

7. NOISE ELEMENT

The purpose of the Noise Element is to provide information for programs to control and abate environmental noise, and to protect the citizens of Santee from excessive exposure to noise. This information then can be used in the planning and environmental review processes to guide the location, type, density and design of future development within the City, with particular consideration to noise



1.0 Statutory Requirements

Section 65302 of the California Planning and Zoning Laws requires each General Plan in the State to contain a Noise Element. The purpose of the Noise Element is to identify and appraise noise problems in the community. The Noise Element analyzes and quantifies to the extent possible, existing and project noise levels for freeways, primary arterial and major local roads, transit, aircraft and airports, as well as stationary noise sources such as industrial plants or outdoor manufacturing uses. Implementation measures and possible solutions to address identified noise problems must be identified as well.

The Noise Element is designed to develop policies which may reduce the loss of property values, social cohesion, psychological stability and physical health, which are often the results of excessive amounts of noise.

2.0 Accomplishments Since Adoption of the General Plan

Since the adoption of the City's first General Plan in August of 1984, the City has fulfilled many of the goals, and implemented the policies found in the Noise Element. Major accomplishments include:

- ◆ The City adopted a Development Review process in 1984 to review applications for development. Through this process, and the City's environmental review procedures, the City has applied the noise thresholds found in the Noise Element to all new development.
- The City has applied the Noise Element policies to all public projects constructed by the City, including the extension of Mast Blvd, the widening of Magnolia Avenue, construction of three new City parks, and the planned extension of Olive Lane.





- In July of 1985, the City adopted a new Zoning Ordinance that includes larger setbacks for both single family and multiple family homes along collector and major roads to reduce noise impacts to new development.
- ♦ The City has worked closely with the California Department of Transportation (CalTrans) to ensure that noise impacts from the construction of State Routes 52 and 125 are addressed in the design of the freeway in a way that both reduces noise, and encourages the use of berms or other noise control measures to avoid the visual impacts often associated with large, continuous noise walls.
- ♦ With the completion of the State Route 52 freeway to the western City boundary, the City undertook an extensive review of noise issues along Mast Boulevard and implemented additional noise attenuation measures to reduce noise impacts resulting from the phased completion of the freeway and the extension of Mast Boulevard.
- Since adoption of the General Plan, no new residential development has been approved which fronts on a collector or major classification roadway.
- Through the Santee Sheriffs Department, the City has enforced motor vehicle laws and set appropriate speed limits throughout the City, which has helped in reducing noise along busy roadways.
- ♦ The City has coordinated review of development applications within the Airport Influence Area for Gillespie Field with the San Diego Association of Governments, acting as the Airport Land Use Commission, to identify and address noise impacts from aircraft operations.
- ♦ Through the Code Compliance Division and the Santee Sheriffs Department, the City enforces the Noise Abatement ordinance of the Santee Municipal Code, addressing noise complaints relating to construction activities, commercial and industrial noise, and other stationary noise sources.
- ♦ Through the Building Division of the Department of Development Services, the City enforces the interior noise standards of the Uniform Building Code.
- ♦ The City has worked with both Gillespie Field and Marine Corps Air Station (MCAS) Miramar to reduce excessive noise impacts to City residents from aircraft overflights.
- ♦ In 1999-2001, the City was actively engaged in discussions with the Marines to ensure that their flight operations out of MCAS Miramar, particularly the Yuma helicopter route, did not generate substantial noise impacts to Santee residents.





3.0 <u>Introduction</u>

The City of Santee can still be characterized as generally quiet, although certainly subject to typical suburban noise patterns. The primary sources of noise in the City are traffic along freeway corridors and major roadways, and aircraft and helicopter overflights from both Gillespie Field and Marine Corps Air Station Miramar. However, as the City and surrounding areas continue to develop, and planned roads and freeways are completed, potential noise conflicts will increase. Thus, the City has developed a Noise Element to identify existing and future noise sources and ways to address their impacts.

Noise is an everyday occurrence. People's tolerance for noise depends on where they are and what they are doing. In a typical noisy daytime urban area, such as Mission Gorge Road or freeway corridors, noise levels can approach 80 decibels (unit of measure for noise, commonly abbreviated as dB) for short periods of time. In a quiet residential neighborhood, the daytime noise levels typically average around 50 dB. In general, people are more tolerant of noise in busier commercial and industrial areas because there is an expectation that these areas will be noisier. In residential areas, people do not expect high noise levels and therefore have a lower tolerance.

Increases and decreases in noise need to be viewed in proper perspective. A one-decibel change in the community noise level can't be perceived by the average human ear. A two to three decibel change can be discerned, while a five-decibel change is generally quite noticeable. A tendecibel change will double the perceived level of noise. A good illustration of how noise level changes work is traffic noise. A doubling of the traffic volume on any street or freeway will only increase the noise level by three decibels. A 50% reduction in traffic volumes works the same way in that it will only result in reducing the noise levels by three decibels.

