7.0 ALTERNATIVES

7.1 INTRODUCTION

Section 15126.6(a)–(b) of the State California Environmental Quality Act ("CEQA") Guidelines (14 *California Code of Regulations* ["CCR"]) provides guidance on the range of alternatives to a proposed project that must be evaluated. The State CEQA Guidelines state:

> (a) Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The Lead Agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.
>
> (b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code §21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

As discussed in Section 3.3, Project Description, the County of Orange, the City of Newport Beach, the Airport Working Group ("AWG"), and Stop Polluting Our Newport ("SPON") entered into the Memorandum of Understanding ("MOU") that defines the Proposed Project and contains a non-exclusive list of alternatives (i.e., Alternatives A, B, and C) to be analyzed pursuant to the CEQA, in addition to the CEQA-mandated No Project Alternative. The Proposed Project and those four alternatives have been evaluated in Section 4 of this Environmental Impact Report ("EIR").

The MOU also affirmed the discretion of the County to consider other alternatives that may be capable of feasibly avoiding, mitigating or minimizing the Proposed Project's significant environmental impacts in accordance with CEQA. This section, consistent with the MOU and CEQA, presents one other potentially feasible alternative for consideration (2025 Horizon Year Alternative); evaluates its environmental effects (particularly in comparison to the Proposed Project); and considers its consistency with the Project Objectives identified in Section 3.2 of this EIR.

Additionally, there were comments received on the Notice of Preparation which suggested that a reduction in the existing number of occurring and allowable flights and passengers served at

John Wayne Airport ("JWA") is appropriate. A discussion is provided here to explain why this is not a viable option.

7.2 CRITERIA FOR SELECTING ALTERNATIVES

Several criteria were used to select alternatives to the Proposed Project. These criteria are described below.

7.2.1 ABILITY TO ACHIEVE PROJECT OBJECTIVES

The ability of an alternative to meet most of the project objectives is an important component when evaluating alternatives. When an alternative is selected, not only are the environmental impacts considered but so is the alternative's ability to meet the project's intended objectives. Section 15126.6(f) of the State CEQA Guidelines (14 CCR) states:

> The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.

Recognizing the role the Settlement Agreement has played in providing a balance between aviation activities and community impacts associated with the operations, the signatories have identified the following Project Objectives:

1. To modify some existing restrictions on aircraft operations at JWA in order to provide increased air transportation opportunities to the air-traveling public using the Airport without adversely affecting aircraft safety, recognizing that aviation noise management is crucial to continued increases in JWA's capacity.
2. To reasonably protect the environmental interests and concerns of persons residing in the vicinity of the JWA, including their concerns regarding "quality of life" issues arising from the operation of JWA, including but not limited noise and traffic.
3. To preserve, protect, and continue to implement the important restrictions established by the 1985 Settlement Agreement, which were "grandfathered" under the Airport Noise and Capacity Act of 1990 ("ANCA") and reflect and accommodate historical policy decisions of the Orange County Board of Supervisors regarding the appropriate point of balance between the competing interests of the air transportation and aviation community and local residents living in the vicinity of the Airport.
4. To provide a reasonable level of certainty to the following regarding the level of permitted aviation activity at JWA for a defined future period of time: surrounding local communities; Airport users (particularly scheduled commercial users); and the air-traveling public.
5. To consider revisions to the regulatory operational restrictions at JWA in light of the current aviation environment; the current needs of the affected communities; and industry interests represented at JWA.

7.2.2 FEASIBILITY

When developing alternatives for evaluation in an EIR, the feasibility of implementing the alternative must be considered. If a range of alternatives are developed but, due to regulatory restrictions, cannot be implemented, the analysis would not meet the intent of CEQA of providing a reasonable range of feasible alternatives. Section 15126.6(f)(1) of the State CEQA Guidelines (14 CCR) states:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; see *Save Our Residential Environment v. City of West Hollywood* (1992) 9 Cal.App.4th 1745, 1753, fn. 1).

It has been recognized that, for purposes of CEQA, "feasibility" encompasses "desirability," to the extent that the latter is based on a reasonable balancing of the relevant economic, environmental, social and technological factors. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1001.) This balancing is harmonized with CEQA's fundamental recognition that policy considerations may render alternatives impractical or undesirable. (*Ibid*.; see also Public Resources Code, §21081; State CEQA Guidelines §§15126.6(c), 15364.)

7.2.3 ELIMINATION/REDUCTION OF SIGNIFICANT IMPACTS

Section 15126.6(b) of the State CEQA Guidelines states that "[b]ecause an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

The Proposed Project and the alternatives evaluated in Sections 4 through 6 of this EIR result in a range of impacts. The alternative evaluated later in this section has been developed in an effort to reduce and/or eliminate one or more significant impacts associated with the Proposed Project. Impacts that would remain significant and unavoidable even after mitigation for the Proposed Project are briefly summarized below.

- **Air Quality.** The Proposed Project would result in significant and unavoidable impacts to regional mass emissions of air pollutants and precursors of pollutants for which the region is classified as in nonattainment for federal or State ambient air quality standards. In addition, the Proposed Project would result in significant and unavoidable impacts to local concentrations of air pollutants (Threshold 4.1-1 in Section 4.1). The Proposed

Project also would result in significant and unavoidable impacts for non-cancer health risk (Threshold 4.1-2 in Section 4.1).

