3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The Project would be implemented at John Wayne Airport, Orange County ("JWA" or "the Airport") in an unincorporated area of Orange County. Although the Airport encompasses approximately 504 acres, the aviation activities at JWA are located on approximately 400 acres. The site is south of Interstate ("I") 405, north of State Route ("SR") 73, west of MacArthur Boulevard, and east of Red Hill Avenue. The Airport property, owned by the County of Orange, includes the airfield; the terminal; maintenance buildings; surface level and parking structures; the administrative building; property leased for aviation support uses; and a portion of the Newport Beach Golf Course. The Project area is surrounded by the cities of Newport Beach, Irvine, and Costa Mesa, as well as several unincorporated County islands. The regional location and local vicinity are provided on Exhibits 3-1 and 3-2, respectively.

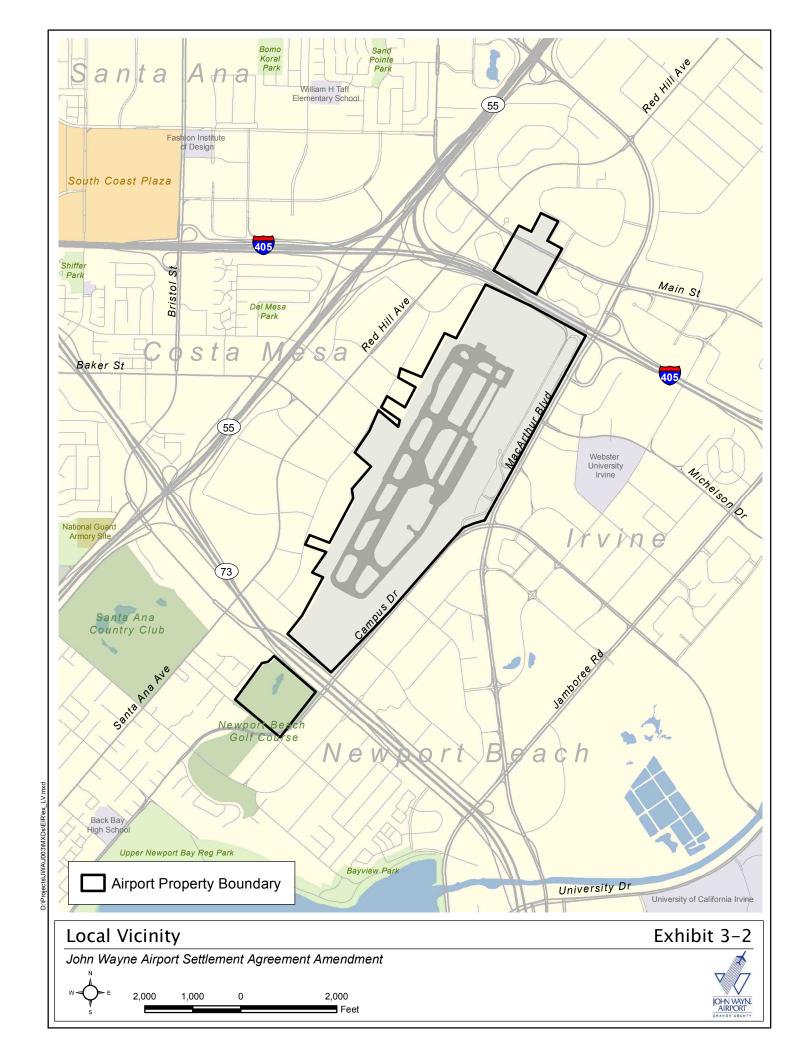
3.2 Purpose of the Project

As discussed in Section 2.3, Project History, the JWA Settlement Agreement and its amendments have played an important role in providing air service at JWA. Having the Settlement Agreement in place since 1985 has quieted the litigation and community discourse over the noise and traffic associated with commercial air service at JWA, which has been an issue since the 1970s. The Settlement Agreement establishes the operational parameters at the Airport that have safeguarded community concerns while allowing needed improvements and capacity increases to be implemented.

The Settlement Agreement is set to expire on December 31, 2015. Therefore, in order to ensure that the types of noise and access restrictions established by the 1985 Settlement Agreement remain grandfathered under the Airport Noise and Capacity Act of 1990 ("ANCA;" see 49 U.S.C. Section 47524(d)(3)-(4)), the Proposed Project contemplates an amendment to that 1985 Settlement Agreement (as amended) that does not further "reduce or limit aircraft operations or affect aircraft safety." (49 U.S.C. Section 47524(d)(4).) Consistent with the long-term implementation of the 1985 Settlement Agreement (as amended), the proposed extension of the Settlement Agreement would allow the community, the airlines, and the County to have a clear understanding of the noise and access restrictions that would govern the Airport's operations, and the resulting environmental effects into a defined future period of time.

In order to preserve the Settlement Agreement's existing "grandfathered" status from the limitations and requirements of ANCA, subsequent amendments to the Settlement Agreement have not reduced or limited aircraft operations or affect aircraft safety.





3.3 PROJECT OBJECTIVES

Recognizing the role the Settlement Agreement has played in providing a balance between aviation activities and community impacts associated with the operations, as part of the Memorandum of Understanding ("MOU") (further discussed below), 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 to 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.

3.4 LEAD AND RESPONSIBLE AGENCIES FOR THE PROJECT

As owner and operator of JWA, the County of Orange is the Lead Agency for the Project. The State California Environmental Quality Act ("CEQA") Guidelines, Section 15367, defines Lead Agency as follows:

"Lead Agency" means the public agency which has the principal responsibility for carrying out or approving a project. The Lead Agency will decide whether an EIR or Negative Declaration will be required for the project and will cause the document to be prepared.

As a signatory to the Settlement Agreement, the City of Newport Beach is a Responsible Agency. The CEQA Guidelines, Section 15381, defines Responsible Agency as follows:

"Responsible Agency" means 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.

The Lead Agency is responsible for the adequacy of its environmental documents and has broader authority to disapprove a project than does a Responsible Agency. However, as discussed in Section 2.2, Environmental Review Process, the County's approval of the Project would be contingent upon the City Council of Newport Beach and the governing boards of Stop Polluting Our Newport ("SPON") and Airport Working Group ("AWG") approving and executing the agreed upon amendment to the Settlement Agreement. The Newport Beach City Council will use the Final EIR as the CEQA compliance document for its decision.

As discussed later in this document, roadway improvements are recommended as mitigation for the Project. Implementation of these measures would require approval of other agencies (surrounding local jurisdictions and Caltrans); however, for this Project (the Settlement Agreement Amendment), these other agencies are not considered Responsible Agencies because they will not be taking action on the Settlement Agreement Amendment. These agencies will likely be Lead or Responsible Agencies for subsequent CEQA documents for implementation of any off-site improvements.

3.5 PROJECT DESCRIPTION

In an effort to balance the environmental, political, social, and economic demands and concerns regarding operations at JWA, operations at the Airport are subject to a number of operational regulations and restrictions that are contained in the Settlement Agreement. These restrictions include various limitations on the number of commercial airline operations; maximum single event noise levels applicable to both commercial and general aviation operations; and noise restrictions applicable to nighttime operations ("curfew"). These local proprietor restrictions were adopted prior to the passage of the ANCA and are expressly "grandfathered" from the limitations and requirements of ANCA under the terms of that statute and its implementing regulations. (49 U.S.C. Section 47524(d)(3)-(4).) Specifically, the legislation permitted the continued implementation of intergovernmental agreements that included airport noise or access restrictions in effect on November 5, 1990. (*Ibid.*)

As discussed above, the County of Orange, the City of Newport Beach, and two community groups (i.e., the AWG and SPON) entered into a Settlement Agreement that included limitations of the operations and facilities at JWA. The Project includes the possible modification of certain substantive provisions and an extension of the term of the Settlement Agreement for JWA.

Since early 2012, the County of Orange, the City of Newport Beach, AWG, and SPON have been discussing a second extension to the Settlement Agreement. The parties entered into an MOU that defines the "Proposed Project" and project alternatives to be analyzed pursuant to CEQA and provides general procedures and protocols that would be followed regarding the preparation of the Environmental Impact Report ("EIR"); however, it clearly states that the acceptance of the MOU is not intended as an approval of the Project. The County retains its "full discretion to adopt an alternative, impose mitigation measures, or disapprove the Project altogether once the requisite CEQA review is complete" (JWA 2013). The Orange County Board of Supervisors authorized execution of the MOU on April 16, 2013. The City of Newport Beach, AWG, and SPON all signed the MOU in April 2013.

In accordance with the MOU, this EIR addresses the impacts associated with the Proposed Project and three different alternatives (known as Alternatives A, B, and C), as well as the No Project Alternative, at a comparable level of detail. The alternatives vary in the details of various modifications to the substantive terms of the Settlement Agreement and in the extension of the curfew at JWA. The potential substantive modifications under these alternatives include possible modifications to the permitted number of "regulated" (presently, "Class A") Average Daily Departures ("ADDs"); and, modification of the existing limitations on the number of million annual passengers ("MAP"), among others.

Neither the Proposed Project nor the alternatives propose physical improvements to the JWA facilities. However, the Proposed Project and the alternatives, other than the No Project Alternative, would permit an increase in the number of loading bridges, though the timing of when this would be permitted varies. Since neither the Project nor any of the alternatives propose to construct additional loading bridges, the impacts are not evaluated in this EIR. (Note the impacts would vary depending on the number of additional loading bridges proposed.) Subsequent CEQA documentation would be required prior to any physical improvements, such as additional loading bridges.

Though no new facilities are proposed as part of the Project, the EIR does include an evaluation of the ability of the existing facilities to serve the various operational scenarios in Section 4.5, Land Use. That analysis finds that the level of service in certain areas of the Airport would decline under some operational scenarios; however, this does not mean that additional facilities would be required. Rather, passengers would experience an inconvenience associated with crowded facilities, such as longer lines.