It should also be noted that noise level standards are generally based on one-hour (generally for stationary sources only), or 24-hour averages. This means that noise levels will fluctuate during the measurement period and can, and often do exceed the applicable noise standard during peak periods as long as over the averaging period, the standard is met.

The City uses the Day-Night Average Sound Level (abbreviated as Ldn) to measure noise in the City. This is a measure of the overall noise experienced during an entire day. The time-weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized for occurring at these times. In the Ldn scale, those noise levels that occur during the night (10 p.m. to 7 a.m.) are penalized by 10 dB to reflect the fact that noise at these times is perceived as being louder. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of a day, where home and sleep is the most probable activity.

Another frequently used measure of noise is the Community Noise Equivalent Level (CNEL). This measurement is similar to the Ldn, except that noise levels between 7 p.m. and 10 p.m. are also increased by 5dB, in addition to the 10dB nighttime weighting. CNEL is used mainly to describe the noise around airports. The values of Ldn and CNEL are normally within one dB of each other. The Gillespie Field CLUP uses the CNEL measurement. When analyzing airport





operations within the City of Santee, therefore, CNEL values will need to be translated into Ldn measurements for consistency.

Relationship to Other Elements - The distribution of noise throughout the City is directly related to the distribution of land uses and the circulation network; therefore, the Noise Element is most closely correlated with the Land Use and Circulation Elements. The noise environment affects the distribution of land uses in the City and is one factor in the siting of more noise-sensitive land uses such as single family homes, schools, hospitals and libraries. Since the primary noise generators in the City are vehicle traffic and aircraft, the Noise Element is closely related to the Circulation Element which identifies the circulation network in the City, including streets, freeways and aircraft flight paths.

As required by State Law, the Noise Element is consistent with the other elements in the General Plan.

4.0 **Existing Conditions**

4.1 Noise Sources

The City is subjected to variable levels of noise in terms of intensity and duration. The major sources of noise include traffic, aircraft from Gillespie Field and Marine Corps Air Station (MCAS) Miramar, commercial/industrial noise, and community activities. For the purpose of this discussion, noise levels refer to the combination of the ambient (background) noise and local noise sources

The effect noise has on society is, to a large degree, dependent upon the nature of an activity or land use. Generally speaking, residential, education and medical uses are more sensitive to noise than are commercial and industrial activities which may, in fact, be noise generators. Noise sensitive uses are defined in this element as those facilities "including, but not limited to, areas containing residences, schools, hospitals, rest homes, long-term medical or mental care facilities, or any other land use areas deemed noise sensitive by the local jurisdiction." They include, but are not limited to, the City's residential areas, Santana and West Hills High Schools, nine elementary schools, Edgemoor Geriatric Hospital, the Stanford Court Nursing Center, and the City's branch library. The City has established a noise standard of 65dB(A) (Ldn) for noise sensitive uses. This element includes policies that are intended to reduce noise impacts to these sensitive land uses.

In order to quantify the existing noise levels and establish a new frame of reference, an acoustical study was conducted for the General Plan in 2002. Field measurements were taken and modeling carried out to define noise levels. This information was then converted into noise contours to graphically illustrate existing noise conditions. Noise was measured in decibels on an "A" weighted scale, dB(A), to most closely represent the response of the human ear. A 24-hour average (Ldn) which places a weighting factor (penalty) on noise levels between 10 p.m. and 7 a.m. was used to calculate the existing and projected future noise levels. These terms and others are defined further in the Glossary of this document.





<u>Traffic Noise</u> - <u>Traffic continues to represent the most significant source of noise in the City. All the freeway corridors and major roads in Santee currently carry traffic volumes which raise noise levels on adjacent property to 65 dB(A) and higher (see Figure 7-1). By the year 2020, noise levels along most of these major transportation routes are expected to increase. The projected noise contours for 2020 are shown on Figure 7-2. It should be noted that the noise levels shown on the figures are a worst-case depiction and does not take into effect any noise attenuation measures such as walls or berms which may exist, or changes in topography or the effect of intervening structures which act to reduce noise.</u>



The construction of State Route (SR) 52 and the planned construction of State Route 125 will heavily influence future noise conditions in Santee. The first two phases of SR52 through the City have been completed, with two phases remaining. In addition to being a noise source itself, the phased construction of the freeway causes shifts in traffic patterns and volumes on City streets, which will cause changes in the noise levels along these roads as the project is constructed. This redistribution of traffic

was graphically demonstrated when the first phase of SR52 was completed to Mast Blvd. Traffic on Mast Blvd increased dramatically almost overnight, resulting in widespread noise complaints from residents bordering Mast Blvd. At the same time, traffic along certain portions of Carlton Oaks Drive and Mission Gorge Road dropped, which improved the noise environment along those streets.

