

# NOISE

# Protecting Newport Beach Residents

# Introduction

The Noise Element of a General Plan is a tool for including noise control in the planning process in order to maintain compatible land use with environmental noise levels. This Noise Element identifies noise sensitive land uses and noise sources, and defines areas of noise impact for the purpose of developing policies to insure that Newport Beach residents will be protected from excessive noise intrusion.

The Noise Element follows the revised state guidelines in Section 46050.1 of the Health and Safety Code. The element quantifies the community noise environment in terms of noise exposure contours for both near and long-term levels of growth and traffic activity. The information contained in this document provides the framework to achieve compatible land uses and provide baseline levels and noise source identification for local noise ordinance enforcement.

# **Background**

Sound is created when objects vibrate and produce pressure variations that move rapidly outward into the surrounding air. The main characteristics of these air pressure waves are amplitude, which we experience as a sound's "loudness" and frequency, which we experience as a sound's "pitch." The standard unit of sound amplitude is the decibel (dB), which is a measure of the physical magnitude of the pressure variations relative to the human threshold of perception. The human ear's sensitivity to sound amplitude is frequency-dependent and thus a modification is usually made to the decibel to

account for this; A-weighted decibels (dBAs) incorporate human sensitivity to a sound's frequency as well as its amplitude.

Noise is generally defined as unwanted sound, aspects of which can negatively affect the physiological or psychological well-being of individuals or communities. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Noise in excessive levels can affect our living environment and quality of life.

Several quantitative indicators are commonly used to gauge the likelihood that environmental noise would have an adverse effect on a community. These indicators consider that the most disruptive aspects of noise are strongly associated with the average acoustical energy content of the sound over

# ELEMENT

# from Excessive Noise Intrusion

the time it occurs and/or with the time of day when the sound occurs. The indicators used in the Noise Element are as follows:

- L<sub>eq</sub>, the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the Leq of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this indicator is not affected by whether the noise occurs during the day or the night.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average  $L_{eq}$  with a 10 dBA "weight" added to noise during the hours of 10:00 P.M. to 7:00 A.M., and a 5 dBA "weight" added during the hours of 7:00 P.M. to 10:00 P.M. to account for increased noise sensitivity in the evening and nighttime.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 55 dBA, moderate in the 55 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated natural settings that can provide noise levels as low as 20 dBA, and quiet suburban residential streets that can provide noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Additional examples of sound levels and loudness in indoor and outdoor environments are shown in Table N1.

| Table N1                  | Representative Environmental Noise Levels |                   |                          |  |
|---------------------------|---|-------------------|--------------------------|--|
| Common Outdoor Activities |   | Noise Level (dBA) | Common Indoor Activities |  |

| Common Outdoor Activities            | Noise Level (dBA) | Common Indoor Activities                    |
|--------------------------------------|-------------------|---|
|                                      | —110—             | Rock Band                                   |
| Jet Fly-over at 100 feet             |                   |   |
|                                      | —100—             |   |
| Gas Lawnmower at 3 feet              |                   |   |
|                                      | <b>—90—</b>       |   |
|                                      |                   | Food Blender at 3 feet                      |
| Diesel Truck going 50 mph at 50 feet | <del></del> 80    | Garbage Disposal at 3 feet                  |
| Noisy Urban Area During Daytime      |                   |   |
| Gas Lawnmower at 100 feet            | <del></del> 70    | Vacuum Cleaner at 10 feet                   |
| Commercial Area                      |                   | Normal Speech at 3 feet                     |
| Heavy Traffic at 300 feet            | <del></del> 60    |   |
|                                      |                   | Large Business Office                       |
| Quiet Urban Area During Daytime      | <b>—</b> 50—      | Dishwasher in Next Room                     |
| Quiet Urban Area During Nighttime    | <u>–40–</u>       | Theater, Large Conference Room (background) |
| Quiet Suburban Area During Nighttime |                   |   |
|                                      | -30-              | Library                                     |
| Quiet Rural Area During Nighttime    |                   | Bedroom at Night, Concert Hall (background) |
|                                      | —20—              |   |
|                                      |                   | Broadcast/Recording Studio                  |
|                                      | —10—              |   |
| Threshold of Human Hearing           | <u> </u>          | Threshold of Human Hearing                  |

# Context

# TRANSPORTATION NOISE SOURCES

The most common sources of noise in urban areas are transportation-related. These include automobiles, trucks, motorcycles, boats, and aircraft. Motor vehicle noise is of concern because it is characterized by a high number of individual events which often create a sustained noise level and its proximity to areas sensitive to noise exposure. Residential land uses and other sensitive receptors should be protected from excessive noise from these sources.