A summary of the principal differences between the Proposed Project and MOU-identified alternatives is reflected in Table 3-1. A more detailed discussion of the Proposed Project and each of the alternatives is provided later in this section. Section 3.6 provides an explanation of the environmental baseline and approach to the evaluation of the phases for each scenario. The details on the assumptions for operations and passengers are also provided in Section 3.7, Assumptions. As evaluated in Sections 4.1 through 4.10 of this EIR, the Proposed Project and all of the alternatives would result in incremental increases in ancillary Airport operations, such as fuel delivery, to support the additional flights and passengers.

CEQA requires that an EIR identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), even if the alternative would impede, to some degree, the attainment of the project objectives. Therefore, in addition to the alternatives identified in the MOU, this EIR also considers one other alternative ("2025 Horizon Year Alternative") in Section 7, Alternatives, and provides a discussion on alternatives that were not carried forward for full evaluation. The "2025 Horizon Year Alternative" is similar to the Proposed Project, subject to the caveats that the proposed extension of the term length would be 10 years and the alternative would limit the number of million annual passengers to 11.8 (see Table 7-2 for additional information). This alternative has been developed to meet the requirements of CEQA.

TABLE 3-1 PRINCIPAL TERMS OF THE PROPOSED PROJECT AND ALTERNATIVES EVALUATED IN THE ENVIRONMENTAL IMPACT REPORT

Principal Restrictions	Proposed Project	Alternative A	Alternative B	Alternative C	No Project ^a
Term	Through December 31, 2030	Through December 31, 2030	Through December 31, 2030	Not Applicable	Not Applicable Settlement Agreement Expired
Curfew	Through December 31, 2035	Through December 31, 2035	Through December 31, 2035	Through December 31, 2020	Through December 31, 2020
Annual Passenger Lin	nit (MAP)				
Phase 1 January 1, 2016– December 31, 2020	10.8 MAP	10.8 MAP	10.8 MAP	16.9 MAP	10.8 MAP
Phase 2 January 1, 2021– December 31, 2025	11.8 MAP	11.4 MAP	13.0 MAP	16.9 MAP	10.8 MAP
Phase 3 January 1, 2026– December 31, 2030	12.2 or 12.5 MAPb	12.8 MAP	15.0 MAP	16.9 MAP	10.8 MAP
Passenger Flights (Cla	ss A ADDs for passe	nger service)			
Phase 1 January 1, 2016– December 31, 2020	85 Class A ADDs	107 Class A ADDs (+22)	100 Class A ADDs (+15)	228 Class A ADDs (+143)	85 Class A ADDs
Phase 2 January 1, 2021– December 31, 2025	95 Class A ADDs (+10)	120 Class A ADDs (+13)	110 Class A ADDs (+10)	228 Class A ADDs (+0)	85 Class A ADDs
Phase 3 January 1, 2026– December 31, 2030	95 Class A ADDs	135 Class A ADDs (+15)	115 Class A ADDs (+5)	228 Class A ADDs (+0)	85 Class A ADDs
Cargo Flights (Class A	ADDs for all-cargo	service)			
January 1, 2016 – December 31, 2030	4 Class A ADDs	4 Class A ADDs	4 Class A ADDs	4 Class A ADDs	4 Class A ADDs
Passenger Loading Br	idges				
January 1, 2016 – December 31, 2020	20	20	20	No Limit	20
January 1, 2021 – December 31, 2030	No Limit	No Limit	No Limit	No Limit	20

MAP: Million Annual Passengers; ADD: Average Daily Departures

Table Notes:

Alternative A was delineated based on information contained in the Federal Aviation Administration's Terminal Area Forecast Detail Report dated January 2013.

Alternative B was delineated based on input from JWA's commercial air service providers.

Alternative C was delineated based on the physical capacity of JWA's airfield.

- The No Project Alternative assumes the maximum number of allowable operations under the current Settlement Agreement (as amended in 2003) would remain unchanged and the protection of the curfew would remain in place through 2020; however, there would be no limitation on the Board of Supervisors to, at a subsequent time, modify or eliminate the curfew or increase the number of ADD and MAP being served at the Airport. The analysis in this EIR assumes the curfew would stay in place for the duration of the analysis period (i.e., December 31, 2030). Subsequent CEQA documentation would be required to amend the curfew or modify the Access Plan to allow an increase in the number of flights and/or passengers.
- ^b 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 calendar year during the January 1, 2021 through December 31, 2025 timeframe.

Source: PROPOSED PROJECT AND ALTERNATIVES: Proposed Extension of the John Wayne Airport Settlement Agreement, Proposed Project and Alternatives A-C, JWA 2013.

3.5.1 PROPOSED PROJECT

The Proposed Project would extend the term of the Settlement Agreement through December 31, 2030, and would require that there be no change to the curfew until December 31, 2035. The curfew, which has been in effect since 1969 and has been adopted by the Board of Supervisors as County Ordinance No. 3505, prohibits regularly scheduled commercial operations and general aviation operations that exceed the defined 86 decibel ("dB") Single Event Noise Equivalent Levels ("SENEL") at specified noise monitoring station locations from taking off between 10:00 PM and 7:00 AM (8:00 AM on Sundays) and landing between 11:00 PM and 7:00 AM (8:00 AM on Sundays). These local proprietor restrictions were adopted prior to the passage of the ANCA and were expressly "grandfathered" under the terms of that statute and its implementing regulations. This Proposed Project would gradually increase the number of regulated Class A commercial passenger flights and the number of passengers departing and arriving annually. Currently, the Airport serves 80 Class A ADDs and 9.2 MAP. The existing Settlement Agreement restrictions allow for 85 Class A ADDs and 10.8 MAP. The Proposed Project assumes the flight and passenger levels allowed under the Settlement Agreement would remain unchanged until January 1, 2021, at which point it would be allowed to increase to 95 Class A ADDs and 11.8 MAP. This is an increase of up to 10 ADDs and 1.0 million additional passengers annually compared to what is currently allowed under the Settlement Agreement.

On January 1, 2026, the number passengers using the Airport, though not the number of flights, would again be able to increase. The amount of the increase would depend upon the actual service levels in the preceding five years. If the number of passengers served in any one calendar year, between January 1, 2021 through December 31, 2025, is within 5 percent of 11.8 MAP (i.e., 11.21 MAP), then the annual passenger level will be permitted to increase to 12.5 MAP through December 31, 2030. If passenger levels do not reach 11.21 MAP in any one calendar year between January 1, 2021 through December 31, 2025, passenger levels will only be able to increase to 12.2 MAP through December 31, 2030. Regardless of the MAP level permitted, there would be no increase in regulated Class A passenger service ADDs. The analysis in the EIR assumes the 12.5 MAP and 95 ADDs in the 2026 through 2030 timeframe because this represents the maximum environmental impact.

JWA currently has 20 passenger loading bridges that allow the passengers to enplane and deplane directly from the terminal building. It should be noted that loading bridges are not equivalent to gates, which are defined as the number of access points from the terminal to the aircraft. For example, there are times when flights "hardstand" and the passengers enplane and deplane directly from the tarmac using portable stairs. When the aircraft is accessed in this fashion, the aircraft occupies a gate but does not utilize a loading bridge. Currently, the commuter flights use gates located at the ends of the terminal building.

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The Notice of Preparation ("NOP") identified that JWA currently served approximately 8.9 MAP. This estimate was developed using data for the first six months of 2013 and projecting the expected number of passengers to be served for the entire year. This estimate was then updated to 9.17 MAP as part of the *Aviation Forecasts Technical Report* (Appendix B) prepared for this project. The updated projection used actual passenger data through August as the basis for projecting passenger levels through the end of 2013. The 9.17 MAP was used throughout the EIR as the forecasted baseline data. The actual 2013 counts were 9.2 MAP.

With the Proposed Project, no additional passenger loading bridges would be allowed through December 31, 2020, at which time the restriction on the number of passenger loading bridges would be lifted. However, the Project is not proposing the construction of any additional gates or other new facilities. Should additional gates or modifications to any Airport facilities be proposed at a subsequent time, separate environmental documentation pursuant to CEQA would be required prior to expansion of Airport facilities (e.g., terminal expansion, additional parking structures, new passenger loading gates). Additionally, if the new facilities were to require modification to the airfield, Federal Aviation Administration ("FAA") and National Environmental Policy Act ("NEPA") approval would also be required.

The Proposed Project would not modify the number of ADDs allocated to air cargo service, which would remain at four ADDs through the term of the Settlement Agreement Amendment.

3.5.2 ALTERNATIVE A

Alternative A was developed based on information contained in the FAA's Terminal Area Forecast Detail Report dated January 2013.² Alternative A is the same as the Proposed Project with regards to expiration of the terms of the Settlement Agreement (December 31, 2030) and restrictions on modifications to the curfew (December 31, 2035). This Alternative would also maintain the restriction on the number of passenger loading bridges until December 31, 2020, at which point the limitation would be removed. Alternative A would also not modify the number of ADDs allocated to air cargo operations. Also, like the Proposed Project, separate environmental documentation pursuant to CEQA would be required prior to implementation of any expansion of Airport facilities.

Alternative A is different than the Proposed Project with regards to the number of regulated Class A passenger service ADDs and MAP served at the Airport. Alternative A would maintain the 10.8 MAP through December 31, 2020. However, effective January 1, 2016, the number of regulated Class A passenger service ADDs would be allowed to increase to 107 ADD (an increase of 22 ADD over what is currently allowed under the Settlement Agreement). The number of regulated ADDs and MAP would then be allowed to increase on January 1, 2021, to 120 regulated Class A passenger service ADDs (an increase of 13 ADD over the 2020 levels and 35 ADD compared to what is currently allowed under the Settlement Agreement). The permitted MAP levels would be allowed to increase to 11.4 MAP, which is 0.6 million additional passengers annually compared to what is currently allowed under the Settlement Agreement.

A final increase in MAP and regulated Class A passenger service ADDs would be permitted to occur after January 1, 2026. Through the end of the Settlement Agreement term (December 31, 2030), a total of 135 regulated Class A passenger service ADDs would be permitted and a total of 12.8 MAP would be allowed.