In general, while traffic volumes on portions of the City's major east-west streets such as Mast Blvd., Mission Gorge Road and Prospect Avenue will lessen once the freeway is completed to SR67, they will continue to be above 65dB(A) Ldn. Noise levels along the freeway corridors will also increase as traffic volumes on the freeway increase and the freeway is built out to it's ultimate six lane configuration.

The State has plans to extend SR125 north from its present terminus to connect with SR15 north of Poway. While the currently studied alignment does not run through the City itself, this extension has the potential to generate noise impacts to existing and planned residential



development in the City. These impacts would require mitigation depending on the ultimate design and location of this future route.

Rapid Transit - The East County extension to the San Diego Trolley terminates in the Town Center area at the northwest corner of Mission Gorge Road and Cuyamaca Street and is not a significant noise generator due to its intermittent operation and it's alignment which passes





through a primarily commercial corridor on Cuyamaca Street.

<u>Aircraft Noise</u> - Aircraft are the other major source of noise in Santee. The principal source of aircraft noise in the City is aircraft operating out of Gillespie Field. Annual operations from Gillespie Field totaled approximately 175,392 in 2001, with most of the aircraft taking off towards the west and then turning north or south.

In 1987, SANDAG, acting as the Airport Land Use Commission for the San Diego Region, updated the 1974 Comprehensive Land Use Plan (CLUP) for Gillespie Field. The plan identifies an "Airport Influence Area" around the airport, which is the area that could be impacted by noise levels exceeding 60dB CNEL or where height restrictions could be needed to protect navigable airspace. The plan projects aircraft operations at the airport will increase to 280,000 per year in 2010. While



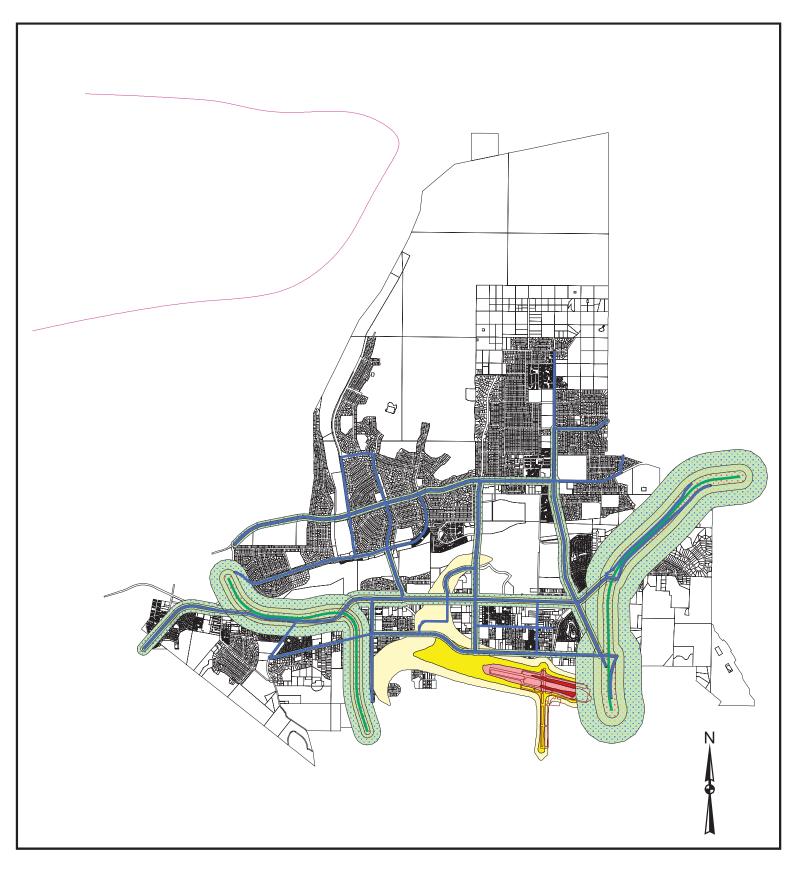
aircraft operations peaked at 340,000 in 1979, there has been a steady decline in operations over the last 20 years. There has been an increase in recent years in the mix of aircraft with an increase in the percentage of jet operations projected by the CLUP. While the plan recommends the County reevaluate any change in the mix of aircraft to determine if there are changes that could affect projected noise contours, no reevaluation of the contours has been done to date.