### Freeway/Highway

Newport Beach has the Corona Del Mar Freeway (State Route 73) and San Joaquin Hills Transportation Corridor (SJHTC) within its borders. State Route 73 runs in a northwest/southeast direction through the City's northern section. The portion of State Route 73 that cuts through the northern portion of the City is below grade from the adjacent land uses. There are a few residences in close proximity to this freeway.

The SIHTC runs in a northwest/southeast direction through the City's northeastern boundary connecting with the State Route 73 at Jamboree Road. SJHTC is considered a highway from Jamboree Road south to Bonita Canyon, and then it becomes a toll road. At various locations, the highway will be at grade with or elevated above the adjacent land uses. There are existing residences that are in close proximity to this highway; however, these residences have already included noise mitigation measures to sufficiently attenuate the noise from SJHTC.

# Major and Minor Arterial Roadways

Traffic noise on surface streets is a significant source of noise within the community. The major sources of traffic noise in Newport Beach are Coast Highway, Jamboree Road, and MacArthur Boulevard. Many of the residential uses located along these roadways include some level of noise attenuation, provided by either a sound barrier or grade separation. Other residential uses, primarily



Traffic is a source of noise within Newport Beach

older units, built near these arterial roadways do not have any attenuation from noise other than the distance between the roadway and the residential structure. The noise attenuation features for new residences are reviewed on a project-by-project basis. This means that as residential projects are proposed near the major roadways within Newport Beach, future noise levels are evaluated and noise mitigation strategies are developed as necessary to meet City standards.

Noise levels along roadways are determined by a number of traffic characteristics. Most important

is the average daily traffic (ADT). Additional factors include the percentage of trucks, vehicle speed, the time distribution of this traffic and gradient of the roadway.

### Water Vehicles

Newport Beach has the largest small boat harbor in Southern California. Thousands of boats operate near noise-sensitive residential uses that border much of Newport Bay, and noise associated with these boats can be a problem to these residences. Of particular concern are the charter boats which generate engine noise and noise from the occupants, as well as use loudspeakers or live entertainment.

# Aircraft Operations

Many residents of Newport Beach are impacted by noise generated by commercial and general aviation aircraft departing John Wayne Airport (JWA). Owned and operated by Orange County, JWA serves both general aviation and scheduled commercial passenger airline and cargo operations. JWA experienced a total of 349,936 aircraft operations (arrivals and departures) in 2005 and of those, 246,920 were general aviation operations, 87,130 were air carrier operations, 15,729, were air taxi (commuter) operations and 157 were military operations. Newport Beach is located immediately south of JWA and is under the primary departure corridor. Although aircraft noise can be heard throughout Newport Beach, the highest noise levels are experienced just south of JWA, in the Airport Area, Santa Ana Heights Area, Westcliff, Dover Shores, the Bluffs, and Balboa Island, and are generated by aircraft departures.

Newport Beach has, since the mid-1970s, actively engaged in efforts to minimize the impact of the airport on our residents and their quality of life. The City's initial efforts focused on involvement in route authority proceedings conducted by the Civil Aviation Board and litigation challenging County decisions that could increase the level or frequency of noise events. In 1985, the City, County, Stop Polluting Our Newport (SPON), and the Airport Working Group (AWG) entered into an agreement (1985 JWA Settlement Agreement) to resolve Federal Court litigation initiated by the County. The 1985 JWA Settlement Agreement required the County to reduce the size of the terminal, cap the number of parking spaces, limit the number of "average daily departures," and limit the number of passengers served each year at JWA (expressed in terms of "million annual passengers" or "MAP") to 8.4 MAP after construction of the new terminal.

After two years of discussion among the parties to the Settlement Agreement, the City Council and County Board of Supervisors approved Settlement Agreement amendments that eliminated noisier aircraft, increased the maximum number of noise regulated and air cargo average daily departures, increased the service level limit from 8.4 to 10.3 MAP until January 1, 2011, and then 10.8 MAP afterwards, and increased the maximum number of passenger loading bridges from 14 to 20. The 2002 Amendments also eliminated the floor area restrictions on the terminal and the "cap" on public parking spaces.

City Council approval of the 2002 Amendments was contingent on receipt of a letter from the FAA confirming that the 2002 Amendments were consistent with the Airport Noise and Capacity Act (ANCA) and other relevant laws, regulations and grant assurances made by the County. In December 2002, the FAA sent a letter confirming compliance and in January 2003, a judge approved the stipulation of the parties reflected by the 2002 Amendments. The FAA letter confirming the validity of the 2002 Amendments is a precedent for future amendments that increase air transportation service without impacting airport safety or the quality of life of residents in Newport Beach and other affected communities.