The Terminal Area Forecast is developed by the FAA's Office of Aviation Policy and Plans. These forecasts are used by the FAA to develop its programs and budget plans.

3.5.3 ALTERNATIVE B

Alternative B was developed based on input from JWA's commercial air service providers. As with Alternative A and the Proposed Project, Alternative B proposes to extend the term of the Settlement Agreement until December 31, 2030, and restrictions on modifications to the curfew would apply until December 31, 2035. This Alternative would also maintain the restriction on the number of passenger loading bridges until December 31, 2020, at which point the limitation would be removed. Alternative B would also not modify the number of ADD allocated to air cargo operations. Prior to the implementation of any expansion of Airport facilities, separate environmental documentation pursuant to CEQA would be required.

Alternative B is different with regards to the number of regulated Class A passenger service ADDs and MAP served at the Airport. Alternative B would also maintain the 10.8 MAP through December 31, 2020. However, effective January 1, 2016, the number of regulated Class A passenger service ADDs would be allowed to increase to 100 ADD (an increase of 15 ADD over what is currently allowed under the Settlement Agreement). The number of regulated ADDs and MAP would then be allowed to increase on January 1, 2021, to 110 regulated Class A passenger service ADDs (an increase of 10 ADD over the 2020 levels and 25 ADD compared to what is currently allowed under the Settlement Agreement). The permitted MAP levels would be allowed to increase to 13.0 MAP, which is a 2.2 MAP annual increase compared to what is currently allowed under the Settlement Agreement. A final increase in MAP and regulated Class A passenger service ADDs would be permitted to occur after January 1, 2026. Through the end of the term of the Settlement Agreement (December 31, 2030), a total of 115 regulated Class A passenger service ADDs would be permitted and a total of 15.0 MAP would be allowed.

3.5.4 ALTERNATIVE C

Alternative C reflects the physical capacity of the JWA airfield. Alternative C would not carry forward the restrictions on the number of regulated Class A passenger service ADDs and MAP served at the Airport. Rather, the passenger and flight levels would be dictated by airfield capacity. Under this alternative, as of January 1, 2016, there also would be no restrictions on the number of passenger loading bridges.

Alternative C does propose to maintain the current curfew until December 31, 2020, at which point the County could modify the General Aviation Noise Ordinance ("GANO", Ordinance 3505). This Alternative does not propose the modification of the GANO at this time. However, to ensure that the full impacts associated with Alternative C are addressed in this EIR assumptions have been made on flight activity with the modification of the GANO. Based on other airports that operate without a curfew and have similar operations and geographic conditions as JWA (i.e., a regional airport near a large hub airport and without major cargo operations), assumptions were made on the flight distributions. It was determined that, without the curfew, a reasonable assumption would be 75 percent day operations (7:00 AM to 7:00 PM), 14 percent evening operations (7:00 PM to 10:00 PM), and 11 percent night operations (10:00 PM to 7:00 AM). The bulk of the night operations would be between the hours of 6:00 AM and 7:00 AM due to the congestion during the 7:00 AM peak hour. There would be some operations after 10:00 PM as well, but most likely concentrated between 10:00 PM and 11:00 PM. This is discussed further in the John Wayne Airport Environmental Impact Report Aviation Forecasts Technical Report and the John Wayne Airport Environmental Impact Report Noise Analysis Technical Report, Appendices B and C, respectively. Should the County desire to modify the GANO after December 31, 2020, it

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would be considered a project pursuant to CEQA, and separate environmental documentation would be required to address the potential impacts associated with that action.

With Alternative C, the increase in flights and passenger levels would be permitted starting on January 1, 2016, and would remain the same throughout the entire study period (through 2030). Based on the current airfield capacity, this alternative would allow 228 regulated Class A passenger service ADDs, an increase of 143 regulated Class A passenger service ADDs over what is currently allowed under the Settlement Agreement. It is expected that this flight level would serve approximately 16.9 MAP, which is 6.1 MAP more than what is currently permitted under the Settlement Agreement. The differences in impacts associated with Phase 1 (2016-2020), and Phases 2 (2021-2025) and 3 (2026-2030) are attributable to the loss of the curfew after December 31, 2020.

3.5.5 NO PROJECT ALTERNATIVE

CEQA requires that the definition of the No Project Alternative include the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project was not approved. Specifically, Section 15126.6(e)(3)(A) of the State CEQA Guidelines addresses the definition of the No Project Alternative for land use or regulatory plans. It states:

When a project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

Based on this guidance, this EIR assumes that no action would be taken by the County under the No Project Alternative, and the Settlement Agreement would be allowed to expire on December 31, 2015. The No Project Alternative also assumes the continuation of the provisions in the Settlement Agreement, as currently amended. Specifically, this alternative assumes there would be 85 regulated Class A passenger service ADDs and 10.8 MAP throughout the study period (i.e., beginning on January 1, 2016 and extending through December 31, 2030). This represents an increase of approximately 1.6 MAP and 5 noise-regulated ADD over 2013 activities. With the No Project Alternative, there would be no change to the curfew; the number of ADD provided for air cargo operations; or the number of passenger loading bridges at the terminal.

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The No Project Alternative assumes an increase of approximately 1.6 MAP over the actual passenger 2013 counts of 9.2 MAP. However, the technical studies for this EIR projected 9.17 MAP in 2013 based on passenger data through August. Therefore, the analysis of the No Project Alternative would result in a 1.63 MAP increase compared to the 2013 baseline assumed in the EIR.

⁴ It should be noted that this level of passenger and air cargo service is greater than current operations but is permitted under the Settlement Agreement (as amended in 2003).

Under the No Project Alternative, although the assumption is made that operations at JWA would remain unchanged, upon expiration of the Settlement Agreement, the normal legislative discretion of the Board, as the owner and operator of JWA, to consider possible expansion of facilities or operations at JWA would, once again, be unconstrained by any judicial order. Therefore, the Board would be able to consider increasing the permitted levels of commercial operations. The Board would also be able to consider elimination of other restrictions on JWA operations including, but not limited to, the preexisting nighttime flight restrictions (curfew) independent of the City of Newport Beach, SPON, and AWG. But none of those things would happen automatically without further express action of the Board. Any of those actions would be "projects" within the meaning of CEQA and would require CEQA (and perhaps NEPA) compliance before they could be approved and implemented.

With expiration of the 1985 Settlement Agreement (as amended) under the No Project Alternative, and irrespective of whether the County exercises it discretion to modify JWA's existing noise and access restrictions (e.g., curfew and Class A ADD limitations), other interested parties – such as the FAA and commercial air carriers – may argue that the restrictions violate ANCA and take action against the County seeking to eliminate the restrictions. (See 49 U.S.C. Section 47254(d)(3) [restrictions are exempt from ANCA to the extent an intergovernmental agreement is in place].)

3.6 Environmental Baseline and Evaluation of Interim and Horizon Years

3.6.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT BASELINE

For purposes of this EIR, the County has measured the Project's potential environmental impacts against the required CEQA baseline, which is the "existing condition" at the time the Notice of Preparation ("NOP") for this EIR was prepared. The NOP was circulated in October 2013. As previously indicated, the NOP identified that JWA currently served approximately 8.9 MAP. This estimate was developed using actual passenger data for the first six months of 2013 and projecting the expected number of passengers to be served for the entire year. This estimate was then updated to 9.17 MAP as part of the *Aviation Forecasts Technical Report* (Appendix B) prepared for this project. The updated projection used actual passenger data through August as the basis for projecting passenger levels through the end of 2013. The 9.17 MAP level was used throughout the EIR to establish the existing conditions baseline. The actual 2013 passenger counts were slightly higher at 9.2 MAP.

3.6.2 PHASES

The Proposed Project and Alternatives A through C have three distinct phases. Each phase has corresponding Principal Restrictions, such as the term of the amendment, curfew, annual passenger (i.e., MAP) limit and maximum number of Class A ADDs for passenger and cargo service, along with the number of passenger loading bridges permitted (see Table 3-1). Unique phases are referenced throughout the EIR by the phase number noted in Table 3-1. For example, when referencing Proposed Project Phase 2, reference is being made to the January 1, 2021 to December 31, 2025 time frame of the Proposed Project.

In all cases, it is assumed that the Principal Restriction maximum limits for each phase, defined in Table 3-1 are reached in the first year of the phase.⁵ By assuming the maximum limit is reach in the first year, the EIR addresses the maximum environmental impact for each phase. For the No Project Alternative, it is assumed that the maximum limits are reached at the beginning of Phase 1 (January 1, 2016) and remain constant throughout the 2030 horizon year.

To ensure the EIR evaluates the full range of impacts, an impact analysis has been conducted for each of the interim phases when flight or passenger levels are proposed to change (i.e., 2016, 2021, and 2026 through 2030), unless otherwise noted in the Section 4 topical sections. There are certain topics, such as the policy analysis in Section 4.2, Biological Resources, where the phasing would not discernibly change the impacts; therefore, the analysis is not presented by phase.

The analysis of the Project's environmental effects on each phase provided in Section 4 of this EIR is organized by specific impact category (e.g., noise, air quality). In each category, the EIR provides an analysis measuring the Proposed Project and alternatives against the "existing conditions" baseline. The analysis of each alternative in Section 4 of this EIR is done at a comparable level of detail.

3.7 AVIATION ANALYSES ASSUMPTIONS

With the exception of the No Project Alternative, all the scenarios considered in this EIR assume an increase in the number of permitted Class A ADDs and maximum number of passengers served at JWA as compared to the existing Settlement Agreement parameters. To conduct the analysis for this EIR, assumptions needed to be made regarding the fleet mix (types of aircraft) that would be used for the additional flights; the distribution of the increased flights throughout the day; and the load factors (the number of passengers compared to the number of seats on the aircraft). This information is discussed in more detail in Appendix B, *Aviation Forecasts Technical Report*. The forecasts utilized in the EIR are based on:

- An analysis of historical trends in aviation activity at the Airport.
- Parameters such as passenger load factors and average aircraft seating capacity.

