4.6 LAND USE AND PLANNING

This section describes the existing and land uses both on site and surrounding John Wayne Airport and assesses the impact of the Project on these uses. Additionally, the section identifies the plans and policies of applicable planning documents and the consistency of the Project with those policies.

Although the John Wayne Airport ("JWA" or "the Airport") General Aviation Improvement Program ("GAIP") proposes to upgrade facilities in the portion of the Airport used for general aviation, the nature of the Airport operations would not change. No physical changes would occur outside the Airport boundaries; therefore, the GAIP would not physically divide an established community. This topic is not discussed in this section (refer to the Notice of Preparation ["NOP"]/Initial Study in Appendix A).

4.6.1 BACKGROUND

Efforts to maximize land use compatibility surrounding the Airport have an extensive history. A mitigation measure in the EIR addressing the 1985 John Wayne Airport Master Plan adopted a two-prong approach to achieving compatibility. The first component was the development of the Santa Ana Heights Specific Plan, whereby portions of Santa Ana Heights were included in a redevelopment area that has resulted in the conversion of some residential areas to commercial use. This plan zoned the areas subject to the highest aircraft noise levels as Business Park. In 1990 this area had approximately 12.5 acres of residential uses, but it currently has less than 6 acres of non-conforming uses.

The second component was the adoption of the Santa Ana Heights Acoustical Insulation Program ("AIP"). AIP eligibility was based on the future 65-decibel ("dB") Community Noise Equivalent Level ("CNEL") contour predicted in the 1985 Master Plan.[1] Interior noise exposure greater than 45 CNEL was needed to be eligible for the program. In return for providing acoustical attenuation, an avigation easement would be provided to the County. An avigation easement is a type of easement which typically conveys the following rights: (i) a right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (usually set in accordance with Federal Aviation Regulation ("FAR") Part 77 criteria); (ii) a right to subject the property to noise, vibrations, fumes, dust, and fuel particle emissions associated with normal airport activity; (iii) a right to prohibit the erection or growth of any structure, tree, or other object that would enter the acquired airspace; (iv) a right-of-entry onto the property, with proper advance notice, for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace; and (v) a right to prohibit electrical interference, glare, misleading lights, visual impairments, and other hazards to aircraft flight from being created on the property.

The AIP has been extensively implemented. For dwelling units found to be non-conforming uses located in an area zoned for business park uses, prescriptive avigation easements were acquired. A prescriptive avigation easement is an avigation easement acquired by continued use without permission of the owner for a legally defined period of time.

[1] The 1985 65 CNEL contour is reflected in the Airport Environs Land Use Plan ("AELUP") and is often called the policy implementation line. The existing 65-CNEL contour is smaller than anticipated in the 1985 Master Plan.

The Santa Ana Heights AIP has been deemed completed. However, in conjunction with Final EIR 617 prepared for the 2014 Settlement Agreement Amendment, a second Sound Insulation Program ("SIP") was adopted. The SIP provides a monitoring program to compare future noise levels to those of the 2013 Annual Noise Report. The program recognizes the difference between the County of Orange noise impact standards and those adopted by the City of Newport Beach. For properties in the County jurisdiction, if the noise levels have increased by 1.5 dB or more over the 2013 levels at noise monitoring stations ("NMS") 1S, 2S, and 3S, all noise-sensitive uses represented by that NMS not previously insulated under the 1985 AIP will be eligible for evaluation for participation in the SIP.[2] The noise level impacting these uses and the measured noise reduction will be used to estimate the interior noise level. If the estimated interior noise level exceeds an average of 45 CNEL, then the use will be eligible for re-evaluation in the form of new interior noise level measurements. If the interior noise level in any habitable room exceeds an average of 45 CNEL, then the use will be eligible for the SIP. For properties in the City of Newport Beach, an increase of 1.0 dB has been established for evaluating eligibility.

When it is determined that a noise-sensitive use is significantly impacted based on measured noise levels and the relevant significance thresholds, that use will be evaluated by the County of Orange for eligibility for sound insulation. The evaluation will be performed by measuring the indoor noise levels for each habitable room or educational space. If the average noise level in all habitable rooms or education spaces of a use is greater than an average of 45 CNEL, then the use will be eligible for sound insulation. Additionally, if the average noise level is less than 45 CNEL, any use with a noise level greater than an average of 45 CNEL in any habitable room or educational space also will be eligible for sound insulation if the Federal Aviation Administration ("FAA") waives its requirement that noise levels be averaged across all habitable rooms or education spaces. The implementation of sound insulation will depend on satisfying the FAA criteria described in Chapter 812 of Order 5100.38C Airport Improvement Program Handbook.

To date an increase in noise levels sufficient to require implementation of the SIP has not occurred. Final EIR 617 did not identify a potential impact until Phase 3 (2026 to 2030) under the scenario that was adopted as part of the Settlement Agreement Amendment. It should also be noted that the analysis in Final EIR 617 assumed a continuation of the 2013 fleet mix. Improvements in aircraft may reduce the projected noise levels.

4.6.2 REGULATORY SETTING

One aspect of land use planning considered under the California Environmental Quality Act ("CEQA") is the consistency of the GAIP with relevant planning documents. Relevant planning documents associated with the GAIP include the *County of Orange General Plan*, the *Airport Environs Land Use Plan for John Wayne Airport*, and the Southern California Association of Governments ("SCAG") *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* ("RTP/SCS"). In addition, for information purposes, this section provides an evaluation of the *City of Newport Beach General Plan,* the *City of Irvine General Plan,* and the *City of Costa Mesa General Plan* because these jurisdictions are immediately adjacent to the Airport.

[2] The Noise Monitoring System is discussed in Section 4.7.4.

State

California Administrative Code

Title 21 of the California Administrative Code establishes regulations pertaining to noise surrounding airports. The regulations establish a quantitative framework within which the airport proprietors, aircraft operators, local communities, counties and the state can work to reduce and prevent airport noise problems. Title 21 establishes the standard for the acceptable level of aircraft noise for persons living in the vicinity of airports as 65 dB CNEL. Section 5014 identifies incompatible land uses within the 65 CNEL contour as follows:

(a) Residences, including but not limited to, detached single-family dwellings, multi-family dwellings, high-rise apartments or condominiums, and mobile homes, unless:

(1) an avigation easement for aircraft noise has been acquired by the airport proprietor, or

(2) the dwelling unit was in existence at the same location prior to January 1, 1989, and has adequate acoustic insulation to ensure an interior CNEL due to aircraft noise of 45 dB or less in all habitable rooms. However, acoustic treatment alone does not convert residences having an exterior CNEL of 75 dB or greater due to aircraft noise to a compatible land use if the residence has an exterior normally occupiable private habitable area such as a backyard, patio, or balcony. Or,

(3) the residence is a high rise apartment or condominium having an interior CNEL of 45 dB or less in all habitable rooms due to aircraft noise, and an air circulation or air conditioning system as appropriate, or

(4) the airport proprietor has made a genuine effort as determined by the department in accordance with adopted land use compatibility plans and appropriate laws and regulations to acoustically treat residences exposed to an exterior CNEL less than 80 dB (75 dB if the residence has an exterior normally occupiable private habitable area such as a backyard, patio, or balcony) or acquire avigation easements, or both, for the residences involved, but the property owners have refused to take part in the program, or

(5) the residence is owned by the airport proprietor.

(b) Public and private schools of standard construction for which an avigation easement for noise has not been acquired by the airport proprietor, or that do not have adequate acoustic performance to ensure an interior CNEL of 45 dB or less in all classrooms due to aircraft noise;

(c) hospitals and convalescent homes for which an avigation easement for noise has not been acquired by the airport proprietor, or that do not have adequate acoustic performance to provide an interior CNEL of 45 dB or less due to aircraft noise in all rooms used for patient care;

(d) churches, synagogues, temples, and other places of worship for which an avigation easement for noise has not been acquired by the airport proprietor, or that do not have

adequate acoustic performance to ensure an interior CNEL of 45 dB or less due to aircraft noise.

Airport Environs Land Use Plan for John Wayne Airport

The Airport Environs Land Use Plan ("AELUP") is the comprehensive land use plan adopted and administered by the Airport Land Use Commission ("ALUC") for Orange County, as required by Section 21675 of the *California Public Utilities Code.* The AELUP, originally adopted by the ALUC in 1975 with subsequent revisions, establishes land use guidelines based on noise and safety impacts for areas surrounding airports. The most current AELUP for JWA was approved in April 2008.

The land use compatibility plan within the AELUP is intended to provide for JWA's 20-year planning future. The purpose of the plan is to "protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable air space." This compatibility plan for JWA affects the cities of Costa Mesa, Irvine, Newport Beach, Santa Ana, and Tustin, as well as unincorporated areas of the County of Orange because the *Federal Aviation Regulation* ("FAR") Part 77 notification area is used for defining the airport influence area ("AIA") for the AELUP. The 60 to 65 CNEL contour, is within the referral area when reviewing applicable land use guidelines, policies, and regulations. The AELUP also takes into account land use compatibility recommendations made in the *California Airport Land Use Planning Handbook,* prepared by the State of California, Department of Transportation Division of Aeronautics. Noise-sensitive land uses, defined in terms of use type and intensity, are specifically discouraged or not compatible within the 65 CNEL contour.

The ALUC and its implementation of the AELUP assists local agencies in ensuring compatible land uses around the Airport and assists in coordinating compatibility planning efforts. These local agencies are required to refer proposed General Plan Amendments, Specific Plans/Planned Communities Amendments or adoptions, zoning ordinances and amendments, or building regulations to the ALUC prior to adoption. The ALUC must determine whether the proposed plan(s) are compatible with the AELUP policies and notify the local agency of the proposed plan's consistency with the AELUP. A two-thirds vote of the local agency governing body is required to approve a plan that the ALUC has found to be inconsistent with the AELUP. Such an override must meet the notification requirements and be accompanied by specific findings pursuant to Section 21670 of the *California Public Utilities Code.*

The AELUP uses a policy implementation line, which was adopted by the Orange County Board of Supervisors in 1985 for establishing the Noise Impact Zones. This line is based on the highest noise level at a given location utilizing noise projections from both the 1990 and 2005 project case contours developed as part of the 1985 John Wayne Airport Master Plan and are used as the basis for planning in the vicinity of JWA. (County 2008).

Regional

Southern California Association of Governments

The SCAG is the Metropolitan Planning Organization ("MPO") for six counties: Orange, Los Angeles, San Bernardino, Riverside, Ventura, and Imperial. The SCAG region includes 191 cities in an area that encompasses more than 38,000 square miles (SCAG 2017). As the designated MPO, SCAG prepares plans for transportation, growth management, hazardous waste management, and air quality. Among the leading activities SCAG undertakes are:

- Maintaining a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan ("RTP") and a Regional Transportation Improvement Program ("RTIP")
- Developing demographic projections plus the integrated land use, housing, employment, transportation programs, measures, and strategies portions of the South Coast Air Quality Management District's Air Quality Management Plan
- Determining, pursuant to the Federal Clean Air Act, the conformity of its projects, plans and programs to the Air Quality Management Plan
- Reviewing environmental impact reports for regionally significant consistency with regional plans
- Serving as the authorized areawide waste treatment management planning agency pursuant to federal water pollution control statutes
- Preparing the Regional Housing Needs Assessment pursuant to State law

SCAG has developed a number of plans to achieve its regional objectives. The plan most applicable to the GAIP is the Regional Transportation Plan/Sustainable Communities Strategy ("RTP/SCS"; adopted on April 7, 2016; Amendment No. 2 adopted on July 6, 2017). Proposed projects are reviewed and an assessment is made about whether each project is consistent with or supports specific policies of the RTP/SCS. Some of the policies within the RTP/SCS are advisory in nature, as discussed below.

2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

The RTP/SCS is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP provides a vision for transportation investments throughout the region. The SCS is a newly required element of the RTP. The SCS integrates land use and transportation strategies that would achieve California Air Resources Board ("CARB") emissions reduction targets pursuant to Senate Bill ("SB") 375. The 2016–2040 RTP/SCS includes goals and policies applicable to most effectively serving the regional demands for growth, economic development, and providing the associated infrastructure to serve the region. Section 4.6.7 evaluates the GAIP's consistency with applicable goals and policies in the 2016–2040 RTP/SCS.

Local

County of Orange General Plan

State law requires each county to adopt a comprehensive, long-range General Plan for its own physical development and for any land outside its boundaries related to its planning activities. The *Orange County General Plan* was adopted in 2005 and was last revised in 2015 to reflect adopted General Plan amendments to the Land Use Element (County 2005a). The General Plan is organized into nine elements: Land Use, Transportation, Public Services and Facilities, Resources, Recreation, Noise, Safety, Housing, and Growth Management. Seven of these elements are required by State law (i.e., Land Use, Transportation, Resources, Recreation, Noise, Safety, and Housing), and the remaining two (i.e., Public Services and Facilities and Growth Management) are either mandated by regional requirements or are optional elements addressing issues relevant to the development of the County. A discussion of the GAIP's consistency with applicable *County of Orange General Plan* goals and policies is provided in Section 4.6.7. Brief descriptions of applicable General Plan elements are provided below.[3]

Land Use Element

The Land Use Element describes objectives, policies, and land use patterns for all unincorporated Orange County territory. Land use categories are used to depict the general distribution, location, and extent of public and private uses of land. This element also establishes development criteria and standards, including population density and building intensity. The Land Use Element would be applicable to the Airport and the few remaining unincorporated islands in the area because the Airport and these islands are the only unincorporated lands in the vicinity of the Airport (LAFCO 2016).

Transportation Element

The Transportation Element contains the County's overall transportation system plan. It develops a strategy for planning, developing, and maintaining a surface transportation system to serve existing and planned land uses in the unincorporated areas of Orange County. The existing traffic conditions in the Airport area are discussed in Section 4.8, Transportation/Traffic, of this Program EIR.