- **Greenhouse Gas Emissions.** The Proposed Project would have a significant and unavoidable impact related to achieving greenhouse gas ("GHG") emission reductions consistent with Assembly Bill ("AB") 32 goals (Threshold 4.3-1 in Section 4.3).

- **Land Use and Planning.** With the Proposed Project, there would be an increase in the number of noise-sensitive uses exposed to exterior noise levels in excess of 65 CNEL, resulting in a land use incompatibility. This would be a significant impact. There are no feasible mitigation measures to reduce exterior noise levels to below 65 CNEL, consistent with the County of Orange standards for noise sensitive uses. With the Proposed Project, potential significant impacts for interior noise have been identified. Mitigation is proposed; however, the FAA guidance for implementing sound insulation programs specifically states that the average noise level in all habitable rooms of a residence must be greater than 45 CNEL for the use to be eligible for sound insulation funded by the Airport or FAA. However, the County's noise standards specifically require that the noise level in any habitable room or educational space must be no greater than 45 CNEL. For those residences within the business park and those residences with a habitable room with noise levels in excess of 45 CNEL but the average noise levels in the habitable rooms is less than 45 CNEL, mitigation would not be feasible. Therefore, the impact would be significant and unavoidable due to lack of funding source for implementing the mitigation provided for in Mitigation Measure LU-1.

- **Noise.** Significant exterior noise impacts are projected to occur with each phase of the Proposed Project as residences currently exposed to noise levels less than 65 CNEL are exposed to noise levels greater than or equal to 65 CNEL. As discussed above, under Land Use and Planning, there is also the potential for interior noise levels to exceed the County threshold of 45 CNEL but due to FAA regulations, mitigation would not be feasible, resulting in a significant unavoidable impact.

- **Transportation/Traffic.** The Proposed Project would result in significant impacts at two intersections outside the County of Orange's jurisdiction, as well as cumulative impacts on one segment of the freeway network. Within the City of Irvine, Phase 3 of the Proposed Project would result in significant impacts at the MacArthur Boulevard/Michelson Drive intersection and the Von Karman Avenue/Alton Parkway intersection. Mitigation measures are recommended in Section 4.8; however, because full implementation of the measures is outside the jurisdiction and control of the County of Orange/JWA implementation cannot be assured. In the event the respective improvements are not fully operational prior to JWA serving 12.5 MAP, the Project's impacts at the intersections would remain significant and unavoidable as there is no other feasible mitigation that would fully reduce the identified impacts to less than significant.

  Similarly, the Proposed Project, Phases 2 and 3 would increase traffic by more than 2 percent on the northbound SR-55 between the onramp from the I-405 northbound to the MacArthur Boulevard offramp, a California Department of Transportation ("Caltrans") facility operating at Level of Service ("LOS") E or F prior to the addition of Proposed Project traffic. As there presently are no plans and corresponding fee programs in place

to address the subject deficiency, mitigation in the form of a fair share payment presently is infeasible. As such, a mitigation measure is proposed providing that in the event such plan or fee program is established, the County of Orange/JWA is to pay its fair share of the cost to remedy the identified impact. However, because full implementation of the measures is outside the jurisdiction and control of the County of Orange/JWA, implementation cannot be assured. As such, the impact would remain significant and unavoidable.

The Proposed Project would not result in unavoidably significant impacts to Biological Resources; Hazards and Hazardous Materials; Public Services; Utilities and Service Systems; and Water Quality.

7.3 ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD

Section 15126.6(c) of the State CEQA Guidelines provides that an "EIR should also identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the Lead Agency's determination. . . Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts".

In furtherance of the disclosure objective of Section 15126.6(c), one type of alternative considered but rejected for detailed analysis in this EIR during the scoping process was any alternative that provides *less* operational capacity than currently permitted by the Settlement Agreement (i.e., less than 10.8 Million Annual Passengers ["MAP"] and 85 Class A Average Daily Departures ["ADDs"]). This type of alternative, which also could be described as an alternative providing less operational capacity than the No Project Alternative, was rejected for two important reasons, as discussed below.

First and foremost, such an alternative would be legally unenforceable by the County of Orange and is therefore infeasible. (See State CEQA Guidelines, Section 15364.) More specifically, any operational restrictions that are more prohibitive than the No Project Alternative (i.e., the current Settlement Agreement terms) would result in the County's Settlement Agreement and implementing Access Plan losing their "grandfathered" status under ANCA, which limits an airport operator's right to impose new restrictions on aircraft operations without obtaining federal approval.