Other aircraft operations related to helicopter operations at Hoag Hospital are also a concern. Helicopter flights are noisy, and there are residential uses located in close proximity to the hospital. The helipad is located on the roof of the emergency area of the hospital. Finally, Newport Beach is exposed to noise from airplanes towing banners along the beach.

# NONTRANSPORTATION NOISE SOURCES (STATIONARY NOISE SOURCES)

There are many stationary noise sources within the boundaries of Newport Beach. Some of these stationary noise sources include restaurant/bar/entertainment establishments, mixed-use structures, mechanical equipment, and use of recreational facilities. The impacts of nontransportation noise sources are most effectively controlled through the enforcement and application of City stationary noise ordinances or regulations.

### Restaurant/Bar/Entertainment Establishments

Numerous restaurants, bars, and entertainment establishments in Mariners' Mile, Corona del Mar, the Peninsula, and Balboa Island have been subject to noise complaints in the past. Noise complaints have been made due to the close proximity of these establishments to residential uses, the potentially high noise levels that these establishments are able to produce, and the late hours of operation.

# Mixed Use Developments (Commercial/Residential)

In a mixed use building, a portion of it may be used as commercial (i.e. office space, restaurant, market, dry cleaner, etc.) and the remaining portion may be used for residential purposes. Such mixed uses can range from a small retail structure with a residence unit on the second floor (as seen on parts of Balboa Island and the Balboa Peninsula) to larger commercial properties that include a residential component. Requiring that the commercial portion conform to the more strict residential noise standards would make operating the commercial facility difficult. However, applying the commercial noise standards to the entire project would make the noise exposure levels at the residential portion of the building potentially too high. Mixed use projects represent a unique noise environment and it is important that a program be developed that allows mixed use to operate with a minimum amount of conflict.

# **Mechanical Equipment Noise**

Various Heating Ventilating and Air Conditioning (HVAC) installations and occasional pool and spa pumps can be noise intrusions. Noise intrusions from HVAC equipment has been a problem in the past, especially in areas such as Balboa Island, Lido Island, and the Peninsula where the homes are very close together, and in commercial areas as well when abutting residential areas. However, the City's Municipal Code now requires a permit before installation of new HVAC equipment. Permits are only granted when a sound rating of the proposed equipment does not exceed standards, or is installed with a timing device that will deactivate the equipment during the hours of 10:00 P.M. to 7:00 A.M. if the standards are exceeded.

Just because HVAC equipment sound ratings are reviewed during plan check, as well as tested in the field after installation, it can still be problematic over time. As equipment ages and sometimes suffers from lack of maintenance, noise from the equipment can increase. Because of this, the City still deals with HVAC equipment noise on a complaint basis, in order insure ongoing compliance with the standards of the Code.

### **Recreational Activities**

Another source of stationary noise in Newport Beach is recreational activities such as league and youth sporting games, as well as recreational rowers in Newport Harbor. These activities are sometimes scheduled during early morning hours on the weekends and can be a source of noise intrusion on nearby residences. Types of noise generated include people shouting and whistles/horns blowing. Some sporting events also utilize loudspeakers.

### Noise Disturbance

Residential party noise, boat party noise, barking dogs, and landscape maintenance tools are disturbing to residents, but are difficult to attenuate, and difficult to control. Complaints about noise disturbances are typically dealt with through code enforcement.

- Residential Party Noise—Residential party noise, particularly on Balboa Peninsula and in the West Newport area has been an ongoing problem. There are many difficulties in trying to control party noise. If a noise limit is established for enforcement using a quantitative measure, the code enforcer would be required to make noise measurements of the intrusive noise. Often, the disturbing levels of noise that were generated by a party are reduced once a code enforcer arrives on the premises to make measurements. Therefore, party noise level measurements may be an impractical means of party noise enforcement since it is often not possible to accurately capture the loud noise levels being generated by the party. Historically, police officers use their judgment for identifying and controlling party noise problems. Additionally, a recently adopted ordinance addressing police services has been effective in curbing party-related noise.
- Boat Party Noise—Charter boats, generally larger in size and carrying large numbers of paid passengers, have also been a source of noise. These boats can control on-deck noise by means of eliminating outside loudspeakers. The City recently amended its Municipal Code to provide greater regulations of charter boat operations.
- Barking Dogs—Dog barks can be characterized as being impulsive and startling or continuous and sustained. In either event, it can be a major source of noise disturbance. When dogs are outdoors, it is very difficult to attenuate the noise.
- Landscape Maintenance Tools—Tools used to maintain landscaping in Newport Beach can also be a source of noise. The most commonly-used tools, which are very difficult to attenuate the noise from, include edgers, blowers, and lawn mowers.