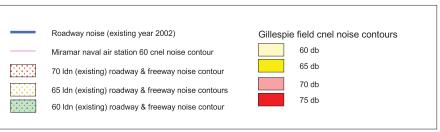
The projected noise contours from the CLUP are shown on Figures 7-1 and 7-2. Some residential uses in the Atlas View Drive / Pryor Drive neighborhood are within the 65dB Ldn noise contours and are considered incompatible uses by the plan. The CLUP recommends the City redesignate these areas to industrial to correct this incompatibility. The City has overridden the CLUP recommendations with a 2/3's majority of the Council, making findings that the proposed action is consistent with the CLUP.

Marine Corps Air Station Miramar – In 1998/1999, a base realignment was undertaken by the military that resulted in the Marines replacing the Navy at the Miramar air base. This change actually reduced the overall noise impacts to the City at buildout, but increased nuisance noise impacts. Prior to the realignment, noise from naval jet operations resulted in noise levels exceeding 60dB CNEL in the far northern area of the City, which remains undeveloped. However, with the base realignment none of the City is projected to be impacted by noise levels in excess of 65dB CNEL.



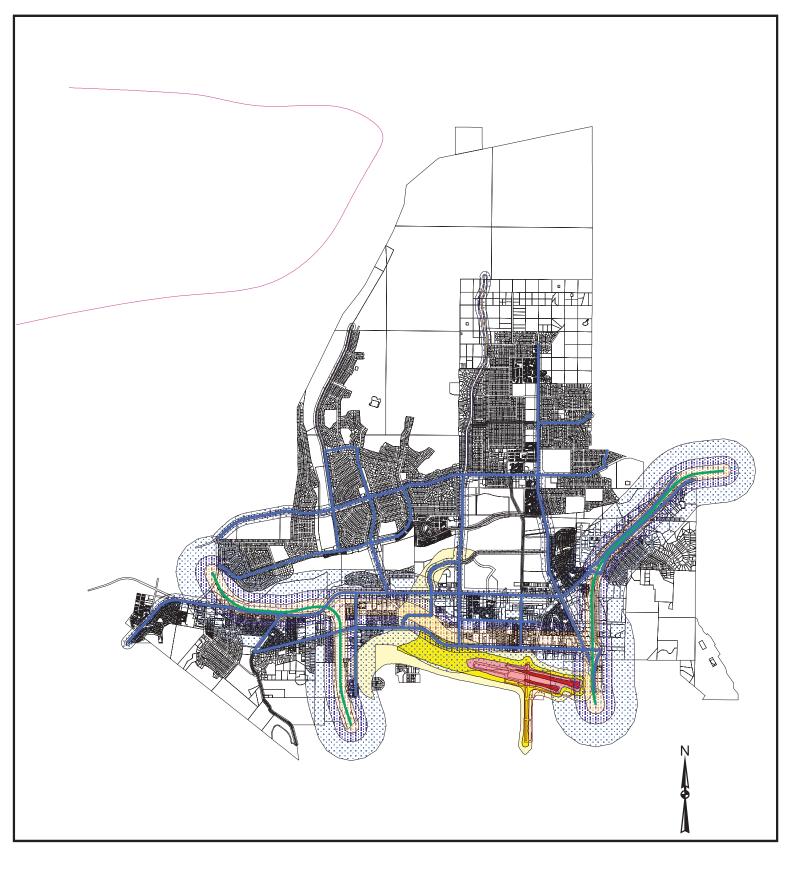


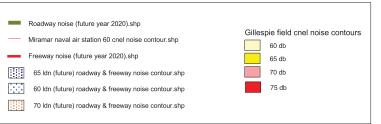




CITY OF SANTEE GENERAL PLAN

EXISTING NOISE LEVELS FIGURE 7-1









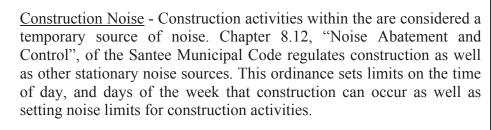
FUTURE NOISE LEVELS FIGURE 7-2



The Marines use helicopters to a greater degree than the Navy and the flight path from Miramar to Yuma passes directly over the City. While these operations do not result in average daily noise levels in excess of 65dB CNEL, they were a source of nuisance noise and significant complaints during 1999 and 2000 when the helicopters deviated from the approved routes or flew at lower than the approved elevation.

Commercial/Industrial Noise - Noise sources such as manufacturing, retail centers and mining also occur throughout the City, but have a much more localized effect. These stationary noise sources are regulated by the City's Noise Abatement and Control Ordinance. In general, retail center noise is largely a function of traffic and is, therefore, taken into account in the previous discussion of traffic noise. Generally, the commercial areas presently existing in the City of Santee do not generate noise in excess of the City's standards, although some nuisance noise from loading dock and delivery activities does occur. Manufacturing and industrial activities are generally restricted to the City's industrial districts in the southeast and far southern portions of the City.