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To ensure the maximum environmental impact scenario was evaluated for Phase 3 of the Proposed Project, the maximum MAP level of 12.5 has been evaluated throughout the EIR. Should the required trigger not be achieved (i.e., air carriers must be within 5 percent of 11.8 MAP, which is 11.21 MAP, in any one year during the January 1, 2021 through December 31, 2025 time frame), the lower MAP level of 12.2 MAP would apply, which would have less impacts.

- The assumption that the maximum number of commuter passengers (500,000) is used first in all scenarios, with the exception of Alternative C (all Phases).⁶
- The assumption that all of the allowed Class A ADDs will be used in each scenario.

Rather than distribute the allocated flights and passenger levels evenly throughout the year, the analyses developed forecasts for the Average Day Peak Month ("ADPM") for each phase of the Proposed Project and alternatives. This is an established and accepted forecast protocol and allows the EIR to evaluate a reasonable, but maximum environmental impact scenario. Based on historic trends, August is typically the peak month for JWA passengers. (*Aviation Forecasts Technical Report*, Table 3-3, AECOM 2014a, provided in Appendix B.)

3.7.1 PASSENGER PROJECTIONS

Over the past 10 years, peak month passengers have ranged from 9.2 to 9.9 percent of the annual total and have averaged 9.4 percent of annual passengers. Due to the markets served by the Airport and the historical data, it is anticipated that this will be similar in future years. Therefore, 9.4 percent of annual passengers have been assumed in the ADPM analyses for the Proposed Project and each of the alternatives. Hourly demands for the ADPM were developed by reviewing historical hourly demands during the peak month and the assumed aircraft fleet mix and load factors. To determine average day passengers, the peak month total passengers were divided by 31 (as there are 31 days in August).

Table 3-2 presents ADPM passenger data for the Proposed Project, Alternatives A, B and C, and the No Project Alternative during each of the three phases. The 2013 data is provided for comparison.

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The Phase 2 Commercial Airline Access Plan and Regulation, which allocates Regular ADDs and Seat Capacity for Commercial Air Carriers, reserves a capacity of 500,000 annual passengers of the total MAP limitation for priority distribution to Qualified Commuter Carriers. Any unused capacity by Commuter Carriers may be allocated as supplemental capacity under the provisions of the Access Plan. A commuter air carrier is any entity which operates regularly scheduled air service into and out of JWA for the purpose of carrying passengers, freight, cargo, or for any other commercial purpose; that using Class E aircraft regularly configured with not more than 70 passenger seats; and a gross takeoff weights of not more than 90,000 pounds.

TABLE 3-2 FORECAST OF AVERAGE DAY PEAK MONTH PASSENGERS

				Forecast		
Airport Activity	Baseline (2013)	Proposed Project	Alternative A	Alternative B	Alternative C	No Project
Phase 1						
Million Annual Passengers	9.17	10.8	10.8	10.8	16.9	10.8
Peak Month Passengers	850,988	1,015,000	1,015,000	1,015,000	1,589,000	1,015,000
Percent Annual Passengers in the Peak Month	9.3%	9.4%	9.4%	9.4%	9.4%	9.4%
Average Day Peak Month Passengers	27,451	32,742	32,742	32,742	51,258	32,742
Phase 2						
Million Annual Passengers	9.17	11.8	11.4	13.0	16.9	10.8
Peak Month Passengers	850,988	1,109,000	1,072,000	1,222,000	1,589,000	1,015,000
Percent Annual Passengers in the Peak Month	9.3%	9.4%	9.4%	9.4%	9.4%	9.4%
Average Day Peak Month Passengers	27,451	35,774	34,581	39,419	51,258	32,742
Phase 3						
Million Annual Passengers	9.17	12.5	12.8	15.0	16.9	10.8
Peak Month Passengers	850,988	1,175,000	1,203,000	1,410,000	1,589,000	1,015,000
Percent Annual Passengers in the Peak Month	9.3%	9.4%	9.4%	9.4%	9.4%	9.4%
Average Day Peak Month Passengers	27,451	37,903	38,806	45,484	51,258	32,742

^{*} The Notice of Preparation ("NOP") identified that JWA currently served approximately 8.9 MAP. This estimate used actual passenger data for the first six months of 2013 and projected the expected number of passengers to be served for the entire year. This estimate was updated to approximately 9.17 MAP as part of the *Aviation Forecasts Technical Report* (Appendix B) prepared for this project. The updated projection used actual passenger data through August as the basis for projecting passenger levels through the end of 2013. The actual 2013 passenger counts were 9.2 MAP.

International service at JWA began in 2010 and currently four destinations in Canada and Mexico are being served. It is anticipated that there will be a continued demand for service to these markets, with a potential for increases through additional destinations or increases in daily flights to current destinations. As international flights at JWA represent an emerging market, it is expected that international passenger traffic will continue to grow rapidly in Phase 1, begin to slow in Phase 2 and stabilize in Phase 3. Projected international passengers are found in Table 3-3.

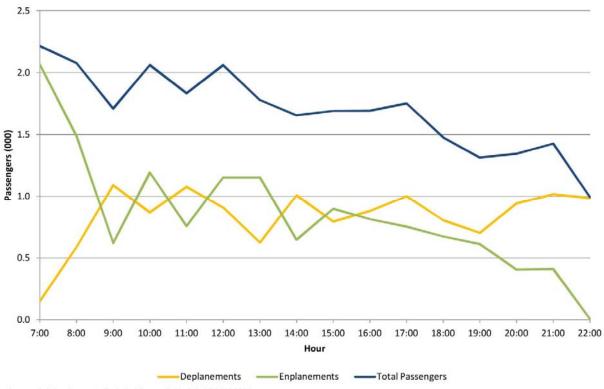
TABLE 3-3 FORECAST OF INTERNATIONAL PASSENGERS

	Baseline (2013)	Proposed Project	Alternative A	Alternative B	Alternative C	No Project
Phase 1		,				,
MAP	9.17	10.8	10.8	10.8	16.9	10.8
International	412,000	756,000	756,000	756,000	1,183,000	756,000
Domestic	8,756,000	10,044,000	10,044,000	10,044,000	15,717,000	10,044,000
Phase 2						
MAP	9.17	11.8	11.4	13	16.9	10.8
International	412,000	1,062,000	1,026,000	1,170,000	1,521,000	756,000
Domestic	8,756,000	10,738,000	10,374,000	11,830,000	15,379,000	10,044,000
Phase 3						
MAP	9.17	12.5	12.8	15	16.9	10.8
International	412,000	1,250,000	1,280,000	1,500,000	1,690,000	756,000
Domestic	8,756,000	11,250,000	11,520,000	13,500,000	15,210,000	10,044,000
Source: Aviation For	recasts Technical Rep	oort, Tables 3-2 and	d 3-7, AECOM 2014a	а.		

HOURLY DISTRIBUTION OF PASSENGERS

Hourly enplaning (departing) and deplaning (arriving) passengers were identified for the 2013 peak month (August). As shown in Exhibit 3-3, passenger enplanements peak in the morning in the 7:00 AM hour at approximately 2,100 enplanements. There are smaller peaks in the 10:00 AM hour and the noon hour. After 1:00 PM, enplanements generally decrease at the Airport. Deplanements peak in the 9:00 AM, 11:00 AM, and 10:00 PM hours, but are largely consistent from about 9:00 AM through the 10:00 PM hour. Hourly passenger volumes are related to operations; the 7:00 AM hour experiences the largest number of operations and thus the highest number of passengers. The 10:00 PM hour experiences the lowest number of passengers.

EXHIBIT 3-3 ADPM HOURLY PASSENGER ENPLANEMENTS AND DEPLANEMENTS, AUGUST 2013 BASELINE

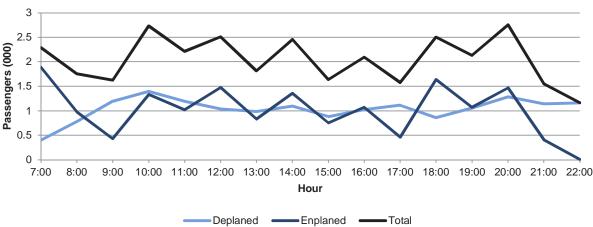


These peaking characteristics have been consistent at JWA for more than ten years and are expected to continue throughout the Proposed Project's horizon year (through December 31, 2030). However, the Proposed Project and Alternatives A and B reflect increased commuter operations than have been seen in recent years. Commuter flights tend to peak mid-morning and late evening. Due to the number of ADDs included in Alternative C, no commuter operations or passengers are assumed. Peak hour information is tabulated in Table 3-4. Hourly passengers for the ADPM are illustrated for the Proposed Project and each alternative in Exhibit 3-4 through Exhibit 3-8.

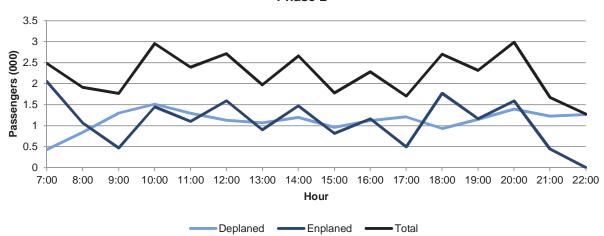
The Access Plan reserves an allocation of 500,000 annual passengers for commuter flights. If the demand for commuter flights is less than this amount, the passenger allocation is redistributed to the commercial airlines.