### NOISE-SENSITIVE RECEPTORS

Newport Beach has a number of public and private educational facilities, hospitals, convalescent homes, day cares, and other facilities that are considered noise sensitive. However, the primary noisesensitive use within the City is residential use. The noise exposure of these sensitive uses varies from low, in quiet residential areas, to high, in areas adjacent to the freeway.

# COMMUNITY NOISE CONTOURS

Noise contours for all of the major noise sources in Newport Beach, which include motor vehicles on roadways and freeways, and aircraft at JWA, were developed for existing conditions and future conditions. Existing noise contours were determined from the 2003 traffic levels and existing aircraft levels for these sources, and are expressed in terms of the CNEL. Existing noise contours are shown in Figure N1 through Figure N3.

Future noise conditions for roadways are presented for the 20 year time period ending 2025 and were derived from projected traffic levels for that horizon year. These noise contours are based on complete buildout of the General Plan, and are shown in Figure N4 through Figure N6. These future noise contours will assist in setting policies for establishing new land uses and appropriate mitigation for properties that will continue to be exposed to higher noise levels.

The aircraft noise contours that are used for planning purposes by the County of Orange and Airport Land Use Commission are found in the Airport Environs Land Use Plan (AELUP) and are derived from the 1985 Master Plan for JWA and the accompanying EIR 508. These noise contours are based on fleet mix and flight level assumptions developed in EIR 508 and are shown in Figures N1 and N2.

The Noise Chapter within 2014 John Wayne Airport Settlement Agreement Amendment Environmental Impact Report EIR No. 617 illustrated how the dBA CNEL noise contours have reduced in size compared to the 1985 AELUP Master Plan CNEL noise contours, in which the General Plan policies and maps are based on. The noise contours in EIR No. 617 are based on more contemporary noise modeling programs. Airport noise contours generated in this noise study using the INM Version 7.0d which was released for use in May 2013, and is the state-of-art in airport noise modeling. Consequently, Figures N4 and N5 are updated to reflect the noise contours identified by the 2014 John Wayne Airport Settlement Agreement Amendment Environmental Impact Report No. 617.

Noise contours represent lines of equal noise exposure, just as the contour lines on a topographic map are lines of equal elevation. The contours shown on the maps are the 60, 65, and 70 dB CNEL noise levels. The noise contours represent the maximum possible traffic noise levels at locations within them (i.e., they do not account for building placement or traffic speeds, nor the attenuating effects of walls, structures, and terrain features that might intervene between the roads and any location of interest) and should be used as a guide for land use planning. The 60 dB CNEL contour defines the Noise Referral Zone. This is the noise level for which noise considerations should be included when making land use policy decisions that affect existing and proposed noise-sensitive developments. The 65 dB CNEL contour area describes the area for which new noise-sensitive developments, including residential uses, will be conditionally permitted only if appropriate measures are included such that the standards contained in this Noise Element are achieved. Noise-sensitive uses shall not be located on parcels that are wholly within the John Wayne Airport 65 dBA CNEL contour as shown in Figure N5.

Furthermore, residential units should be sufficiently indoor-oriented, consistent with Title 21 of the California Code of Regulations, so as to reduce noise impingement on outdoor living areas. The JWA AELUP also strongly recommends that all designated outdoor common or recreational areas provide outdoor signage informing the public of the presence of operating aircraft.

### TYPICAL NOISE ATTENUATION METHODS

Noise impacts can typically be abated using four basic methods: (1) reducing the sound level of the noise generator, (2) interrupting the noise path between the source and receiver, (3) increasing the distance between the source and receiver, and (4) insulating the receiver with building materials and construction methods more resistant to noise intrusion.

Quieting certain noise sources may often be successfully achieved through design or the use of mufflers. However, a local government has limited direct control of transportation noise at the source. This control lies with the state and federal agencies that have this responsibility. The most effective method available to the City to mitigate transportation noise and reduce the impact of the noise onto the community is through comprehensive planning that includes noise as planning criteria, the inclusion of noise mitigation in project planning and design, and improved building noise reduction characteristics.

Noise may also be minimized by strategically placing a noise barrier (wall, berm, or combination wall/berm), the most common way of alleviating traffic noise impacts. Generally, effective noise shielding requires a continuous, solid barrier with a mass which is large enough to block the line of sight between source and receiver. Variations may be appropriate in individual cases based on distance, nature, and orientation of buildings behind the barrier, and a number of other factors. Garage or other structures may be used to shield dwelling units and outdoor living areas from non-aircraft noise.

The effects of noise may also be minimized by separating or isolating the noise source from the potential receiver. Wide buffers along freeways, for example, may reduce the noise level affecting adjacent noise sensitive land uses. These buffer areas may be developed with less sensitive uses.