Extraction of sand and gravel and associated construction material manufacturing along the river channel does represent a major noise source. Equipment such as bulldozers, conveyers, mechanical shovels and heavy trucks generate high noise levels which can, in some instances, exceed 80 dB(A) Ldn. The impact of extraction activities is, however, lessened because they tend to be temporary uses. The sand mining operations in the river are winding down which will reduce noise levels in this stretch of the San Diego River. Noise associated with the block manufacturing may remain somewhat beyond the end of the mining operation.



Community Noise - For the purpose of this Noise Element, community activities are defined as any noise source that intrudes above the local ambient noise levels and which is not associated with traffic flow, business and industry, or aircraft operations. These activities include normal household operations such as lawn mowing, air conditioners, house cleaning, recreational areas such as Santee Lakes and Carlton Oaks Country Club, and animal noise, i.e., barking dogs. These activities are not considered significant noise sources; while they can be objectionable, they are normally classified as nuisance noise.

5.0 Needs

5.1 Traffic Noise

Within the City of Santee, future noise problems are primarily traffic-related. Traffic noise is expected to change significantly in the City over the next 15 years. Three major factors will





cause this change. The first factor is the natural growth occurring both in Santee and the East County, which generally will cause the traffic on some streets to rise, creating higher noise levels. Secondly, completion or widening of major freeways will introduce significant noise into some areas that are now relatively quiet. Finally, changes in the traffic circulation due to the new freeways may cause a redistribution of traffic on some streets, in some instances reducing noise levels. The development of Santee's circulation system includes the completion of two freeways (State Routes 52 and 125) and the widening of a third (State Route 67), completion of the street network in Town Center and extensions or improvements to many of the City's major thoroughfares.

The Circulation Element depicts the adopted alignment for State Route (SR) 52 which will extend from its current terminus at the interchange with SR125 east to SR 67. The alignment runs approximately 500 feet north of and parallel to Prospect Avenue east to SR67. Caltrans expects SR52 to be carrying over 100,000 ADT through the City of Santee, which is approximately 50% higher than projected volumes on SR67. Given the relatively quiet conditions along much of this corridor, the remaining phases of SR52 will result in increased noise levels along the freeway corridor, even with mitigation.

The Regional Transportation Improvement Program includes a northerly extension of the SR125



freeway running outside the City's western border. The Caltrans forecast for this corridor is approximately 25,000 ADT. Depending on the design and ultimate alignment, this highway could create a considerable noise impact at Santee Lakes and some residential neighborhoods at the western edge of the City.

Planned improvements to State Route 67 would widen the portion of the freeway between SR52 and Interstate 8 from six to eight lanes and between 52 and Mapleview Street from four to six lanes. This widening will increase the capacity of the

freeway and could cause additional noise impacts to existing residential areas along Graves Avenue and South Woodside Avenue areas. It should be noted that noise mitigation measures do not exist along SR67 through the City, so any future expansion of this freeway could have a beneficial effect if noise mitigation measures, such as berms or walls, are installed in conjunction with the freeway's improvement.

The northern extensions of Carlton Hills Boulevard, Fanita Parkway, Cuyamaca Street and Magnolia Avenue as significant roads will cause noise impacts in residential areas where they now exist as less frequently traveled streets or do not exist at all. The same applies to the completion, and opening, of Mast Boulevard east to Lakeside. Mitigation will need to be considered and applied for these future street extensions to address impacts on existing as well as new noise sensitive uses.





Other improvements expected to create significant noise impacts are the improvements to Prospect Avenue and the completion of the planned street network in Town Center. The road network in Town Center is expected to primarily affect new development, which will be designed with noise mitigations to address expected traffic volumes.

While the San Diego trolley is not a significant noise generator, and in fact contributes to reductions in traffic-related noise impacts, future extensions of the trolley to the east could result in noise increases for existing and planned noise sensitive uses. The noise impact of any future rapid transit installations in Santee will be dealt with through the environmental review process.

5.2 Aircraft Noise

In 2001, Gillespie Field logged 175,392 operations, a seven percent reduction from 2000. Based on the 1987 Comprehensive Land Use Plan for Gillespie Field, the noise level within the influence of Gillespie Field will rise by approximately 3 dB(A) CNEL over the next 8 years and will then remain fairly constant unless expansion of the airport takes place. Changes in the mix of aircraft, such as an increase in private jet operations, could also alter the noise projections in the existing Gillespie Field plan.



<u>Military Aircraft</u> – While projected noise contours would not result in any significant noise impacts to the City, changes in the alignment of any fixed wing or helicopter routes, particularly the Yuma route, could result in increased noise impacts to existing or future residences and noise sensitive use in the City.

<u>Future Airport</u> - Over the years there have been studies prepared to evaluate the feasibility of constructing a civilian airport at MCAS Miramar (assuming the base was vacated by the military), or east of I-15, to replace Lindbergh Field. While no specific noise studies are yet available to quantify the actual impacts, it is likely that any future airport located on or near MCAS Miramar could result in direct and significant noise impacts to the City as well as other communities in the region. The City should remain active in tracking this issue and providing input on this regionally significant issue.