TABLE 3-4 PEAK HOUR ENPLANED, DEPLANED, AND TOTAL PASSENGERS FOR THE PROPOSED PROJECT, ALTERNATIVES A, B, AND C, AND NO PROJECT ALTERNATIVE

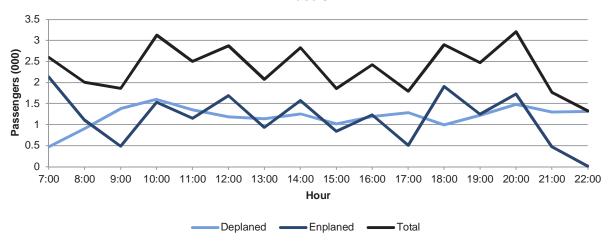
Dhaga	Baseline	Proposed	Alternative	Alternative	Alternative	No Duois et					
Phase	(2013)	Project	A	В	С	No Project					
Phase 1	(D. 1										
Peak Hour for Arriving Pas			1 100	1 100	0.000	1 100					
Number of Passengers	1,100	1,400	1,400	1,400	2,200	1,400					
Peak Hour(s)	9:00 and 11:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 PM	10:00 AM					
Peak Hour for Departing Passengers (Enplaning)											
Number of Passengers	2,100	1,900	2,000	2,000	3,600	1,900					
Peak Hour(s)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM					
Total Peak Hour Passenger	s (Deplaning an	d Enplaning)									
Number of Passengers	2,200	2,800	2,700	2,700	4,100	2,800					
Peak Hour(s)	7:00 AM	8:00 PM	10:00 AM	10:00 AM and 8:00 PM	7:00 AM	8:00 PM					
Phase 2											
Peak Hour for Arriving Pas	sengers (Deplar	ning)									
Number of Passengers	1,100	1,500	1,500	1,700	2,100	1,400					
Peak Hour(s)	9:00 and 11:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 and 11:00 AM	10:00 AM					
Peak Hour for Departing Po	assengers (Enpl	aning)									
Number of Passengers	2,100	2,000	2,200	2,300	3,100	1,900					
Peak Hour(s)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM					
Total Peak Hour Passenger	rs (Deplaning an	nd Enplaning)									
Number of Passengers	2,200	3,000	2,900	3,300	4,000	2,800					
Peak Hour(s)	7:00 AM	10:00 AM and 8:00 PM	10:00 AM	8:00 PM	10:00 AM	8:00 PM					
Phase 3											
Peak Hour for Arriving Pas	sengers (Deplar	ning)									
Number of Passengers	1,100	1,600	1,600	1,900	2,100	1,400					
Peak Hour(s)	9:00 and 11:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 and 11:00 AM	10:00 AM					
Peak Hour for Departing P	assengers (Enpl	aning)									
Number of Passengers	2,100	2,100	2,500	2,600	3,100	1,900					
Peak Hour(s)	7:00 AM	7:00	7:00	7:00	7:00	7:00					
Total Peak Hour Passenger	l	nd Enplaning)									
Number of Passengers	2,200	3,200	3,200	3,800	4,000	2,800					
Peak Hour(s)	7:00 AM	8:00 PM	10:00 AM	8:00 PM	10:00 AM	8:00 PM					
Source: Aviation Forecasts To					<u> </u>						
		,									



Phase 2



Phase 3

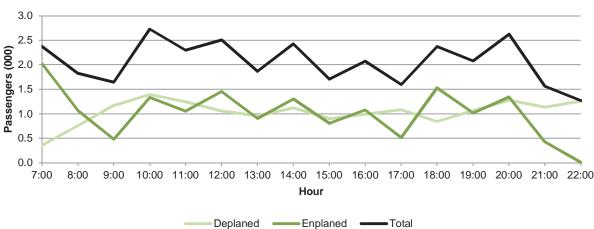


Source: Aviation Forecasts Technical Report, AECOM 2014a

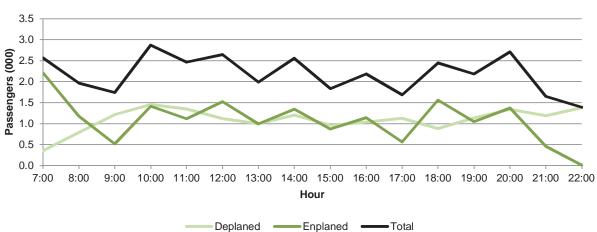
Average Daily Peak Month Hourly Passengers – Proposed Project

Exhibit 3-4

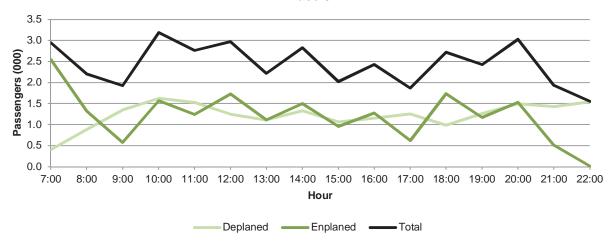




Phase 2



Phase 3

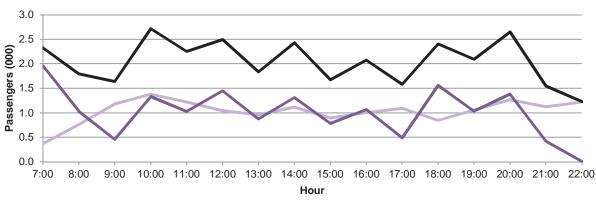


Source: Aviation Forecasts Technical Report, AECOM 2014a

Average Daily Peak Month Hourly Passengers – Alternative A

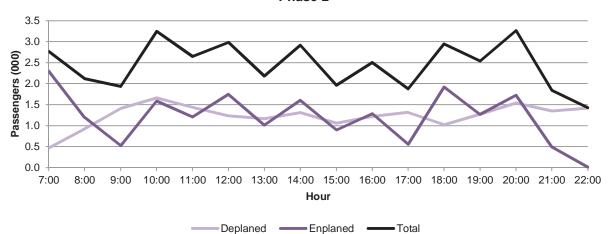
Exhibit 3-5



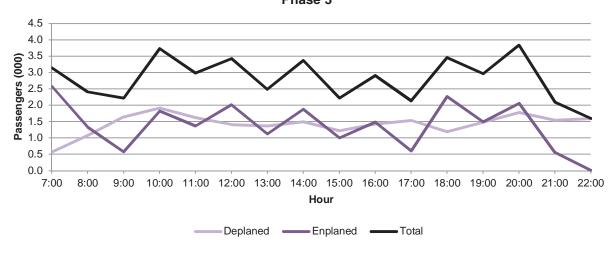


——Deplaned ——Enplaned ——Total

Phase 2



Phase 3

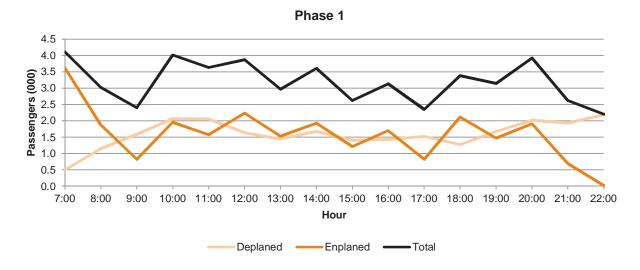


Source: Aviation Forecasts Technical Report, AECOM 2014a

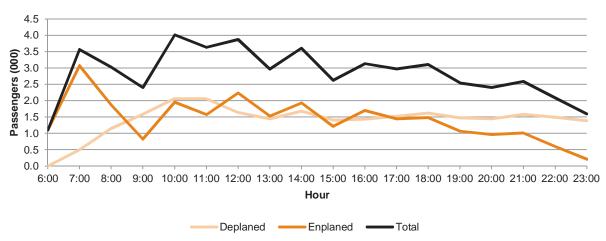
Average Daily Peak Month Hourly Passengers – Alternative B

Exhibit 3-6





Phases 2 and 3

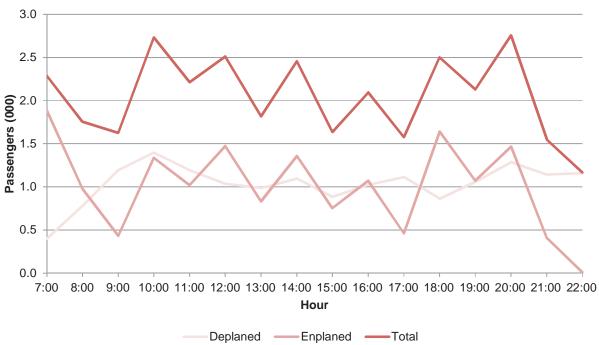


Source: Aviation Forecasts Technical Report, AECOM 2014a

Average Daily Peak Month Hourly Passengers – Alternative C

Exhibit 3-7





Average Daily Peak Month Hourly Passengers -No Project Alternative

Exhibit 3-8



3.7.2 OPERATION ASSUMPTIONS

Aircraft operations are categorized by the FAA as air carrier (passenger and all-cargo operations), commuter and air taxi, general aviation, and military. Air carrier operations have fluctuated within a 10,000 operation range (approximately) since 2003, with the low experienced in 2011 (82,425 operations) and the high experienced in 2007 (92,601 operations). It should be noted that estimated 2013 passenger levels of 9.17 MAP⁸ is very close to the 2004 level of 9.27 MAP; yet, due to increased load factors and fleet mix size, operations are over 4,000 flights less in 2013 than in 2004.

Commuter operations have significantly declined at the Airport, with most operations noted as commuter and air taxi being air taxi operations. General aviation operations have also experienced a significant decline since 2003. Military operations have increased in recent years, but represent less than 0.3 percent of all operations. (*Aviation Forecasts Technical Report*, Table 4-1, AECOM 2014a, provided in Appendix B.)

LOAD FACTOR

The load factor is based on a ratio of the number of passengers to the seats available on the plane (i.e., how full the flights are). Based on an analysis of the operations at JWA over the past five years (2008 to 2013), a trend was identified in which airlines started to "right size" equipment to routes, sometimes varying equipment for the same route during the week depending upon demand levels, which results in higher load factors. As such, load factors at JWA are at the highest they have been over the last decade.

Load factors applied to the forecasts are based on 2013 data, which are reflected in Table 3-5. These load factors take into account different load factors by airline and aircraft type. Load factors, with the exception of Alternative C, are assumed to remain constant. For Alternative C, load factors are assumed to decrease as airlines fill all available Class A ADDs. More detailed information is provided in Appendix B.

This estimated 2013 passenger level used in the technical studies is 9.17 MAP. This projection was developed using actual passenger data through August as the basis for projecting passenger levels through the end of 2013. The actual 2013 counts were 9.2 MAP.

