

Noise Element

PURPOSE

The purpose of the Noise Element is to include 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 ensure that Newport Beach residents will be protected from excessive noise intrusion.

OVERVIEW

The Noise Element follows the State guidelines as required by 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.

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 weighting scale is used 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 background 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 the time it occurs and/or with the time of day when the sound occurs. The indicators used to measure exterior sound level exposure in the Noise Element are as follows:

- L_{eq} , the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} 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. Common averaging times for L_{eq} s range from 5-minutes for a steady sound source like an air conditioning unit, 10 to 15 minutes for steady traffic, to 1-hour or even as long as 8-hours for a more variable source such as construction or traffic on a rural roadway. 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 average noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the exterior CNEL is below 55 dBA, moderate in the 55 to 70 dBA range, and high above 70 dBA. Examples of hourly average sound levels are isolated natural settings that can provide noise levels as low as 30 dBA L_{eq} , and quiet suburban residential streets that can provide noise levels around 40 dBA L_{eq} during nighttime hours and 50 dBA L_{eq} during the day. Examples of moderate exterior level noise environments are urban residential or semi-commercial areas (typically 55 to 65 dBA L_{eq} during daytime hours) and

commercial locations (typically 60 to 70 dBA L_{eq} during daytime hours). 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
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
Diesel Truck going 50 mph at 50 feet		Food Blender at 3 feet
	—80—	Garbage Disposal at 3 feet
Noisy Urban Area During Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area During Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area During Nighttime	—40—	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	—0—	Threshold of Human Hearing
SOURCE: California Department of Transportation 2013		

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 noise-sensitive 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. As for the Airport Area and the West Newport Mesa Focus Areas, as shown in the Housing Element and Land Use Element, both offer opportunities to integrate new residential and mixed use development, it is important to thoughtfully design new development in a manner that allows harmonious colocation of noise sensitive uses with noise generating uses.

Roadway Noise Contours

Noise contours for the major surface transportation noise sources in Newport Beach, which include motor vehicles on arterial roadways and freeways, were developed for existing conditions and future conditions. Existing noise contours were determined from the 2020 traffic levels as sound sources and are expressed in terms of the CNEL. Existing noise contours are shown in Figure N1, Existing Traffic Noise Contours. Future noise conditions for roadways are presented for the 20 year time period ending 2040 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 N2, GPHE Traffic Noise Contours. 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.

Noise contours represent lines of equal noise exposure, just as the contour lines on a topographic map are lines of equal elevation. The traffic noise contours shown Figures N1 and N2 are the 50 through 75 dBA CNEL noise levels in 5 dB intervals. Roadway traffic noise contours account for traffic volumes and speeds and for terrain features but do not account for the shielding provided by building placement, sound walls, structures, and other features that might intervene between the roads and any location of interest.

These contours are meant to be used as a guide for land use planning. The 60 dBA CNEL contour defines the Noise Referral Zone. Above this noise level, noise considerations should be included when making land use policy decisions that affect existing and proposed noise-

sensitive developments. The 65 dBA CNEL contour area describes the area for which new noise sensitive developments, including residential uses, will be conditionally permitted only if appropriate mitigation measures are included such that the standards contained in this Noise Element are achieved. Additionally, 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 N3, Airport Noise Contours, further discussed below.

Airport Noise Contours

The aircraft noise contours that were 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.

However, 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. Figure N3 reflects the noise contours identified by the 2014 John Wayne Airport Settlement Agreement Amendment Environmental Impact Report No. 617. The aircraft noise contours shown in Figure N3 are the 60, 65, and 70 dBA CNEL noise levels.

The airport noise contours will continue to be updated from time to time. As updates become available, new contours may be considered for planning purposes.

Typical Noise Attenuation Methods for Transportation Sources

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. Vehicular traffic noise may also be minimized by strategically utilizing quieter pavement surfaces on local roads or by placing a noise barrier (wall, berm, or combination wall/berm) between the noise source and the sensitive receiver. Aircraft noise, which arrives at the receiver from above, is reduced primarily by siting sensitive uses outside of noise impacted areas and through the use of a combination of forced-air mechanical ventilation and sound-rated construction methods to reduce interior sound exposure levels.

Construction of noise barriers is 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. Garages or other structures may be used to shield dwelling units and outdoor living areas from non- aircraft noise. Other methods of noise control for traffic noise include the use of quieter pavement surfaces or developing truck routes to minimize the occurrence of these noisier vehicles in noise sensitive areas. 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 be reduced by protecting the receiver with acoustical structures, enclosures, or construction techniques. Windows and doors are the most likely 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. Use of building construction techniques for noise reduction is effective for both ground transportation and aircraft noise sources.