5.3 Community Activities

General neighborhood noise sources are not expected to change. In fact, some household operations, such as lawn mowing, could become quieter because of Federal, State and local regulations which are aimed at reducing noise output from household equipment.

5.4 Off Road Vehicle Parks / Activities

There have been discussions and proposals over the years to locate a State-sponsored off-road





vehicle facility in the open space areas to the north or to the west of the City limits. The City has opposed these proposals which would likely result in noise impacts to existing and planned residential development in Santee. The City should continue to oppose the establishment of any off-road vehicle facility that results in noise impacts to the existing or planned development in the City. Unauthorized off-road vehicle activity will likely continue to occur with open space areas throughout the City. The City will need to continue a program of active enforcement through the Sheriff's Department.

5.5 Other Noise Sources

In recent years, there have been discussions with the owners of the property located just to the north of the City regarding their intent to extend the existing mining operation in Slaughterhouse Canyon south onto the properties bordering the planned Fanita Ranch development. An active mining operation in this area could have considerable noise impacts on future planned development in the Fanita Ranch.

6.0 Goal

Improve the city's overall quality of life by reducing harmful and annoying noise for existing and future residents.

7.0 Objectives and Policies

Objective 1.0 Control noise from sources adjacent to residential, institutional and other noise-sensitive receptors.

<u>Policy 1.1</u> The City shall support a coordinated program to protect and improve the acoustical environment of the City including development review for new public and private development and code compliance for existing development.

<u>Policy 1.2</u> The City shall utilize noise studies and noise contour maps when evaluating development proposals during the discretionary review process.

<u>Policy 1.3</u> The City shall enforce motor vehicle laws and standards as appropriate, related to traffic flow and speed, in an effort to reduce noise along roadways experiencing high noise levels.

<u>Policy 1.4</u> The City shall promote alternative sound attenuation measures rather than traditional wall barrier wherever feasible; these may include glass or polycarbonate walls, berms, landscaping, and the siting of noise-sensitive uses on a parcel away from the roadway or other noise source.





- <u>Policy 1.5</u> The City shall review future projects with particular scrutiny regarding the reduction of unnecessary noise near noise-sensitive areas such as hospitals, schools, parks, etc.
- <u>Policy 1.6</u> The City shall continue to monitor noise throughout Santee and enforce the standards and regulations of the City's Noise Ordinance.
- <u>Policy 1.7</u> The City shall discourage any future expansion of the facilities of Gillespie Field or intensification of operation, other than what has been already planned in the airport's master plan, that would result in greater noise impacts to the City.
- <u>Policy 1.8</u> The City shall encourage the implementation of noise control procedures by Gillespie Field to minimize noise exposure caused by aircraft flyovers within the City.
- <u>Policy 1.9</u> As recommended by the Gillespie Field Comprehensive Land Use Plan, the City of Santee shall work with the County of San Diego to reduce the future 65dB CNEL noise contour impact on residentially zoned areas.
- <u>Policy 1.10</u> The City of Santee shall require single family detached residences located between the 65-70 dB CNEL contours for Gillespie Field to ensure that interior noise levels do not exceed 45dB Ldn.
- <u>Policy 1.11</u> The City shall require disclosure of airport noise impacts as a condition of all future residential development in the 65-70dB noise contours.
- <u>Policy 1.12</u> The City shall require the recordation of avigation easements for new development proposed within the 65-70dB noise contours and the Runway Protection and Inner Approach / Departure zones for Gillespie Field.
- <u>Policy 1.13</u> The City shall continue to monitor helicopter routes from MCAS Miramar to ensure approved routes are adhered to and shall oppose any realignment of existing routes or establishment of new routes that would result in increased noise impacts to the City.
- <u>Policy 1.14</u> The City shall, whenever feasible, take noise generation into consideration for new equipment purchases for the City.
- <u>Policy 1.15</u> The City shall encourage Caltrans to recognize and implement the City's noise standards for planned and future freeway projects in the City.
- <u>Policy 1.16</u> The City shall ensure that appropriate regulations and standards are incorporated into the City's development policies and ordinances, including the use of noise evaluations in Environmental Impact Reports and statements, which take all aspects of noise into consideration.





<u>Policy 1.17</u> The City shall officially support the control of noise through legal regulations and cooperative government efforts.

Objective 2.0 Ensure that future developments will be constructed to minimize interior and exterior noise levels.

<u>Policy 2.1</u> The City shall adhere to planning guidelines and building codes which include noise control for the exterior and interior living space of all new residential developments within noise impacted areas.