TABLE 3-5 LOAD FACTORS BY AIRCRAFT, 2013

Aircraft	Load Factor
Clas	s A
A318	93.7%
A319	86.2%
A320	80.8%
A321	80.1%
B737-300	72.6%
B737-400	89.0%
B737-700	78.7%
B737-800	86.3%
B757	85.7%
CRJ900	66.4%
Clas	s E
B737-700	72.6%
B737-800	72.6%
CL60	87.2%
CRJ2	87.2%
CRJ700	87.2%
CRJ900	84.7%
E120	87.2%
Source: Aviation Forecasts 7 2, AECOM 2014a.	echnical Report, Table 4-

COMMERCIAL PASSENGER OPERATIONS FORECAST

Table 3-1 identifies the total number of Class A ADDs permitted for the Proposed Project and the alternatives. However, in addition to the regulated Class A ADDs, Class E (exempt) flights would also be flown. To accommodate the proposed MAP levels, each phase of the Proposed Project, three alternatives, and No Project Alternative assume the maximum number of Class A ADDs is used first. Once all Class A flights are utilized, passengers are then allocated to commuter flights, up to a maximum of 500,000 commuter passengers. The remaining passengers are then assigned to air carrier flights in Class E ADDs. Table 3-6 provides a simplified comparison of the total number of commercial passenger flights (Class A and Class E) for the Proposed Project and alternatives.

TABLE 3-6 COMMERCIAL PASSENGER OPERATIONS FORECAST SUMMARY FOR THE PROPOSED PROJECT AND ALTERNATIVES BY PHASE

	Proposed Project		Alternative A		Alternative B			Al	ternativ	e C	No		
	1	2	3	1	2	3	1	2	3	1	2	3	Project
MAP	10.8	11.8	12.5	10.8	11.4	12.8	10.8	13	15	16.9	16.9	16.9	10.8
Average Dai	Average Daily Departures												
Class A	85.0	95.0	95.0	107.0	120.0	135.0	100.0	110.0	115.0	228.0	228.0	228.0	85.0
Class E	60.8	63.0	72.8	34.9	28.1	30.0	43.2	62.2	84.2	0.0	0.0	0.0	60.8
Total	145.8	158.0	167.8	141.9	148.1	165.0	143.2	172.2	199.2	228.0	228.0	228.0	145.8
Source: Noise	Source: Noise Analysis Technical Report, Table 19, Landrum and Brown 2014.												

The forecasted mix of commercial aircraft departures assumes the same aircraft types operating at the Airport today will continue to operate at the Airport. The fleet mix was adjusted to utilize Class A ADDs in the Proposed Project and the four alternatives first, with the remaining operations being Class E aircraft. This results in a slight change in fleet mix for each phase of the Proposed Project and alternatives. Fleet mix assumptions are presented in Table 3-7 through Table 3-9.

Given the Proposed Project's term length (through 2030), it is likely that there will be some fleet turnover at the Airport through the commercial airlines' purchase and utilization of newer, next generation aircraft. These newer aircraft likely would generate less noise and air pollutants as compared to the current fleet at JWA (AECOM 2014b). However, the timing of changes to the fleet mix cannot be known at this time and CEQA does not allow speculation. In order to be conservative, the environmental analysis presented in this EIR assumes the Project would maintain the Airport's existing fleet mix, thereby likely presenting a maximum environmental impact assessment of noise, air quality, and greenhouse gas impacts. (*Capacity Analysis Technical Report*, in the section titled: Aircraft in Development that Will Replace Aircraft Currently Operating at John Wayne Airport, AECOM 2014b, Appendix F,)

The next generation of aircraft at the Airport may not require any modifications to the existing facilities and could be incorporated into the fleet mix once the commercial airlines demonstrate that these aircraft meet the requirements of a Class A aircraft, as defined in the Phase 2 Access Plan. However, it also is possible that some newer aircraft would require facilities modifications. At this point in time, it is not known what, if any, facilities modifications would need to be undertaken as no specific aircraft have been identified for introduction at the Airport. Any changes to the facilities needed for the Airport to service the next generation of aircraft would require subsequent CEQA documentation subject to County evaluation.

TABLE 3-7
MIX OF COMMERCIAL AIRCRAFT IN THE AVERAGE DAY PEAK MONTH
ADPM BY AIRCRAFT TYPE, PHASE 1 (JANUARY 1, 2016)

Type of Service			osed oject	Altern	ative A	Altern	ative B	Altern	ative C	No P	roject
and Aircraft Type	Typical Number of Seats	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%
Air Carrier	Passenger	Service									
A318	120	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
A319	127	15	11.3%	19	14.7%	18	13.8%	43	18.8%	15	11.3%
A320	142	11	8.3%	13	10.1%	12	9.2%	30	13.1%	11	8.3%
A321	187	1	0.8%	1	0.8%	1	0.8%	3	1.3%	1	0.8%
B737-300	137	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
B737-400	144	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
B737-700	137	78	58.6%	65	50.4%	69	53.1%	94	41.0%	78	58.6%
B737-800	153	17	12.8%	21	16.3%	20	15.4%	44	19.2%	17	12.8%
B757	183	5	3.8%	6	4.7%	5	3.8%	13	5.7%	5	3.8%
CRJ900	80	6	4.5%	4	3.1%	5	3.8%	2	0.9%	6	4.5%
Subtotal		133	100.0%	129	100.0%	130	100.0%	229	100.0%	133	100.0%
Average Aircraft Size (Seats)		138		139		139		142		138	
Commuter	Passenger	Service									
CRJ700	66	12	100.0%	12	100.0%	12	100.0%	0	N/A	12	100.0%
Subtotal		12	100.0%	12	100.0%	12	100.0%	0	N/A	12	100.0%
Average Aircraft Size (Seats)		66		66		66		N/A		66	
A300	N/A	2	55.2%	2	55.2%	2	55.2%	2	55.2%	2	55.2%
A310	N/A	0	0.3%	0	0.3%	0	0.3%	0	0.3%	0	0.3%
B757	N/A	2	44.5%	2	44.5%	2	44.5%	2	44.5%	2	44.5%
Subtotal		4		4		4		4		4	
Total Comn Departures		149		145		146		233		149	
ADPM= Ave											

TABLE 3-8
MIX OF COMMERCIAL AIRCRAFT IN THE AVERAGE DAY PEAK MONTH
ADPM BY AIRCRAFT TYPE, PHASE 2 (JANUARY 1, 2021)

Type of Service			osed oject	Altern	ative A	Altern	ative B	Altern	ative C	No P	roject
and Aircraft Type	Typical Number of Seats	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%
Air Carrier	Passenger	Service									
A318	120	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
A319	127	17	11.7%	23	17.0%	20	12.6%	43	18.8%	15	11.3%
A320	142	12	8.3%	15	11.1%	14	8.8%	30	13.1%	11	8.3%
A321	187	1	0.7%	1	0.7%	1	0.6%	3	1.3%	1	0.8%
B737-300	137	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
B737-400	144	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
B737-700	137	84	57.9%	63	46.7%	90	56.6%	94	41.0%	78	58.6%
B737-800	153	19	13.1%	24	17.8%	21	13.2%	44	19.2%	17	12.8%
B757	183	5	3.4%	6	4.4%	6	3.8%	13	5.7%	5	3.8%
CRJ900	80	7	4.8%	3	2.2%	7	4.4%	2	0.9%	6	4.5%
Subtotal		145	100.0%	135	100.0%	159	100.0%	229	100.0%	133	100.0%
Average Aircraft Size (Seats)		138		140		138		142		138	
Commuter	Passenger	Service									
CRJ700	66	12	100.0%	12	100.0%	12	100.0%	0	N/A	12	100.0%
Subtotal		12	100.0%	12	100.0%	12	100.0%	0	N/A	12	100.0%
Average Aircraft Size (Seats)		66		66		66		N/A		66	
A300	N/A	2	55.2%	2	55.2%	2	55.2%	2	55.2%	2	55.2%
A310	N/A	0	0.3%	0	0.3%	0	0.3%	0	0.3%	0	0.3%
B757	N/A	2	44.5%	2	44.5%	2	44.5%	2	44.5%	2	44.5%
Subtotal		4		4		4		4		4	
Total Comn Departures		161	.1 -	151		175		233		149	

ADPM= Average Daily Peak Month; Dep.=Departure

Source: Aviation Forecasts Technical Report, Table~4-8, AECOM~2014a.

TABLE 3-9 MIX OF COMMERCIAL AIRCRAFT IN THE AVERAGE DAY PEAK MONTH ADPM BY AIRCRAFT TYPE, PHASE 3 (JANUARY 1, 2026)

Type of Service			oosed oject	Altern	ative A	Altern	ative B	Altern	ative C	No P	roject
and Aircraft Type	Typical Number of Seats	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%	ADPM Dep.	%
Air Carrier	Passenger	Service									
A318	120	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
A319	127	17	11.0%	25	16.4%	22	11.8%	43	18.8%	15	11.3%
A320	142	12	7.7%	17	11.2%	15	8.0%	30	13.1%	11	8.3%
A321	187	1	0.6%	2	1.3%	1	0.5%	3	1.3%	1	0.8%
B737-300	137	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
B737-400	144	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
B737-700	137	93	60.0%	71	46.7%	111	59.4%	94	41.0%	78	58.6%
B737-800	153	19	12.3%	26	17.1%	22	11.8%	44	19.2%	17	12.8%
B757	183	5	3.2%	7	4.6%	6	3.2%	13	5.7%	5	3.8%
CRJ900	80	8	5.2%	4	2.6%	10	5.3%	2	0.9%	6	4.5%
Subtotal		155	100.0%	152	100.0%	187	100.0%	229	100.0%	133	100.0%
Average Aircraft Size (Seats)		137		140		137		142		138	
Commuter	Passenger	Service									
CRJ700	66	12	100.0%	12	100.0%	12	100.0%	0	N/A	12	100.0%
Subtotal		12	100.0%	12	100.0%	12	100.0%	0	N/A	12	100.0%
Average Aircraft Size (Seats)		66		66		66		N/A		66	
A300	N/A	2	55.2%	2	55.2%	2	55.2%	2	55.2%	2	55.2%
A310	N/A	0	0.3%	0	0.3%	0	0.3%	0	0.3%	0	0.3%
B757	N/A	2	44.5%	2	44.5%	2	44.5%	2	44.5%	2	44.5%
Subtotal		4		4		4		4		4	
	Total Commercial Departures 171 168 203 233 149										
ADPM= Ave	rage Daily	Peak Mo	onth; Dep.	=Depart	ure						

When the air carrier and commuter average aircraft sizes are multiplied by the corresponding average load factors, the result is the average numbers of passengers carried per operation. The forecasts of annual air carrier and commuter operations are derived by dividing passenger levels for each phase of the Proposed Project and four alternatives by these average numbers of passengers carried. Load factors are presented in Table 3-5.