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 dBA DNL (day- night 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. The CNEL and DNL metrics are similar, with the CNEL metric being slightly higher due to its inclusion of an additional 5 dB penalty in the evening hours. Since CNEL is the City’s preferred metric, interior standards are given in CNEL with the understanding that if a project were to meet the 45 dBA CNEL interior standard it would also meet the 45 dBA DNL standard.

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 consistent with those displayed in Table N3.

Contrary to the compatibility guidelines contained in the Noise Element, the Municipal Code standards are meant for law enforcement and not for planning purposes. 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 once these facilities are constructed and operating. The levels given in Table N3, which coincide with the Municipal Code levels, are used for planning purposes so that a project can be properly designed to maintain land use compatibility and reduce annoyance.

Table N2 Land Use Noise Compatibility Matrix								
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	A	A	B	C	C	D	D
Residential	Mixed Use	A	A	B	C	C	C	D
Residential	Mobile Home	A	A	B	C	C	D	D
Commercial Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial Industrial Institutional	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Institutional Civic Center	Amphitheatre, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special Industrial, Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional	Hospital, Church, Library, Schools' Classroom	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

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.

SUBCOMMITTEE DRAFT

Table N3 Noise Limits for Non-Transportation Noise Sources

Land Use Categories		Interior ^{a,b}		Exterior ^{a,b}	
Categories	Uses ^{1,3}	Interior Noise Level (L _{eq}) 7am to 10pm	Interior Noise Level (L _{eq}) 10 pm to 7 am ²	Exterior Noise Level (L _{eq}) 7am to 10pm	Exterior Noise Level (L _{eq}) 10 pm to 7 am ²
	Single Family, Two Family, Multiple Family (Zone I)	45	40	55	50
	Residential Portions of Mixed Use Developments (Zone III)	45	40	60	50
	Commercial (Zone II)	N/A	N/A	65	60
	Industrial or Manufacturing (Zone IV)	N/A	N/A	70	70
	Schools, Day Care Centers, Churches, Libraries, Museums, Health Care Institutions (Zone I)	45	40	55	50

¹ In addition to the standards provided in Table N3, newly developed residential uses must also be designed so that interior sound levels from exterior sources are 45 dBA CNEL or less in noise sensitive spaces like bedrooms. This standard may be met with windows in the closed position if the residence is supplied with forced-air ventilation, so as to allow residents to keep windows shut.

² Nighttime noise limits only apply to land uses with nighttime use.

³ In addition to the standards provided in Table N3, newly developed non-residential uses must meet the California Green Building Standards Code, which provides noise standards for interior areas of non-residential uses.

^a If the background noise level exceeds the resulting standard, the background level shall be the standard, so long as the resulting sound level increases do not exceed the standard provided in the Table associated with Policy 1.9.

^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:

- The noise standard for the applicable zone for any fifteen-minute period (L_{eq-15min});
- A maximum instantaneous noise level (L_{max}) equal to the value of the noise standard plus twenty dBA for any period of time (measured using A- weighted slow response).
- In the event the background noise level exceeds the noise standard, the noise standard applicable to said category shall be increased to reflect the background 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 apply.

SUBCOMMITTEE REVIEW NOTE:

EXISTING POLICY OR RENUMBERED POLICY

ADAPTED POLICY

NEW

GOALS AND POLICIES

Noise and Land Use Compatibility

Noise and land use compatibility refers to how well various land uses can coexist with noise levels. The Noise Element influences land use policies since excessive noise can affect the quality of life of residents, workers, and visitors. Noise and land use compatibility is especially important for noise-sensitive receptors such as educational facilities, day cares, hospitals, and most notably residential uses. Reducing noise impacts through coordination with land use policies such as siting of new development, building code, and other zoning regulations plays a critical role in the prevention and mitigation of excessive noise impacts. For example, residential units should be sufficiently indoor-oriented, consistent with Title 24 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. Below are goals and policies to address noise and land use compatibility.

Goal N-1 A community where noise impacts are reduced, and compatibility between land uses is maintained

- (EXISTING) Policy 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)
- (ADAPTED from Policy N-1.2) Policy N-1.2: Noise Exposure Verification for New Development. Allow a noise study to be submitted for the purposes of providing 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 for proposed projects that require environmental review as follows:

- Residential or mixed use projects located in areas projected to be exposed to exterior noise levels of 60 dBA CNEL or greater.
- Residential or mixed use projects located in either the Airport Area Focus Area or the West Newport Mesa Focus Area projected to be exposed to exterior noise levels of 65-70 dBA CNEL.

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), consistent with Title 21 of the California Code of Regulations. (Imp 2.1)

- (EXISTING) Policy 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)
- (EXISTING) Policy 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)
- (EXISTING) Policy 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 24 of California Code of Regulations. (Imp 2.1, 7.1)
- (FORMER POLICY N 1.5A) Policy N1.6: 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 N3, 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 N3.