<u>Policy 2.2</u> The City should require new development to mitigate noise impacts to existing uses resulting from new development when: 1) such development adds traffic to existing City streets that necessitates the widening of the street; <u>and</u> 2) the additional traffic generated by the new development causes the noise standard or significance thresholds to be exceeded.

<u>Policy 2.3</u> The City should not require new development to mitigate noise impacts to existing uses when the new development only adds traffic already anticipated by the City's General Plan to an existing street, but does not necessitate widening of that street.

8.0 Implementation

There are a variety of existing Federal, State and local programs and strategies that can be used within the City to reduce the potential noise impacts described within this Element.

8.1 Local Regulations

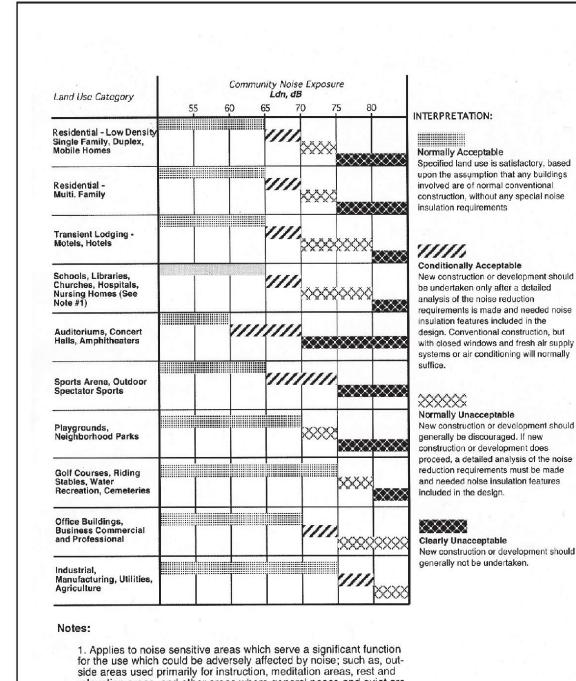
Thresholds of Significance: The California Environmental Quality Act encourages jurisdictions to establish local thresholds for determining whether a particular impact is significant. Impacts exceeding these thresholds would require that measures be identified to avoid or reduce the severity of the impact. Noise impacts shall be considered significant if any of the following occur as a result of the proposed development:

- 1. If, as a direct result of the proposed development, noise levels for any existing or planned development will exceed the noise levels considered compatible for that use as identified in Figure 7-3, Noise / Land Use Compatibility Guide.
- 2. If, as a direct result of the proposed development, noise levels which already exceed the levels considered compatible for that use are increased by 3 or more decibels.

Development standards should be applied to future projects during the discretionary review process and should include the following:







CITY OF SAMEE
GENERAL PLAN
NOISE/LAND USE COMPATIBILITY QUIDE
FIGURE 7-3

Santee General Plan Santee, California



relaxation areas, and other areas where general peace and quiet are

important.

- 1. Whenever it appears that new development will result in any existing or future noise sensitive uses being subjected to noise levels of 65 dB(A) Ldn, or greater, as depicted on Figure 7-2, an acoustical study will be required.
 - For residential uses, noise sensitive areas shall include rear yard areas on single family residences and ground floor common areas and private patio areas for multiple family residences. For other noise sensitive uses such as libraries, schools or hospitals, noise sensitive areas shall be those areas that serve a significant function for the use that could be adversely affected by noise. Examples include resting or patient recovery areas at hospitals, outdoor service areas for churches (excluding areas used for short-term social gatherings) or outdoor teaching or discussion areas at schools (does not include playgrounds or other active outdoor areas).
- 2. If the acoustical study shows that the noise levels at any noise sensitive area will exceed 65 dB(A) Ldn, the development should not be approved unless the following findings are made:
 - a. Modifications to the development have been, or will be made, which will reduce the exterior noise level in noise sensitive areas to 65 dB(A) Ldn or less, or
 - b. If, with current noise abatement technology, it is not feasible to reduce the exterior noise level to 65 dB(A) Ldn or less, then modifications to the development will have been, or will be made which reduce the exterior noise level to the maximum extent feasible and the interior noise level to 45 dB(A) Ldn or less. Particular attention shall be given to noise sensitive spaces such as bedrooms.

For rooms in noise sensitive areas which are occupied only for a part of the day, (schools, libraries or similar), the interior one-hour average sound level during occupation, due to noise outside, should not exceed 45 dB(A) Leq (hour).

The City's noise maps will be used to determine whether a proposed project or land use is compatible with its surrounding land uses. Noise compatible land uses are assessed according to the categories depicted on Figure 7-3, Noise / Land Use Compatibility Guide. The Noise / Land Use Compatibility Guide should not be misinterpreted as being prohibitive but should be used as a guide and a resource. If doubt exists as to the noise impact, whether it be the existing or future noise on the project or from the project on the surrounding community, an acoustical study will be required. Land use changes should be reviewed for potential noise impacts.