The number of commercial passenger operations in the passenger ADPM is forecasted using a similar approach as the number of passengers in the peak month. As previously discussed, August historically is the peak passenger month for JWA, with commercial operations in that month constituting approximately 8.7 percent of the Airport's annual operations, on average. Therefore, in order to calculate the commercial passenger aircraft operations forecast associated with ADPM passengers, annual operations are multiplied by 8.7 percent. This amount is then divided by 31 (the total number of days in August) to determine ADPM operations. Table 3-10 presents the commercial passenger aircraft operations associated with ADPM passengers for the Proposed Project, Alternatives A through C, and the No Project Alternative.

Forecasts of hourly operations of commercial aircraft for the Proposed Project and each alternative based on the assumptions and analysis presented above are graphically shown in Exhibit 3-9 through Exhibit 3-13.

TABLE 3-10 COMMERCIAL PASSENGER AIRCRAFT OPERATIONS^a FORECAST ASSOCIATED WITH THE AVERAGE DAY PEAK MONTH PASSENGERS

	Proposed Project	Alternative A	Alternative B	Alternative C	No Project Alternative
Phase 1					
Air Carrier	266	258	260	458	266
Commuter	24	24	24	0	24
Total	290	282	284	458	290
Phase 2					
Air Carrier	290	270	318	458	266
Commuter	24	24	24	0	24
Total	314	294	342	458	290
Phase 3					
Air Carrier	310	304	374	458	266
Commuter	24	24	24	0	24
Total	334	328	398	458	290

^a An operation is defined as either a takeoff or landing, each counting as one operation. There is not a direct correlation between ADDs and operations as ADDs are only the departure or takeoff operation.

Source: Aviation Forecasts Technical Report, Table 4-6, AECOM 2014a.

COMMERCIAL CARGO OPERATIONS

The Proposed Project and alternatives maintain the four daily cargo ADDs, or a total of eight daily operations (four departures and four arrivals) currently provided for in the Settlement Agreement. This is 2,920 annual cargo operations. The maximum number of cargo operations is assumed for the Proposed Project, Alternatives A through C, as well as the No Project Alternative.

As discussed above, on average and over the past 10 years, 9.4 percent of the annual passengers at JWA fly during peak month (August). And, 8.7 percent of the commercial flights occur during the peak month. The difference in percentages is due to higher load factors and an increased number of flights in August.

Currently, less than half of the allocated air cargo flights are being flown. However, to ensure the maximum environmental impact (the maximum number of flights) is evaluated in this EIR, the four air cargo ADD allowed under the Settlement Agreement have been included in all the assumptions. By including them, all the technical analyses (e.g., air quality, noise, and traffic) have incorporated the impacts associated with the maximum number of flights.

There are no dedicated cargo facilities available at JWA. Cargo aircraft use the south Remaining Overnight ("RON") apron for cargo loading operations. To avoid conflict with passenger operations, cargo flights occur in the middle of the afternoon. Cargo arrivals generally occur in the 4:00 PM hour and depart a few hours later at 7:00 PM. This is expected to continue for the Proposed Project, Alternatives A and B, and the No Project Alternative. Alternative C, Phase 1 also will retain this schedule. However, in Phases 2 and 3 of Alternative C, the curfew is removed. Therefore, it is assumed that cargo operations would then move to night time hours, when cargo operations are typically conducted. (*Aviation Forecasts Technical Report*, Section 4, AECOM, 2014a, provided in Appendix B.)

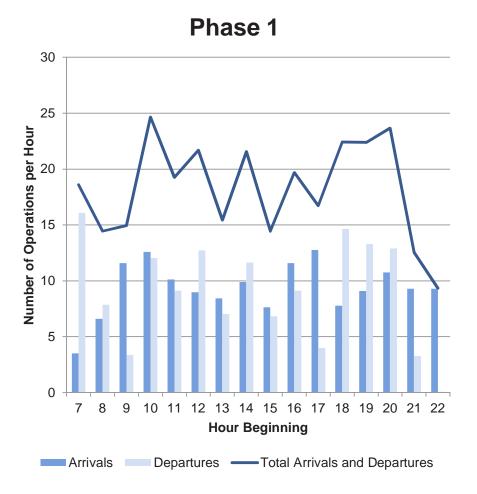
GENERAL AVIATION ASSUMPTIONS

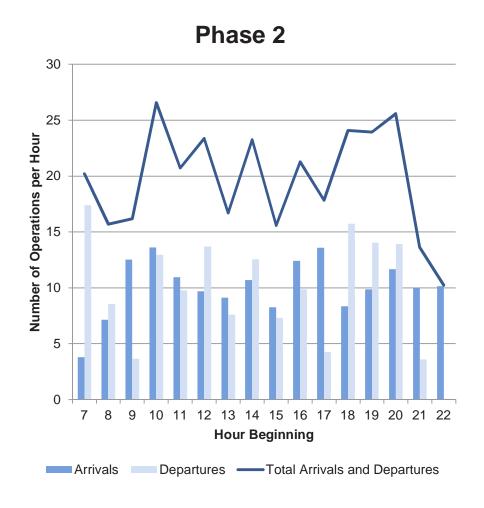
General aviation is all flying that is not for commercial service or the military. Overall general aviation activity at JWA has declined during the past ten years due in part to economic changes within the general aviation industry and decline of active pilots in the area (AECOM 2014a). Although activity by small general aviation aircraft at the Airport has decreased, growth in business aircraft activity remains strong.

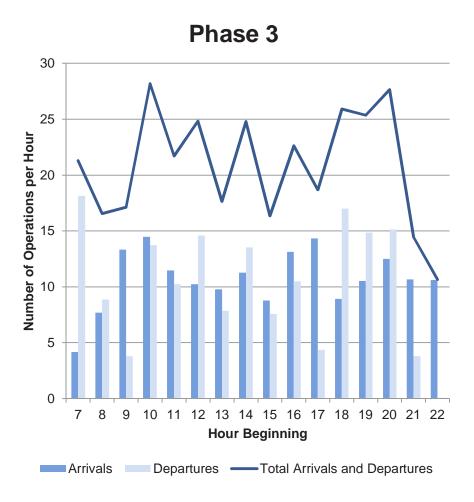
The mix of aircraft based at the Airport in 2013 was approximately 81.1 percent single engine piston aircraft, 7.4 percent multi-engine piston aircraft, 2.4 percent turboprop aircraft, 6.4 percent jet aircraft, and 2.6 percent helicopters (see Table 3-11).

TABLE 3-11
GENERAL AVIATION BASED AIRCRAFT BY TYPE, 2013

	Single-	Multi-	Turbo-						
Location	Engine	Engine	prop	Jet	Helicopter	Total			
County Tie-downs	253	17	5	0	0	275			
Atlantic Aviation	0	0	0	8	2	10			
Executive Hangars, LLC	74	11	1	1	2	89			
Signature Flight Support (East)	10	3	2	0	0	15			
Signature Flight Support (West)	3	0	0	12	7	22			
South Coast Associates	0	0	2	6	0	8			
Total Airport	340	31	10	27	11	419			
Percent	81.1%	7.4%	2.4%	6.4%	2.6%	100.0%			
Source: Aviation Forecasts Technical Report, Table 6-2, AECOM 2014a.									