Noise Element

The purpose of the Noise Element is to provide a statement of public policy and a decision framework for the maintenance of a quiet environment. The Noise Element identifies the sources of noise; analyzes the extent of the noise intrusion; and estimates the potential impact of noise on the County. This identification process, in turn, provides the basis for goals, policies, and implementation programs designed to preserve, where possible, a quiet environment in Orange

[3] The General Plan Elements for the County of Orange were reviewed for goals and policies that pertain to JWA, either directly or indirectly. The goals and policies were considered to be applicable if, through implementation, the GAIP had the potential to conflict with the provisions outlined in the General Plan. If no goals or policies were identified, then the Element was not included in the discussion.

County. A noise study has been conducted for the GAIP and is discussed in Section 4.7, Noise, of this Program EIR.

Safety Element

The Safety Element was updated in 2011. It is the primary document for identifying hazards that impact persons and property in the unincorporated areas of Orange County. The Element focuses on fire, flood, and geologic hazards; other hazards that are locally relevant to safety issues are also discussed.

Other Local Jurisdictions

In addition to the presence of several unincorporated County Islands (LAFCO 2016), the Airport is surrounded by the cities of Newport Beach, Irvine, and Costa Mesa. Although not identified as responsible or trustee agencies for the GAIP,[4] because of the proximity to these cities, an evaluation of the GAIP's consistency with applicable goals and policies of each city's General Plan is provided in Table 4.6-7. Additionally, for the City of Newport Beach, an encroachment permit may be required for improvements on Campus Drive. Similar to the approach used for the County of Orange, city General Plan Elements were reviewed for goals and policies that pertain to JWA, either directly or indirectly. The goals and policies were considered to be applicable if, through implementation, the GAIP had the potential to conflict with the provisions outlined in a surrounding city's General Plan. If no applicable goals or policies were identified, then the Element was not included in the discussion.

City of Newport Beach General Plan

The *City of Newport Beach General Plan* is the long-range guide for growth and development in the city. On July 25, 2006, the General Plan was adopted, and the Final EIR was certified by the Newport Beach City Council. At the General Municipal Election held on November 7, 2006, the City Electorate approved the land use plan of the General Plan, pursuant to City Charter Section 423. In November 2017, the City formally initiated a General Plan update, which is expected to be completed in 2020.

The *City of Newport Beach General Plan* contains the following ten elements: Land Use; Harbor and Bay; Housing; Historical Resources; Circulation; Recreation; Arts and Cultural; Natural Resources; Safety; and Noise. A discussion of the GAIP's consistency with applicable goals and policies in the *City of Newport Beach General Plan* is provided in Section 4.6.7. Brief descriptions of applicable General Plan elements are provided below.

Land Use Element

The General Plan Land Use Element presents goals and policies pertaining to how existing development is to be maintained and enhanced and how new development is to be implemented. The *City of Newport Beach General Plan* establishes goals and policies for land use development

[4] The CEQA Guidelines defines a "Responsible Agency" as "a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval power over the project."

in the City as well as its Sphere of Influence. The southern and southeastern boundaries of JWA are adjacent to the City of Newport Beach jurisdictional boundary.

Circulation Element

The Circulation Element governs the long-term mobility system of the City of Newport Beach. The goals and policies in this element are closely correlated with the Land Use Element and are intended to provide the best possible balance between the City's future growth and land use development, roadway size, traffic service levels, and community character. The existing traffic conditions in the Airport area are discussed in Section 4.8, Transportation/Traffic, of this Program EIR.

Natural Resources Element

The primary objective of the Natural Resources Element is to provide direction regarding the conservation, development, and use of natural resources. It identifies the City's natural resources and policies for their preservation, development, and wise use. This Element addresses water supply (as a resource) and water quality (includes bay and ocean quality, and potable drinking water); air quality; terrestrial and marine biological resources; open space; archaeological and paleontological resources; mineral resources; visual resources; and energy. The City's Local Coastal Program ("LCP") identifies a number of Environmentally Sensitive Areas ("ESAs"), including West Bay, Upper Newport Bay State Marine Park (formerly Ecological Reserve), and East Bluff Remnant—all of which are referred to as Upper Newport Bay in this EIR section. Upper Newport Bay is also identified as an important open space resource in the City.

Noise Element

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 ensure that Newport Beach residents would be protected from excessive noise intrusion. The Noise Element follows the revised State guidelines in Section 46050.1 of the *California Health and Safety Code*. The Element quantifies the community noise environment in terms of noise exposure contours for both short and long-term levels of growth and traffic activity. The information contained in the Noise Element provides the framework to achieve compatible land uses and to provide baseline levels and noise source identification for local Noise Ordinance enforcement.

Safety Element

The Safety Element of a General Plan is a tool to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human-induced hazards. The Safety Element recognizes and responds to public health and safety risks that could cause exposure to the residents of Newport Beach. Implementation of City, county, and state emergency response and mutual aid plans will enable the community to avert or minimize impacts to the extent practical and feasible, as well as allow restoration of the City in a timely manner after an event. The element specifically addresses coastal hazards, geologic hazards, seismic hazards, flood hazards, wildland and urban fire hazards, hazardous materials, aviation hazards, and disaster planning. JWA is described in the City's Safety Element as

generating nearly all aviation traffic above the City of Newport Beach. Three City areas identified in the Safety Element as being subject to increased vulnerability to aviation hazards are Balboa Peninsula, Balboa Island, and Upper Newport Bay.

Housing Element

The City of Newport Beach's Housing Element details the City's strategy for enhancing and preserving the community's character, identifies strategies for expanding housing opportunities and services for all household types and income groups, and provides the primary policy guidance for local decision-making related to housing. The Housing Element is mandated by Sections 65580 to 65589 of the Government Code, which includes the requirement that Housing Elements be updated at least every five years. The current City of Newport Beach Housing Element addresses the years 2014–2021. In the 2006 General Plan update process, several key areas in the City were identified for future housing opportunities, including the Airport Area near JWA, Newport Center, Banning Ranch, and the Balboa Peninsula area. The 2014-2021 Housing Element reiterates these areas as future housing opportunities.

City of Irvine General Plan

The City of Irvine *Year 2000 General Plan Update* (*City of Irvine General Plan*) was adopted on March 9, 1999, and has subsequently been updated. The *City of Irvine General Plan* is current with respect to amendments through June 2015 (Supplement 9, August 2015). The *City of Irvine General Plan* contains the following 13 elements: Land Use, Circulation, Housing, Seismic, Cultural Resources, Noise, Public Facilities, Integrated Waste Management, Energy, Safety, Parks and Recreation, Conservation and Open Space, and Growth Management. A discussion of the GAIP's consistency with applicable goals and policies in the *City of Irvine General Plan* is provided in Section 4.6.7. Brief descriptions of applicable General Plan elements are provided below.

Land Use Element

The *City of Irvine General Plan's* Land Use Element seeks to protect and enhance the quality of life in the community through land use policies that guide future growth and that define the quality of life in the city. The goal of the Land Use Element is to "promote land use patterns that maintain safe residential neighborhoods, bolster economic prosperity, preserve open space, and enhance the overall quality of life in Irvine." Land use policies determine how land is developed in the community and also guide and resolve many land use issues and constraints in order to define the quality of life in the city. The northern and northeastern boundaries of JWA are adjacent to the City of Irvine jurisdiction boundary.

Circulation Element

The Citywide circulation system can influence the pace of urban development and facilitate interaction among the City's planning areas. The Circulation Element describes the City's circulation system, which has been designed to: (1) create a hierarchy of roadways; (2) reinforce boundaries of planning areas; (3) respond to conservation, noise, air pollution, and wildlife preservation policies; and (4) satisfy City General Plan and Strategic Business Plan objectives. Four different types of systems comprise Irvine's circulation system: air, road, public transit, and transit.

City of Costa Mesa General Plan

The *City of Costa Mesa 2015-2035 General Plan* was adopted in June 2016 by City Council Resolution 16-50. The *City of Costa Mesa 2015-2035 General Plan* contains the following ten elements: Land Use, Circulation, Growth Management, Housing, Conservation, Noise, Safety, Community Design, Open Space and Recreation, and Historical and Cultural Resources. A discussion of the GAIP's consistency with applicable goals and policies in the *City of Costa Mesa 2015-2035 General Plan* is provided in Section 4.6.7. Brief descriptions of the applicable General Plan elements are provided below.

Land Use Element

The Land Use Element unifies the other elements by providing an overall policy context for future physical change. Goals and policies define the community's desired balance among social, environmental, and economic considerations, while maintaining those characteristics of the community that reinforce quality neighborhoods and viable business districts.

Circulation Element

The Circulation Element identifies and establishes the City's policies governing the system of roadways, intersections, bike paths, pedestrian ways, and other components of the circulation system, which collectively provide for the movement of persons and goods throughout the City.

Noise Element

The Noise Element describes existing noise levels and sources in the City of Costa Mesa. Aircraft noise from John Wayne Airport is identified as a source of noise in the city. The Noise Element includes an exhibit prepared in 2013, Figure N-2, Existing Noise Contours-2015, that depicts JWA's CNEL contours.

4.6.3 METHODOLOGY

This section describes the methods used for assessing potential land use impacts and consistency with applicable planning policies. The threshold from the County's *Environmental Analysis Checklist,* which is generally consistent with the State CEQA Guidelines Appendix G Checklist, provide the thresholds that have been used in this section of the Program EIR. Pursuant to Section 15125(a) of the State CEQA Guidelines, the discussion of the Airport is based on the conditions of the Airport when the NOP was published in March 2017 (JWA 2017).

On-Site Land Use Evaluation

The County General Plan does not have specific criteria for capacity considerations of the Airport facilities. Although the GAIP proposes physical improvements to general aviation facilities, the GAIP would not change the type of use (general aviation) on site. Therefore, the evaluation will assess the compatibility of the proposed general aviation facilities with uses on the Airport and the overall aviation operations. The assessment considers the aircraft storage capacity of general aviation facilities with capacity assumptions identified in Section 3.7, Project Description, of the Program EIR. The analysis of the on-site facilities is based on data provided in the *Orange*

County/John Wayne Airport (JWA) General Aviation Improvement Program (GAIP) Based Aircraft Parking-Capacity Analysis and General Aviation Constrained Forecasts Technical Memorandum provided in Appendix D.

Surrounding Land Use Evaluation

An important consideration when assessing land use compatibility surrounding an airport is the potential for incompatible land uses associated with excessive noise levels. The GAIP proposes new and improved facilities that would require several phases of construction, as identified in Section 3.7.2 for the Proposed Project and Section 3.7.3 for Alternative 1. The surrounding land use evaluation focuses on land use incompatibility associated with changes in noise levels from aircraft associated with the new and improved facilities serving general aviation.

The County of Orange General Plan has established compatibility standards and guidelines for various land uses in terms of CNEL and L_{eq}. The County generally uses the 65 CNEL as a standard for determining land use compatibility for noise-sensitive uses. For residential land uses, the County has established a maximum exterior noise level standard of 65 CNEL for private outdoor living areas and an interior standard of 45 CNEL. These standards are reproduced in Table 4.6-1.

TABLE 4.6-1
COUNTY OF ORANGE COMPATIBILITY MATRIX FOR LAND USE AND COMMUNITY NOISE EQUIVALENT LEVELS

Type of Use	65+ decibels CNEL	60 to 65 decibels CNEL
Residential	3a, b, e	2a, e
Commercial	2c	2c
Employment	2c	2c
Open Space		
Local	2c	2c
Community	2c	2c
Regional	2c	2c
Educational Facilities		
Schools (K through 12)	2c, d, e	2c, d, e
Preschool, college, other	2c, d, e	2c, d, e
Places of Worship	2c, d, e	2c, d, e
Hospitals		
General	2a, c, d, e	2a, c, d, e
Convalescent	2a, c, d, e	2a, c, d, e
Group Quarters	1a, b, c, e	2a, c, e
Hotel/Motels	2a, c	2a, c
Accessory Uses		
Executive Apartments	1a, b, e	2a, e
Caretakers	1a, b, c, e	2a, c, e

TABLE 4.6-1
COUNTY OF ORANGE COMPATIBILITY MATRIX FOR LAND USE AND COMMUNITY NOISE EQUIVALENT LEVELS

Type of Use	65+ decibels CNEL	60 to 65 decibels CNEL

CNEL: Community Noise Equivalent Level; L_{eq}: average noise level.

EXPLANATION AND DEFINITIONS

Action Required to Ensure Compatibility Between Land Use and Noise From External Sources:

1: Allowed if interior and exterior community noise levels can be mitigated.
2: Allowed if interior levels can be mitigated.
3: New residential uses are prohibited in areas within the 65 CNEL contour from any airport or air station and are allowed in other areas if interior and exterior community noise levels can be mitigated. The prohibition against new residential development excludes limited "infill" development within an established neighborhood.

Standards Required for Compatibility of Land Use and Noise:

a **Interior Standard:** CNEL of less than 45 decibels (habitable rooms only).
b **Exterior Standard:** CNEL of less than 65 decibels in outdoor living areas.
c **Interior Standard:** $L_{eq(h)}$ = 45 to 65 decibels interior noise level, depending on interior use.
d **Exterior Standard:** $L_{eq(h)}$ of less than 65 decibels in outdoor living areas.
e **Interior Standard:** As approved by the Board of Supervisors for sound events of short duration such as aircraft flyovers or individual passing railroad trains.

Key Definitions:

Habitable Room: Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking, or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

Interior: Spaces that are covered and largely enclosed by walls.

$L_{eq(h)}$: The A-weighted equivalent sound level averaged over a period of "h" hours. An example would be $L_{eq(12)}$ where the equivalent sound level is the average over a specified 12-hour period (such as 7:00 AM to 7:00 PM). Typically, time period "h" is defined to match the hours of operation of a given type of use.

Outdoor Living Area: Outdoor living area is a term used by the County of Orange to define spaces that are associated with residential land uses typically used for passive private recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, and other outdoor areas associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are front yard areas, driveways, greenbelts, maintenance areas, and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Source: Orange County General Plan Noise Element, Tables VIII-2 and VIII-3

Existing noise-sensitive land uses now located within the 65 CNEL contour as a result of the GAIP are assessed as potential incompatible land uses. The County's standard also identifies an interior noise standard of 45 CNEL. Therefore, a determination is made in this analysis regarding land use compatibility with both the exterior and interior noise standards for existing residential uses adjacent to the Airport. However, no interior noise readings have been taken at any locations as part of this Program EIR. As discussed in Section 4.7, Noise, the assessment assumes

the typical construction attenuates outdoor noise by 20 dBA with windows closed and 12 dBA with windows open. [5]

Title 21 establishes the standard for the acceptable level of aircraft noise for persons living in the vicinity of airports as 65 dB CNEL. Section 5014 identifies land uses within the 65 CNEL contour as compatible if an avigation easement for aircraft noise has been acquired by the airport proprietor. Therefore, if noise-attenuation (i.e., sound insulation) measures were installed as part of the 1985 JWA Master Plan and Santa Ana Heights Acoustical Insulation Program ("AIP"), then—even if the existing land use is within the 65 CNEL—no land use impact would occur at the residential units that received insulation and for which avigation easements were recorded. This is because there has been a meaningful reduction in aircraft noise inside the residences to satisfy the interior noise standard of CNEL 45 dB and an avigation easement has been recorded. The residences are compatible for purposes of Title 21 of the California Noise Standards.[6]

Additionally, a number of noise-sensitive land uses (e.g., schools and places of worship) are currently located in office/industrial buildings adjacent to the Airport. As part of the construction permit process, a standard condition implemented by the jurisdictions adjacent to the Airport is to require documentation demonstrating that these buildings can achieve appropriate interior noise standards. Therefore, even though these uses may be within the 65 CNEL contour, a noise impact would not occur; and the land use may be found to be compatible even though it is located in the 65 CNEL contour pursuant to Title 21 (see Section 4.6.2).

The land use analysis is based on the *John Wayne Airport General Aviation Improvement Program Noise Analysis Technical Report* prepared by Landrum and Brown and included in this Program EIR as Appendix G (Landrum & Brown 2018), review of aerial photographs; 2010 U.S. Census data; and review of relevant planning documents referenced in this section.

Policy Consistency Evaluation

As part of the land use analysis, the State CEQA Guidelines require an EIR to evaluate potential "conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project." For the GAIP, the County of Orange is the lead agency with jurisdiction. The plans and policies of the County of Orange have been used as the basis for making a determination of a significant impact. However, for informational purposes, information from other jurisdictions adjacent to the Airport (Newport Beach, Irvine, and Costa Mesa) and SCAG have been included in the analysis.

5 Detailed outdoor and indoor noise measurements were made in these neighborhoods as part of the AIP. The average outdoor-to-indoor noise reduction (measured from outside of the house to inside the house) before the insulation work was in the mid-20 dB range. This measured reduction is consistent with the general rule of thumb utilized by the FAA and State of California that the minimum outdoor-to-indoor noise reduction achieved by typical Southern California wood frame homes is 20 dBA with windows closed.

6 The AIP and a second Sound Insulation Program ("SIP"), which was adopted in conjunction with the 2014 Settlement Agreement Amendment, are further discussed in Section 4.7, Noise, of this Draft Program EIR.

4.6.4 EXISTING CONDITIONS

Land Uses

On-Site Land Uses

Existing facilities within the Airport property include general aviation facilities, airside facilities, passenger terminal facilities, support facilities, and Airport access and auto parking facilities. The existing general aviation on-site land uses are conceptually depicted on Exhibit 2-2, Conceptual Facilities Layout—Existing Facilities, in Section 2.0 of this Program EIR, and fully described in Section 2.0. A summary of the existing general aviation land uses is provided below. Additionally, Exhibit 1-3 provides an aerial photograph of the site with key facilities identified. The following are the existing conditions for the key land uses on the Airport.

General Aviation Facilities

JWA is the home base for more than 480 private general aviation aircraft and provides general aviation services including aircraft handling/support, ground transportation/customer parking, aircraft storage (tie-downs and box hangars), flight school/training/rental, aircraft charter and overall aircraft maintenance. JWA currently has two full service fixed-base operators ("FBOs") and two limited service FBOs. The full service FBOs provide aircraft fueling services, supplies, aircraft maintenance, flying lessons, and other services at the Airport. The two limited service FBOs at the Airport provide small aircraft maintenance and service. Additionally, the Lyon Air Museum is located at one of the limited service FBOs. The limited service FBOs are both located on the west side of the Airport. A general aviation fuel farm is located in the southeast area of the Airport and consists of seven underground storage tanks, which provide Jet A, avgas, diesel, and unleaded fuel.[7] Fuel is delivered to the general aviation fuel farm by tanker trucks accessing the Airport at the Campus Drive/Quail Street intersection. Refueling trucks, operated by the full service FBOs, are then used to deliver fuel from the fuel farm to the parked general aviation aircraft.

Non-General Aviation Facilities

The non-general aviation services at JWA consist of those used for commercial airline service. These include the passenger terminal building located at the north end of the airfield, parallel to and east of the runways. The JWA terminal building includes Terminals A, B and C.

The Airport has a commercial fuel farm located on approximately 2 acres on the west side of the airfield at the northern end, within the security fencing of the airfield. The fuel farm includes three approximately 300,000-gallon, aboveground storage tanks for the storage of jet fuel. An underground hydrant fuel system pumps fuel directly from the fuel farm to commercial aircraft parked at the passenger terminal building. Currently, fuel delivery to the commercial fuel farm is by tanker trucks each night. The County of Orange has recently approved a privately-initiated proposal by Wickland Pipelines LLC ("Wickland") to supply Jet-A fuel to the Airport. As part of the Wickland project, two fuel storage tanks with an operating capacity of approximately 1.5 million gallons each are under construction. This facility is located on the west side of the

[7] The size of the underground tanks is provided in Section 4.5, Hazards and Hazardous Materials.

Airport in proximity to the existing fuel tanks. These large tanks will be connected with an underground pipe to a larger off-site pipeline distribution system for delivery of Jet-A via pipeline.

Surrounding Land Uses

A majority of the area surrounding the Airport is within the cities of Newport Beach, Costa Mesa, and Irvine. The formerly unincorporated area of Santa Ana Heights was annexed into the City of Newport Beach in 2008. The Santa Ana Heights community is an area roughly bound by Upper Newport Bay to the south, Santa Ana Avenue to the west, Bristol Street to the north, and the Bayview Terrace area to the east. The Orange County Local Agency Formation Commission ("LAFCO") Unincorporated Islands Vicinity Map (2016) shows one island located immediately south of the Airport. This island, the Santa Ana Avenue/South Mesa Island, includes the Santa Ana Country Club ("SACC"), which has a land use designation of 5 – Open Space, while the remaining part of this island has land use designations of 1B-Suburban Residential and 2A-Community Commercial. The SACC/South Mesa Island remains unincorporated and has made no movement toward annexation (Tapia 2017).

The Airport is located in an urbanized area; therefore, the majority of land surrounding JWA is developed, generally in accordance with the adopted land use plans and policies of the relevant local jurisdictions. Surrounding land uses include the following:

- In the City of Newport Beach, RS-D (Single-Unit Residential Detached), RM (Multiple-Unit Residential), OS (Open Space), CO-G (General Commercial Office), PR (Parks and Recreation), and CG (General Commercial) in the Santa Ana Heights community to the south; and AO (Office Airport), CO-G (General Commercial Office), CG General Commercial, MU-H2 (Mixed Use Horizontal) and PF (Public Facilities) in the Airport Area to the east
- Business Park uses north of Interstate ("I") 405 in the City of Irvine and along MacArthur Boulevard, north of Campus Drive in the Irvine Business Complex ("IBC")
- Recreation and open space uses at the end of the runways south of the Airport in unincorporated Orange County and in the City of Newport Beach
- Industrial park uses west of the Airport between Red Hill Avenue and JWA in the City of Costa Mesa
- An important natural reserve and habitat to the south of the Airport, commonly known as the Upper Newport Bay Ecological Reserve, located in the City of Newport Beach

Sensitive Land Uses

Sensitive land uses include schools, hospitals, places of worship, and residential areas. The *Noise Analysis Technical Report*, included in Appendix H, identifies the number of surrounding schools, hospitals, places of worship, and dwellings within the contour bands between 60 and 65 CNEL, 65 and 70 CNEL, and greater than 70 CNEL. Six schools are in the contour band between 60 to 65 CNEL and no hospitals are within a contour of 60 CNEL or greater. Of the nine places of worship, five are between 60 and 65 CNEL, three are between 65 and 70 CNEL, and one is in the greater than 70 CNEL contour. For a determination that a noise-sensitive land use is incompatible, it must be in the 65 CNEL contour or greater.

General Plan Designations/Zoning

On-Site Designations/Zoning

The *County of Orange General Plan* categorizes JWA within land use Category 4 – Public Facilities. The public facilities land use category identifies major facilities built and maintained for public use. Included are civic buildings, airports, junior colleges, military installations, correctional institutions, hospitals, solid waste facilities, water facilities, and sewer facilities.

JWA is zoned A1, "General Agricultural" District. The A1 District is established to provide for agriculture, outdoor recreational uses, and low intensity uses that have a predominately open space character. The General Plan permits airports to be located within the A1 General Agricultural District. The County of Orange has exempted the Airport from the zoning code requirements (see County Zoning Code, Section 7-9-20[i]).

Surrounding Designations/Zoning

The majority of zoning classifications for areas around the Airport allow uses that are compatible with Airport operations and the land use compatibility requirements of the State Noise Standards (*California Administrative Code,* Title 21, Chapter 2.5, Subchapter 6, Section 5000 et seq.) as discussed in Section 4.6.2, Regulatory Setting.

Zones which may potentially include land uses that are incompatible with the requirements of Title 21 include zones that allow for residential uses. However, as discussed in Section 4.6.2, Title 21 establishes standards for the acceptable level of aircraft noise for persons living in the vicinity of airports as 65 dB CNEL. This includes residential uses with avigation easements for aircraft noise; residences with adequate acoustic insulation to ensure an interior CNEL due to aircraft noise of 45 dB or less in all habitable rooms; and when the airport proprietor has made a genuine effort in accordance with adopted land use compatibility plans to acoustically treat residences exposed to an exterior CNEL in excess of adopted Title 21 standards. The cities of Newport Beach, Costa Mesa, and Irvine surround the majority of the Airport. Each of these cities has its own land use designations and zoning for land uses surrounding the Airport. The zoning for each is as follows:

- Irvine zoning is 5.1 (IBC Multi-Use).
- Costa Mesa zoning is MP (Industrial Park) and CL (Commercial Limited).
- Newport Beach zoning is SP-7 (East Santa Ana Heights Specific Plan), RMD (Multiple Residential Detached), R-A (Residential-Agricultural), R-1 (Single-Unit Residential), R-1-6,000 (Single-Unit Residential – 6,000), PF (Public Facilities), PC-11 (Newport Place Planned Community), PC-15 (Koll Center Planned Community), CG (General Commercial), OG (Office – General), and OA (Office-Airport).

4.6.5 THRESHOLDS OF SIGNIFICANCE

In accordance with the County's *Environmental Analysis Checklist* and Appendix G of the State CEQA Guidelines, the GAIP would result in a significant land use impact if it would:

Threshold 4.6-1 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

The analysis for this threshold is broken down into three areas:

- Potential for conflict with a land use plan, policy, or regulation as it pertains to compatibility with land uses on site
- Potential for conflict with a land use plan as it pertains to compatibility with surrounding off-Airport land uses
- Potential conflict with applicable planning documents

4.6.6 REGULATORY REQUIREMENTS AND STANDARD CONDITIONS OF APPROVAL

No regulatory requirements or County standard conditions of approval are applicable to land use and planning. However, regulatory requirements identified elsewhere in this document are applicable to the GAIP and would serve to minimize potential land use compatibility concerns. RR AES-1 requires all projects to demonstrate compliance with the FAR Part 77 regulation, as it relates to building or structure heights, markings, lighting, and other standards. RR GHG-1 and RR GHG-2 would require building improvements to comply with the applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (*California Code of Regulations* [CCR], Title 24, Part 6). These standards are updated, approximately every three years, to incorporate improved energy efficiency technologies and methods. Additionally, development would be designed in accordance with the applicable *California Green Building Standards* (CALGreen) *Code* (24 CCR 11). Compliance with these requirements would serve to meet some of the policies discussed below.

4.6.7 IMPACT ANALYSIS

Threshold 4.6-1

- ***Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

Proposed Project

Compatibility with On-Site Land Uses

The Proposed Project would implement the various facilities, described in Section 3.6, Project Description, within the area currently used for general aviation activities at the Airport. The analysis considers the potential for conflict with a land use plan, policy, or regulation as it pertains to compatibility with land uses on site. The proposed GAIP improvements would not introduce any uses that would be incompatible with the current general aviation functions at the Airport because the type of improvements (i.e., FBOs, hangars, and tie-downs) are consistent with the type of uses currently on site. Additionally, the area on the Airport dedicated to general aviation uses would not substantially change. The only reduction in overall area for general aviation uses would be associated with the transient aircraft apron parking area located at the south end of the Airport. Aircraft are parked in an Object Free Area ("OFA") for Runway 2L, and the Proposed Project would correct this non-standard condition. It should also be noted, the removal of the 31 transient parking spaces in this area would not change the number of based aircraft at the Airport because it is used for transient parking only.

Recognizing the constrained capacity at the Airport, one of the objectives of the GAIP is to utilize limited land area efficiently and economically. The GAIP includes facilities that recognize the trend toward the reduction of small single-engine fixed-wing piston aircraft and an increase in turboprops and business/private jets and proposes facilities to accommodate this trend. As a result, the Proposed Project would result in a reduction in the overall number of aircraft that could be accommodated at JWA. Table 4.6-2 shows the reduction in the capacity for general aviation aircraft of the Proposed Project compared to the current capacity and the number of aircraft parking spaces currently being used at the Airport.

TABLE 4.6-2
NUMBER OF AIRCRAFT PARKING POSITIONS LOST FOR THE PROPOSED PROJECT

Facility	Change in Aircraft Parking Spaces (+/-)	
	Compared to Capacity	Compared to Current Use
Tie-Down Apron	-167	-87
T-Hangars	-15	-15
Box Hangars (includes OCSD)	-10	-10
FBO/Community Hangars	24	24
Shade Structures	-66	-66
FBO Apron Spaces	-8	26
Total	**-242**	**-128**

Note: The type and size of aircraft parked at an FBO facility may vary based on demand and can change frequently; therefore, the actual number and type of aircraft at the Airport may differ from what is shown in this table.

Source: AECOM 2018

The type of aircraft that would be most affected by the reduction in general aviation capacity would be the single-engine fixed-wing piston aircraft. Table 4.6-3 shows the projected change in the number of aircraft based on the facilities proposed by the Proposed Project.

TABLE 4.6-3
CHANGE IN NUMBER OF BASED AIRCRAFT BY TYPE
PROPOSED PROJECT

Year	Fixed Wing Piston[a]		Fixed Wing Turbine		Helicopter	Total Based Aircraft
	Single Engine	Multi-Engine	Turboprop	Turbo Jet		
2016	339	35	26	65	17	**482**
2026[b]	198	37	30	72	17	**354**
Change in the Number of Aircraft Accommodated	-141	2	4	7	0	**-128**

Note: Numbers may not add up due to rounding.

[a] The based aircraft totals for single-engine include one glider.

[b] Assume four existing single-engine piston aircraft would park at the vacant spaces for multi-engine piston aircraft and fill up capacity.

Source: AECOM 2018.

The loss of aircraft parking spaces may be perceived as adverse because it reduces the overall capacity at the Airport; however, it would not result in an incompatible land use or conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The Airport is committed to maintaining general aviation uses; however, there are no requirements that establish a minimum or maximum amount of general aviation. JWA would continue to serve general aviation uses. The aircraft are accommodated on the Airport through lease agreements, which have established expiration dates or provisions for cancelation of the lease. Therefore, the reduction in the overall number of aircraft based at JWA would not result in a significant environmental impact.

Displaced aircraft can be accommodated elsewhere in the region. Fullerton Municipal Airport is also a general aviation airport in Orange County with capacity for 600 aircraft. For the year ending on October 31, 2017, 223 aircraft were based at the Fullerton Municipal Airport. Long Beach Airport has 380 based aircraft. Historically, Long Beach Airport has accommodated higher numbers of general aviation aircraft (AirNav.com 2018).

Implementation of the Proposed Project would not affect operations at the non-general aviation (commercial) services or facilities at the Airport. Impacts to on-site land use are less than significant, and no mitigation is required.

Construction Impacts

Construction of the Proposed Project would be phased to minimize disruption to Airport operations and minimize the need to temporarily relocate based aircraft to other airports in the region. Exhibit 3-3a depicts the 14 primary construction phases, while Exhibit 3-3b provides a corresponding listing of the improvements identified for each task. Given the space limitations

on the Airport, small segments of work would need to be conducted at a single time in order to minimize disruptions. During construction, current users of the general aviation facilities (i.e., FBOs and aircraft owners) would need to be temporarily relocated either to alternative locations on the Airport or to other airports in the region while each area on the Airport is under construction. The timing and precise number of aircraft that may need to relocate to other airports in the region cannot be known at this time. It will be a factor of the precise design of the improvements and number of aircraft based at the Airport at the time. As discussed above, aircraft are accommodated on the Airport through lease agreements, which have established expiration dates or provisions for cancelation of the lease. Therefore, the need to relocate a number of aircraft during construction would not result in a significant environmental impact.

Potential short-term, construction-related land use compatibility issues related to air quality, noise, and traffic are discussed in Sections 4.2, 4.7, and 4.8, respectively, of this Program EIR.

Compatibility with Surrounding Land Uses

The analysis considers the potential for conflict with a land use plan, policy, or regulation as it pertains to compatibility with surrounding land uses. Land use compatibility with existing adjacent land uses considers the impacts associated with different and incompatible land uses interfacing with each other. The Proposed Project would not change the nature of the uses on the Airport, so a direct incompatibility would not be associated with the surrounding land uses. As noted in existing conditions, the uses immediately adjacent to the Airport are industrial park uses west of the Airport between Red Hill Avenue and JWA and general commercial to the east of the Airport. These uses have been designed and constructed with the knowledge that the Airport is an adjacent use and appropriate sound attenuation has been incorporated into the design of these commercial/office buildings.

The greatest potential for impacts to surrounding land uses are associated with increased noise from the Airport operations on noise-sensitive land uses within the departure path to the south. Generally, the land uses within the 65 CNEL contour north of the Airport (i.e., approach path) are not noise sensitive uses. As noted in Section 4.7, no significant noise impacts have been identified for the Proposed Project compared to the Baseline (2016) condition. However, the thresholds established for defining a noise impact are slightly different than the policies established for determining land use compatibility.[8]

As identified above, if the noise impacts are of sufficient magnitude, noise-sensitive uses may be deemed an incompatible use. The 65 CNEL is generally considered the upper threshold for noise-sensitive uses (e.g., residences, places of worship, and schools/childcare facilities) to be considered compatible, unless noise-attenuation measures (such as insulation) have been implemented.

Based on the *Noise Analysis Technical Report* (Landrum & Brown), the CNEL noise contours in the Baseline Plus Proposed Project remain approximately the same size and shape as the Baseline (2016) noise contours. The change in general aviation operations from the GAIP has a negligible impact on the CNEL noise contours in the Baseline Plus Proposed Project scenario.

[8] For noise, the County uses a noise increase of 1.5 CNEL or more at a sensitive receptor where the existing exposure is 65 CNEL or above when identifying a noise increase as a significant impact. For land use, generally, inclusion of an additional noise-sensitive use in the 65 CNEL contour is considered potentially significant. However, as noted, use of attenuation and avigation easements may reduce these impacts to less than significant.

Table 4.6-4 provides a comparison to the Baseline (2016) of the land uses located within the CNEL contours for Baseline (2016) Plus the No Project, the Proposed Project, and Alternative 1 scenarios. The land use data for all the scenarios are provided in a single table to avoid duplication and assist in an easy comparison.

TABLE 4.6-4
LAND USES WITHIN THE CNEL CONTOURS

CNEL	Baseline (2016)	Baseline Plus No Project	Baseline Plus Proposed Project	Baseline Plus Alternative 1
Total Contour Area (sq. mi.)				
65-70	1.49	1.51	1.50	1.50
>70	0.91	0.93	0.92	0.92
Number of Schools				
60-65	6	6	6	6
65-70	0	0	0	0
>70	0	0	0	0
Number of Hospitals				
65-70	0	0	0	0
>70	0	0	0	0
Number of Places of Worship				
65-70	3	3	3	3
>70	1	1	1	1
Total Number of Dwelling Units				
65-70	247	257	257	259
>70	0	0	0	0
Total Number of Dwelling Units in the Acoustical Insulation Program Area				
65-70	247	257	257	259
>70	0	0	0	0
Total Number of Dwelling Units Outside the Acoustical Insulation Program Area				
65-70	0	0	0	0
>70	0	0	0	0
Source: Landrum & Brown 2018.				

As shown in Table 4.6-5, the changes as a result of the Proposed Project in the size of the contours and sensitive land uses located within the 65 CNEL contour or greater are nominal when compared to the Baseline (2016) data. For the Proposed Project, the total contour areas between 65 and 70 CNEL would increase by 0.01 square mile (0.6 percent) when compared to the Baseline (2016) noise contours. The area exceeding 70 CNEL will increase by 0.01 square mile (0.7 percent) over Baseline (2016) conditions. Exhibit 4.7-9 in Section 4.7, Noise, provides a comparison of the Baseline (2016) 60, 65, 70, and 75 CNEL contours and the projected contours with the Proposed Project.

TABLE 4.6-5
CHANGES IN LAND USES COMPARED TO BASELINE (2016) CONDITIONS

CNEL	Baseline Plus No Project	Baseline Plus Proposed Project	Baseline Plus Alternative 1
Total Contour Area (sq. mi.)			
65-70	0.02	0.01	0.01
>70	0.02	0.01	0.01
Number of Schools			
65-70	0	0	0
>70	0	0	0
Number of Hospitals			
65-70	0	0	0
>70	0	0	0
Number of Places of Worship			
65-70	0	0	0
>70	0	0	0
Total Number of Dwelling Units			
65-70	10	10	12
>70	0	0	0
Total Number of Dwelling Units in the Acoustical Insulation Program Area			
65-70	10	10	12
>70	0	0	0
Total Number of Dwelling Units Outside the Acoustical Insulation Program Area			
65-70	0	0	0
>70	0	0	0
Source: Landrum & Brown 2018.			

Though the physical area encompassed by the subject noise contours would increase, the assessment of land use impacts needs to consider the presence of sensitive receptors. No additional sensitive receptors would be within the greater than 70 CNEL contour of the Proposed Project compared to Baseline (2016) conditions. The total number of residences exposed to noise levels between 65 and 70 CNEL would increase by ten residences for the Proposed Project. However, as indicated in Section 4.7, the ten additional residences that would be included between the 65 and 70 CNEL contour compared to the Baseline (2016) condition are included in the area covered by the AIP approved in conjunction with the 1985 Master Plan (refer to Section 4.7 Noise). Of these additional ten units included in the 65 to 70 CNEL contour:

- Four multi-family units are non-conforming uses (residential use in a business park zone), and a prescriptive avigation easement has been acquired.
- Two units have received acoustical insulation, and an avigation easement has been acquired.

- One unit has participated in the purchase assurance program and received insulation, and an avigation easement was acquired.
- One unit declined the offer of acoustical insulation.
- A genuine effort to offer insulation to two units was made, but no response was received.

As noted above, consistent with the provisions of Title 21, for the seven residential units with avigation easements, impacts would be less than significant because attenuation has been provided and avigation easements have been granted. The other three residential units have a potential for incompatibility due to excessive interior and exterior noise levels.[9] Residences with outdoor living areas exposed to a greater than 65 CNEL would be incompatible with the County's exterior noise standard.[10] There is no feasible mitigation for the exterior noise levels. Therefore, the 65 CNEL contour expanding beyond the existing contour and including additional residences would be a significant land use compatibility impact. Based on the County standard, an indoor noise impact occurs when the interior noise level exceeds 45 CNEL in any habitable room of a residence or similar habitable space for schools, places of worship, and other noise-sensitive uses. As the 65 CNEL contour expands to include additional noise-sensitive uses, the interior noise levels would need to be verified on a house-by-house basis to determine if the average interior noise levels are in excess of 45 CNEL. However, this impact would not be a new land use compatibility impact. As noted above, these uses are all within the 65 CNEL contour from the 1985 Master Plan, which the AELUP uses as a policy implementation line for establishing the Airport Noise Impact Zones. Additionally, in 2014 when the Final EIR 617 was prepared for the Settlement Agreement Amendment, this area was again identified as being in a future (2026) 65 CNEL contour due to the increased commercial carrier flights.

These units would continue to be eligible for consideration of attenuation measures through the SIP adopted as part of Final EIR 617 because they fall within the 65 CNEL contour projected for 2026 due to the increased commercial carrier flights associated with the 2014 Settlement Agreement Amendment. However, Final EIR 617 identified a significant unavoidable impact because until interior noise measurements are taken after the increase in commercial carrier flights at the Airport, as projected in Final EIR 617, it cannot be determined if all the noise-sensitive uses with interior noise levels in excess of 45 CNEL would qualify for sound attenuation based on FAA criteria. Although the Board of Supervisors has already made a finding addressing this issue, it is being identified as a significant impact to ensure the decision-makers understand that the Proposed Project would result in three residential units not currently in the Baseline (2016) 65 CNEL contour to be identified as an incompatible.

[9] As previously discussed in Section 4.6.2, Title 21 does provide that a residential use can be determined to be compatible if " the airport proprietor has made a genuine effort as determined by the department in accordance with adopted land use compatibility plans and appropriate laws and regulations to acoustically treat residences exposed to an exterior CNEL less than 80 dB (75 dB if the residence has an exterior normally occupiable private habitable area such as a backyard, patio, or balcony) or acquire avigation easements, or both, for the residences involved, but the property owners have refused to take part in the program." Under this provision, these residential units could be found to be compatible despite being located in the 65 to 70 CNEL contour.

[10] Table 4.6-1 provides a definition of "outdoor living area." As noted in the definition, outdoor areas usually not included in this definition are front yard areas, driveways, greenbelts, maintenance areas, and storage areas associated with residential land uses.

Policy Consistency Analysis

Airport Environs Land Use Plan for John Wayne Airport

As noted above, the AELUP is the comprehensive land use plan adopted and administered by the ALUC for Orange County. The goal is to provide land use compatibility based on noise and safety impacts for areas surrounding the Airport. The AELUP establishes several compatibility zones for JWA and regulates the land uses and activities that are allowed within each zone. The general aviation facilities at the Airport are located within Zones 1 through 5, which have the following basic safety compatibility qualities related to general aviation facilities:

- Zone 1: Runway Protection Zone – Prohibits all new structures and residential uses, children's schools, and hospitals and avoids non-residential uses, except if very low intensity in character and confined to the sides and outer end of the area
- Zone 2: Inner Approach/Departure Zone – Prohibits residential uses, children's schools, and hospitals; limits non-residential uses to activities that attract few people; and prohibits hazardous uses (e.g., aboveground bulk fuel storage)
- Zone 3: Inner Turning Zone – Prohibits children's schools and hospitals; avoids non-residential uses having moderate or higher usage intensities; and avoids hazardous uses (e.g., aboveground bulk fuel storage)
- Zone 4: Outer Approach/Departure Zone – Prohibits children's schools and hospitals and limits non-residential uses having moderate or higher usage intensities
- Zone 5: Sideline Zone – Prohibits children's schools and hospitals; allows all common aviation-related activities provided that height-limit criteria are met; and limits other non-residential uses having moderate or higher usage intensities

None of the uses identified for the Proposed Project would conflict with the requirements of the zone where the use is proposed. The Proposed Project would not directly or indirectly change any land uses off site.

As noted above, the AELUP uses a policy implementation line, which was adopted by the Orange County Board of Supervisors in 1985 for establishing the Noise Impact Zones. This line is used for assessing consistency with applicable land use guidelines, policies, and regulations related to the 60 and 65 CNEL contours. The 60 and 65 CNEL contours for the Proposed Project would be consistent with the policy implementation line in the AELUP. The Proposed Project would be consistent with the provisions of the JWA AELUP, and no significant impacts would occur.

2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

The 2016–2040 RTP/SCS includes goals and policies applicable to most effectively serving the regional demands for growth, economic development, and providing the associated infrastructure to serve the region. The RTP/SCS recognizes the importance of the airport system in the SCAG region. In the six-county region, passenger and cargo air travel is supported by seven commercial airports with scheduled passenger service, five additional facilities with the infrastructure to accommodate scheduled service, seven active military air fields, and more than forty general aviation airports. Though the RTP/SCS does identify capacity at the key commercial airports in the region, these demand forecasts are focused on the capacity of the airfield and

other constraints. For JWA, the capacity is shown as 12.5 million annual passengers ("MAP"), which is reflective of the Settlement Agreement Amendment. General aviation capacity numbers have been included in the 2016 RTP/SCS. The Proposed Project would not conflict with any of the assumptions in the RTP/SCS for JWA.

In the development of the RTP/SCS, SCAG identified 18 performance measures to analyze existing environmental justice parameters in the region and to address any potential impacts of the 2016 RTP/SCS on the various environmental justice population groups.[11] Performance Measure 12 pertains to aviation noise impacts. The evaluation assessed income levels, disability, age, and race/ethnicity of affected populations of those exposed to adverse effects from aircraft and airport noise. The RTP/SCS discussed the role of the Airport Land Use Commission in each county for ensuring that new noise-sensitive land uses are not allowed near airports. In Orange County this is implemented through the AELUP (see above). Further, the RTP/SCS concluded that given land use controls, noise attenuation programs, jet engine technology, and airline scheduling trends, the noise created by aircraft is forecast to have minimal impact beyond current levels, even out to 2040. The Proposed Project would not substantially change the Airport noise contours or conflict with the aviation assumptions in the RTP/SCS.

In addition to these aviation-specific aspects of the RTP/SCS, the Proposed Project's consistency was evaluated in comparison to the relevant goals adopted in the 2016-2040 RTP/SCS. These goals are broad and reflect what SCAG hopes to achieve in the region by linking the goal of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging fair and equitable access to residents impacted by socioeconomic, geographic, and commercial conditions. The analysis presented in Table 4.6-6 provides an evaluation of the Proposed Project in relation to the applicable goals in the 2016-2040 RTP/SCS. A consistency evaluation of Alternative 1 is also included in Table 4.6-6 to reduce duplication and provide an easy comparison.

[11] SCAG identifies Environmental Justice as being equal and fair access to a healthy environment, with the goal of protecting underrepresented and poorer communities from incurring disproportionate environmental impacts.

TABLE 4.6-6
SCAG 2016–2040 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY
GOALS CONSISTENCY ANALYSIS

	Proposed Project	Alternative 1
SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy		
Goals		
RTP/SCS G1 Align the plan investments and policies with improving regional economic development and competitiveness.	This goal is for the RTP/SCS investments and policies to focus on improving the regional economic development. The Proposed Project would improve general aviation facilities at JWA to be responsive to trends in the aviation community. By being responsive to trends in the market, the Proposed Project would utilize limited land area efficiently and economically. The Proposed Project is consistent with this goal.	Alternative 1 is consistent with this goal. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
RTP/SCS G3 Ensure travel safety and reliability for all people and goods in the region. **RTP/SCS G9** Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	JWA meets the required security requirements established by federal and state requirements. The Airport is required to have and maintain plans for evacuation, handling of hazardous materials, and emergency response. Infrastructure (e.g., the fire stations and sheriff substation) and personnel (TSA, ICE, OCFA, and OC Sheriff) are all located at the Airport to serve this need. None of the elements of the Proposed Project would conflict with or require modification of current security procedures. The Proposed Project is consistent with these goals.	The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
RTP/SCS G2 Maximize mobility and accessibility for all people and goods in the region. **RTP/SCS G4** Preserve and ensure a sustainable regional transportation system. **RTP/SCS G5** Maximize the productivity of our transportation system.	Given the trends in general aviation toward a decline in single-engine piston airplanes and an increase in turboprop and turbo jet aircraft, the Proposed Project would provide for facilities that serve a share of the regional market demand. This allows the Airport to utilize limited land area efficiently and economically. It would allow the Airport to maximize the use of the facilities for air transportation. The Proposed Project is consistent with these goals.	Alternative 1 is consistent with these goals. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
RTP/SCS G6 Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-	JWA's website provides information on ground transportation (including public buses and trains) and shuttle services that provide service to the airport. Information on bus schedules and regional train service is also provided.	Alternative 1 would not conflict with these goals. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-6
SCAG 2016–2040 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY GOALS CONSISTENCY ANALYSIS

	Proposed Project	Alternative 1
motorized transportation, such as bicycling and walking). **RTP/SCS G8** Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	The Proposed Project does not include any modifications to the surrounding areas that would impede or otherwise change access to transit or active transportation facilities. The Proposed Project does not propose any changes to land uses or actions that would indirectly influence growth patterns or the transit system. The Airport has taken actions to improve air quality through the implemented improvements and programs that reduce air emissions associated with Airport operations. Additionally, the Airport has developed the *John Wayne Airport Climate Action Plan* ("CAP") that includes requirements that would encourage alternative modes of transportation by providing facilities to accommodate bicyclists and also acknowledges the Airport-wide support of transit. MN GHG-1 requires that the general aviation leases incorporate the provisions of the CAP (MN GHG-1 and an analysis of the CAP is provided in Section 4.4, Greenhouse Gas Emissions). The Proposed Project would not conflict with these goals.	
RTP/SCS G7 Actively encourage and create incentives for energy efficiency, where possible.	The Proposed Project would provide new facilities that would meet current Title 24 Energy Efficiency Standards and the *California Green Building Standards* (see RR GHG-1 and RR GHG-2). Additionally, MN GHG-1 requires the Proposed Project to construct new facilities consistent with the requirements of the Airport CAP. These measures would ensure the Proposed Project would maximize energy efficiency. The Proposed Project is consistent with this goal.	Alternative 1 is consistent with this goal. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

ICE: U.S. Immigration and Customs Enforcement; JWA: John Wayne Airport; OCFA: Orange County Fire Authority; OC Sheriff: Orange County Sheriff's Department; RTP/SCS: Regional Transportation Plan/Sustainable Communities Strategy; SCAG: Southern California Association of Governments; TSA: Transportation Security Administration

Source: goals taken from 2016–2040 RTP/SCS, SCAG 2016

County of Orange General Plan

The majority Airport is in unincorporated Orange County, and the County of Orange is the lead agency for the Proposed Project.[12] Therefore, the goals and policies of the Orange County General Plan would be the applicable planning program for the Proposed Project. Table 4.6-7 provides an evaluation of the Proposed Project in relation to the applicable goals and policies addressed in the relevant documents previously discussed. A consistency evaluation of Alternative 1 is also included in Table 4.6-7 to reduce duplication and provide an easy comparison.

Other Jurisdictions

As discussed in Section 4.6.3, Methodology, for this Project, the plans and policies of the County of Orange have been used as the basis for making a determination of a significant impact because it is the agency with jurisdiction over the Project. For informational purposes, an evaluation of the Proposed Project's consistency with the goals from the General Plans for the adjacent jurisdictions is provided in Table 4.6-8. Similar to the other consistency evaluation tables, Alternative 1 is also included in Table 4.6-8 to reduce duplication and provide an easy comparison.

[12] A portion of the Airport facilities on the west side of the Airport are within the City of Costa Mesa.

TABLE 4.6-7
COUNTY OF ORANGE GENERAL PLAN
GOALS AND POLICIES CONSISTENCY ANALYSIS

	Proposed Project	Alternative 1
Transportation Element		
Goal 5 Manage peak hour traffic congestion to achieve an acceptable level of service (LOS) on existing and future circulation plan facilities in the unincorporated areas of the County.	As discussed in Section 4.8, Transportation/Traffic, the Proposed Project would result in fewer trips than existing Baseline (2016) conditions and would not cause a change in LOS at the study area intersections. All intersections would operate at an acceptable LOS D or better. The Proposed Project is consistent with this goal.	Alternative 1 is consistent with this goal. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Noise Element		
Policy 5: Noise/Land Use Planning To fully integrate noise considerations in land use planning to prevent new noise/land use conflicts. **Policy 6: Noise Sensitive Land Uses** To identify and employ mitigation measures in order to reduce the impact of noise levels and attain the standards established by the Noise Element, for both interior areas and outdoor living areas for noise sensitive land uses.	Although ten additional residences would be included in the 65 and 70 CNEL contour compared to Baseline (2016) condition, these homes are included in the area covered by the AIP approved in conjunction with the 1985 Master Plan. Additionally, the noise contours for the Baseline (2016) Plus Proposed Project does not exceed the policy implementation line shown in the AELUP for the Noise Impact Zones for JWA. The Proposed Project is consistent with these policies of the General Plan.	Alternative 1 is consistent with these policies. With Alternative 1, the total number of residences exposed to noise levels between the 65 and 70 CNEL contour compared to Baseline (2016) condition would increase by 12 residences. These homes are included in the area covered by the AIP approved in conjunction with the 1985 Master Plan. Additionally, the noise contours for the Baseline (2016) Plus Alternative 1 do not exceed the policy implementation line shown in the AELUP for the Noise Impact Zones for JWA. Alternative 1 is consistent with these policies of the General Plan.
Safety Element		
Goal 2 Minimize the effects of public safety hazards through implementation of appropriate regulations and standards which maximize protection of life and property.	The Proposed Project is consistent with this goal. The Airport is heavily regulated by federal, State, and local regulations. The County has established guidelines consistent with State and federal regulations pertaining to hazardous materials to minimize the risk associated with the use and storage of the hazardous materials. Numerous safeguards are in place that preclude or substantially reduce the likelihood of occurrence or severity of safety hazards. These include physical measures incorporated into the facilities at the Airport or designation of safety zones; as well as	Alternative 1 is consistent with this goal. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-7
COUNTY OF ORANGE GENERAL PLAN
GOALS AND POLICIES CONSISTENCY ANALYSIS

	Proposed Project	Alternative 1
	Best Management Practices associated with the handling of hazardous materials. The Proposed Project would also correct four non-standard conditions that are present at the Airport under current operations. With the Proposed Project, these conditions would be consistent with FAA design standards.	

AELUP: Airport Environs Land Use Plan; AIP: Santa Ana Heights Acoustical Insulation Program; CNEL: Community Noise Equivalent Level; FAA: Federal Aviation Administration; JWA: John Wayne Airport; LOS: level of service

Source (goals and policies): General Plan 2005, County of Orange 2005, last updated 2015.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
City of Newport Beach General Plan		
Land Use Element		
Policy 6.15.3: Airport Compatibility Require that all development be constructed in conformance with the height restrictions set forth by Federal Aviation Administration ("FAA"), Federal Aviation Regulations ("FAR") Part 77, and Caltrans Division of Aeronautics, and that residential development be located outside of the 65 dBA CNEL noise contour specified by the 1985 JWA Master Plan.	The Proposed Project would construct new facilities that would be designed to be in compliance with FAA height standards. The noise contours for the Baseline (2016) Plus Proposed Project does not exceed the policy implementation line shown in the AELUP for the Noise Impact Zones for JWA and within 65 CNEL noise contour specified by the 1985 JWA Master Plan. As noted above, the additional residences within the 65 to 70 CNEL contour are within the AIP, which was developed to mitigate the impacts associated with the policy implementation line. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Circulation Element		
Policy CE 3.1.2: Integration of Transportation Systems with Adjoining Communities and the Region Interface with regional and surrounding local agencies, such as Caltrans, OCTA, the County of Orange, John Wayne Airport, the Cities of Irvine, Costa Mesa, and Huntington Beach, and the University of California, Irvine to implement systems that serve the needs of regional travelers in a way that minimizes impacts on Newport Beach residents.	Input was solicited from the adjacent jurisdictions on the methodology used in the Traffic Impact Analysis prepared for this EIR. As discussed in Section 4.8, Transportation/Traffic, the Proposed Project would result in fewer trips than existing Baseline (2016) conditions and would not cause a change in LOS at the study area intersections. All intersections would operate at an acceptable LOS D or better. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy CE 4.1.5: John Wayne Airport Shuttles Encourage the use of airport shuttle services to minimize the impacts of air travelers on the local roadway system.	JWA's website provides information on shuttle service companies that provide service to the Airport. While it is expected that general aviation flyers are less likely to use the shuttle service, the Proposed Project would not preclude the use of shuttle service to/from the Airport.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
Policy CE 6.2.1: Alternative Transportation Modes Promote and encourage the use of alternative transportation modes, such as ridesharing, carpools, vanpools, public transit, bicycles, and walking; and provide facilities that support such alternate modes.	JWA's website provides information on ground transportation (including public buses and trains) and shuttle services that provide service to the airport. Information on bus schedules and regional train service is also provided and can be found at www.ocair.com/groundtransportation/default.aspx As indicated above, no changes would occur to the facilities at the Airport that would modify access by these providers. The Proposed Project would not preclude the use of alternative modes of transportation to/from the Airport.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Natural Resources Element		
Goal NR 9 Reduced air pollution emissions from aircraft ground operations at John Wayne Airport. **Policy NR 9.1: Efficient Airport Operations** Work with John Wayne Airport to minimize air pollution generated by stationary and non-stationary sources. **Policy NR 9.2: Aircraft and Equipment Emission Reduction** Work with John Wayne Airport to encourage development and use of reduced emission ground service equipment and transit vehicles.	JWA has developed a climate action plan to establish a framework to minimize GHG emissions. JWA has implemented a number of measures to reduce emissions, such as installing pre-conditioned air and electric power infrastructure for aircraft so that onboard auxiliary power units can be turned off while aircraft are parked at the loading gates. Additionally, the current operation of the Airport has incorporated various measures to reduce air emissions associated with ground support equipment ("GSE"), including working with the airlines to phase in electrification of the GSE equipment. However, these efforts are focused on the commercial carriers where the greatest gains can be achieved. The Proposed Project would continue this effort. MN AQ-2 requires the general aviation FBOs to employ Zero Emission Vehicle ("ZEV") GSE where available for 90 percent or greater of the GSE operating hours (see Section 4.2, Air Quality for MN AQ-2). Therefore, the Proposed Project is working to implement and would be consistent with this goal and related policies.	Alternative 1 is consistent with this goal and related polices. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
Safety Element		
Goal S 8 Residents, property, and the environment are protected from aviation-related hazards.	Although these measures do not pose aviation hazards to the residents of Newport Beach, the Proposed Project would correct four non-standard conditions present at the Airport. Three of these conditions pertain to modifications to facilities because they are within the Object Free Area of Runway 2L. The fourth condition would remove two community hangars from the Full Service Southeast FBO to comply with FAA height restrictions. The Proposed Project would correct these non-standard conditions to be consistent with FAA design standards. The Proposed Project would be consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy S 8.5 **Limit John Wayne Airport Expansion** Oppose any facility expansions that would increase air operations at John Wayne Airport, except those described in the Settlement Agreement Extension.	The Proposed Project includes improvements to facilities, which would accommodate an increased number of larger general aviation aircraft. However, with the Proposed Project the number of aircraft based at the Airport and the associated number of general aviation operations would be reduced. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy S 8.6 **John Wayne Airport Traffic Pattern Zone** Use the most currently available John Wayne Airport (JWA) Airport Environs Land Use Plan (AELUP) as a planning resource for evaluation of land use compatibility and land use intensity in areas affected by JWA operations. In particular, future land use decisions within the existing JWA Clear Zone/Runway Protection Zone (Figure S5) should be evaluated to minimize the risk to life and property associated with aircraft operations.	The JWA AELUP reflects the 1985 JWA Master Plan noise contours. The Proposed Project's noise contours are contained within the 1985 JWA Master Plan, and the Proposed Project would not jeopardize the noise-related safeguards provided in the AELUP. No modifications to the AELUP would be required. Additionally, the Proposed Project would correct four non-standard conditions that are present at the Airport under current conditions. The Proposed Project would not require amending the existing JWA Clear Zone/Runway Protection Zone, which is related to safety concerns. The	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

<table>
<tr><th></th><th>Proposed Project</th><th>Alternative 1</th></tr>
<tr><td></td><td>Proposed Project would be consistent with this policy.</td><td></td></tr>
<tr><td>Policy H 3.2
Enable construction of new housing units sufficient to meet City quantified goals by identifying adequate sites for their construction. Development of new housing will not be allowed within the John Wayne Airport (JWA) 65 dB CNEL contour, no larger than shown on the 1985 JWA Master Plan.</td><td>The Proposed Project is consistent with this policy. Policy H 3.2 from the Housing Element pertains to new residential development within the City. Specifically, this policy provides for land use protections for future residential development in the Airport Area in order to minimize land use compatibility conflicts. Exhibit 4.7-10 in Section 4.7 shows the 1985 Master Plan contours and the Proposed Project noise contours. Within the City of Newport Beach, the noise contours associated with the Proposed Project encompasses less area than the 1985 Master Plan 65 CNEL contour. Therefore, the Proposed Project would not restrict housing in the Airport Area.</td><td>Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1. Exhibit 4.7-12 in Section 4.7 shows the 1985 Master Plan contours and Alternative 1 noise contours.</td></tr>
<tr><td colspan="3">Noise Element</td></tr>
<tr><td>Policy 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.

<table><tr><th>CNEL (dBA)</th><th>dBA increase</th></tr><tr><td>55</td><td>3</td></tr><tr><td>60</td><td>2</td></tr><tr><td>65</td><td>1</td></tr><tr><td>70</td><td>1</td></tr><tr><td>Over 75</td><td>Any increase is considered significant</td></tr></table></td><td>The Proposed Project would be consistent with this policy of the General Plan. None of the increases at any of the noise monitoring stations would be greater than the significance threshold. See Table 4.7-8 for the changes in CNEL values compared to the Baseline (2016) at each of the noise monitoring stations.</td><td>Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.</td></tr>
</table>

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
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.	The noise contours associated with the Proposed Project would not exceed the noise contours contained in the 1985 JWA Master Plan, which is the basis for the Settlement Agreement, as amended. The JWA AELUP reflects the 1985 JWA Master Plan noise contours so the Proposed Project would not jeopardize the safeguards provided for in the AELUP. Exhibit 4.7-10 in Section 4.7 shows the 1985 Master Plan contours and the Proposed Project noise contours within the City of Newport Beach. The Proposed Project would be consistent with this goal.	Alternative 1 is consistent with this goal. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1. Exhibit 4.7-12 in Section 4.7 shows the 1985 Master Plan contours and Alternative 1 noise contours.
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).	The Proposed Project would not construct noise-sensitive uses or expand the need for avigation easements. Although the Proposed Project would increase the number of residences in the 65 CNEL contour compared to Baseline (2016), the impacts would not extend beyond the policy implementation line provided in the AELUP. As noted above, avigation easements have been obtained on several of the affected residences. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy 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.	The Proposed Project does not modify the curfew and GANO. As indicated above, the noise contours associated with the Proposed Project are less than those identified in the 1985 JWA Master Plan and the Settlement Agreement. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy 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.	The Proposed Project includes improvements to general aviation services and facilities and does not propose construction of a second air carrier runway. With the Proposed Project, new facilities would be located in generally the same location as the current general aviation facilities. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
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.	Although the Proposed Project includes new support facilities to serve the general aviation operations at the Airport, the improvements would not significantly change operations. The overall number of based aircraft and their associated number of operations is projected to be reduced with implementation of the GAIP. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
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.	The Proposed Project would not modify or interfere with the RMS or reporting mechanisms. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
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.	The Proposed Project recognizes that the Airport does not have sufficient capacity to accommodate all of the aircraft that wish to be based JWA. The Proposed Project acknowledges the trend for a reduction in single-engine piston aircraft with an increased demand for business jets. As a result, the Proposed Project would require a component of the general aviation demand be accommodated at other airports in the region. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy 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 Proposed Project would not influence the Settlement Agreement, as amended. The Settlement Agreement is focused on commercial carrier operations, whereas the GAIP is for general aviation. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
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.		
City of Irvine General Plan		
Circulation Element		
Objective B-1 Policy (c) Develop, on an incremental basis, a vehicular circulation system responding to local and regional access requirements. The following Level of Service (LOS) Standards shall be the goal applied to arterial highways, which are in the City of Irvine or its sphere of influence, and which are under the City's jurisdiction. • LOS "E" or better shall be considered acceptable within the Irvine Business Complex (IBC-PA 36), Irvine Center (PA 33), and at the intersection of Bake Parkway and the I-5 northbound off-ramp.	As discussed in Section 4.8, Transportation/Traffic, the Proposed Project would result in fewer trips than existing Baseline (2016) conditions and would not cause a change in LOS at the study area intersections. All intersections would operate at an acceptable LOS D or better. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
• In conjunction with individual subdivision map level traffic studies for development proposed in Planning Areas 5B, 6, 8A and 9, a LOS "E" standard would be considered acceptable for application to intersections impacted in Planning Areas 13, 31, 32, 34, 35 and 39. • In conjunction with individual subdivision map level traffic studies for development proposed in Planning Areas 30 and 51, a LOS "E" standard would be considered acceptable for application to intersections impacted in Planning Areas 13, 30, 31, 32, 34, 35 and 39.		
Objective B-1 Policy (e) Cooperate with state, county and local governments to assure orderly development. **Objective B-1 Policy (f)** Work with the county, landowners, and other agencies in developing compatible land use and circulation plans for the area northerly of the sphere of influence, recognizing that new development in this area can have a significant impact on the existing City circulation system.	The Airport has coordinated with the City of Irvine and other adjacent jurisdictions as needed throughout the development of the traffic impact analyses. A primary source of traffic forecast data is the Irvine Transportation Analysis Model ("ITAM"), and the recent update to ITAM includes growth for JWA that reflects the 2014 Settlement Agreement Amendment. The Proposed Project is consistent with these objectives.	Alternative 1 is consistent with these objectives. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Objective B-7 Policy (a) Coordinate public and local transit with planning for air transportation.	JWA's website provides information on ground transportation (including public buses and trains) and shuttle services that provide service to the airport. The information can be found at www.ocair.com/groundtransportation/default.aspx. The Proposed Project would not preclude the use of public or local transit use. The Proposed Project is consistent with this objective.	Alternative 1 is consistent with this objective. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
Objective B-7 Policy (b) Support expansion of service at John Wayne Airport as long as all environmental impacts such as noise, air pollution, and traffic congestion can be mitigated.	The Proposed Project is inconsistent with this objective. Based on the analysis, the Proposed Project would result in a potential significant land use compatibility impact that would not be mitigated to a level considered less than significant. Other impacts would all be less than significant.	Alternative 1 is inconsistent with this objective. Alternative 1 would result in a potential significant land use compatibility impact.
Objective B-7 Policy (d) Encourage use of Los Angeles and Ontario International Airports for continental and international flights. Explore commercial airport potential of existing and closing military facilities within Los Angeles, San Bernardino, Riverside and San Diego counties, as well as existing commercial airport and general aviation airports which have expansion potential in order to meet the growing passenger demand on a regional basis. Discourage the development or expansion of airfields which are not now operating as commercial airports, or the expansion of existing commercial airports which would adversely impact existing urban communities.	The RTP/SCS reflects the MAP allocation provided for in the 2014 Settlement Agreement Amendment. The Proposed Project would not change these assumptions. Further, the Proposed Project would not result in the development of additional area not currently being used for aviation activities. As noted above, the Proposed Project would require a component of the general aviation demand be accommodated at other airports in the region. The Proposed Project is consistent with this objective.	Alternative 1 is consistent with this objective. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Objective B-7 Policy (e) Develop, in cooperation with the City of Newport Beach, an activity center transportation system to alleviate the ground access congestion related to John Wayne Airport.	This objective outlines an action to be taken by the Cities of Irvine and Newport Beach. JWA has encouraged the use of transit, shuttle service, and direct access to/from the JWA remote long-term parking lot to minimize congestion immediately adjacent to the Airport. No provisions in the Proposed Project would preclude a future activity center as a connection point to JWA. The Proposed Project is consistent with this objective.	Alternative 1 is consistent with this objective. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
City of Costa Mesa General Plan		
Land Use Element		
Policy LU-3.13 Prohibit construction of buildings which would present a hazard to air navigation, as determined by the Federal Aviation Administration (FAA).	The Proposed Project does not propose the development of any buildings that are not consistent with FAA standards and, therefore, would not present a hazard to air navigation as determined by the FAA. The Proposed Project is consistent with this objective.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy LU-6.3 Continue to prioritize commercial and industrial park use of properties north of I-405 and within the Airport Industrial District.	The Proposed Project does not propose the development of any sensitive land uses, nor would it result in off-site effects that would necessitate the changes of land uses within the city of Costa Mesa in order to maintain land use compatibility. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Circulation Element		
Policy C-2.8 Continue the use of the Intersection Capacity Utilization (ICU) methodology to address local traffic level of service and impacts, with Level of Service "D" as the threshold for meeting the City's significance criteria.	The Airport has coordinated with the City of Costa Mesa and other adjacent jurisdictions as needed throughout the development of the traffic impact analyses. The analyses use the ICU methodology and the long-range (2035) plans from the City of Costa Mesa when assessing potential impacts. The Proposed Project would not result in any significant impacts to intersections located in Costa Mesa. The Proposed Project is consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Noise Element		
Policy N-1.6 Discourage sensitive land uses from locating within the 65 CNEL noise contour of John Wayne Airport. Should it be deemed by the City as appropriate and/or necessary for a sensitive land use to locate in the 65 CNEL noise contour, ensure that appropriate interior noise levels are met and that minimal outdoor activities are allowed.	Within the city of Costa Mesa, the Proposed Project would not expand the 65 CNEL contour to include any residential areas or known noise-sensitive uses. Currently, noise-sensitive uses (schools and places of worship) are adjacent to the Airport. This area has been built as office uses, and sound attenuation has been incorporated into the design	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
	of the buildings. The Proposed Project is consistent with this policy.	
Policy N-1.7 Support alternative methods for the reduction of noise impacts at John Wayne Airport while continuing to maintain safety and existing limitations on aircraft daily departures.	Noise reduction methods associated with aircraft operations (e.g., changes in flight path or power cutback) are the jurisdiction of the FAA and would not be a consideration of the Proposed Project. The Proposed Project would result in the reduction of general aviation operations, thereby reducing the number of single event noise episodes. The Proposed Project does not conflict with this policy.	Alternative 1 does not conflict with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Goal N-1: Noise Hazards and Conditions The City of Costa Mesa aims to protect residents, local works, and property from injury, damage, or destruction from noise hazards and to work towards improved noise abatement. **Objective N-1A** Control noise levels within the City for the protection of residential areas and other sensitive land uses from excessive and unhealthful noise.	The 65 CNEL contour would not result in new off-site areas in the city of Costa Mesa with incompatible land uses due to aviation noise. The Proposed Project would be consistent with this goal and objective.	Alternative 1 is consistent with this goal and objective. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Safety Element		
Policy S-1.17 Utilize the John Wayne Airport Environs Land Use Plan (AELUP) as a planning resource for evaluation of land use compatibility and land use intensity in areas affected by airport operations. In particular, future land use decisions within the Safety/Runway Protection Zone will be evaluated in light of the risk to life and property associated with aircraft operations.	The noise contours associated with the Proposed Project would not exceed the noise contours contained in the JWA AELUP. Therefore, no modification to the AELUP would be required, and the AELUP would continue to be an effective tool for future land use decisions with regard to noise and safety as it pertains to the Airport. The Proposed Project would be consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.

TABLE 4.6-8
GENERAL PLAN GOALS AND POLICIES CONSISTENCY ANALYSIS
FOR THE CITIES OF NEWPORT BEACH, IRVINE, AND COSTA MESA

	Proposed Project	Alternative 1
Policy S-1.18 Comply with Federal Aviation Regulations (FAR) and the John Wayne AELUP requirements relative to Objects Affecting Navigable Airspace.	The Proposed Project would correct four current non-standard conditions that exist at the Airport, one of which pertains to aircraft parked in an Object Free Area for Runway 2L. The Proposed Project would be consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy S-1.19 Use the Federal Aviation Regulations as a guideline to establish the ultimate height of structures as defined in FAR Part 77.	The Proposed Project would be required to comply with the height of structures in compliance with FAR Part 77 (see RR AES-1). The Proposed Project would be consistent with this policy.	Alternative 1 is consistent with this policy. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
Policy S-1.20 Minimize hazards to aeronautical operations by ensuring land uses do not emit excessive glare, light, steam, smoke, dust, or electronic interference in compliance with FAR regulations and the John Wayne AELUP.	The Proposed Project would be required to comply with the lighting requirements in compliance with FAR Part 77 to minimize potential light and glare (see RR AES-1). The Proposed Project would be consistent with this policy.	Alternative 1 is consistent with these policies. The consistency analysis presented for the Proposed Project would be applicable to Alternative 1.
AELUP: Airport Environs Land Use Plan; AIP: Santa Ana Heights Acoustical Insulation Program; CNEL: Community Noise Equivalent Level; FAA: Federal Aviation Administration; FAR: Federal Aviation Regulations; FBOs: fixed based operators; GAIP: General Aviation Improvement Program: GANO: General Aviation Noise Ordinance; GSE: ground service equipment; ICU: Intersection Capacity Utilization; ITAM: Irvine Transportation Analysis Model; JWA: John Wayne Airport; LOS: level of service; MAP: million annual passengers; OCTA: Orange County Transportation Authority; RTP/SCS: Regional Transportation Plan/Sustainable Communities Strategy; RMS: remote monitoring system Sources (goals and policies): City of Newport Beach General Plan, Newport Beach 2006; The City of Irvine General Plan, Irvine 1999, last updated 2015; 2015-2035 General Plan, Costa Mesa 2016.		

Impact Conclusion: *The Proposed Project would result in a reduction in the number of general aviation aircraft that could be based at the Airport. The reduction would be 242 fewer aircraft parking spaces compared to current capacity and 128 fewer aircraft parking spaces compared to the number of currently used aircraft parking spaces at the Airport. Although this would be perceived as adverse to the general aviation community, it would not be a significant environmental impact under Threshold 4.6-1*.

The Proposed Project would result in 10 residential units being exposed to noise levels in excess of 65 CNEL compared to the Baseline (2016) condition. Avigation easements have been obtained for seven of these units and therefore, land use compatibility impacts are less than significant. For the remaining three units, the noise exposure would potentially result in interior and exterior noise levels in excess of policies adopted to avoid or mitigate an environmental effect. This has been identified as a significant land use compatibility impact. However, this impact has been identified in previous studies done for the Airport so it is not a new land use compatibility impact. These residences are located within the policy implementation line used in the AELUP for establishing the Airport Noise Impact Zones. Final EIR 508 certified in conjunction with the 1985 Master Plan and Final EIR 617 certified for the adoption of the 2014 Settlement Agreement Amendment identified significant unavoidable land use compatibility impacts because noise-sensitive uses would be located in an area exposed to future noise levels of 65 CNEL or greater. Although the Board of Supervisors has already made a finding addressing this issue, it is being identified as a significant impact under Threshold 4.6-1 to ensure it is understood that the Proposed Project would result in three residential units not currently in the Baseline (2016) 65 CNEL contour now being identified as incompatible.

Alternative 1

Compatibility with On-Site Land Uses

Alternative 1 improvements would not introduce any uses that would be incompatible with the current general aviation functions at the Airport because, as with the Proposed Project, the type of improvements (i.e., FBOs, hangars, and tie-downs) are consistent with the type of uses currently on site. The portion of the Airport dedicated to general aviation uses would not substantially change. The only reduction in overall area for general aviation uses would be associated with the removal of transient aircraft apron parking in the OFA for Runway 2L. This is a correction of a non-standard condition. As previously noted, the removal of the 31 transient parking spaces in this area would not change the number of based aircraft at the Airport because it is used for transient parking only.

The facilities proposed in Alternative 1 recognize the trend toward the reduction of small single-engine fixed-wing piston aircraft and an increase in turboprops and business/private jets and proposes facilities to accommodate this trend. However, this would result in a reduction in the overall number of aircraft that could be accommodated at JWA. Table 4.6-9 shows the reduction in capacity for general aviation aircraft of Alternative 1 compared to the current capacity and the number of aircraft parking spaces currently being used at the Airport.

TABLE 4.6-9
NUMBER OF AIRCRAFT PARKING POSITIONS LOST
FOR ALTERNATIVE 1

Facility	Change in Aircraft Parking Spaces (+/-)	
	Compared to Capacity	Compared to Currently Used
Tie-Down Apron	-183	-103
T-Hangars	3	3
Box Hangars (includes OCSD)	-40	-40
FBO/Community Hangars	39	39
Shade Structures	-66	-66
FBO Apron Spaces	7	41
Total	**-240**	**-126**

Note: The type and size of aircraft parked at an FBO facility may vary based on demand and can change frequently; therefore, the actual number and type of aircraft at the Airport may differ from what is shown in this table.

Source: AECOM 2018

The type of aircraft that would be most affected by the reduction in general aviation capacity would be the single-engine fixed-wing piston aircraft. Table 4.6-10 shows the projected change in the number of aircraft based on the facilities proposed by Alternative 1.

TABLE 4.6-10
CHANGE IN NUMBER OF BASED AIRCRAFT BY TYPE
ALTERNATIVE 1

Year	Fixed Wing Piston[a]		Fixed Wing Turbine		Helicopter	Total Based Aircraft
	Single Engine	Multi-Engine	Turboprop	Turbo Jet		
2016	339	35	26	65	17	**482**
2026[b]	200	37	26	76	17	**356**
Change in the Number of Aircraft Accommodated	-139	2	0	11	0	**-126**

Note: Numbers may not add up due to rounding.

[a] The based aircraft totals for single-engine include one glider.

[b] Assume four existing single-engine piston aircraft would park at the vacant spaces for multi-engine piston aircraft and fill up capacity.

Source: AECOM 2018.

As with the Proposed Project, the loss of aircraft parking spaces may be perceived as adverse because it reduces the overall capacity at the Airport; however, it would not result in an incompatible land use or conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The Airport is committed to maintaining general aviation uses; however, there are no requirements that establish a minimum or maximum amount of general aviation. JWA would continue to serve general aviation uses. The aircraft are accommodated on the Airport through lease agreements, which have established expiration dates or provisions for cancelation of the lease. Therefore, the reduction in the overall number of aircraft based at JWA would not result in a significant environmental impact.

Displaced aircraft can be accommodated elsewhere in the region. As noted above, Fullerton Municipal Airport and Long Beach Airport have sufficient capacity to accommodate the displaced aircraft.

Implementation of Alternative 1 would not affect operations at the non-general aviation (commercial) services or facilities at the Airport. Impacts to on-site land use are less than significant, and no mitigation is required.

Construction Impacts

Construction of Alternative 1 would be phased to minimize disruption to Airport operations and minimize the need to temporarily relocate based aircraft to other airports in the region. Exhibit 3-5a depicts the 15 primary construction phases, while Exhibit 3-5b provides a corresponding listing of the improvements identified for each task. Given the space limitations on the Airport, small segments of work would need to be conducted at a single time in order to minimize disruptions. During construction, current users of the general aviation facilities (i.e., FBOs and aircraft owners) would need to be temporarily relocated either to alternative locations on the Airport or to other airports in the region while each area on the Airport is under construction. The timing and precise number of aircraft that may need to relocate to other airports in the region cannot be known at this time. It will be a factor of the precise design of the improvements and number of aircraft based at the Airport at the time. As discussed above, aircraft are accommodated on the Airport through lease agreements, which have established expiration dates or provisions for cancelation of the lease. Therefore, the need to relocate the number of aircraft during construction would not result in a significant environmental impact.

Potential short-term, construction-related land use compatibility issues related to air quality, noise, and traffic are discussed in Sections 4.2, 4.7, and 4.8, respectively, of this Program EIR.

Compatibility with Surrounding Land Uses

The increased number of sensitive receptors and physical area projected to occur in the 65 to 70 CNEL contour with Alternative 1 is identified in Table 4.6-4, provided above. As shown in Table 4.6-5, when compared to the Baseline (2016) noise contours, the total contour area between 65 and 70 CNEL would increase by 0.01 square mile (0.6 percent). The area exceeding 70 CNEL will increase by 0.01 square mile (0.7 percent) over Existing conditions. Alternative 1 would not result in any additional schools, hospitals, or places of worship being included in the 65 CNEL or greater contour. The incremental increase in the 65 to 70 CNEL contour would result in 12 residential parcels being exposed to noise levels in excess of the threshold established for compatibility. However, as noted above, use of attenuation and avigation easements may reduce

potential impacts to less than significant. Exhibit 4.7-11 in Section 4.7, Noise, provides a comparison of the Baseline (2016) 60, 65, 70 and 75 CNEL contours and the projected contours with Alternative 1. Of the additional 12 units included in the 65 to 70 CNEL contour:

- Six multi-family units are non-conforming uses (residential use in a business park zone), and a prescriptive avigation easement has been acquired.
- Two units have received acoustical insulation, and an avigation easement has been acquired.
- One unit has participated in the purchase assurance program and received insulation, and an avigation easement was acquired.
- One unit declined the offer of acoustical insulation.
- A genuine effort to offer insulation to two units was made but no response was received.

Similar to the Proposed Project, for the nine residential units with avigation easements, the impacts would be less than significant because mitigation has been provided to the conforming uses (i.e., those in a residential land use designation); and the avigation easement was granted for all nine of the units. The other three residential units have a potential for incompatibility due to excessive interior and exterior noise levels. Residences with outdoor living areas exposed to a greater than 65 CNEL would be incompatible with the County's exterior noise standard. Therefore, the 65 CNEL contour expanding beyond the existing contour and including additional residences would be a significant land use compatibility impact.

As noted above, these uses are all within the 65 CNEL contour from the 1985 Master Plan, which the AELUP uses as a policy implementation line for establishing the Airport Noise Impact Zones. Additionally, in 2014 when Final EIR 617 was prepared for the Settlement Agreement Amendment, this area was again identified as being in a future (2026) 65 CNEL contour due to the increased commercial carrier flights.

These units would continue to be eligible for consideration of attenuation measures through the SIP adopted as part of Final EIR 617 if they fall within the 65 CNEL contour due to the increased commercial carrier flights in 2026 as projected in Final EIR 617. However, Final EIR 617 identified a significant unavoidable impact because until interior noise measurements are taken after the increase in commercial carrier flights at the Airport, as projected in Final EIR 617, it cannot be determined if all the noise-sensitive uses with interior noise levels in excess of 45 CNEL would qualify for sound attenuation based on FAA criteria. Although the Board of Supervisors has already made a finding addressing this issue, it is being identified as a significant impact to ensure the decision-makers understand that Alternative 1 would result in three residential units not currently in the Baseline (2016)65 CNEL contour now being identified as incompatible.

Policy Consistency Analysis

The policy consistency analysis provided for the Proposed Project would also be applicable to Alternative 1.

Impact Conclusion: *Alternative 1 would result in a reduction in the number of general aviation aircraft that could be based at the Airport. The reduction would be 240 fewer aircraft parking spaces compared to current capacity and 126 fewer aircraft parking spaces compared to the number of currently used spaces at the Airport. Although this would be perceived as adverse to the general aviation community, it would not be a significant environmental impact under Threshold 4.6-1.*

Alternative 1 would result in 12 residential units being exposed to noise levels in excess of 65 CNEL compared to the Baseline (2016) condition. Avigation easements have been obtained for nine of these units and therefore, land use compatibility impacts are less than significant. . For the remaining three units, the noise exposure would potentially result in interior and exterior noise levels in excess of policies adopted to avoid or mitigate an environmental effect. This has been identified as a significant land use compatibility impact. However, this impact has been identified in previous studies done for the Airport so it is not a new land use compatibility impact. These residences are located within the policy implementation line used in the AELUP for establishing the Airport Noise Impact Zones. Final EIR 508 certified in conjunction with the 1985 Master Plan and Final EIR 617 certified for the adoption of the 2014 Settlement Agreement Amendment identified significant unavoidable land use compatibility impacts because noise-sensitive uses would be located in an area exposed to future noise levels of 65 CNEL or greater. Although the Board of Supervisors has already made a finding addressing this issue, it is being identified as a significant impact under Threshold 4.6-1 to ensure it is understood that Alternative 1 would result in three residential units not currently in the Baseline (2016) 65 CNEL contour now being identified as incompatible.

4.6.8 CUMULATIVE IMPACTS

The Proposed Project and Alternative 1 would result in a significant land use impact under Threshold 4.6-1 because it would result in three residential units not currently in the Baseline (2016) 65 CNEL contour now being identified as incompatible due to noise (i.e., in the 65 CNEL contour). This is a conservative approach to the impact assessment because the provisions of Title 21 do indicate that if the airport proprietor has made a genuine effort to provide attenuation, the residential use can be assessed as compatible (this is further discussed in Section 4.6.2).

The Proposed Project and Alternative 1 would also result in the displacement of general aviation aircraft from the Airport; however, this was not identified as a significant environmental impact. The potential for cumulative effect for both of these impacts is discussed below.

From a cumulative perspective, the additional commercial flights approved as part of the 2014 Settlement Agreement Amendment would contribute to an increase in noise levels in future years for the area surrounding the Airport. This area would be the same area affected by the GAIP (Proposed Project and Alternative 1); therefore, these two projects would have the potential for a cumulative noise increase resulting in a land use compatibility impact.

Although the *Noise Analysis Technical Report* did not identify a cumulative noise impact (i.e., the cumulative noise increase would not exceed the noise thresholds) when compared to the Baseline (2016) noise levels, the size of the 65 CNEL and greater noise contours would be larger. However, the increase in the size of the contours is as a result of the future increased commercial carrier operations approved as part of the 2014 Settlement Agreement Amendment.[13] As discussed in Section 4.7 of this Program EIR and supported by the *Noise Analysis Technical Report,* the GAIP (the Proposed Project and Alternative 1) would not contribute substantial noise associated with the cumulative scenario, as demonstrated by the GAIP's small incremental noise increase shown in Table 4.7-8, which quantifies the noise increase directly attributable to the GAIP. Therefore, the GAIP's (Proposed Project and Alternative 1) contribution to cumulative noise would be less than significant.

Table 4.7-12 in the Noise Section, identifies four NMSs (1S, 2S, 3S and 8N) that would exceed the 65 CNEL in 2026.[14] However, it should be noted, these NMS exceed the 65 CNEL level in the Baseline (2016), as well as with the Proposed Project, Alternative 1, and No Project scenarios. The 65 CNEL contour is used to assess potential land use compatibility impacts. The land uses surrounding NMS 8N are not considered noise-sensitive uses; therefore, there would not be land use compatibility concerns adjacent to this NMS. Additionally, although the noise level at NMS 1S exceeds the 65 CNEL standard, the projected values in 2026 are less than the Baseline (2016) value.[15] A discussion on the potential for incompatible land uses from this cumulative increase in noise is provided below.

Table 4.6-11 identifies the changes in the greater than 65 CNEL contours for the Baseline (2016) and future (2026) cumulative scenarios. The table identifies the number of noise-sensitive uses, which allows a comparison to the Baseline (2016) condition, as well as to the future No Project Alternative. Compared to the Baseline (2016), with the cumulative scenario, there would be an increase of 0.6 square mile of area in the 65 CNEL contour for the Proposed Project and Alternative 1, and a 0.7 square mile increase with the No Project Alternative.[16] As shown, the cumulative increase is virtually the same for all the scenarios, which demonstrates that the increased area is substantially associated with the increased commercial carrier operations

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13 A discussion of the 2015 changes to the noise monitoring equipment and associated parity study is provided in Section 4.7.4. Additionally, it should be noted that the FAA model used for calculating the noise impacts in this DEIR is different than the model used in Final EIR 617 (see Section 4.7.3).

14 The locations of the NMS are depicted in Exhibit 4.7-7. NMS 1S, 2S, and 3S are all located south of the Airport in the City of Newport Beach. NMS 8N is located in the City of Irvine.

15 As discussed in Section 4.7.8, the cumulative noise analysis take into account an increase in the use of the Boeing 737-MAX and Airbus A320-NEO families. These aircraft families include substantial noise reduction features and are beginning to operate at JWA now and are projected to continue to operate in increasing numbers at the Airport in the future.

16 The comparable data is provided in Table 4.6-4 for the Baseline (2016) Plus Future (2026) GAIP alternative scenarios (Proposed Project, Alternative 1, and No Project Alternative. This allows the increased noise associated with the GAIP to be isolated separate from the future growth in commercial carrier operations approved as part of the 2014 Settlement Agreement. Table 4.7-8 also provides the change in noise levels at each of the NMS for the Baseline (2016) Plus Future (2026) GAIP alternative scenarios (Proposed Project, Alternative 1, and No Project Alternative.

(2014 Settlement Agreement Amendment). The increased size of the contour will result in an increase in the number of residential units exposed to noise levels in excess of 65 CNEL. The change in the area in the greater than 70 CNEL contour (approximately 0.86 square mile) would also be substantially associated with commercial carrier operations. As shown in Table 4.6-11, a decrease in the size of the contour is projected when compared to the Baseline (2016) condition. This is due to the increased usage of aircraft that provide substantial noise reduction features by 2026 (see discussion in Section 4.7.8).

TABLE 4.6-11
LAND USES WITHIN THE CUMULATIVE (2026)
65 CNEL AND GREATER NOISE CONTOURS

CNEL	Baseline (2016)	Future (2026) No Project	Future (2026) Proposed Project	Future (2026) Alternative 1
Total Contour Area (sq. mi.)				
65-70	1.49	1.56	1.55	1.55
>70	0.91	0.86	0.86	0.86
Number of Schools				
65-70	0	0	0	0
>70	0	0	0	0
Number of Hospitals				
65-70	0	0	0	0
>70	0	0	0	0
Number of Places of Worship				
65-70	3	2	2	2
>70	1	1	1	1
Total Number of Dwelling Units				
65-70	247	273	274	276
>70	0	2	2	2
Total Number of Dwelling Units in the Airport Implementation Program Area				
65-70	247	271	272	274
>70	0	0	0	0
Total Number of Dwelling Units Outside of the Airport Implementation Program Area				
65-70	0	2	2	2
>70	0	0	0	0

[a] Multifamily unit impacts are calculated by multiplying the area (acres) in the multifamily complex impacted by the contour band by the total number of dwelling units per acre in the complex.

Source: Data taken from Landrum & Brown 2018

Based on the cumulative noise levels, there would be an increase in the number of units in the 65 to 70 CNEL contour when compared to the Baseline (2016) condition. Under the cumulative scenario the number of units in the 65 to 70 CNEL contour increases by 27 units for the Proposed

Project, 29 units for Alternative 1,[17] and 26 units for the No Project Alternative, when compared to the Baseline (2016). All but two of these units are located within the AIP Area from the 1985 Master Plan (these units are discussed below). For the units in the AIP that have received sound attenuation, the land use impacts would be less than significant. However, similar to the GAIP impacts identified under Threshold 4.6-1 for both the Proposed Project and Alternative 1, there are residential units where the homeowner has been offered sound attenuation, although it has not been implemented for any variety of reasons. In these cases, the noise exposure would potentially result in interior and exterior noise levels in excess of policies adopted to avoid or mitigate an environmental effect. For these units there would be a significant cumulative land use compatibility impact. As previously noted, this impact has been identified in previous studies done for the Airport so it is not a new land use compatibility impact. All but two of these residences are located within the policy implementation line used in the AELUP for establishing the Airport Noise Impact Zones. Final EIR 508 certified in conjunction with the 1985 Master Plan and Final EIR 617 certified for the approval of the 2014 Settlement Agreement Amendment identified significant unavoidable land use compatibility impacts because noise-sensitive uses would be located in an area exposed to future noise levels of 65 CNEL or greater. Although the Board of Supervisors has already made a finding addressing this issue, it is being identified as a cumulative significant impact.

As noted above, there are two parcels in the 2026 65 CNEL contour that are outside of the AIP. These units have not been offered sound attenuation. However, the 65 CNEL contour from the 1985 Master Plan, which was the basis for the AIP, extended along the edge of the two parcels. They were not included in the AIP because the livable areas (i.e., the houses and backyards) were not in the 65 CNEL contour. This condition remains unchanged (i.e., both the 1985 and the projected 2026 65 CNEL contour line for the Proposed Project, Alternative 1, and the No Project Alternative do not include areas that would be considered a habitable room or outdoor living areas based on the General Plan). Only the periphery of these long parcels would be affected. Because the living areas would not be exposed to the projected cumulative 65 CNEL contour, there would not be a land use compatibility impact based on the Orange County General Plan standard for either the Proposed Project or Alternative 1 (see Table 4.6-1).

There would also be two units in the greater than 70 CNEL contour. Both of these residences received sound insulation through the AIP and avigation easements have been recorded. Therefore, these two residences would not be identified as incompatible uses.

The SIP, adopted in conjunction with the 2014 Settlement Agreement Amendment, provides for noise-sensitive uses to be evaluated and if interior noise levels are in excess of applicable standards, the SIP would be implemented to achieve interior noise levels consistent with County standards. This measure, which has already been adopted by the Board of Supervisors, would address the potential cumulative land use impact identified above, However, when recommending the SIP as a mitigation measure for the 2014 Settlement Agreement Amendment, Final EIR 617 identified due to the FAA requirements, the average interior noise level must exceed 45 CNEL or insulation would not be allowed. As result, there may be some portions of the habitable portions of residential units with noise levels in excess of 45 CNEL but if the average noise levels in rooms is less than 45 CNEL, mitigation would not be feasible.

[17] The additional units impacted by Alternative 1 is due to how impacts on a multifamily complex is calculated. The differences between the No Project and Alternative 1, compared to the Proposed Project is due to rounding.

Although in the cumulative condition, there would be a potential significant land use compatibility impact for interior noise levels, a more detailed review of the data was done to determine the GAIP contribution to the cumulative impacts. The evaluation compared the increase in sensitive land uses using the 2026 data with the GAIP (Proposed Project and Alternative 1) to the 2026 No Project Alternative. This allows the GAIP's contribution to the cumulative impacts to be isolated. As noted above, in the 2026 cumulative scenario, the Proposed Project would result in one additional residence (a single-family residence) being exposed to noise levels in excess of 65 CNEL. Alternative 1 would result in three additional residences in the 65 CNEL (one single-family residence and two multi-family units). However, an avigation easement has been recorded on the additional single-family residence identified for both the Proposed Project and Alternative 1.[18] A prescriptive avigation easement has been acquired for the entire multifamily development area where the two multifamily units are located; which is a non-conforming use. As noted above, for the units that have received sound attenuation and/or there is an avigation easement, the land use impacts would be less than significant. Therefore, based on this evaluation, the incremental effect of the GAIP (Proposed Project and Alternative 1) would not be cumulatively considerable.[19]

Similarly, the land area in the 65 CNEL or greater, is not projected to increase as a result of the GAIP. As shown in Table 4.6-11, the increased area within the 65-70 CNEL contour for the No Project Alternative and Alternative 1 is the same, and the increased area for the Proposed Project is slightly less than the No Project Alternative. Therefore, although a significant unavoidable cumulative land use compatibility impact is identified, the GAIP is not substantially contributing to the cumulative impact.

As shown in Table 4.6-11, for all the scenarios (Baseline 2016, Proposed Project, Alternative 1, and the No Project Alternative), no schools/educational facilities would be located in the 65 CNEL or greater contour. Therefore, there would be no significant land use impacts on schools/educational facilities.

Places of worship are also a noise sensitive land use. As shown in Table 4.6-11, under the Baseline (2016) there would be places of worship in the 65 to 70 CNEL contour and one in the greater than 70 CNEL contour. In the Cumulative (2026) scenarios (Proposed Project, Alternative 1, and the No Project Alternative), the number of places of worship in the 65 CNEL or greater contour is reduced compared to the Baseline (2016) condition. Therefore, no significant cumulative impact on places of worship are anticipated. The reduction is because of increased usage of the MAX and NEO aircraft in the cumulative (2026) scenario. The MAX and NEO aircraft are quieter on departure; therefore, the contours are narrower when compared to the Baseline (2016).

The second, though less than significant, land use impact pertains to the displacement of general aviation aircraft from the Airport. None of the other cumulative projects would result in a loss of

[18] As noted above, multifamily unit impacts are calculated by multiplying the area (acres) in the multifamily complex impacted by the contour band by the total number of dwelling units per acre in the complex. The entire multifamily development has a prescriptive avigation easement

[19] Section 15065(a)(3) of the CEQA Guidelines defines cumulatively considerable as, ". . . the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

general aviation spaces; therefore, there would be no cumulative loss of general aviation aircraft parking spaces.

4.6.9 MITIGATION PROGRAM

The SIP adopted by the Board of Supervisors in 2014 would serve to mitigate land use compatibility impacts associated with noise for the Proposed Project and Alternative 1. However, until interior noise measurements are taken after the year 2026 when there will be an authorized increase in the number of commercial carrier flights at the Airport, as projected in Final EIR 617, it cannot be determined if all the noise-sensitive uses with interior noise levels in excess of 45 CNEL would qualify for sound attenuation based on FAA criteria. No additional mitigation measures are feasible.

4.6.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the GAIP (Proposed Project and Alternative 1) there would be three residential units that would be included in the future (2026) cumulative 65 CNEL contour that do not have avigation easements and have not received (although they were offered) attenuation through the AIP to ensure interior noise levels do not exceed 45 CNEL. Additionally, potential significant cumulative land use impacts associated with the future commercial carrier operations have been identified. However, the SIP adopted in conjunction with 2014 Settlement Agreement Amendment would provide sound attenuation for the noise sensitive land uses that would be affected by the increased commercial carrier operations. Because the three units affected by the GAIP are also included in the number of residential units that may be exposed to cumulative impacts, the SIP would serve as mitigation for both direct and cumulative impacts. However, until interior noise measurements are taken after 2026 when the GAIP is fully implemented and the commercial activity increases at the Airport, it cannot be determined if all the noise sensitive uses with interior noise levels in excess of 45 CNEL would qualify for sound attenuation based on FAA criteria. Given the uncertainty that this measure is feasible to adequately reduce interior noise levels at all potentially impacted uses, these impacts have been determined to be significant and unavoidable.

Impacts associated with displaced aircraft would be less than significant for both direct and cumulative scenarios.

4.6.11 REFERENCES

AECOM. 2018. (April). *Orange County/John Wayne Airport (JWA) General Aviation Improvement Program (GAIP) Based Aircraft Parking—Capacity Analysis and General Aviation Constrained Forecasts*. Orange, CA (Appendix D)

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