Pursuant to the United States Code (Title 49, Section 47524[d][4]), the "grandfathered" status of the County's Settlement Agreement and implementing Access Plan only remains intact if the "subsequent amendment to an airport noise or access agreement or restriction . . . does not reduce or limit aircraft operations or affect aircraft safety." In this instance, this type of alternative would constitute a subsequent amendment to the Settlement Agreement (as most recently amended in 2003) that reduces or limits aircraft operations relative to the existing, authorized regulatory limits (i.e., 10.8 MAP and 85 Class A ADDs), thereby precluding the Federal Aviation Administration ("FAA") from rendering a favorable legal opinion regarding JWA's standing under ANCA (and its Airport Improvement Program grant assurances). Further, because this alternative would reduce aircraft operations, the County would be divested of its legal authority to implement the types of restrictions needed to reduce operation levels to those below the existing parameters of the Settlement Agreement absent the speculative success of a

Part 161 application to the FAA. (See generally 14 *Code of Federal Regulations* ["CFR"] Sections 161.1–161.505; see also 14 CFR Section 161.3[b] ["This part also applies to airports enacting amendments to airport noise and access restrictions in effect on October 1, 1990, but amended after that date, where the amendment reduces or limits aircraft operations or affects aircraft safety."].)

Second, an alternative proposing to reduce operational capacity below the existing levels authorized by the Settlement Agreement, and in violation of ANCA, would fail to meet most of the basic Project Objectives, as explained below:

1. To modify some existing restrictions on aircraft operations at JWA in order to provide increased air transportation opportunities to the air-traveling public using the Airport without adversely affecting aircraft safety, recognizing that aviation noise management is crucial to continued increases in JWA's capacity.

   This type of alternative would not provide "increased air transportation opportunities" at JWA, but would instead reduce air transportation opportunities. Additionally, this type of alternative would threaten the implementation status of JWA's "aviation noise management" regulations due to the loss of the Settlement Agreement's "grandfathered" status under ANCA.

2. To reasonably protect the environmental interests and concerns of persons residing in the vicinity of the JWA, including their concerns regarding "quality of life" issues arising from the operation of JWA, including but not limited noise and traffic.

   This type of alternative would threaten the implementation of JWA's current efforts to "protect the environmental interests and concerns of persons residing in vicinity of JWA" due to the loss of the Settlement Agreement's "grandfathered" status under ANCA. Absent the continuation of that status, the County's ability to protect the community and environment would be constrained by ANCA and subject to the County's ability to successfully process a Part 161 application with the FAA.

3. To preserve, protect, and continue to implement the important restrictions established by the 1985 Settlement Agreement, which were "grandfathered" under ANCA and reflect and accommodate historical policy decisions of the Orange County Board of Supervisors regarding the appropriate point of balance between the competing interests of the air transportation and aviation community and local residents living in the vicinity of the Airport.

   This type of alternative would result in JWA's restrictions losing their "grandfathered" status under ANCA.

4. To provide a reasonable level of certainty to the following regarding the level of permitted aviation activity at JWA for a defined future period of time: surrounding local communities; Airport users (particularly scheduled commercial users); and the air-traveling public.

   This type of alternative would not provide a "reasonable level of certainty" regarding the level of permitted aviation activity for a defined period of time because the loss of JWA's

restrictions being "grandfathered" under ANCA would preclude immediate implementation of the alternative absent the County's ability to successfully process a Part 161 application with the FAA.

5. To consider revisions to the regulatory operational restrictions at JWA in light of the current aviation environment; the current needs of the affected communities; and industry interests represented at JWA.

   This type of alternative, which would reduce existing, permitted operations levels, would not be consistent with the currently anticipated demand for aviation services at JWA, as forecast by the FAA and air carriers operating at the Airport. (See Appendix B, *Aviation Forecast Technical Study*, AECOM 2014.)

In light of the information above, and in accordance with Section 15126.6(c) of the State CEQA Guidelines, this EIR does not give further consideration to any alternative providing less operational capacity than currently authorized by the Settlement Agreement.

7.4 ALTERNATIVES FOR ANALYSIS

In accordance with Section 15126.6(a) of the State CEQA Guidelines, the discussion in this section of the EIR focuses on a reasonable range of alternatives. The analysis provides a comparison of the alternatives' varying environmental effects and their merits and/or disadvantages in relation to the Proposed Project and to each other; their feasibility and ability to achieve project objectives are also discussed.

The following alternatives are analyzed in this EIR:

- **Proposed Project.** Extension through 2030; curfew maintained until 2035; Phase 3 provides for a maximum of 12.5 MAP and 95 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.

- **Alternative A.** Extension through 2030; curfew maintained through 2035; Phase 3 provides for 12.8 MAP and 135 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.

- **Alternative B.** Extension through 2030; curfew maintained through 2035; Phase 3 provides for 15.0 MAP and 115 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.

- **Alternative C.** No term; curfew maintained through 2020; All Phases provide for 16.9 MAP and 228 ADD; maximum 4 air cargo ADD; and no limit on additional gates beginning in 2016.

- **No Project Alternative.** No extension, Settlement Agreement expires at the end of 2015; curfew assumed through 2020; provides for 10.8 MAP and 85 ADD; maximum 4 air cargo ADD; and assumes 20 gates are maintained.

- **2025 Horizon Year Alternative.** Extension through 2025; curfew maintained through 2025; provides for 11.8 MAP and 95 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.

The Proposed Project, Alternatives A through C, and the No Project Alternative have been fully analyzed in Sections 4.1 through 4.10. An additional alternative has been developed in the interest of minimizing environmental impacts. The evaluation of this alternative, using the same thresholds of significance identified in Sections 4.1 through 4.10, is provided below in Section 7.4.1.