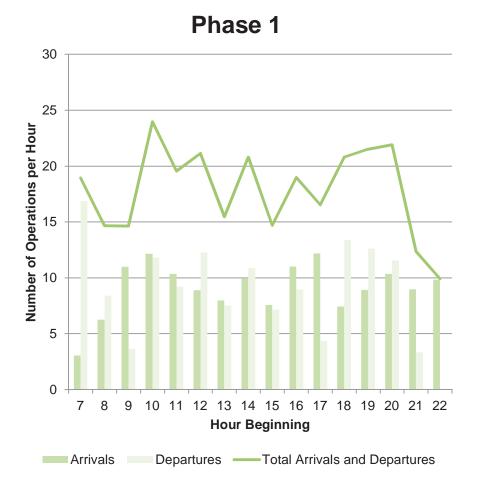


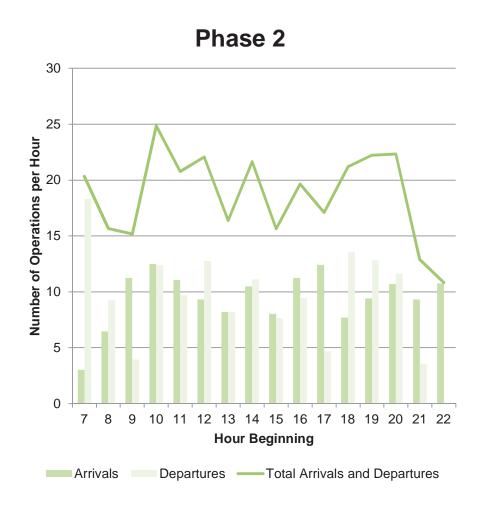


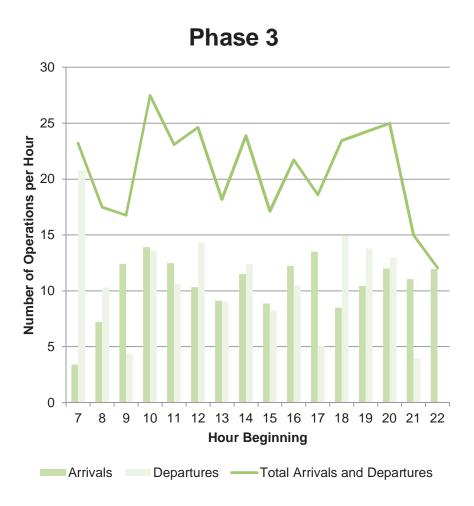


Forecast of Hourly Commercial Operations - Proposed Project







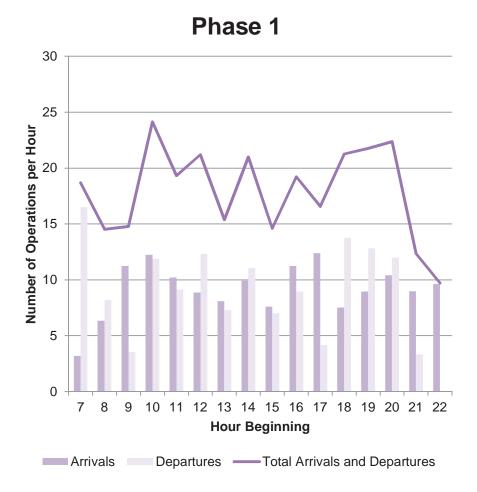


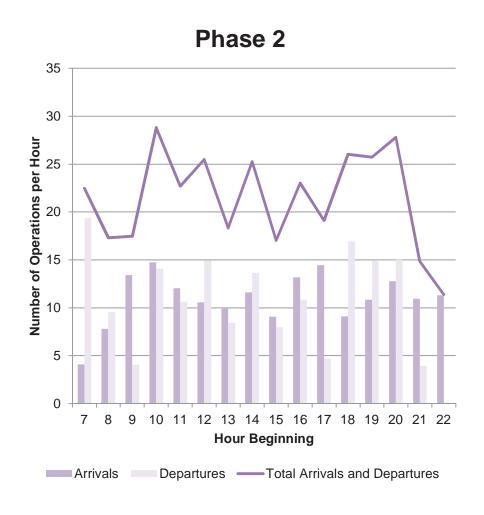
Forecast of Hourly Commercial Operations - Alternative A

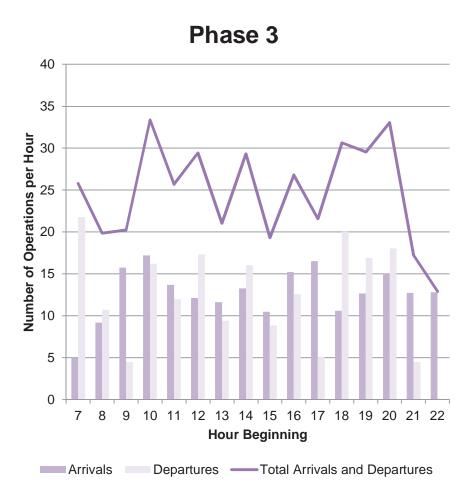
John Wayne Airport Settlement Agreement Amendment



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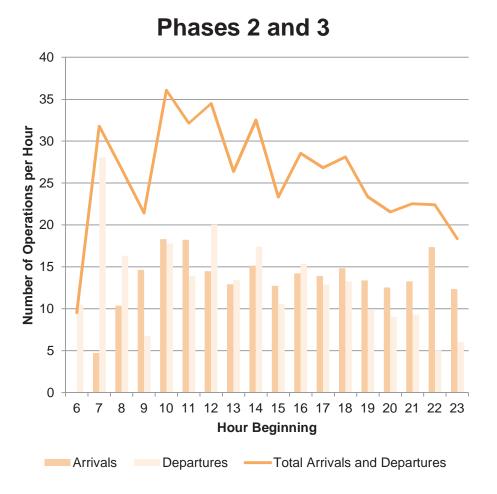
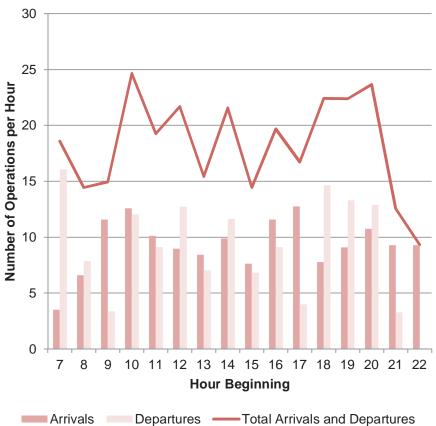




Exhibit 3–12

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Forecast of Hourly Commercial Operations -No Project Alternative

Exhibit 3-13

John Wayne Airport Settlement Agreement Amendment



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Since general aviation demand is not a function of MAP levels or Class A ADDs, but is a separate segment of aviation demand, one general aviation forecast was developed that is applicable to the Proposed Project, three alternatives, and No Project Alternative.

Historical trends at the Airport have shown a consistent decline in piston engine aircraft since 1980 at the Airport. Multi-engine aircraft experienced a sharp decline in the early 1990s and have continued to decrease, though at a slower rate. Turbine powered aircraft have been on a general positive increase at the Airport. With the exception of helicopters, forecasts used a regression analysis of trends since 1980, adjusted to 2013 actual numbers. Helicopters are assumed to remain constant at present levels (11). Forecasts are presented in Table 3-12. (*Aviation Forecasts Technical Report*, Table 6-2, AECOM, 2014a, provided in Appendix B.)

TABLE 3-12 BASED AIRCRAFT FORECASTS

Year	Single- Engine	Multi-Engine	Turbine	Helicopter	Total				
2013	340	31	37	11	419				
Phase 1 (2016-2020)	317	27	38	11	393				
Phase 2 (2021-2025)	283	21	40	11	367				
Phase 3 (2026-2030)	252	17	42	11	322				
Source: Aviation Forecasts Technical Report, Table 6-3, AECOM 2014a.									

In 2013, peak month general aviation operations were 15,974, about 9.8 percent of the annual total. Over the last ten years, the peak month has averaged 9.6 percent of the total annual operations, which is used in the future year forecasts. Based on hourly general aviation operations profiles from August 2011 and information from the JWA Airport Traffic Control Tower personnel, general aviation operations in the peak hour are about 9.9 percent of the total for the ADPM. During the peak hour, 69.5 percent of the general aviation operations are local operations. Applying these percentages to the 2013 ADPM indicates there were approximately 51 general aviation operations in the peak hour of the ADPM.

3.8 ALTERNATIVES EVALUATION

Section 15126.6(a) of the State CEQA Guidelines provides guidance on the scope of alternatives to a proposed project that must be evaluated. It states:

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

General aviation operations are categorized as either local or itinerant. A local operation, as defined by the FAA, is one that is performed by aircraft that: (1) operate in the local traffic pattern or within sight of the airport (including touch-and-go operations), (2) are known to be departing for or arriving from flights in local practice areas located within a 20-mile radius of the airport, or (3) execute simulated instrument approaches or low passes at the airport. Itinerant operations are all operations other than local and generally include flights to and from other airports.

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.

As indicated above, in accordance with the MOU entered into by the Settlement Agreement signatories, this EIR addresses the impacts associated with the Proposed Project, Alternatives A through C, and the No Project Alternative at a comparable level of detail. In addition to the alternatives identified in the MOU, this EIR also discusses an alternative with a 2025 horizon year in Section 7. That analysis includes a different operational scenario than those identified by the Settlement Agreement signatories in the MOU and was formulated in furtherance of the County's obligation to describe a range of reasonable alternatives in the EIR under State CEQA Guidelines Section 15126.6(a). The referenced section of the State CEQA Guidelines requires that 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], even if the alternative would impede, to some degree, the attainment of the project objectives. The additional alternative, identified as 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, thereby minimizing the potential environmental impacts. Section 7 also includes a discussion of alternatives that were not carried forward for further evaluation.

The analysis provided for all alternatives evaluated in the EIR conforms with the requirement of State CEQA Guidelines Section 15126.6(d) that the EIR "shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with" the Proposed Project.

3.9 INTENDED USES OF THE ENVIRONMENTAL IMPACT REPORT

This EIR has been prepared to address the potential impacts associated with the extension and modification of the Settlement Agreement. This document is intended to support the following actions:

- Approval by the Orange County Board of Supervisors of an extension and modification of the existing agreement with the other Settlement Agreement signatories on the operations and facilities at JWA.
- Approval by the City of Newport Beach of an extension and modification of the existing agreement with the other Settlement Agreement signatories on the operations and facilities at John Wayne Airport.

In addition, SPON and AWG will be required to approve the modifications of the Settlement Agreement provisions, and the federal court will need to review and approve any stipulation reflecting any approved amendments filed by the signatories. The FAA does not need to approve the Settlement Agreement. However, the County will coordinate with the FAA regarding the

proposed Project's standing under the ANCA, as well as the Airport's grant assurances and other federal laws.

3.10 REFERENCES

- AECOM. 2014a (April). John Wayne Airport Settlement Agreement Amendment Environmental Impact Report Aviation Forecasts Technical Report. Orange, CA: AECOM (Appendix B).
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- Orange, County of, John Wayne Airport (JWA). 2013 (March). PROPOSED PROJECT AND ALTERNATIVES: Proposed Extension of the John Wayne Airport Settlement Agreement). Costa Mesa, CA: JWA. http://www.ocair.com/communityrelations/settlementagreement/docs/ProjectAlternativesExhibit2013-3-19.pdf.
- U.S. Congress. 1990 (as amended through 2005). 49 U.S. Code Chapter 475, Subchapter II National Aviation Noise Policy. Ithaca, NY: Legal Information Institute, Cornell Law School. http://www.lawa.org/uploadedFiles/LAX/noise/Part161/PDF/Airport_Noise_and_Capacity_Act_of_1990.pdf

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