Building interior noise levels can also be reduced by protecting the receiver with acoustical structures, enclosures, or construction techniques. Windows and doors are the most important paths for sound to enter a structure. Use of sound insulating doors and double paned windows can provide substantial reductions of interior noise levels. Because these features have little effect in reducing noise when they are left open, installation of air conditioning for adequate ventilation may be required.

Noise exposure criteria should be incorporated into land use planning to reduce future noise and land use incompatibilities. This is achieved by specifying acceptable noise exposure ranges for various land uses throughout the City. These criteria are designed to integrate noise considerations into land use planning to prevent noise/land use conflicts. Table N2 presents criteria used to assess the compatibility of proposed land uses with the noise environment.

The noise/land use compatibility matrix presented in Table N2 presents broad ranges of compatibility and are intended to be flexible enough to apply to a wide range of projects and environments. For example, a project in a large undeveloped area may be evaluated differently than an infill project in a densely developed area of the City. But in no case would it be desirable for any land use to have noise exceeding the highest "normally compatible" noise level shown in the matrix. This matrix is intended to be used as one of the many factors used in the land use planning process. It should be noted that California requires that interior noise levels in multi-family residential uses not exceed 45 LDN (daynight noise level); it is commonly used as an interior standard for all residential uses, but is not required under the California Administrative Code, Title 24, and Part 2.

In addition to the noise/land use compatibility guidelines contained in the General Plan Noise Element, the City of Newport Beach has adopted Community Noise Control policies and standards as part of its Municipal Code in order to limit unnecessary, excessive and annoying noise in the City. These noise standards are displayed in Table N3.

The most effective method to control community noise impacts from non-transportation noise sources is through application of Municipal Code standards. The noise levels established by the

Municipal Code assure that noise from mechanical equipment, and other types of non-transportation noise are not excessive in residential and other noise-sensitive areas.

#### Figure N1 **Existing Noise Contours (1)**

Pg 1—11x17 color

Pg 2—11x17 color

# Figure N2 Existing Noise Contours (2)

Pg 1—11x17 color

Pg 2—11x17 color

# Figure N3 Existing Noise Contours (3)

Pg 1—11x17 color

Pg 2—11x17 color

# Figure N4 Future Noise Contours (1)

Pg 1—11x17 color

Pg 2—11x17 color

# Figure N5 Future Noise Contours (2)

Pg 1—11x17 color

Pg 2—11x17 color

# Figure N6 Future Noise Contours (3)

Pg 1—11x17 color

Pg 2—11x17 color

| Land Use Categories   |  |     | Community Noise Equivalent Level (CNEL) |       |       |       |       |     |
|---|--|-----|---|-------|-------|-------|-------|-----|
| Categories  | Uses   | <55 | 55-60                                   | 60–65 | 65–70 | 70–75 | 75–80 | >80 |
| Residential   | Single Family, Two Family, Multiple Family   | Α   | Α                                       | В     | С     | С     | D     | D   |
| Residential   | Mixed Use  | Α   | Α                                       | Α     | С     | С     | С     | D   |
| Residential   | Mobile Home  | Α   | Α                                       | В     | С     | С     | D     | D   |
| Commercial<br>Regional, District                            | Hotel, Motel, Transient Lodging  | Α   | Α                                       | В     | В     | С     | С     | D   |
| Commercial<br>Regional, Village<br>District, Special        | Commercial Retail, Bank, Restaurant, Movie Theatre   | Α   | Α                                       | Α     | Α     | В     | В     | С   |
| Commercial Industrial Institutional                         | Office Building, Research and Development, Professional Offices, City Office Building              | Α   | Α                                       | Α     | В     | В     | С     | D   |
| Commercial Recreational Institutional Civic Center          | Amphitheatre, Concert Hall Auditorium, Meeting Hall  | В   | В                                       | С     | С     | D     | D     | D   |
| Commercial<br>Recreation                                    | Children's Amusement Park, Miniature Golf Course,<br>Go-cart Track, Equestrian Center, Sports Club | Α   | Α                                       | Α     | В     | В     | D     | D   |
| Commercial<br>General, Special<br>Industrial, Institutional | Automobile Service Station, Auto Dealership,<br>Manufacturing, Warehousing, Wholesale, Utilities   | A   | Α                                       | Α     | Α     | В     | В     | В   |
| Institutional   | Hospital, Church, Library, Schools' Classroom  | Α   | Α                                       | В     | С     | С     | D     | D   |
| Open Space  | Parks  | Α   | Α                                       | Α     | В     | С     | D     | D   |
| Open Space  | Golf Course, Cemeteries, Nature Centers Wildlife Reserves, Wildlife Habitat                        | Α   | Α                                       | Α     | Α     | В     | С     | С   |
| Agriculture   | Agriculture  | Α   | Α                                       | Α     | Α     | Α     | Α     | Α   |

