 65 decibels. The area impacted by noise will generally increase as the community develops and traffic volumes approach future projections.



LAND USE	ANNUAL DAY/NIGHT AVERAGE SOUND LEVEL IN DECIBELS				
	55	60	65	70	75
1. OUTDOOR AMPHITHEATERS					
2. NATURE PRESERVES, WILDLIFE PRESERVES, LIVESTOCK FARMING, NEIGHBORHOOD PARKS AND PLAYGROUNDS					
3. SCHOOLS, PRESCHOOLS, LIBRARIES		45			
4. RESIDENTIAL- SINGLE FAMILY, MULTIPLE FAMILY MOBILE HOMES, RESIDENTIAL HOTELS, RETIREMENT HOMES, INTERMEDIATE CARE FACILITIES, HOSPITALS, NURSING HOMES		45			
5. HOTELS AND MOTELS, OTHER TRANSIENT LODGING, AUDITORIUMS, CONCERT HALLS, INDOOR ARENAS, CHURCHES		45	45		
6. OFFICE BUILDINGS-BUSINESS, EDUCATIONAL, PROFESSIONAL AND PERSONAL SERVICES; R&D OFFICES AND LABORATORIES			50		
7. RIDING STABLES, WATER RECREATION FACILITIES, REGIONAL PARKS AND ATHLETIC FIELDS, CEMETERIES, OUTDOOR SPECTATOR SPORTS, GOLF COURSES					
8. COMMERCIAL-RETAIL; SHOPPING CENTERS, RESTAURANTS, MOVIE THEATERS			50	50	
9. COMMERCIAL-WHOLESALE; INDUSTRIAL; MANUFACTURING					
10. AGRICULTURE (EXCEPT RESIDENCES AND LIVESTOCK), EXTRACTIVE INDUSTRY, FISHING, UTILITIES, AND PUBLIC R-O-W					

 **COMPATIBLE**
 THE OUTDOOR DAY/NIGHT AVERAGE SOUND LEVEL IS SUFFICIENTLY ATTENUATED BY CONVENTIONAL CONSTRUCTION THAT THE INDOOR NOISE LEVEL IS ACCEPTABLE, AND BOTH INDOOR AND OUTDOOR ACTIVITIES ASSOCIATED WITH THE LAND USE MAY BE CARRIED OUT WITH ESSENTIALLY NO INTERFERENCE FROM AIRCRAFT NOISE.

 **CONDITIONALLY COMPATIBLE**
 THE OUTDOOR DAY/NIGHT AVERAGE SOUND LEVEL WILL BE ATTENUATED TO THE INDOOR LEVEL SHOWN, AND THE OUTDOOR NOISE LEVEL IS ACCEPTABLE FOR ASSOCIATED OUTDOOR ACTIVITIES.

 **INCOMPATIBLE**
 THE DAY/NIGHT AVERAGE SOUND LEVEL IS SEVERE. ALTHOUGH EXTENSIVE MITIGATION TECHNIQUES COULD MAKE THE INDOOR ENVIRONMENT ACCEPTABLE FOR PERFORMANCE OF ACTIVITIES THE OUTDOOR ENVIRONMENT WOULD BE INTOLERABLE FOR OUTDOOR ACTIVITIES ASSOCIATED WITH THE LAND USE.

NOTE: This matrix should be used with reference to the Implementation Directives shown on the following page.

Land Use Compatibility with Annual Noise Equivalent Levels Produced by NAS Miramar Operations



AIRPORT NOISE/LAND USE COMPATIBILITY MATRIX IMPLEMENTATION DIRECTIVES

All the uses specified are “compatible” up to the noise level indicated. Specified uses are also allowed as “conditionally compatible” in the noise levels shown if two specific conditions are met and certified by the local general-purpose agency:

- Proposed buildings will be noise attenuated to the level shown on the matrix based on acoustical study submitted along with building plans.
- In the case of discretionary actions, such as approval of subdivisions, zoning changes, or conditional use permits, a navigation easement for noise shall be required to be recorded as a condition of approval of the project. For all property transactions, appropriate legal notice shall be given to all purchasers, lessees and renters of property in “conditionally compatible” areas which clearly describes the potential for impacts from airplane noise associated with airport operations. Notice also will be provided as required on the state Real Estate Disclosure form.

Identified uses proposed in noisier areas than the level indicated on the matrix are considered “incompatible.”

The directives below relate to the specific “conditionally compatible” land use categories identified by number on the matrix.

1. New schools, preschools and libraries located within the 60-65 dB DNL contours must be subjected to an acoustical study to assure that interior levels will not exceed 45 dB DNL.
2. New residential and related uses located within the 60-65 dB DNL contours must be subjected to an acoustical study to assure that interior levels will not exceed 45 dB DNL. Appropriate legal notice shall be provided to purchasers, lessees, and renters of properties in this conditionally compatible zone in the manner previously described.

“Residential hotels” are defined as those that have 75 percent or more of accommodations occupied by permanent guests (staying more than 30 days) or those hotels which have at least 50 percent of their accommodations containing kitchens.

3. Transient Lodging is defined as hotels and motels, membership lodgings (Y’s, etc.), suite or apartment hotels, hostels, or other temporary residence units, unless 75 percent or more users are permanent residents. Within the 60-70 dB DNL contours, buildings must be subjected to an acoustical study to assure that interior levels do not exceed 45 dB DNL. Appropriate legal notice shall be provided to purchasers, lessees, and renters of properties in this conditionally compatible zone in the manner previously described.
4. Office buildings include many types of office and services uses: business services; finance, insurance, real estate; personal services; professional (medical, legal and educational); and government, research and development and others. Within the 65-70 dB

DNL contours, buildings must be subjected to an acoustical study to assure that interior levels do not exceed 50 dB DNL. Appropriate legal notice shall be provided to purchasers, lessees, and renters of properties in this conditionally compatible zone in the manner previously described.

5. For new commercial retail uses located within the 65-75 dB DNL contours, buildings must be subjected to an acoustical study to assure that interior levels do not exceed 50 dB DNL. Appropriate legal notice shall be provided to purchasers, lessees, and renters of properties in this conditionally compatible zone in the manner previously described.

Primary sources of roadway noise will include I-5, I-805, SR-52, La Jolla Village Drive, Nobel Drive, Genesee Avenue, Regents Road, Eastgate Mall, Miramar Road and North Torrey Pines Road.

The Atchinson, Topeka and Santa Fe Railroad is a source of intermittent noise along Rose Canyon and Sorrento Valley. Peak noise levels from trains can exceed 85 decibels at 100 feet from the track. Noise levels currently do not exceed 65 decibels as close as 25 feet from the track because of the intermittent nature of the noise. However, if the number of trains per day increases substantially in the future, the railroad could result in significant noise impacts to adjacent properties.

I. GOALS

- A. Minimize and avoid adverse noise impacts by planning for the appropriate placement and intensity of land uses relative to noise sources.
- B. Provide guidelines for the mitigation of noise impacts where incompatible land uses are located in a high noise environment.

II. PROPOSALS

- A. The development of land uses incompatible with the SANDAG study or subsequent similar studies on aircraft noise should be prohibited. The Plan proposes that much of the area impacted by this noise source be developed with industrial and scientific research uses or retained as open space.
- B. Encourage and where possible assist the Navy in its acquisition of land or easements surrounding NAS Miramar to ensure that the land uses are compatible with noise from airport operations.
- C. Mitigation measures should be evaluated for their effectiveness, visual impact, energy efficiency and economic efficiency.

1. Projects impacted by roadway noise or point sources should be carefully designed so that building orientation, placement of windows and other design features will minimize noise impacts.
2. Residential development along the freeways should be sufficiently buffered from vehicular noise by means of setbacks or elevation differences wherever feasible, to avoid the use of solid walls as mitigation. Some of these buffers along the freeways or major roads could be used for compatible uses, such as pedestrian pathways or bikeways and linear parks.
3. Where solid walls are necessary to mitigate noise impacts along roadways, the design of the wall and surrounding land should soften the visual effect of the wall. A site-sensitive wall design should be combined with landscaping and berms to enhance the visual quality of the wall.
4. Mechanical ventilation should be installed in residential developments to supplement or replace air conditioning in situations where interior insulation is the chief means of reducing noise impacts.