In accordance with Section 15126.6(a) of the State CEQA Guidelines, the EIR provides a comparison of the environmental effects and their merits and/or disadvantages of the alternative in relation to the Proposed Project, as well as its ability to achieve the Project Objectives. To facilitate the readers' understanding, Table 7-1 provides a matrix that compares of each alternative's ability to meet the Project Objectives. The level of environmental impact and ability to meet Project Objectives is considered as part of the identification of the environmentally superior alternative, which is discussed in Section 7.5.

TABLE 7-1
COMPATIBILITY COMPARISON OF ALTERNATIVES WITH PROJECT OBJECTIVES

Project Objective	Proposed Project	Alternatives				
		A	B	C	No Project	2025 Horizon
1. To modify some existing restrictions on aircraft operations at JWA in order to provide increased air transportation opportunities to the air-traveling public using the Airport without adversely affecting aircraft safety, recognizing that aviation noise management is crucial to continued increases in JWA's capacity.	●	●	●	○	○	●
2. To reasonably protect the environmental interests and concerns of persons residing in the vicinity of the JWA, including their concerns regarding "quality of life" issues arising from the operation of JWA, including but not limited noise and traffic.	●	◒	◒	○	●	◒
3. To preserve, protect, and continue to implement the important restrictions established by the 1985 Settlement Agreement, which were "grandfathered" under ANCA and reflect and accommodate historical policy decisions of the Orange County Board of Supervisors regarding the appropriate point of balance between the competing interests of the air transportation and aviation community and local residents living in the vicinity of the Airport.	●	●	◒	○	○	◒
4. To provide a reasonable level of certainty to the following regarding the level of permitted aviation activity at JWA for a defined future period of time: surrounding local communities; Airport users (particularly scheduled commercial users); and the air-traveling public.	●	●	●	○	○	●
5. To consider revisions to the regulatory operational restrictions at JWA in light of the current aviation environment; the current needs of the affected communities; and industry interests represented at JWA.	●	◒	◒	○	○	◒

Proposed Project—Extension through 2030; curfew maintained until 2035; Phase 3 provides for 12.5 MAP and 95 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.
Alternative A—Extension through 2030; curfew maintained through 2035; Phase 3 provides for 12.8 MAP and 135 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.
Alternative B—Extension through 2030; curfew maintained through 2035; Phase 3 provides for 15.0 MAP and 115 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.
Alternative C—No term; curfew maintained through 2020; All Phases provide for 16.9 MAP and 228 ADD; maximum 4 air cargo ADD; and no limit on additional gates beginning in 2016.
No Project Alternative—No extension, Settlement Agreement expires at the end of 2016; curfew assumed through 2020; provides for 10.8 MAP and 85 ADD; maximum 4 air cargo ADD; and assumes 20 gates are maintained.
2025 Horizon Year Alternative—Extension through 2025; curfew maintained through 2025; provides for 11.8 MAP and 95 ADD; maximum 4 air cargo ADD; and additional gates allowed after 2020.

Legend:

● = Fully Implements
◒ = Partially Implements
○ = Does Not Implement

7.4.1 2025 HORIZON YEAR ALTERNATIVE

The 2025 Horizon Year Alternative would maintain limitations on the operations and facilities at JWA. This alternative proposes the same ADDs and MAP levels ultimately provided by Phase 2 of the Proposed Project, and would only extend the Settlement Agreement through December 31, 2025. This would allow the continuation of the Settlement Agreement, but would not commit to the higher flight and passenger levels provided in Phase 3 of the Proposed Project. More specifically, the 2025 Horizon Year Alternative would increase the number of regulated Class A commercial passenger flights and the number of passengers departing and arriving annually. There would be no change in the permitted number of flights and passengers in the first phase (2016 through 2020). Rather, Phase 1 would permit a maximum of 85 Class A commercial passenger ADDs and a 10.8 MAP cap consistent with the parameters of the Settlement Agreement (as amended in 2003). (This is an increase of 5 ADD and 1.6 MAP over 2013 levels.) On January 1, 2021, the MAP would be permitted to increase to 11.8 and the number of Class A commercial passenger ADDs would increase to 95. This is an increase of up to 1.0 million additional passengers annually compared to what is currently allowed under the Settlement Agreement and an increase of 10 additional ADDs. The number of permitted air cargo operations would not change.

As with the Proposed Project, under the 2025 Horizon Year Alternative, no physical improvements are proposed. The passenger loading bridges would be limited to the 20 existing bridges through December 31, 2020, and hardstanding would be permitted. Similar to the Proposed Project, it is assumed that the 2025 Horizon Year Alternative would be "grandfathered" under the terms of the ANCA; however, this would be subject to change after 2025 unless another Settlement Agreement Amendment were to be processed.

Table 7-2 provides a comparison of the principal terms of the Proposed Project and 2025 Horizon Year Alternative.