SOURCE: Newport Beach, 2006

Zone A: Clearly Compatible—Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B: Normally Compatible\*\*—New construction or development should be undertaken only after detailed analysis of the noise reduction requirements and are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C: Normally Incompatible—New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

**Zone D**: Clearly Incompatible—New construction or development should generally not be undertaken.

| Table N3      | Noise Standards  |  |  |  |  |  |  |
|---------------|--|--|--|--|--|--|--|
|               | Land Use Categories  |  | Allowable Noise Levels (dBA)                   |  |  |  |  |
|               |  | Interior <sup>a,b</sup>                      |  | Exterior <sup>a,b</sup>                      |  |  |  |
| Categories    | Uses   | Interior Noise<br>Level (Leq)<br>7am to 10pm | Interior Noise<br>Level (Leq)<br>10 pm to 7 am | Exterior Noise<br>Level (Leq)<br>7am to 10pm | Exterior Noise<br>Level (Leq)<br>10 pm to 7 am |  |  |
| Residential   | Single Family, Two Family,<br>Multiple Family (Zone I)   | 45   | 40   | 55   | 50   |  |  |
| Residential   | Residential Portions of Mixed Use Developments (Zone III)  | 45   | 40   | 60   | 50   |  |  |
| Commercial    | Commercial (Zone II)   | N/A  | N/A  | 65   | 60   |  |  |
| Industrial    | Industrial or Manufacturing (Zone IV)  | N/A  | N/A  | 70   | 70   |  |  |
| Institutional | Schools, Day Care Centers,<br>Churches, Libraries, Museums,<br>Health Care Institutions (Zone I) | 45   | 40   | 55   | 50   |  |  |

SOURCE: EIP Associates, 2006

- The noise standard for the applicable zone for any fifteen-minute period;
- · A maximum instantaneous noise level equal to the value of the noise standard plus twenty dBA for any period of time (measured using Aweighted slow response).
- In the event the ambient noise level exceeds the noise standard, the noise standard applicable to said category shall be increased to reflect the maximum ambient noise level.
- · The noise standard for the residential portions of the residential property falling within one hundred feet of a commercial property, if the intruding noise originates from that commercial property.
- · If the measurement location is on a boundary between two different noise zones, the lower noise level standard applicable to the noise zone shall

# Goals and Policies

### **Noise and Land Use Compatibility**

Goal

Noise Compatibility—Minimized land use conflicts between various noise sources and other human activities.

<sup>&</sup>lt;sup>a</sup> If the ambient noise level exceeds the resulting standard, the ambient shall be the standard.

b It shall be unlawful for any person at any location within the incorporated area of the City to create any noise or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such a person which causes the noise level when measured on any other property, to exceed either of the following:

### **Policies**

#### N 1.1 Noise Compatibility of New Development

Require that all proposed projects are compatible with the noise environment through use of Table N2, and enforce the interior and exterior noise standards shown in Table N3. (Imp 2.1)

#### N 1.2 Noise Exposure Verification for New Development

Applicants for proposed residential or mixed-use projects located in areas projected to be exposed to 65-70 dBA CNEL or greater, as shown on Figure N5 must conduct a noise study to provide evidence that the depicted noise contours do not adequately account for local noise exposure circumstances due to such factors as, topography, variation in traffic speeds, and other applicable conditions. These findings shall be used to determine the level of exterior or interior noise, attenuation needed to attain an acceptable noise exposure level and the feasibility of such measures when other planning considerations are taken into account, consistent with Title 21 of the California Code of Regulations. (Imp 2.1)

#### N 1.3 Remodeling and Additions of Structures

Require that all remodeling and additions of structures comply with the noise standards shown in Table N3. (Imp 7.1)

#### N 1.4 New Developments in Urban Areas

Require that applicants of residential portions of mixed-use projects and high density residential developments in urban areas (such as the Airport Area and Newport Center) demonstrate that the design of the structure will adequately isolate noise between adjacent uses and units (common floor/ceilings) in accordance with the California Building Code. (Imp 7.1)

#### N 1.5 **Infill Projects**

Allow a higher (above 65 dBA CNEL) exterior noise level standard for infill projects in existing residential areas adjacent to major arterials if it can be shown that there are no feasible mechanisms to meet the exterior noise levels. The interior standard of 45 dBA CNEL shall be enforced for any new residential project or mixed-use project containing a residential component, consistent with Title 21 of California Code of Regulations. (Imp 2.1, 7.1)

#### N 1.5A Airport Area Infill Projects

Allow infill residential projects proximate to John Wayne Airport to have a higher exterior noise level standard (65-70 dBA CNEL) if it can be shown that there are no practical mechanisms or designs to meet the exterior noise levels. The interior standard of 45 dBA CNEL shall be enforced for any residential component of projects. No residential units may be located on parcels wholly within the John Wayne Airport 65 dBA CNEL noise contour area as shown in Figure N5, of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate. Nonresidential uses are encouraged on parcels located wholly within the 65 dBA CNEL contour area, shown in Figure N5.

#### N 1.6 Mixed-Use Developments

Encourage new mixed-use developments to site loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from the residential portion of the development. (Imp 7.1, 8.1)

#### N 1.7 Commercial/Entertainment Uses

Limit hours and/or require attenuation of commercial/entertainment operations adjacent to residential and other noise sensitive uses in order to minimize excessive noise to these receptors. (Imp 2.1, 8.1, 8.2)

#### N 1.8 Significant Noise Impacts

Require the employment of noise mitigation measures for existing sensitive uses when a significant noise impact is identified. A significant noise impact occurs when there is an increase in the ambient CNEL produced by new development impacting existing sensitive uses. The CNEL increase is shown in the table below. (Imp 2.1, 7.1)

| CNEL (dBA) | dBA increase                           |  |  |
|------------|--|--|--|
| 55         | 3                                      |  |  |
| 60         | 2                                      |  |  |
| 65         | 1                                      |  |  |
| 70         | 1                                      |  |  |
| Over 75    | Any increase is considered significant |  |  |

### **Transportation-Related Noise**

Goal

### N 2

Minimized motor vehicle traffic and boat noise impacts on sensitive noise receptors

### **Policies**

#### N 2.1 New Development

Require that proposed noise-sensitive uses in areas of 60 dBA and greater, as determined the analyses stipulated by Policy N1.1, demonstrate that they meet interior and exterior noise levels. (Imp 2.1)

#### N 2.2 **Design of Sensitive Land Uses**

Require the use of walls, berms, interior noise insulation, double paned windows, advanced insulation systems, or other noise measures, as appropriate, in the design of new residential developments to attenuate noise levels to not exceed 45 dBA CNEL interior. Other new noise sensitive land uses that are adjacent to major arterials and located proximate to John Wayne Airport (e.g., infill residential) and within the 65-70 dBA CNEL noise contour area are required to be indoor-oriented to reduce noise impacts on outdoor living or recreational areas. Application of the Noise Standards in Table N2 shall govern this requirement. (Imp 7.1)

#### N 2.3 **Limiting Hours of Truck Deliveries**

Limit the hours of truck deliveries to commercial uses abutting residential uses and other noise sensitive land uses to minimize excessive noise unless there is no feasible alternative. Any exemption shall require compliance with nighttime (10:00 P.M. to 7:00 A.M.) noise standards. (Imp 2.1, 8.1)

#### N 2.4 **Interagency Coordination to Enforce Standards**

Encourage the enforcement of State Motor Vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Newport Beach Police Department. (Imp 14.16, 14.17)

#### N 2.5 **Boating Activities**

Enforce compliance of all boating activities with the noise standards defined in the Municipal Code. (Imp 26.1)

#### N 2.6 **Barrier Construction Funding**

Establish a program to secure funding for the construction of noise barriers to protect private outdoor yard areas along arterial roadways where existing homes are exposed to noise levels above the City noise standards and develop a priority program for the construction of such barriers. A potential source of such funding may be a fee for new projects, which generate new traffic within the City, as well as road improvement funds where road improvements are made. The amount of these fees should be proportional to the amount of the new traffic that is caused by the new project. It should be recognized that noise barriers will not always be feasible mitigation to roadway noise. Noise barriers are most feasible for single-family homes where the rear yards are adjacent to

the roadway. The feasibility of other situations should be evaluated on a case-bycase basis. (Imp 30.2)

### Goal

### N 3

Protection of Newport Beach residents from the adverse noise impacts of commercial air carrier operations at John Wayne Airport as provided in the City Council Airport Policy.

### Policy

#### N 3.1 New Development

Ensure new development is compatible with the noise environment proximate to John Wayne Airport by not allowing residential units on parcels located wholly within the John Wayne Airport 65 dBA CNEL noise contour, as shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate. (Imp 2.1, 3.1, 4.1)

#### N 3.2 Residential Development

Require that residential development proximate to John Wayne Airport shall not be located on parcels wholly within the John Wayne Airport 65 dBA CNEL noise contour shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate. Require developers of residential or mixed-use land uses with a residential component to notify prospective purchasers or tenants of aircraft noise. Additionally, require outdoor common areas or recreational areas of residential or mixed-used developments to be posted with signs notifying users regarding the proximity to John Wayne Airport and the presence of operating aircraft and noise. (Imp 2.1, 3.1, 4.1)

#### N 3.3 **Avigation Easement**

Consider requiring the dedication of avigation easements in favor of the County of Orange when noise sensitive uses are proposed in the JWA planning area, as established in the JWA Airport Environs Land Use Plan (AELUP). (Imp 2.1, 3.1, 4.1)

#### N 3.4 **Existing Noise Restrictions**

Take any action necessary to oppose any attempt to modify the existing noise restrictions, including the existing curfew and the General Aviation Noise Ordinance. (Imp 9.1)

#### N 3.5 Additional Facilities at John Wayne Airport

Take any action necessary to oppose any attempt to construct a second air carrier runway including the acquisition of land necessary to provide required separation of the existing air carrier runway and any proposed facility. (Imp 9.1)

#### N 3.6 Existing Level of General Aviation Operations

Support any plan or proposal that maintains, and oppose any plan or project that proposes any significant changes to the existing level of general aviation operations and general aviation support facilities. (Imp 9.1)

#### N 3.7 **Remote Monitoring Systems**

Support preservation or enhancement of the existing remote monitoring systems (RMS) and the public reporting of the information derived from the RMS. (Imp 9.1)

#### N 3.8 Meeting Air Transportation Demand

Support means of satisfying some of Orange County's air transportation demand at airports other than John Wayne Airport or through alternative means of transportation. (Imp 14.3)

#### N 3.9 John Wayne Airport Amended Settlement Agreement

Take all steps necessary to preserve and protect the validity of the John Wayne Airport Amended Settlement Agreement, including the following:

- Oppose, or seek protection from any federal legislative or regulatory action that would or could affect or impair the County's ability to operate John Wayne Airport consistent with the provisions of the John Wayne Airport Amended Settlement Agreement or the City's ability to enforce the Amended Settlement Agreement.
- Approving amendments of the John Wayne Airport Settlement Agreement to ensure continued validity provided amendments are consistent with the City Council Airport Policy, do not materially impair the quality of life, and are in the long-term best interests of Newport Beach residents.
- Continuing to monitor possible amendment of the Airport Noise and Capacity Act of 1990 as well as various FAA Regulations and Advisory Circulars that relate to aircraft departure procedures. (Imp 14.3)

#### N 3.10 Community and Public Agency Support

Take steps necessary to secure broad-based support for all aspects of the City Council Airport Policy. (Imp 14.3, 29.1)

### Nontransportation-Related Noise

### Goal

### N 4

Minimization of Nontransportation-Related Noise—Minimized nontransportation-related noise impacts on sensitive noise receptors.

### **Policy**

#### N 4.1 **Stationary Noise Sources**

Enforce interior and exterior noise standards outlined in Table N3, and in the City's Municipal Code to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources, such as heating, ventilation, and air conditioning equipment. (Imp 7.1)

#### N 4.2 New Uses

Require that new uses such as restaurants, bars, entertainment, parking facilities, and other commercial uses where large numbers of people may be present adjacent to sensitive noise receptors obtain a use permit that is based on compliance with the noise standards in Table N3 and the City's Municipal Code.  $(Imp\ 2.1)$ 

#### N 4.3 **New Commercial Developments**

Require that new commercial developments abutting residentially designated properties be designed to minimize noise impacts generated by loading areas, parking lots, trash enclosures, mechanical equipment, and any other noise generating features specific to the development to the extent feasible. (Imp 2.1)

#### N 4.4 Limiting Hours of Recreational Activities

Limit hours when recreational activities in parks and the harbor can take place. (Imp 9.1, 23.4)

#### N 4.5 Sound-Amplifying Equipment

Regulate the use of sound-amplifying equipment through the City's Municipal Code. (Imp 2.1, 8.2)

#### N 4.6 **Maintenance or Construction Activities**

Enforce the Noise Ordinance noise limits and limits on hours of maintenance or construction activity in or adjacent to residential areas, including noise that results from in-home hobby or work related activities. (Imp 7.1, 8.1)

#### N 4.7 Nuisances

Regulate the control of nuisances, such as residential party noise, boat party noise, private fireworks, and barking dogs, through the City's Municipal Code. (Imp 8.1, 26.1)

#### N 4.8 Mechanized Landscaping Equipment

Regulate the use of mechanized landscaping equipment. (Imp 8.1)

### **Construction Noise**

### Goal

### N 5

Minimized excessive construction-related noise.

### **Policies**

#### N 5.1 **Limiting Hours of Activity**

Enforce the limits on hours of construction activity. (Imp 8.1)