The acoustical study shall include existing and future noise levels on the site, the effect of the project on its surroundings, and mitigating measures, if necessary. The mitigation measures may include, but not be limited to the following:

1. The use of site design techniques such as the provision of buffers to increase distances between the noise source and receiver, siting of buildings and parking areas and the careful





siting of noise-sensitive outdoor features to minimize noise impacts;

- 2. Provision of berms, landscaping and other sound barriers, without the exclusive use of walls; i.e., a combination of a small wall and a berm in concert with the overall streetscape in the area could be appropriate; and
- 3. Insulation of buildings against noise, including thicker-than-standard glazing and mechanical ventilation.

In addition, there are several other procedures, which, where practical, would be effective in reducing noise throughout the City. These include:

- 1. Improving traffic circulation to "smooth" flow by such measures as interconnecting traffic signals;
- 2. Considering the use of innovative construction technologies and materials in constructing or reconstructing streets;
- 3. Reducing speed limits in noise sensitive areas;
- 4. Setting time limits on certain noisy activities; and
- 5. Purchasing demonstrably quiet equipment for City use.

With regard to transportation, a liaison should be maintained with transportation agencies, such as CALTRANS, the Regional Airport Authority and the Marine Corps in a cooperative effort to reduce noise at existing facilities and ensure the consideration of noise impacts when designing and locating proposed facilities and operations. The City should encourage other transportation agencies and the military to comply with the City's noise regulations when designing new facilities, or route alignments which impact the City. In addition, the City should review ongoing policies, programs, and ordinances every five (5) years or as warranted by technological developments, as per State guideline requirements

6.2 State Regulations

Noise Compatibility Guidelines, State of California Office of Noise Control – Developed in 1976, these guidelines were developed to evaluate noise levels for various land uses and determine the acceptability or compatibility of noise levels with specific land uses.

Motor Vehicle Code, Sections 23130, 27002, 27150, 27151 and 27160 (Annex A), sets the noise level limits for all vehicles operating on California highways. These regulations are normally enforced by the California Highway Patrol.

The State Uniform Building Code (Title 24, Noise Insulation Standards), establishes interior noise levels of 45 dB CNEL for new hotels, motels, apartment houses, condominiums, and





dwellings other than single family dwellings. When such structures are subject to noise levels of 60 dB(A) Ldn or greater, an acoustical analysis is required to show that the interior noise levels will not exceed 45 dB(A)Ldn. This regulation is enforced by the City's Building Inspection Department. When it is proposed to erect an eligible building within a noise impacted zone, an acoustical analysis is required. This analysis must be carried out by a qualified acoustical consultant and the report submitted together with the building plans.

California Environmental Quality Act - The California Environmental Quality Act (Public Resources Code Section 21000 et seq) requires that the impacts of both short-term (temporary) and permanent noise sources and ground borne vibration be evaluated and that such impacts be eliminated or mitigated to the extent feasible. The City of Santee has adopted local environmental review procedures which implement the California Environmental Quality Act.

The California Environmental Quality Act (Section 21096) also requires the use of the Airport Land Use Planning HandBook prepared by the California Department of Transportation's Division of Aeronautics to be used as a technical resource in evaluating airport-related noise and safety issues.

6.3 Federal Regulations

The Federal Highway Administration (FHWA). The FHWA administers regulations 23 CFR 772, which provide procedures for noise studies and noise abatement criteria to be used in the planning and design of federally funded or permitted freeway projects.

The Noise Control Act of 1972 established a national policy "to promote an environment for all Americans free from noise that jeopardizes their public health and welfare". The Act provides for a division of powers between the federal, state and local governments in which the primary federal responsibility is for noise source emission control, with the states and other agencies retaining the rights to control noise sources and the level of noise within their communities and jurisdictions.

The Federal Interagency Committee on Noise (FICON) – FICON consists of representatives of governmental agencies that have responsibilities for airport noise, including the FAA and military services. It reviews policies that govern the assessment of airport noise impacts.

The Occupational Safety and Health Act (OSHA) sets noise exposure limits in the workplace. In California this Act is administered as CAL/OSHA.

The Federal Aviation Administration (FAA) regulates noise emissions for private and commercial aircraft. The FAA and the Caltrans Division of Aeronautics (Title 21, Subchapter 6) have adopted general standards that define compatible uses within the 65 CNEL contour around civil airports.





6.4 Regional Regulations

The Regional Airport Authority, acting as the Airport Land Use Commission, is responsible for defining the noise impact areas surrounding airports in the region, and developing land use plans for these "Airport Influence Areas". These areas form the boundary of the Authority's planning and review authority for each airport.