- (FORMERLY Policy N 1.6) Policy N-1.7: 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)
- (FORMERLY Policy N 1.7) Policy N-1.8: 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)
- (ADAPTED FROM POLICY N 1.8) Policy N-1.9: Significant Noise Increases. Require the employment of noise mitigation measures for existing sensitive uses when a significant noise increase is identified. Significant noise increases are described within the City's Municipal Code. (Imp 2.1, 7.1)
- (NEW) Policy N-1.10: Noise Regulations. Review the City's noise ordinance periodically but no less than every 10 years, and make revisions where needed.

Transportation-Related Noise

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. Below is a

summary of the various types of transportation related noise, followed by goals and policies to address transportation related noise.

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 SJHTC 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 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, pavement type, gradient of the roadway, and

if there are any structures or topographical elements located between the roadway and the receivers.

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 the County of Orange, JWA serves both general aviation and scheduled commercial passenger airline and cargo 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, and Balboa Island, and are generated by aircraft departures.

In 1985, the City, the County of Orange, the Airport Working Group (AWG), and Stop Polluting Our Newport (SPON) entered into a Settlement Agreement to resolve litigation related to John Wayne Airport (JWA). This agreement is unique in the United States and extremely important to protecting the quality of life in Newport Beach.

The City believes that the coordinated, collective efforts of local citizen groups, neighboring cities, and the County are essential to controlling the adverse impacts of JWA and protecting the quality of life in Newport Beach for this and future generations of residents.

Emerging Technologies

As new technologies emerge, this may change the way people and goods are transported. New technologies have the potential to create new noise in communities. The potential noise impacts of vertiports, air taxis, drones, delivery robots, and other advanced transportation

systems must be carefully considered to ensure they do not adversely affect community noise levels.

Goal N-2 Sensitive receptors are protected from excessive motor vehicle and boat noise

- (EXISTING) Policy N-2.1: New Development. Require that proposed noise-sensitive uses in areas of 60 dBA CNEL and greater, as identified from Figure N2 and Figure N3, demonstrate that they meet interior and exterior noise levels as determined the analyses stipulated by Policy N-1.1. (Imp 2.1)
- (EXISTING) Policy 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 not to 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 recreation areas. Application of the Noise Standards in Table N2 shall govern this requirement. (Imp 7.1)
- (EXISTING) Policy 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 in accordance with Table N3. (Imp 2.1, 8.1)
- (EXISTING) Policy 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)
- (ADAPTED from Policy N 2.5) Policy N-2.5: Boating Activities. Encourage the enforcement of the Municipal Code noise limits for boating activities through coordination with Newport Beach Police Department. (Imp 26.1)

- (EXISTING) Policy 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 and that alternate methods such as quieter pavement or use of solid safety barriers may also be considered. Noise barriers are most feasible for single-family homes where the rear yards are at grade with and adjacent to the roadway. The feasibility of other situations should be evaluated on a case-by- case basis. (Imp 30.2)

Goal N-3 A community safeguarded from the adverse noise impacts of commercial air carrier operations at John Wayne Airport

- (EXISTING) 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 N3, 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)
- (EXISTING) Policy N-3.2: Residential Development. Require developers of residential or mixed-use land uses located within the John Wayne Airport 65 dBA CNEL with a residential component to notify prospective purchasers or tenants of aircraft overflight and noise. Additionally, require outdoor common areas or recreational areas of residential or mixed-use 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)

- (EXISTING) Policy 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)
- (EXISTING) Policy N-3.4: Existing Noise Restrictions. Oppose any attempt to modify the existing noise restrictions, including the existing curfew and the General Aviation Noise Ordinance. (Imp 9.1)
- (EXISTING) Policy N-3.5: Additional Facilities at John Wayne Airport. 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)
- (EXISTING) Policy 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)
- (EXISTING) Policy 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)
- (EXISTING) Policy 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)
- (EXISTING) Policy N-3.9: John Wayne Airport Amended Settlement Agreement. 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 amendments 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)
- (ADAPTED from Policy N 3.10) Policy N-3.10: Community and Public Agency Support. Conduct outreach and coordinate with neighboring cities and the County for broad-based support for all aspects of the City Council Airport Policy. (Imp 14.3, 29.1)
- (NEW) Policy N-3.11. Updated Airport Noise Contours. Review and consider updates to the airport noise contours periodically and revise Figure N3, as appropriate.