TABLE 7-2
COMPARISON OF THE PRINCIPAL TERMS OF THE PROPOSED PROJECT AND 2025 HORIZON YEAR ALTERNATIVE

Principal Restrictions	Proposed Project	2025 Horizon Year Alternative
Term	Through December 31, 2030	Through December 31, 2025
Curfew	Through December 31, 2035	Through December 31, 2030
Annual Passenger Limit (MAP)		
January 1, 2016 – December 31, 2020	10.8 MAP	10.8 MAP
January 1, 2021 – December 31, 2025	11.8 MAP	11.8 MAP
January 1, 2026 – December 31, 2030	12.2 *or* 12.5 MAP*	Not Applicable

TABLE 7-2
COMPARISON OF THE PRINCIPAL TERMS OF THE PROPOSED PROJECT AND 2025 HORIZON YEAR ALTERNATIVE

Principal Restrictions	Proposed Project	2025 Horizon Year Alternative
Passenger Flights (Class A ADDs for passenger service)		
January 1, 2016 – December 31, 2020	85 Class A ADDs	85 Class A ADDs
January 1, 2021 – December 31, 2025	95 Class A ADDs	95 Class A ADDs
January 1, 2026 – December 31, 2030	95 Class A ADDs	Not Applicable
Cargo Flights (Class A ADDs for all-cargo service)		
January 1, 2016 – December 31, 2030	4 Class A ADDs	4 Class A ADDs
Passenger Loading Bridges		
January 1, 2016 – December 31, 2020	20	20
January 1, 2021 – December 31, 2030	No Limit	No Limit

MAP: Million Annual Passengers; ADD: Average Daily Departures

* Trigger for capacity increase to 12.5 MAP: air carriers must be within 5 percent of 11.8 MAP (i.e., 11.21 MAP) in any one year during the January 1, 2021 through December 31, 2025 timeframe.

There would be no guarantees that the flights and passengers levels would not increase at the end of 2025. Rather, prior to the expiration of the terms of the Settlement Agreement in 2025, the signatories may elect to again amend the Settlement Agreement to extend the terms beyond 2025. This would require subsequent CEQA documentation.

IMPACT EVALUATION

Air Quality

The 2025 Horizon Year Alternative would have the same significant and unavoidable impacts of mass air pollutant emissions and local concentrations of air pollutants as the Proposed Project. However, as shown in Table 7-3, the impacts associated with the 2025 Horizon Year Alternative would be less severe than those of the Proposed Project, primarily because the aircraft and traffic emissions generated by the 2025 Horizon Year Alternative, particularly nitrogen oxides ("NOx"), volatile organic compounds ("VOC"), and respirable particulate matter with a diameter of 10 microns or less ("PM10") would be less than the aircraft and traffic emissions generated by the Proposed Project.

TABLE 7-3
MASS EMISSIONS CRITERIA POLLUTANT EMISSIONS
COMPARISON OF PROPOSED PROJECT AND 2025 HORIZON YEAR

	Project Emissions (lbs/day)											
	VOC		**NOx**		**CO**		**SOx**		**PM10**		**PM2.5**	
	Proposed Project	**2025 Horizon Year Alternative**	**Proposed Project**	**2025 Horizon Year Alternative**	**Proposed Project**	**2025 Horizon Year Alternative**	**Proposed Project**	**2025 Horizon Year Alternative**	**Proposed Project**	**2025 Horizon Year Alternative**	**Proposed Project**	**2025 Horizon Year Alternative**
Project Emissions	**111**	**68**	**758**	**632**	-5,343	-4,025	78	63	**164**	130	43	34
SCAQMD Significance Threshold	55	55	55	55	550	550	150	150	150	150	55	55
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	No	No	No	No	**Yes**	No	No	No

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less

Source: *Air Quality Technical Report,* Table 5.3-3b, Environ 2014.

Biological Resources

Similar to the Proposed Project, the 2025 Horizon Year Alternative would not have any direct or indirect impacts on listed plant species or sensitive natural communities, nor would it interfere with the movement of migratory fish. As with the Proposed Project, bird strikes would not be a major concern for wildlife species. These issues are more fully discussed in Section 4.2, Biological Resources.

The greatest potential for impacts to biological resources would be associated with an increase in noise associated with increased flights. The 2025 Horizon Year Alternative would have the same number of commercial regulated ADD and MAP in Phases 1 and 2 as the Proposed Project. Therefore, the impacts would be the same. Unlike the Proposed Project, the 2025 Horizon Year Alternative does not propose a third phase; therefore, the incremental increase in noise associated with Phase 3 of the Proposed Project would not occur.

Table 7-4 provides a comparison of the acres of the Upper Newport Bay affected by noise levels greater than the 60 CNEL contour for the Proposed Project and the 2025 Horizon Year Alternative.

TABLE 7-4
ACREAGE OF UPPER NEWPORT BAY AFFECTED BY NOISE LEVELS GREATER THAN 60 COMMUNITY NOISE EQUIVALENT LEVEL CONTOUR COMPARISON OF PROPOSED PROJECT AND 2025 HORIZON YEAR ALTERNATIVE

	Proposed Project Acres in 60 dB CNEL Contour	2025 Horizon Year Alternative Acres in 60 dB CNEL Contour
Phase 1	237	237
Phase 2	259	259
Phase 3	274	Not Applicable

dB: decibel; CNEL: Community Noise Equivalent Level
Source: Acreages are based on the noise contours developed as part of the *Noise Analysis Technical Report,* Landrum & Brown 2014.

Based on this information, the increase in noise in Upper Newport Bay associated with the 2025 Horizon Year Alternative would not have substantial adverse effects on the habitats and wildlife species in Upper Newport Bay because this noise level has already been present in Newport Bay and wildlife have habituated to it. The slight increase in noise levels and the areas of Upper Newport Bay subject to these noise levels are below the noise levels evaluated under the original Settlement Agreement (EIR No. 508) and are less than the impacts analyzed in EIR 582 and Addendum EIR 582-1 for the 2003 Settlement Agreement Amendment, which were not found not to be significant.

As with the Proposed Project, the 2025 Horizon Year Alternative would not interfere with the Natural Community Conservation Plan/Habitat Conservation Plan ("NCCP/HCP") goals to establish the reserve system because it does not convert any of the Newport Bay Ecological

Reserve's sensitive habitats to other types of habitat or use. The indirect effects (e.g., incremental increase in noise) would not result in significant impacts to the NCCP/HCP because the additional area in Upper Newport Bay subject to noise is relatively small.

The 2025 Horizon Year Alternative would have less than significant impacts on biological resources. The impacts for the 2025 Horizon Year Alternative are reduced compared to the Proposed Project because it does not extend the Settlement Agreement through 2030. Neither the Proposed Project nor the 2025 Horizon Year Alternative would result in significant impacts on biological resources.

Greenhouse Gas Emissions

Similar to the Proposed Project, the 2025 Horizon Year Alternative would result in significant and unavoidable impacts by not achieving GHG reductions consistent with Assembly Bill ("AB") 32 goals. However, the impacts associated with the 2025 Horizon Year Alternative would be less severe than those of the Proposed Project, primarily because the aircraft and traffic GHG emissions generated by the 2025 Horizon Year Alternative would be less than the aircraft and traffic emissions generated by the Proposed Project, as shown in Table 7-5.

TABLE 7-5
GREENHOUSE GAS EMISSIONS COMPARISON
PROPOSED PROJECT AND 2025 HORIZON YEAR ALTERNATIVE

	GHG Emissions ($MTCO_2e$/year)	
	Proposed Project	**2025 Horizon Year Alternative**
Annual GHG Emissions	59,774	47,661

GHG: greenhouse gas; $MTCO_2e$/year: Metric tonnes carbon dioxide equivalent per year
Source: *Greenhouse Gas Technical Report,* Table 4.6-19, Environ 2014.

Hazards and Hazardous Materials

The 2025 Horizon Year Alternative would result in an increase in fueling activities commensurate with up to ten additional average daily noise-regulated passenger flights (i.e., ADDs), which would be served by JWA's commercial fuel farm. Therefore, this Alternative would continue to involve the routine transport and use of a hazardous material (jet fuel) at the Airport. The increased fueling activity would increase the statistical likelihood of a spill (i.e., upset and accident conditions) over the existing conditions. However, similar to the Proposed Project, the existing regulations and Best Management Practices would reduce the potential for impact to less than significant levels.

As discussed in Section 4.4, the fuel storage capacity was evaluated for the average day peak month ("ADPM"). As with the Proposed Project, to accommodate the passenger levels and number of ADD during the peak period associated with the 2025 Horizon Alternative, Phase 2, modifications to the current operations would be required. Fuel is currently delivered during the nighttime hours (i.e., between 11:30 PM and 5:30 AM). With this alternative, it is estimated that an average of two additional tanker truck deliveries of fuel would be required on a daily basis. Due to the requirements to allow fuel to settle prior to dispensing it to the aircraft, during the

peak month when the demand is greatest, fuel deliveries would need to start earlier in the evening (i.e., before 11:30 PM). This alternative would require fewer tanker truck deliveries than would be required with the Proposed Project, Phase 3, which would require an additional four tanker truck deliveries daily. However, for both the Proposed Project and the 2025 Horizon Year Alternative, this would be a minor modification to the operations and would not result in safety impacts or major disruptions to the Airport operations.

Both the Proposed Project and this alternative would have a less than significant impact related to handling of hazardous materials within ¼ mile of a school because the closest school, Mariner's Christian School, is located 0.27 mile from the fuel trucking route and 0.60 mile from the fuel storage tanks.

The Airport site is not included on a list of hazardous materials sites compiled pursuant to Section 65962.5 of the *California Government Code.* Therefore, there would be no impacts associated with this threshold. Additionally, as with the Proposed Project, this alternative would not conflict with the provisions of the Airport Environs Land Use Plan (AELUP) for JWA. No modifications are proposed to on-site or surrounding land uses as part of this alternative; therefore, it would not introduce obstructions or other urban encroachment that would affect operations at the Airport and would not result in safety hazard for the people residing or working in the area. Though the number of flights and passengers served would change compared to existing conditions, both the Proposed Project and this alternative assume the operational characteristics of the Airport would remain unchanged.

Land Use and Planning

The Land Use and Planning evaluation considers potential impacts to on-site facilities, impacts to off-site land uses, and planning policy consistency.

On-Site Facilities

As discussed in Section 4.5, the Proposed Project would not require new facilities at the Airport; however, starting in Phase 2, the Proposed Project would require that additional fuel deliveries be made in the late evening hours. Phase 3 of the Proposed Project would also require the implementation of the planned and programmed Parking Structure C improvements (anticipated to be completed by 2016). The 2025 Horizon Year Alternative would not exceed the capacity of any of on-site facilities; however, it would require that the fuel deliveries be initiated earlier and the third fuel tank be utilized. The 2025 Horizon Year Alternative would not have to rely on the completion of Parking Structure C to accommodate the projected number of automobiles associated with the 11.8 MAP. Table 7-6 identifies the capacity for the various on-site facilities and provides a comparison of the Proposed Project and the 2025 Horizon Year Alternative.

TABLE 7-6
ON-SITE FACILITIES CAPACITY COMPARISON FOR THE PROPOSED PROJECT AND 2025 HORIZON YEAR ALTERNATIVE

On-Site Facility	Threshold Used to Determine Impact	Proposed Project, Phase 3 Demand	2025 Horizon Year Alternative Demand
Remaining Overnight Spaces ("RON")			
- Commuter RON	5	0	0
- Air Carrier RON	33	26	24
Gate Capacity			
- Daily Departures Per Gate	9.1	7.6	7.1
- Enplanements Per Gate	306,000	282,500	300,000
Projected International Departures	16	11.8	13.8
Fuel Capacity (gallons per day)			
- Daily Working Capacity	254,000	280,000	265,000
- Additional Truck Deliveries	Not Applicable	4	2
General Aviation ("GA")	Displacement of GA facilities	No Displacement	No Displacement
Automobile Parking*			
- Existing Spaces	7,520 spaces	7,719	7,287
- With Structure C, Phase 2	8,763 spaces		

RON: remaining overnight; GA: general aviation

* The threshold assumes an impact when usage exceeds 90 percent of capacity. Currently, there are 8,356 spaces, with the construction of Parking Structure C, Phase 2 there will be 9,737 spaces. Construction on the parking structure is programmed to start in 2015, with improvements completed in 2016.

Source: *Capacity Analysis Technical Report,* Tables 2-3, 3-2, 3-5, 4-1, 5-3, AECOM 2014b; *Parking Adequacy for JWA With Increased MAP and Flights,* Table 1, Fehr & Peers 2014.

Off-Site Land Uses

When the full capacity allowed under the Proposed Project is realized (post-2025), an additional 76 additional residences would be included within the 65 CNEL contour, of which 34 are currently insulated and 44 are not insulated. With the 2025 Horizon Year Alternative, 62 additional residences would be included within the 65 CNEL contour, of which 23 are currently insulated and 39 are not insulated. No other noise-sensitive land uses (i.e., schools or places of worship) would be added to the 65 CNEL contour with either the Proposed Project or the 2025 Horizon Year Alternative.

Residences with outdoor living areas exposed to a greater than 65 CNEL would be incompatible with the County's exterior noise standard. There is no feasible mitigation for the exterior noise levels. Therefore, as the 65 CNEL contour expands beyond existing and includes additional residences, this would be a significant impact. When compared to the Proposed Project, the 2025 Horizon Year Alternative would result in a reduction of residences exposed to exterior noise levels in excess of 65 CNEL.

Indoor noise impact occurs when the interior noise level exceeds 45 CNEL in any habitable room of a residence. This is a potentially significant land use impact. As discussed above, and in Section

4.5, as the 65 CNEL expands beyond the existing contour and includes additional homes, interior noise levels will be evaluated and if interior noise levels are in excess of 45 decibels the Sound Insulation Program ("SIP") would be implemented to achieve interior noise levels consistent with County standards (see Mitigation Measure LU-1). However, as with the Proposed Project, the FAA criteria would apply. For those residences within the business park and those residences with a habitable room with noise levels in excess of 45 CNEL but the average noise levels in the habitable rooms is less than 45 CNEL, mitigation would not be feasible because a funding source would not be available; therefore, the impact would be significant and unavoidable.

Both the Proposed Project and the 2025 Horizon Year Alternative would be consistent with applicable land use plans and policies.

Noise

Similar to Proposed Project, Phases 1 and 2, the 2025 Horizon Year Alternative would not result in noise level increases of 1.0 CNEL or greater and there are no noise monitoring stations ("NMS") in Newport Beach where the noise level would be 75 CNEL or greater. Therefore, there would be no exceedance of the FAA, County of Orange, or City of Newport Beach thresholds for Proposed Project, Phases 1 and 2 or for the 2025 Horizon Year Alternative.

The Proposed Project, Phase 3, would result in a significant noise impact at NMS 2S when the City of Newport Beach Noise Standards are applied. There would be an increase of 1.0 CNEL at NMS 2S in the Santa Ana Heights community of Newport Beach where the forecasted noise level is 66.4 CNEL. Mitigation Measure LU-2 would reduce this impact to less than significant. The 2025 Horizon Year Alternative does not propose a third phase; therefore, the incremental increase in noise would not occur.

Similar to the Proposed Project, no roadways with existing adjacent noise-sensitive uses that are projected to experience a traffic noise level increase of 1.5 dB or greater would result with the 2025 Horizon Year Alternative. In Newport Beach, there are no roadways in the Project area with adjacent noise-sensitive uses with traffic volumes that could generate a noise level approaching 75 A-weighted decibels ("dBA") in a private yard area where the noise standards are applicable. There also are no roadways in Newport Beach with existing adjacent noise-sensitive uses that are projected to experience a traffic noise level increase of 1.0 dB or greater. Impacts would be less than significant for both the Proposed Project and the 2025 Horizon Year Alternative.

In summary, the 2025 Horizon Year Alternative would have less than significant impacts on noise. The impacts for the 2025 Horizon Year Alternative are reduced compared to the Proposed Project.

Public Services

Similar to the Proposed Project, the 2025 Horizon Year Alternative would not have any significant impacts to fire protection services. The existing fire facilities would be sufficient to respond to the need for fire protection services. Therefore, because the existing fire facilities would be able to accommodate the increase in demand, impacts to fire protection services would be less than significant for both the Proposed Project and the 2025 Horizon Year Alternative.

Similar to the Proposed Project, the 2025 Horizon Year Alternative would not have any significant impacts to police/security protection services. Because the Transportation Security Administration ("TSA"), U.S. Immigration and Customs Enforcement services, and Orange County Sheriff's Department would be able to accommodate the increase demand for police/security services without interference with established response times or require new facilities, impacts to police/security services would be less than significant for both the Proposed Project and the 2025 Horizon Year Alternative.

Transportation/Traffic

As part of the *Transportation Impact Analysis Report*, impacts to intersections and freeway/mainline segments in the study area were evaluated. Similar to the Proposed Project, the 2025 Horizon Year Alternative would result in a cumulative intersection impact at the Campus Drive/Bristol Street North intersection. However, this impact would be reduced to less than significant with mitigation. JWA has completed planning studies for this improvement and construction is expected to be completed by 2016. This improvement, is identified as Mitigation Measure T-3 in Section 4.8, would apply to the 2025 Horizon Year Alternative.

Similar to the Proposed Project, the 2025 Horizon Year Alternative would result in a cumulative freeway impact to the on-ramp from Interstate ("I") 405 northbound to the MacArthur Boulevard off-ramp during Phase 2. The impacts of the Proposed Project, Phase 3 would contribute more traffic to this deficient freeway on-ramp, whereas the 2025 Horizon Year Alternative does not propose a third phase. Therefore, the 2025 Horizon Year impacts at this location would be lessened compared to the Proposed Project, Phase 3. As indicated in Section 4.8, mitigation for freeway impacts is infeasible. Therefore, both the Proposed Project and the 2025 Horizon Year Alternative would contribute to cumulative freeway impacts that are significant and unavoidable.

Utilities and Service Systems

Impacts to utilities and service systems were identified as less than significant for both water and wastewater systems. As indicated in Section 4.9, the estimate in the 2005 "will serve" letter from the Orange County Sanitation District ("OCSD") indicated the use of water efficient facilities in the terminals would allow the resulting discharge for 10.8 MAP to be over 20 percent less than the anticipated volumes when the original terminal facilities were built. Using this estimate there is capacity to serve approximately 12.96 MAP (10.8 MAP plus 20 percent). Therefore, for wastewater, neither the Proposed Project nor the 2025 Horizon Year Alternative would result in a significant impact related to the wastewater conveyance facilities that serve JWA. Similarly, the Mesa Water District indicated they would have the capacity to serve the Proposed Project. Therefore, since the 2025 Horizon Year Alternative would have lower MAP levels, it is reasonable to assume there would be no impacts associated with this alternative.

Water Quality

Similar to the Proposed Project, the 2025 Horizon Year Alternative would result in an increase in passengers and commercial flights that would increase the potential for concentration of oils, grease, and total petroleum hydrocarbons in storm water and other runoff at JWA due to increased passenger jet emissions on runways and increased automobile traffic and associated emissions in parking lots. However, water quality Best Management Practices ("BMPs") are in place at JWA for petrochemical pollutants. It is anticipated that the BMPs in place to minimize

impacts to surface water quality would accommodate the increase in the concentration of petrochemicals within the existing runoff flows. Neither the Proposed Project nor the 2025 Horizon Year Alternative would increase the volume of runoff generated at JWA because there would be no physical modifications at the Airport. Therefore, both the Proposed Project and the 2025 Horizon Year Alternative would not violate water quality standards or waste discharge requirements; would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; and would not otherwise substantially degrade water quality. Impacts to water quality would be less than significant for both the Proposed Project and the 2025 Horizon Year Alternative.

7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the State CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, as is the case here, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the evaluation contained in this EIR, the 2025 Horizon Year Alternative would be the environmentally superior alternative because it would reduce the severity of the Proposed Project's impacts by serving fewer passengers and resulting in fewer automobile trips. However, this alternative would extend the benefits of the noise and access restrictions for a shorter duration (10 years, as compared to the Proposed Project's 15 years). As shown in Table 7-1, this alternative is only able to fully meet two of the Project objectives and partially meet the remaining three Project objectives. As part of the decision-making process, these environmental benefits must be weighed against the ability to meet the Project Objectives and other factors.

7.6 REFERENCES

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