Goal N-4 A City that proactively responds to and plans for emerging technologies

- (NEW) Policy N-4.1: Mitigate noise impacts from air delivery, and air taxis, and other emerging aerial mobility systems to the extent feasible consistent with Table N3.
- (NEW) Policy N-4.2: Direct emerging transportation systems along routes with minimal residential uses, to the extent feasible.

Non-Transportation Related Noise

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 non-transportation noise sources are most effectively controlled through the enforcement and application of City stationary noise ordinances or regulations. Below is a summary of the various types of non-transportation related noise as well as existing and related regulations, followed by goals and policies to address non-transportation related noise.

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 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 ensure 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, the adopted “Loud and Unruly Gathering 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 amended Title 17, Harbor Code 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. Use of electric tools and limiting hours to less sensitive daytime periods can help to reduce noise disturbances.

Goal N-5 Sensitive receptors are protected from non-transportation related noise impacts through reduced exposure.

- (FORMERLY N 4.1) Policy N-5.1: Stationary Noise Sources. Design projects to enforce interior and exterior noise standards outlined in Table N3 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)
- (FORMERLY N 4.2) Policy N-5.2: 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. (Imp 2.1)
- (FORMERLY Policy N 4.3) Policy N-5.3: New Commercial Developments. Require that new commercial developments abutting residentially designated properties be designed to minimize noise levels generated by loading areas, parking lots, trash enclosures, mechanical equipment, and any other noise generating features specific to the development consistent with the noise standards in Table N3. (Imp 2.1)
- (ADAPTED from Policy N 4.4) Policy N-5.4: Limiting Hours of Recreational Activities. Limit hours when recreational activities in parks and the harbor can take place, consistent with the Municipal Code. (Imp 9.1, 23.4)
- (ADAPTED from Policy N 4.5) Policy N-5.5: Sound-Amplifying Equipment. Ensure that projects that include sound amplifying equipment are designed to comply with the

limits in Table N3. Regulate the use of sound-amplifying equipment through the City's Municipal Code. (Imp 2.1, 8.2)

- (FORMERLY Policy N 4.7) Policy N-5.6: 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)
- (FORMERLY Policy N 4.8) Policy N-5.7: Mechanized Landscaping Equipment. Regulate the use of mechanized landscaping equipment through the City's Municipal Code. (Imp 8.1)
- (NEW) Policy N-5.8: Residential Uses in West Newport Mesa Focus Area. Require noise attenuation measures for new residential development in the West Newport Mesa Focus Area to ensure compatibility with existing industrial uses, protect residents from excessive noise exposure, and maintain operational flexibility for surrounding businesses.

Construction Noise

Construction noise can temporarily elevate noise levels due to the nature of activities such as demolition and building and the heavy machinery used such as earth movers, dump trucks, saws, and drills. In Newport Beach, construction noise is a common complaint received by the City. While construction noise may be necessary, the City can work to minimize noise levels associated with construction. Given the short duration of construction activity, operational noise limits are inappropriate for the regulation of construction noise occurring during allowable hours; therefore, these construction activities would be exempt from the limits given in Table N3. Below are goals and policies to address construction related noise and vibration.

Goal N-6 Construction activities that are managed to prevent excessive noise impacts

- (ADAPTED from Policy N 5.1) Policy N-6.1: Limiting Hours of Activity. Enforce the limits on hours of construction activity to the City's Municipal Code allowable hours. (Imp 8.1)
- (NEW) Policy N-6.2: Limiting Damage to Structures Resulting from Heavy Construction. For construction activities involving high-powered vibratory tools or pile driving within 200 feet of an existing structure, demonstrate that project construction would not

exceed the Caltrans construction vibration thresholds (0.25 in/sec PPV for historic and old buildings, 0.3 in/sec PPV for older residential structures, and 0.5 in/sec PPV for new residential and modern commercial/industrial structures) to ensure that no damage to sensitive structures would occur. (New Policy)

- (NEW) Policy N-6.3: Limiting Noise from Construction Activities. Limit construction noise to 80 dBA L_{eq} over an 8-hour daytime period for residential uses and 70 dBA L_{eq} over an 8-hour nighttime period in cases where construction is approved to occur outside of the City's allowable hours. (Imp 7.1, 8.1)
- (NEW) Policy N 6.4: Construction Noise Best Practices. Utilize the construction best practices to minimize noise intrusion on sensitive receivers.. Utilize the construction best practices to minimize noise intrusion on sensitive receivers.
 - Promote efficient residential maintenance and construction practices to reduce the duration of noise exposure in surrounding areas;
 - Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment;
 - Locate stationary noise generating equipment as far as possible from noise-sensitive uses when noise-sensitive uses adjoin or are near a construction project area;
 - Use "quiet" air compressors and other stationary noise-generating equipment where appropriate technology exists; and
 - Encourage the use of a project sponsor to designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise.