5.0 CUMULATIVE IMPACTS

5.1 INTRODUCTION

In requiring the State Office of Planning and Research to develop guidelines for the implementation of CEQA, the *Public Resources Code* Section 21083(b) requires that the guidelines shall specifically include criteria for public agencies to follow in determining whether or not a proposed project may have a "significant effect on the environment." The criteria shall require a finding that a project may have a "significant effect on the environment" if one or more of the following conditions exist:

- (1) A proposed project has the potential to degrade the quality of the environment, curtail the range of the environment, or to achieve short-term, to the disadvantage of long-term, environmental goals.
- (2) The possible effects of a project are individually limited but cumulatively considerable. As used in this paragraph, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

This directive has been carried forth in Section 15064 of the State CEQA Guidelines, which establishes the criteria for determining the significance of environmental effects caused by a project. Subsection 15064(h)(1) directs the preparation of an EIR in the following circumstance:

[I]f the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Section 15355 of the State CEQA Guidelines defines cumulative impacts as:

Two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Pursuant to Section 15130(b) of the State CEQA Guidelines:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

5.2 METHODOLOGY

A project's cumulative impact is "an impact to which that project contributes and to which other projects contribute as well. The project must make some contribution to the impact; otherwise, it cannot be characterized as a cumulative impact of that project".¹

Section 15130(b) of the State CEQA Guidelines indicates:

The following elements are necessary to an adequate discussion of significant cumulative impacts:

- (1) Either:
 - (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
 - (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

To provide an evaluation of the potential cumulative impacts for the Proposed Project, both the list approach (Section 15130(b)(A)) and the growth projections approach (Section 15130(b)(B)) to the analysis have been used. In keeping with the State CEQA Guidelines, this cumulative evaluation: (1) includes specific projects that, because of their size or proximity to the Project site, have the potential to cause cumulative impacts ("related projects"); (2) considers the adopted general plans for the affected local jurisdictions; and (3) includes regional development projections. Section 5.2.1 below provides an overview of how the regional projections have been incorporated from adopted plans into the cumulative evaluation. Section 5.2.2 provides a summary of the related projects that have been identified as potentially cumulative.

As indicated below in Section 5.2.2, surrounding jurisdictions were contacted in October and November 2013 to provide input on additional related projects that should be included in the analysis. The jurisdictions that were contacted include County of Orange, City of Newport Beach, City of Costa Mesa, City of Irvine, City of Santa Ana, and City of Tustin. The related projects that these jurisdictions identified are listed in Tables 5-1 through 5-6 and graphically in Section 5.2.2 below.

¹ Sierra Club v. West Side Irrigation Dist. (2005) 128 Cal.App.4th 690, 700.

The cumulative study area varies from one environmental topic to another depending upon the nature of impacts related to that particular issue, as described further below.

5.2.1 ORANGE COUNTY PROJECTIONS – 2010 MODIFIED

For this Project, one component of the cumulative analysis is the growth projected in the OCP-2010 Modified socioeconomic projections for the study area.² The OCP-2010 Modified projections are countywide growth and development forecasts based on input from the County of Orange and the cities located in the County. These projections reflect adopted land uses and future growth scenarios based on local land use policies. The purpose of establishing countywide projections is to establish a consistent database for jurisdictions to use for planning efforts. The OCP-2010 Modified projections are used in the demographic projections for this EIR to ensure consistency with local and regional planning efforts.

To ensure that the adopted socioeconomic data reflects the current conditions in Orange County, the data sets are updated approximately every four to five years. By having an iterative process, the agencies that use this data (the Southern California Association of Governments ["SCAG"], the County of Orange, and local jurisdictions) are able to factor in variables (e.g., changes in employment patterns, economic considerations, and migration patterns) that occur over time.

The OCP-2010 Modified projections provide forecasts to the year 2035 and take into account the projected growth Orange County in its entirety. OCP-2010 Modified projections are particularly useful in evaluating the cumulative impacts associated with traffic, air quality, greenhouse gas ("GHG") emissions, and noise because they provide growth assumptions consistent with the local general plans that have been developed with a long-range horizon year. This allows the cumulative analysis to go beyond just a listing of projects, which would not adequately reflect conditions at Project buildout.

The OCP-2010 Modified projections reflect not just local growth but the anticipated growth for the region. Therefore, these numbers are also integrated into the regional planning programs, such as the Air Quality Management Plan ("AQMP"), the Regional Transportation Plan ("RTP"), and Regional Growth Management Element. Consistency between local and regional forecasts is imperative because the regional planning programs have been developed to ensure that the region achieves national and State air quality standards. The control strategies that have been identified in these regional planning programs assume the effects of long-range growth. The regional emissions analysis has demonstrated that, even with the projected growth, the region would be consistent with the State Implementation Plan for achieving the National Ambient Air Quality Standards as long as AQMP control measures are implemented.

The OCP-2010 Modified projections are incorporated into the traffic modeling effort which, in turn, is used for the traffic-related noise, air quality and GHG emissions analyses. Therefore, the long-range (2030) analyses done for air quality, GHG, noise, and transportation/traffic (contained in Sections 4.1, 4.3, 4.6, and 4.8, respectively) incorporate the effects of all the development assumed in the OCP-2010 Modified projections.

² OCP-2010 Modified socioeconomic projections are available for review at the John Wayne Airport, 3160 Airway Avenue, Costa Mesa, California and the California State University at Fullerton, Center for Demographic Research, 2600 Nutwood Avenue, Suite 750, Fullerton, California.

5.2.2 REASONABLY FORESEEABLE PROBABLE FUTURE PROJECTS

As indicated above, the growth assumed in the OCP-2010 Modified projections is used in the evaluation of cumulative impacts. To ensure that the cumulative impact analysis also provides as much detail as possible regarding other projects in the study area, the County of Orange and the cities of Newport Beach, Costa Mesa, Irvine, Tustin and Santa Ana were contacted for input on potential cumulative impacts. The cities provided a listing of possible cumulative projects to use as part of the evaluation in this EIR. The use of the specific projects in the evaluation allows for a closer scrutiny of potential cumulative impacts.

Tables 5-1 through 5-6 identify known projects that were provided by the above-listed jurisdictions to be considered as cumulative projects. Efforts have been made to get the current status of the projects. A number of them appear to be on hold; however, they have been included in the listings to ensure that the analysis is comprehensive and because they are reasonably foreseeable. The locations of the cumulative projects listed in Tables 5-1 through 5-6 are shown on Exhibits 5-1 through 5-6.

Project	Proposed Land Uses	Location	Determination/Status
John Wayne Airport ("JWA") New Jet Fuel Pipeline and Tank Farm	Wickland Pipelines LLC is proposing construction of an approximately 5- mile long, 12-inch common carrier jet fuel pipeline connecting JWA to an existing 16-inch pipeline operated by Kinder Morgan Energy Partners. The proposed pipeline will be located in the public streets of the cities of Irvine and Tustin, County of Orange/Airport property, and minimally on private property or industrially-zoned property. The pipeline will be horizontally directionally drilled under several major channels and roadways, including Interstate 405.	The proposed pipeline would connect to the existing Kinder Morgan products pipeline at a location near the planned intersection of Edinger Avenue and Tustin Ranch Road, and would proceed southwest to the new proposed fuel farm on Airport property in close proximity to the existing Airport fuel tank farm.	The IS/MND (Errata, MMRP) and the Encroachment application were conditionally approved subject to applicable Findings and Conditions of Approval (COA) on May 8, 2014 by the Director, OC Planning. The NOD was also filed on May 8, 2014. However, the Encroachment Permit will not be issued until all applicable COAs are satisfied.
Parking Structure C, Phase 2 ("C2")	Construction of Parking Structure C2 would add 1,381 parking spaces.	John Wayne Airport; 18601 Airport Way (Santa Ana)	Parking Structure C was evaluated in EIR No 582 (SCH No. 2003091046) and approved by the County in October 19, 2004. Though design is complete, construction will not occur until demand warrants
5 Unit Townhome Complex	5-unit townhome complex.	2562 Santa Ana Avenue (Costa Mesa)	PA130032 for a Use Permit was approved by the Planning Commission on January 8, 2014.

TABLE 5-1POTENTIAL CUMULATIVE PROJECTS – COUNTY OF ORANGE

TABLE 5-2
POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
919 Bayside Drive	Development of 17 individual residential lots; 1 common recreational lot with possible pool and trellis structure; 2 landscape/open space lots; waterfront and dock lots.	919 Bayside Dr.; southwest of Bayside Dr. and Jamboree Rd	IS/MND and project approved in 2008. The CDP has been approved by the Coastal Commission. Project has not been constructed.	 IS/MND Code Amendment Use Permit TTM CDP (Coastal Commission)
AERIE	Residential development including the following: (a) the demolition of the existing residential structures on the 1.4-acre site; (b) the development of 8 residential condominium units; and (c) the replacement, reconfiguration, and expansion of the existing gangway platform, pier walkway, and dock facilities on the site.	201–207 Carnation Ave and 101 Bayside Pl; southwest of Bayside Dr. between Bayside Pl and Carnation Ave, Corona del Mar	Final EIR was certified and project approved by the City on July 14, 2009. The CDP has been approved by the Coastal Commission. The Project has not been constructed.	 EIR GP Amendment CLUP Amendment Zone Change Tract Map Modification Permit CDP (Coastal Commission)
Back Bay Landing	Request for legislative approvals to accommodate the future redevelopment of a portion of the property with a mixed-use waterfront project. The Planned Community Development Plan would allow for the development of a new enclosed dry stack boat storage facility for 140 boats, 61,534 sf of visitor-serving retail and recreational marine facilities, and up to 49 attached residential units.	300 E. Coast Highway (generally located at the northwesterly corner of east Coast Highway and Bayside Drive)	Draft EIR was circulated for a 45 day public review period from October 3, 2013 through November 18, 2013. The project was approved by the City Council on February 11, 2014.	 General Plan Amendment Coastal Land Use Plan Amendment Planned Community Development Plan Lot Line Adjustment

TABLE 5-2POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Balboa Marina Expansion	City of Newport Beach Public Access and Transient Docks and Expansion of Balboa Marina. Project to include 25 boat slips, 20,000 sf restaurant, and 15,000 sf marine commercial.	201 E. Coast Highway	Application submitted on November 19, 2013. On December 19, 2013, the City requested additional information for the application. The IS/MND is currently being prepared. Construction anticipated to begin Fall 2015.	 IS/MND Site Development Review CDP (Coastal Commission)
Banning Ranch	Development of 1,375 residential dwelling units, a 75-room resort inn and ancillary resort uses, 75,000 sf of commercial uses, approximately 51.4 gross acres of parklands, and approximately 252.3 gross acres of permanent open space.	Generally located north of West Coast Highway, south of 19th Street, and east of the Santa Ana River	The City Council approved the project and certified the Final EIR in July 2012. The project and California Environmental Quality Act (CEQA) documentation were litigated. In November 2013, the Superior Court of California upheld the adequacy of the Final EIR but overturned the project because of the project's inconsistency with a General Plan policy. The City is in the process of appealing the decision.	 Development Agreement General Plan Amendment to the Circulation Element Code Amendment Pre-annexation Zone Change Planned Community Development Plan Master Development Plan Tentative Tract Map Affordable Housing Implementation Plan Traffic Phasing Ordinance Traffic Study

TABLE 5-2
POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Beauchamp Project	5-unit residential development.	2000–2016 East Balboa Blvd; east of East Balboa St and L Street	Draft IS/MND was released for public review on January 12, 2010. Planning Commission recommended approval on March 4, 2010. The IS/MND and the project was approved by the City Council on May 25, 2010. The CDP has been approved by the California Coastal Commission. The project has not been constructed.	 GP Amendment CLUP Amendment CDP (California Coastal Commission)
Coast Community College District - Newport Beach Learning Center Project	3-story, 67,000-sf learning facility.	505–1533 Monrovia Ave; west of Monrovia Ave and north of the terminus of 15 th St	IS/MND and project approved August 2009. Pursuant to the City's Traffic Phasing Ordinance, a traffic study is required. The traffic study and parcel map were approved by the City on April 22, 2010. The project has been constructed and is complete.	IS/MNDParcel MapTraffic Study

TABLE 5-2POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
General Plan Land Use Element Amendment	The Project is an amendment to the City of Newport Beach General Plan Land Use Element. The amendment is intended to shape future development within the City and invoices the alteration, intensification, and redistribution of land uses in certain subareas of the City, including Newport Center/Fashion Island, Newport Coast, and the Airport Area near JWA. The Airport Area modifications are focused on four areas: The Hangars, Saunders Properties, Lyon Communities, and UAP Companies. Combined, these four projects would allow 334,877 square feet of retail, 1,179 residences (850 identified as replacement units), a 150 room hotel, and a congregate care facility. The Amendment also includes Land Use Element policy revisions and updates/refinements, and amendments to the Zoning Code, Zoning Map, and Coastal Land Use Plan.	City of Newport Beach	A Draft Supplemental Environmental Impact Report (SEIR) was released for 45-day public review and comment period, which ended on April 30, 2014. Public hearings on the amendment are tentatively scheduled for July 2014. If approved by the City Council, the amendment will be placed on the November 2014 ballot for voter approval pursuant to Section 423 of the Charter of the City of Newport Beach.	 GP Amendment Coastal LUP Amendment Zoning Map Amendment Zoning Code Amendment

TABLE 5-2
POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Golf Realty Tennis Club	Demolition of existing tennis and golf clubhouses to construct a new 3,735 sf tennis clubhouse and 35,000 sf golf clubhouse. Included in the project are 27 short-term, visitor-serving units (bungalows); a bungalow spa/fitness area and concierge and guest meeting facilities; and 5 single-family residential dwelling units (villas).	1600 East Coast Hwy	The City Council approved the construction of a new 3,735 sf. tennis clubhouse, 27 hotel units with spa/fitness area and concierge and guest meeting facilities; and five single-family residential dwelling units. The project was approved by the City Council on March 27, 2012 and by the California Coastal Commission in April 2013. The project has not been constructed.	 Development Agreement PC Development Plan Amendment TTM Transfer of Development Rights CDP (Coastal Commission)
Hoag Memorial Hospital Presbyterian Master Plan Update	General Plan Amendment to reallocate up to 225,000 sf of previously approved (but not constructed) square footage from the Lower Campus to the Upper Campus.	1 Hoag Dr.; northwest of West Coast Hwy and Newport Blvd	Final EIR certified and project approved on May 13, 2008. No new development has been constructed.	 EIR GP Amendment Planned Community Development Plan (PC) Text Amendment Development Agreement Amendment CDP (California Coastal Commission)
Hyatt Regency Newport Beach Expansion	Improvements to the existing hotel, which include the addition of 88 new timeshare units; a 24,387 sf, 800-seat ballroom/meeting building; a 10,072-sf spa and new pool; and a 2-level parking garage.	1107 Jamboree Rd; northwest of Back Bay Dr. and Jamboree Rd	Final EIR certified and project approved on February 24, 2009. The project has not obtained a CDP; therefore, the City's entitlements cannot be implemented.	 EIR Use Permit Parcel Map Modification Permit Development Agreement CDP (California Coastal Commission)

TABLE 5-2POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Koll Mixed Use Development	Development of 260 residential units.	4343 Von Karman Ave	Application submitted. No activity.	 PC Development Plan Amendment Traffic Study (TPO) Development Agreement Airport Land Use Commission
Lido House Hotel	Construction and operation of the 130-room, Lido House Hotel project to be located at the former City Hall site.	3300 Newport Boulevard and 475 32 nd Street	Application submitted. Notice of Availability was released on April 29, 2014 for a 45-day public review period.	 EIR GP Amendment Coastal Land Use Plan Amendment Zoning Code Amendment
Lido Villas (DART)	Request for the demolition of an existing church and office building and legislative approvals for the development of 23 attached three- story townhome condominiums. The Planned Community would allow for site specific setbacks and an increase in the height limit up to 35 ft 4 inches and 39 ft for architectural projections.	3303 and 3355 Via Lido Generally bounded by Via Lido, Via Oporto, and Via Malaga.	MND was approved by the Planning Commission on September 9, 2013 and by the City Council in November 2013. Construction has not starting pending approval from the CCC. CCC permit application was submitted April 4, 2014.	 GP Amendment Coastal Land Use Plan Amendment Zoning Code Amendment PC Development Plan Tentative Tract Map
MacArthur at Dolphin-Striker Way	Demolition of a 7,996 sf restaurant and 12,351 sf commercial retail development.	4221 Dolphin-Striker Way	MND, Transfer of Development Rights, Traffic Study, CUP, Waiver of DA, and Modification Permit were approved by City Council on October 25, 2011. PC Development Plan Amendment approved on November 22, 2011. The project is completed, except for one freestanding building pad.	 PC Development Plan Amendment Transfer of Development Rights Traffic Study (TPO) CUP Waiver of DA Modification Permit

TABLE 5-2
POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Marina Park	Development includes a public park and beach with recreational facilities; restrooms; a new Girl Scout House; a public short-term visiting vessel marina and sailing center; and a new community center with classrooms and ancillary office space.	1700 Balboa Blvd; west of 15 th St and east of 19 th St	The Final EIR was certified and the project approved on May 11, 2010. The CDP application has been approved. Construction is proposed to start late Winter 2014.	 EIR General Construction Activity Storm Water (NPDES) Permit (RWQCB) CDP (California Coastal Commission) Section 401 Certification (RWQCB)
Mariner's Medical Arts Project	A 12,763 sq. ft. addition to an existing 17,500 sq. ft. medical office complex. The existing medical office complex was designed by Master architect Richard Neutra and is considered to be significant historical resource.	1901 Westcliff Dr.	Application was withdrawn on January 22, 2013.	n/a
Mariner's Pointe	A 19,905-sf, two-story commercial building and a three-story parking structure.	200-300 West Coast Highway	An IS/MND was released for public review on April 11, 2011. The MND was certified and the project approved by the City Council on August 9, 2011. As of February 2014, construction is nearing completion.	 GP Amendment Code Amendment CUP Variance Site Development Review Traffic Study
Megonigal Residence	3,566 sf single-family residence.	2333 Pacific Dr., Corona del Mar	Final EIR and project approved on January 12, 2010. The CDP has been approved. Building permits have been issued for this project. The project is currently under construction.	EIRModification Permit

TABLE 5-2POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Newport Beach City Hall and Park Development	Relocation of City Hall (except for the Fire Department). Construction and operation of the following: (a) an approximate 90,000 sf City Hall building, meeting hall, and Council Chambers; (b) a 450-space parking structure; (c) an approximate 20,000 sf expansion of the Newport Beach Central Library; and (d) construction of a public park.	1100 Avocado Ave; between Avocado Ave and MacArthur Blvd	Final EIR certified and project approved on November 24, 2009. Project construction began in May 2010. Construction has been completed.	 EIR Design plans Exemption from Zoning Code and PC 27
Newport Beach Country Club Inc.	Demolition of existing golf course and clubhouse to construct of a new 51,213 sf golf clubhouse and ancillary facilities, including a cart barn and bag storage.	1600 East Coast Hwy; northwest of Pacific Coast Hwy and Newport Center Dr.	This project was approved by the City Council on February 28, 2012 and approved by the California Coastal Commission in December 2012. In January 2014, a new application was filed for minor changes to the plans.	 GP Amendment Planned Community (PC) Text Adoption Temporary Use Permit Development Agreement Approval-in-Concept for CDP (California Coastal Commission)
Newport Business Plaza	Demolition of 2 existing connected buildings to construct a new 46,044 gross sf business plaza.	4699 Jamboree Rd and 5190 Campus Dr.	The City Council approved the project on January 25, 2011. Ordinance became effective on February 25, 2011. The project has not been constructed.	 GP Amendment PC text amendment Tentative Parcel Map
Newport Harbor Yacht Club	Demolition of the approximately 20,500 sf yacht club facility and construction of a new 23,163 sf facility. The yacht club use will remain on the subject property.	720 West Bay Avenue, 800 West Bay Avenue, 711-721 West Bay Avenue, and 710- 720 Balboa Boulevard	Project approved by the City Council on February 25, 2014. The Coastal Land Use Plan for the Project was submitted to the California Coastal Commission on April 23, 2014.	 GP Amendment Coastal Land Use Plan Amendment Zoning Code Amendment Planned Development Permit CUP

TABLE 5-2
POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Newport Beach Marina	A mixed-use development consisting of 27 residential units and approximately 36,000 sf of retail and office uses.	2300 Newport Boulevard	Final EIR certified and project approved on December 7, 2006. Tentative Tract Map extended in October 2010. Building permits issued February 2012. The project is currently under construction.	 Site Plan Review Use Permit Tentative Tract Map
North Newport Center Planned Community	The North Newport Center Planned Community (PC) Development Plan serves as the controlling zoning ordinance for the sub-areas identified in the PC Development Plan and is authorized and intended to implement the provision of the Newport Beach General Plan.	The North Newport Center PC District is comprised of seven sub-areas that include Fashion Island and Block 600 and portions of Block 100, Block 400, Block 500, Block 800, and San Joaquin Plaza.	As of December 31, 2010, the remaining entitlement consists of 126,933 sf of retail in Fashion Island; 430 du in Block 500; and 434,736 sf of office in Block 600.	• Addendum to the Newport Beach General Plan Program EIR
Old Newport GPA	Demolition of 3 existing buildings to construct a new 25,000 sf medical office building.	328, 332, and 340 Old Newport Blvd	The IS/MND and project were approved on March 9, 2010. No current activity.	 Modification Permit Traffic Study Use Permit GP Amendment
Plaza Corona Del Mar	Development of 1,750 sf new office space and six (6) detached townhomes.	3900-3928 East Coast Highway	Application approved by Planning Commission on January 3, 2013. No activity.	 Tentative Tract Map MUP CUP Site Development Review Zoning Code Amendment
PRES Office Building B Project	Increase the maximum allowable entitlement by 11,544 gross sf; increase the maximum allowable entitlement in office suite B by 9,917 net sf to allow for development of a new 2-level office building over a ground-level parking structure.	4300 Von Karman Ave	An IS/MND was released for public review on May 19, 2010. The MND was certified and the project approved by the City Council on February 22, 2011.	 GP Amendment PC Text Amendment Parcel Map

TABLE 5-2POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Rhine Channel Contaminated Sediment Cleanup	Dredging of approximately 150,000 cy of contaminated sediments within portions of Lower Newport Harbor, specifically from the Rhine Channel and nearby areas bayward of Marina Park, the American Legion Post and 15 th Street. Transport sediment by ocean barge for disposal and beneficial reuse within the approved Port of Long Beach Middle Harbor Redevelopment Project confined aquatic disposal facility.	In the vicinity of Marina Park, the American Legion Post, and 15 th Street	An IS/MND and conceptual project were approved by City Council on July 27, 2010. The project has been completed.	 Section 404 Permit (USACE) Section 10 Permit (USACE) 401 Water Quality Certification (RWQCB) CDP (California Coastal Commission) Dredging Lease (California State Lands Commission)
Santa Barbara Condominiums (now Meridian)	79 condominium units totaling approximately 205,232 net sf; approximately 97,231 gross sf of subterranean parking structures for a total of 201 parking spaces on site; approximately 79,140 sf of open space and approximately 21,300 sf of recreational area.	Santa Barbara Dr. west of Fashion Island	IS/MND and project approved in January 2006. The CDP has been approved by the Coastal Commission. Plan check has been submitted for building permits. The project is currently under construction.	 IS/MND GP Amendment CLUP Amendment Code Amendment Parcel Map TTM Modification Permit CDP (California Coastal Commission)
Sunset Ridge Park	Develop the approximate 13.67- acre site with active and passive recreational uses.	Northwest of West Coast Hwy and Superior Ave; contiguous to Project site to the east	The Final EIR was certified and the project approved by the City on March 23, 2010. The California Coastal Commission approved the project in August 2012. The Coastal Commission issued the CDP in 2013. The City started construction in January 2014.	 EIR Site Plan CDP (California Coastal Commission) Streambed Alteration Agreement (CDFG) Section 7 (USFWS)

TABLE 5-2POTENTIAL CUMULATIVE PROJECTS – NEWPORT BEACH

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Uptown Newport Mixed Use Development	Development of 1,244 residential units and 11,500 sf of commercial retail.	4311 & 4321 Jamboree Rd	EIR, Tentative Tract Map, Traffic Study, and AHIP were approved by City Council on 2/26/2013. The PC Development Plan and Development Agreement were approved on 3/12/2013. In January 2014, the applicant requested to amend the AHIP related to the timing and amount of affordable housing that must be constructed.	 PC Development Plan Amendment and Adoption Tentative Tract Map Traffic Study (TPO) AHIP DA Airport Land Use Commission

TABLE 5-3POTENTIAL CUMULATIVE PROJECTS - COSTA MESA

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
West 17 th Street and Superior Avenue Live/Work Project	Demolish existing commercial/industrial uses that currently exist at 643-651 West 17th Street and 1677 Superior Avenue to construct a 29-unit, three-story, attached live/work development.	643-651 West 17th Street and 1677 Superior Avenue	An IS/MND was released for public review from October 1, 2013 to October 30, 2013. Approved by Planning Commission on November 12, 2013.	 IS/MND VTTM Master Plan Demolition Permit Grading Permit Building Permit
125 East Baker Street Apartment Project	Demolish existing office building to construct a new five-story 240-unit residential apartment building.	125 East Baker	The EIR was released for public review from December 20, 2013 to February 3, 2014. Approved by City Council on May 6, 2014.	 EIR GP Amendment Zoning Code Amendment Rezone Master Plan
Anchor Live/Work Project, 1527 Newport Boulevard	Construct a 40-unit, three-story, attached live/work development in place of a 43-unit mobilehome/recreational vehicle park.	1527 Newport Boulevard	An IS/MND was released for public review from November 21, 2012 to December 21, 2012. The project was approved on January 13, 2013. Demolition is currently underway.	 IS/MND Master Plan VTTM
2626 Harbor Boulevard 33-Unit Residential Common Interest Development	Development of 33 single-family detached homes on a 3.71 acre site.	Northeast corner of Harbor Boulevard/Merrimac Way intersection	The IS/MND was approved on September 9, 2011. Construction has not started and, the applicant has requested a time extension.	 IS/MND GP Amendment Rezone Master Plan TTM
Pacific Gateway Residences Project	Construct 113 for-lease residential units on a 2.46-acre area.	421 Bernard Street	The project is currently under construction.	 Addendum to FEIR 1050 Master Plan Amendment

Project	Proposed Land Uses	Location	Status
PA 6 Residential	575 condominiums.	Generally east of SR-133, north of Irvine Boulevard and south of Portola Parkway	An Addendum to the Northern Sphere Area Final Program EIR was prepared in 2011. Construction has been initiated.
PAs 17 and 33 General Plan Amendment and Zone Change	An amendment to the General Plan Land Use Element Intensity Table (Table A-1) is proposed to transfer 600,000sf of non- residential intensity from PA 33 (Regional Commercial) to PA 17 (Research / Industrial). Additionally, a revision to Section 9-33-3 of the Irvine Zoning Code is proposed to reduce non- residential intensity in PA 33 by 600,000 sf; a revision to Section 9-17-3 of the Irvine Zoning Code is also proposed to increase the 5.5C Medical and Science designation's intensity in PA 17 by 600,000 sf. The intensity transferred to PA 17 would be added to the currently entitled but undeveloped 1,060,000 sf of Medical and Science intensity designated for the project site in the northeast area of PA 17.	PA 17 is located east of Shady Canyon Drive, south of I-405 and west of SR-133. PA 33 is a triangle-shaped area bound by I-5 to the northeast, I-405 to the south, and SR-133 to the northwest.	On September 26, 2000, the City certified the Final Program EIR for Planning Area 17 (SCH Number 2000021051). A Supplemental EIR is currently in preparation for the proposed GPA and ZC.
PA 33 Spectrum Restaurant	14,427 sf restaurant.	31-115 Fortune Drive	Modification of an existing entitlement and the 14,427 sf restaurant was analyzed as part of the EIR for General Plan Amendment and Zone Change for Planning Areas 18, 34, 39, and Lot 109 of Planning Area 33.
PA 40 East Residential	485 apartments and 54,987 sf office.	Project site is bound by Nightmist to the south, Roosevelt to the North, 133 to the East and Sand Canyon to the west.	Project analyzed as part of Program EIR (Planning Area 40/12 GPA and Zone Change EIR).

TABLE 5-4POTENTIAL CUMULATIVE PROJECTS – CITY OF IRVINE

TABLE 5-4
POTENTIAL CUMULATIVE PROJECTS – CITY OF IRVINE

Project	Proposed Land Uses	Location	Status
PA 51 High School	High school with a capacity of 2,600 students.	Southeast corner of Irvine Boulevard and future "B" Street, east of Sand Canyon and Highway 133 and west of Alton and Bake Parkways	EIR was certified on November 12, 2013.
Campos Verdes (formerly New Irvine Technology Center)	1,600 residential units; up to 17,000 sf retail/restaurant uses; and up to 23,000 sf accessory retail/resident serving uses.	Northwest corner of Jamboree Road/Campus Drive intersection	Application submitted to City. No environmental documentation currently available.
96 Corporate Park	37,587 sf medical office.	96 Corporate Park	A Conditional Use Permit was submitted for this project, but the project is currently on hold. The expected environmental documentation is an exemption.
Hilton Garden Inn	170-room extended stay hotel.	2381 Morse	Urban infill exemption applied to this project.
Homewood Suites	161-room extended stay hotel and 3,100 sf of general retail.	17330 Red Hill Avenue	Urban infill exemption applied to this project.
2852 McGaw/17321 & 17351 Murphy residential	280 dwelling units.	2852 McGaw/17321 & 17351 Murphy	Project is on hold, and there is no environmental documentation available for review yet.
2772 Main/ 2699 & 2719 White residential	362 dwelling units.	2772 Main/ 2699 & 2719 White	Project is incomplete and currently inactive; no environmental determination has been made.

Project	Proposed Land Uses	Location	Determination/Status
Tustin Legacy (MCAS Tustin Specific Plan)	Approximately 1,606 gross acre Specific Plan for the maximum development in Tustin of 4,199 dwelling units, 8.2 million sf of commercial development, 2.0 million sf of institutional/recreational development, and 133,294 sf of transitional housing.	Project site is surrounded by Red Hill Avenue on the west, Edinger Avenue and Irvine Center Drive on the north, Harvard Avenue on the east, and Barranca Parkway on the south. Jamboree Road transects the site.	Final EIS/EIR for MCAS Tustin approved January 2001. Several zone changes and Specific Plan amendments have occurred with the most recent SP Amendment in May 2013. 2,105 dwellings, 1.0 million sf of commercial development, 128,122 sf of institutional uses, and 123,664 sf in Village of Hope are complete.
Pacific Center East Specific Plan	Approximately 126 gross acre site. Maximum of 2,200,000 sf of new commercial, office, hotel, and research and development uses.	Project site is bound by the Costa Mesa Freeway (SR-55) to the west, the northern limit of the Santa Ana-Santa Fe Channel (F-IO) to the north, Red Hill Avenue and MCAS (H) Tustin to the east, and Valencia Avenue to the south.	Pacific Center East Final EIR approved August 1990. 57,151 sf in Pacific Business Center, 66,578 sf in Pacific Office Plaza, one 4-story Residence Inn with 149 guest rooms, one 4-story Fairfield Inn with 144 guest rooms, one 8,900 sf restaurant building, and one 7,300 sf retail building have been completed.
Assisted Living/Congregate Care Facility	201 unit age-restricted (62 years or older) assisted living/congregate care facility.	13841 Red Hill Avenue	MND approved by City Council on January 2, 2008 including General Plan Amendment 07- 001, Zone Change 07-002, Design Review 07-012, and Conditional Use Permit 07-011. GPA and ZC are still in effect; however, entitlements for DR 07-012 and CUP 07-011 expired on July 2, 2010 due to inactivity on the project.
Newport Avenue Extension	Extension of Newport Avenue from its present cul-de-sac north of the railway line underneath the tracks to intersect with Edinger Avenue.	Newport Avenue	Supplement to Pacific Center East Final EIR approved May 2003.
Tustin Ranch Road Extension	Project includes a grade separation and 403-foot concrete bridge as part of the extension of Tustin Ranch Road from its current terminus at Walnut Avenue.	Tustin Ranch Road between Walnut Avenue and Valencia North Loop Road	Supplement to Final EIS/EIR for MCAS Tustin approved December 2004. Project completed in November 2013.

TABLE 5-5POTENTIAL CUMULATIVE PROJECTS – TUSTIN

TABLE 5-6
POTENTIAL CUMULATIVE PROJECTS – CITY OF SANTA ANA

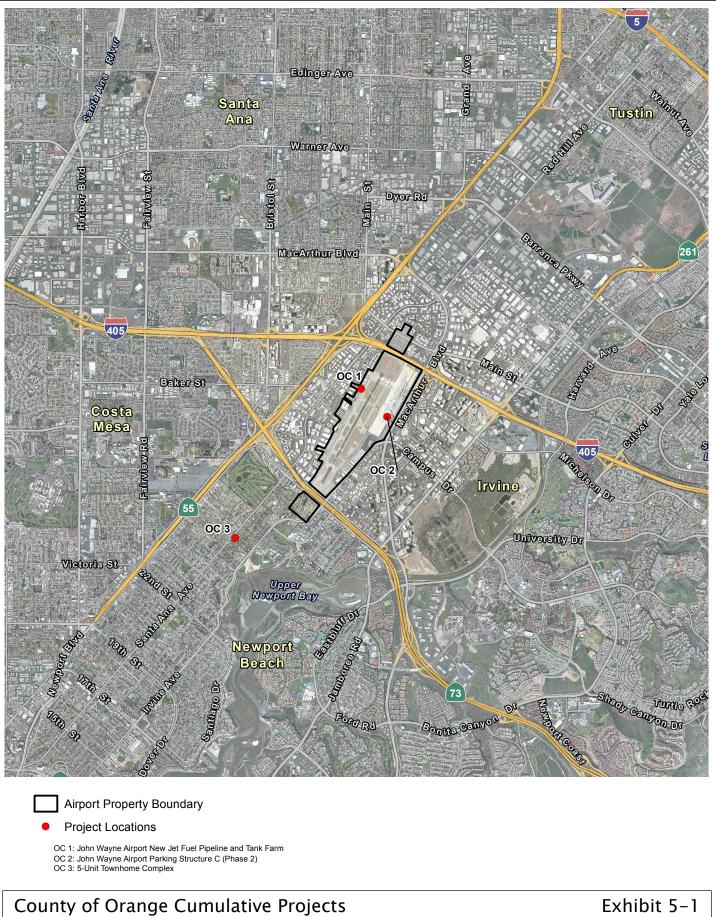
Project	Proposed Land Use	Location	Determination/Status
Alliance Church of Orange	21,000 sf Church Addition for a Gym/Classroom	2130 N. Grand Avenue	Project entitled in January 2009
Bat Nha Buddhist Meditation Center	27,428 sf Sanctuary Addition	803 S. Sullivan Street	City Council approved September 2013, currently in plan check.
Boys & Girls Club	2,700 sf Community Center Expansion	950 W. Highland Avenue	Project in Site Plan Review
Bristol-Memory Commercial Building	6,900 sf Commercial Development	2702 N. Bristol	Project approved December 2012
Catalina Retail Building	5,580 sf Commercial Development	2102 N. Tustin Avenue	Project in Site Plan Review
Christ Our Savior Cathedral	2,650 seat sanctuary	2001 W. MacArthur Boulevard	Project Entitled 2005
City Venture: Magnolia Lane	28 Single Family Residences	4226 W. Fifth Street	Negative Declaration was prepared. City Council to take action on March 18, 2014.
City Venture	8 Residential Condo	606-620 E. Fifth Street	Site Plan approved. Project currently in grading and plan check
City Venture	17 Single Family Residences	1030 S. Euclid Avenue	Project in Site Plan Review
City Venture	73 Live/Work & Residential Townhouse	1010 S. Harbor Boulevard	Project in Site Plan Review
Compass Mediation Center	16,093 sf Community Center	520 S. Harbor Boulevard	Project in Site Plan Review
Depot at Santiago	Residential apartments	923 N. Santiago	Project in Site Plan Review
Discovery Science Center Expansion	53,384 sf Commercial Development	2500 N. Main Street	Project Entitled in 2012
Discovery Science Center Ph. II	48,428 sf Expansion of the Existing Center	2500 N. Main Street	Project in Plan Check
Fifth & Harbor Commercial Building	35,349 sf Commercial Development	421 N. Harbor Boulevard	Site Plan Approved

TABLE 5-6POTENTIAL CUMULATIVE PROJECTS – CITY OF SANTA ANA

Project	Proposed Land Use	Location	Determination/Status	
Lotus Townhomes	8 Residential Townhomes	627 E. Washington Avenue	Project in Site Plan Review	
Lyon Communities	250 Residential apartments	1901 E. First Street	City Council approved on October 21, 2013. Project currently in Plan Check.	
Lyon Communities	14 Residential Townhomes (rental)	1901 E. First Street	City Council approved on October 21, 2013. Project currently in Plan Check.	
Mater Dei Park Structure	3 story Parking Structure	1202 W. Edinger Avenue	Project in Site Plan Review/future EIR	
Mater Dei Performing Arts Building	Demo Old Gymnasium (reduction of 21,320 sf)	1202 W. Edinger Avenue	Project Entitled in 2001. The gymnasium project has been completed.	
Mater Dei Performing Arts Building	36,000 sf Performing Art Center	1202 W. Edinger Avenue	Project Entitled in 2001. The performing arts center has not been constructed.	
Metro Town Square Expansion	6,000 sf Retail/Restaurant	3719 S. Plaza Drive	Project Entitled in 2011	
One Broadway Plaza	518,000 sf Office Tower	1109 N. Broadway	Applicant in process of resubmitting plans.	
One Broadway Plaza	16,000 sf Restaurant	1109 N. Broadway	Applicant in process of resubmitting plans.	
ProWash Xpress Car Wash	3,300 sf Retail	4426 W. First Street	Project under construction	
Sexlinger Homes	24 Single Family Residence	1584 E. Santa Clara Avenue	City Council approved on March 4, 2014	
Skyline Phase II	150 unit Residential Condo	10 E. Hutton Centre	Project Entitled in Sept 2005	
South Coast Speedwash	118,048 sf Commercial Development	2402 S. Bristol Street	Project in Site Plan Review	
The Roost	1 Reuse of commercial to live/work unit (reduction of 109 sf)	601 E. Santa Ana Boulevard	Project in Site Plan Review	

TABLE 5-6
POTENTIAL CUMULATIVE PROJECTS – CITY OF SANTA ANA

Project	Proposed Land Use	Location	Determination/Status
The 301	182 Multi-Family Residential	301 E. Jeanette Lane	City Council approved in December 2013
The Academy Charter High School	8 "Family" apartments	1901 N. Fairview Street	Project on hold.
The Academy Charter High School	110,500 sf Educational facility (high school)	1901 N. Fairview Street	Project under construction, anticipated opening Spring 2014
The Marke by Lyon Realty	300 unit Residential Condo/Rental	100-130 E. MacArthur Boulevard	Project Under construction
The MET	272 unit Residential Condo/Rental	200 E. First American Way	Project Entitled in August 2013
Town and Country Independent Living	174 unit Multi-Family Residential Condo	555 E. Memory	Project EIR in Process

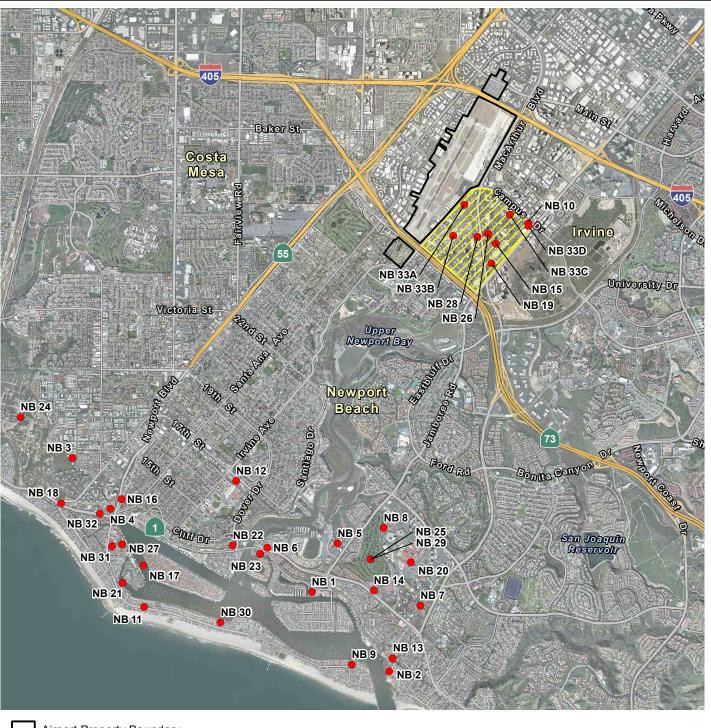


John Wayne Airport Settlement Agreement Amendment

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Airport Property Boundary

Project Locations

- NB 1: 919 Bayside Drive NB 2: AERIE Project
- NB 3: Coast Community College District Newport Beach Learning Ctr
- NB 5: Hoast Conintinity College District Newport Beach NB 4: Hoag Hospital Master Plan Update NB 5: Hyatt Regency Newport Beach Expansion Project NB 6: Back Bay Landing NB 7: Newport Beach City Hall and Park Development
- NB 8: Santa Barbara Condominiums
- NB 9: Beauchamp
- NB 10: Newport Business Plaza Project
- NB 11: Marina Park Project NB 12: Mariner's Medical Arts Project
- NB 24: Banning Ranch

NB 25: Golf Realty Tennis Club

NB 23: Balboa Marina Expansion

NB 13: Megonigal Residence NB 14: Newport Beach Country Club NB 15: Pres Office Building B Project

NB 16: Shaoulian/Old Newport GPA Project

NB 18: Sunset Ridge Park Project NB 19: Uptown Newport Village Specific Plan Project

NB 20: North Newport Center Planned Community

NB 21: Newport Marina - ETCO Development NB 22: Mariner's Pointe

NB 17: Rhine Channel Contaminated Sediment Cleanup Project

NB 33C: Lyon Properties NB 33D: UAP Companies

General Plan Land Use

Amendment Airport Area NB 33A: Saunders Properties

Newport Beach Cumulative Projects

Exhibit 5-2

NB 33:

NB 26: Koll Mixed Use Development NB 27: Lido Villas

NB 29: Newport Beach Country Club

NB 33B: The Hangars

NB 30: Newport Harbor Yacht Club

NB 28: MacArthur at Dolphin-Striker Way

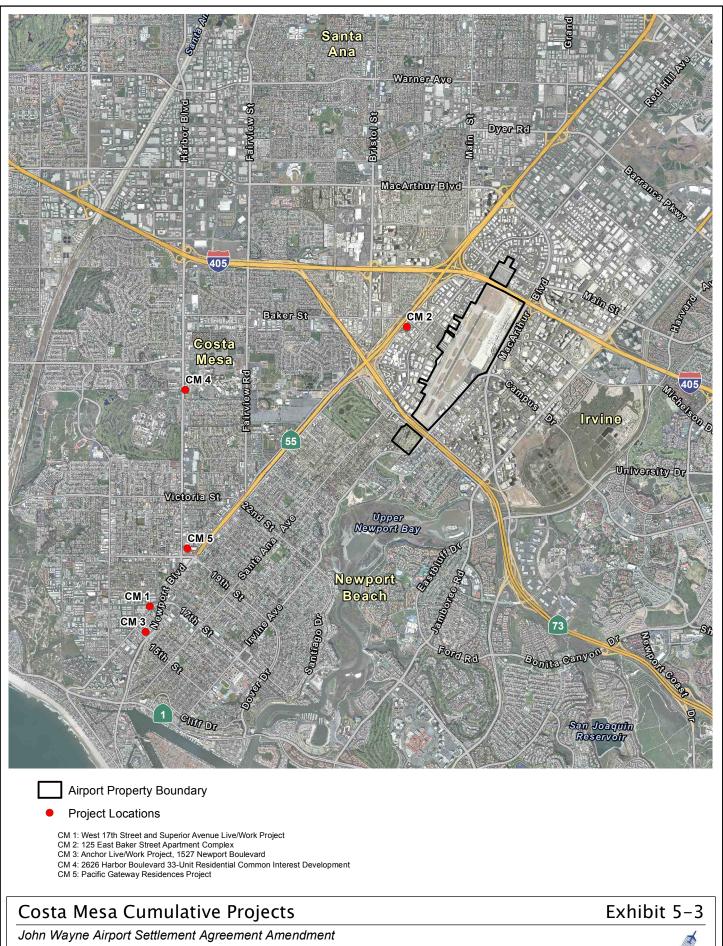
NB 31: Old City Hall Complex Redevelopment NB 32: Plaza Corona Del Mar



John Wayne Airport Settlement Agreement Amendment

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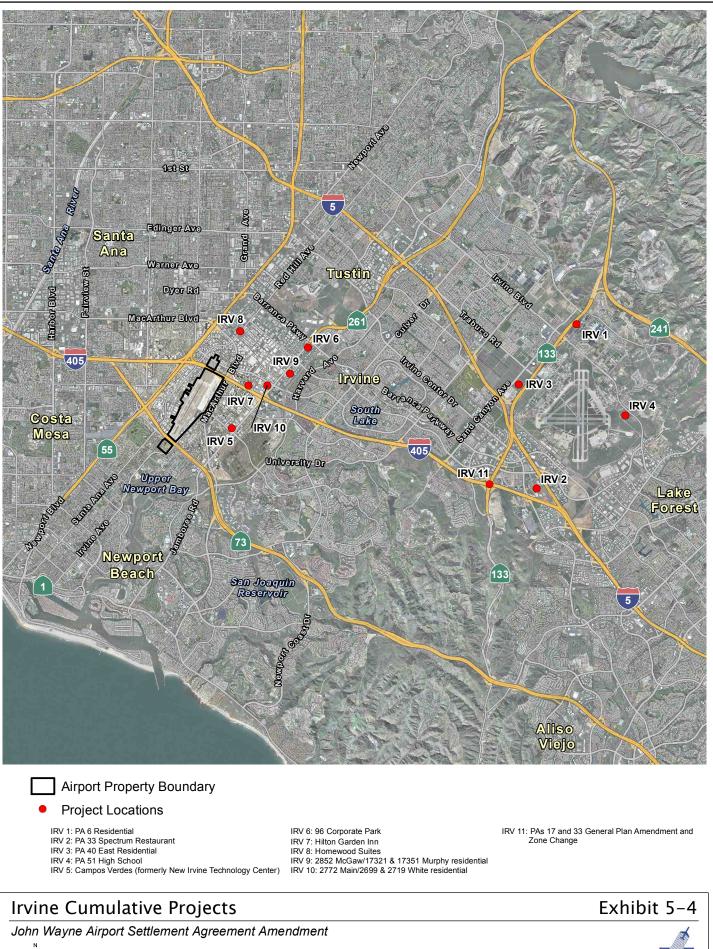
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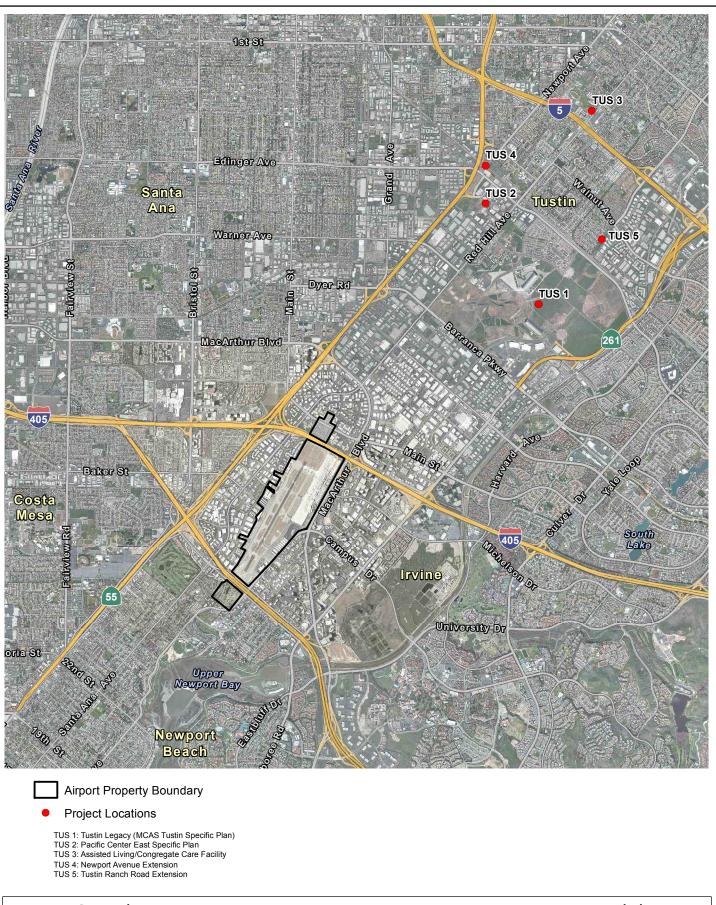
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JOHN WAY AIRPORT



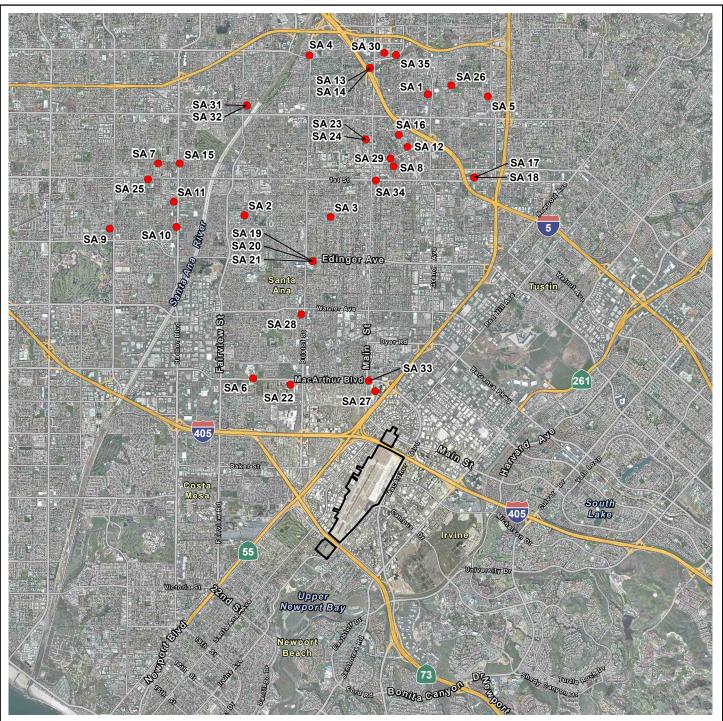
Tustin Cumulative Projects

John Wayne Airport Settlement Agreement Amendment

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Exhibit 5-5





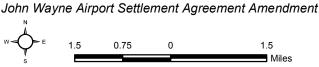
Airport Property Boundary **Project Locations**

- SA 1: Alliance Church of Orange SA 2: Bat Nha Buddhist Meditation Center
- SA 3: Boys & Girls Club
- SA 4: Bristol-Memory Commercial Building
- SA 5: Catalina Retail Building SA 6: Christ Our Savior Cathedral
- SA 7: City Venture (Magnolia Lane)
- SA 8: City Venture SA 9: City Venture SA 10: City Venture
- SA 11: Compass Mediation Center
- SA 12: Depot at Santiago

SA 13: Discovery Science Center Expansion SA 14: Discovery Science Center Phase II SA 15: Fifth & Harbor Commercial Building

- SA 16: Lotus Townhomes SA 17: Lyon Communities SA 18: Lyon Communities
- SA 19: Mater Dei Park Structure
- SA 20: Mater Dei Performing Arts Building SA 21: Mater Dei Performing Arts Building
- SA 22: Metro Town Center Expansion
- SA 23: One Broadway Plaza
- SA 24: One Broadway Plaza

Santa Ana Cumulative Projects



SA 25: ProWash Xpress Car Wash SA 26: Sexlinger Homes SA 27: Skyline Phase II SA 28: South Coast Speedwash SA 29: The Roost SA 30: The 301

- SA 31: The Academy Charter High School SA 32: The Academy Charter High School
- SA 33: The Marke by Lyon Realty SA 34: The MET
- SA 35: Town and Country Independent Living

Exhibit 5-6



5.3 CUMULATIVE IMPACT ANALYSIS

This section analyzes potential cumulative impacts to the environment that could be associated with implementation of the Proposed Project in concert with the cumulative projects and projected growth, including the above-listed projects. As discussed above, the OCP-2010 Modified projections are used for projecting regional growth that would occur in the study area, even though this growth is not currently tied to specific projects. As part of the technical analysis done for this EIR, the cumulative projects listed in Tables 5-1 through 5-6 have been reviewed to ensure that the level of growth that would occur with these projects is provided for in the OCP-2010 Modified projections. This data was then used to evaluate the potential for cumulative impacts as a result of implementing the Proposed Project.

The threshold of significance used to determine whether the cumulative projects considered would create a significant impact on the environment, as provided in the CEQA Environmental checklist, and is as follows:

Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of an applicable project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The cumulative analysis provided below addresses each of the topical issues addressed in Section 4.

5.3.1 AIR QUALITY

The study area for the consideration of regional emissions is the South Coast Air Basin (SCAB), which includes Los Angeles, Orange, and the urbanized portions of Riverside and San Bernardino Counties, including the Project site. The study area for localized health risk impacts extends to 1,000 meters from the Project site.

Cumulative impacts analysis for air quality is based on the guidance provided by South Coast Air Quality Management District ("SCAQMD") (Environ 2014).

As Lead Agency, the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions...

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

This analysis also conservatively assumes the same non-cancer Hazard Index ("HI") significance threshold for the cumulative analysis.

The related projects are shown in Section 5.2 above. These projects may result in construction and/or operational criteria air pollutant and toxic air contaminant emissions that could contribute to cumulative impacts. However, information that could be quantitatively evaluated in combination with the Proposed Project and alternatives is generally not available for most projects listed. Without specific information for all of the related cumulative projects, it would be speculative to quantitatively evaluate the cumulative effects of these related projects. Further, based on SCAQMD's methodology to evaluating cumulative impacts, it is not necessary to develop emission estimates for the related projects to assess the Project's cumulative impacts.

Though the cumulative projects may generate short-term construction air emissions, the Project would not contribute to cumulatively significant construction impacts because the Project plans for no construction.

Based on SCAQMD's methodology, if the project exceeds the SCAQMD's recommended significance thresholds for project-specific operational air emissions, then the project would also have a cumulatively considerable increase in emissions for those pollutants. The direct, and therefore cumulatively considerable operational impacts for the Proposed Project and alternatives are as follows. Each exceedance would be a cumulatively significant impact.

- For the Proposed Project, "criteria air pollutants" ("CAPs") emissions would exceed the SCAQMD's threshold for nitrogen oxides ("NOx") in all three phases, for volatile organic compounds ("VOCs") in Phases 2 and 3, and for PM10 in Phase 3. For toxic air contaminants ("TACs") emissions, the acute non-cancer hazard index ("HI") at a worker receptor would exceed the SCAQMD threshold.³
- For Alternative A, CAP emissions would exceed the SCAQMD's threshold for NOx in all three phases and for VOCs and PM10 in Phase 3. For TAC emissions, the acute non-cancer HI at a worker receptor would exceed the SCAQMD threshold.
- For Alternative B, CAP emissions would exceed the SCAQMD's threshold for NOx in all three phases and for VOC, PM10, and PM2.5 in Phases 2 and 3. For TAC emissions, the acute non-cancer HI at a worker receptor would exceed the SCAQMD threshold.
- For Alternative C, CAP emissions would exceed the SCAQMD's thresholds for NOx, VOC, PM10, PM2.5 and SOx in all three phases. For TAC emissions, the cancer burden and the acute non-cancer HI at all receptor would exceed the SCAQMD thresholds.
- For the No Project Alternative, CAP emissions would exceed the SCAQMD's threshold for NOx. For TAC emissions, no SCAQMD thresholds would be exceeded.

The mitigation measures (AQ/GHG-1 through AQ/GHG-15) provided in Section 4.1, Air Quality, would serve to minimize the impacts associated with Proposed Project and alternatives; however, air quality impacts would remain a significant, unavoidable impact. Because the Project would have significant and unavoidable impacts described above, these impacts would be cumulatively considerable. Therefore, the Project would have a significant and unavoidable cumulative air quality impact.

³ TAC impacts were evaluated for Phase 3 of the Proposed Project and each alternative.

5.3.2 BIOLOGICAL RESOURCES

For evaluation of specific projects, the biological resources cumulative study area includes development within the jurisdictions adjacent to the Airport. These are the cumulative projects listed in Tables 5-1 through 5-6. For consideration of the potential long-term growth of the region, the Orange County Central-Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan ("NCCP/HCP") area has been considered.

For both the long-term growth, as well as listing of specific projects, an understanding of the NCCP/HCP process is important. The Orange County Central-Coastal NCCP/HCP uses a multi-species habitat conservation approach rather than a species-specific approach and was developed to take a broad-based ecosystem approach to planning for the protection and management of coastally occurring wildlife and plant communities. This program anticipated and planned for impacts to native habitats and associated wildlife in the coastal subregion with a corresponding reserve system that permanently preserved coastal lands that are biologically important to the area. The reserve system for the Orange County Central-Coast NCCP/HCP encompasses 37,380 acres (CDFW 2014) In this context, habitat impacts resulting from cumulative projects discussed in Section 5.2 above would be covered under the NCCP/HCP and would not be considered cumulatively significant provided the development is located outside the designated reserve system and the cumulative projects are consistent with the program guidelines. The County of Orange and the City of Newport Beach are participating jurisdictions in the Central-Coastal NCCP/HCP.

As discussed in Section 4.2, Biological Resources, the Project site is located in the Orange County Coastal-Central Subregion NCCP/HCP; however, it is located outside the designated protection areas (reserve system). The closest NCCP/HCP-designated reserve system area is the Newport Bay Ecological Reserve, located in Upper Newport Bay. None of the cumulative projects are proposed for development within the reserve system area. Therefore, no direct impacts on the areas designed to provide for the protection and management of coastally occurring wildlife and plant communities would occur.

The other component of the evaluation is if the Project and cumulative projects would result in indirect impacts potentially diminishing function of the reserve system. No significant indirect were identified for the Proposed Project, Alternatives A and B, or No Project Alternative; however, potential significant unavoidable impacts to local population of listed bird species in Upper Newport Bay were identified with implementation of Alternative C (refer to Section 4.2, Biological Resources). These impacts would be Project-specific and would not be considered cumulative. The nature of the Project's impacts to biological resources is a result of an increase in noise from additional flights and removal of the curfew, whereas none of the cumulative projects are located outside the Central-Coastal NCCP/HCP reserve system. Based on the location of the cumulative projects, it is not expected that they would result in indirect impacts that would interfere with the function of the reserve system. Therefore, significant cumulative impacts to biological resources are not anticipated. As such, from a cumulative perspective, the Central-Coastal NCCP/HCP would serve to ensure that cumulative impacts on biological resources would not be considered significant.

5.3.3 GREENHOUSE GAS EMISSIONS

The study area for greenhouse gas ("GHG") emissions is global. .

There is no scientific or regulatory consensus regarding what particular quantity of GHG emissions would result in a substantial adverse change to the physical conditions resulting in global climate change. Further, no agency with regulatory authority and expertise (such as the California Air Resources Board ["CARB"] or SCAQMD) has adopted numeric GHG thresholds for airports for purposes of CEQA. That being said, the emissions of GHGs and corresponding contribution to global climate change are generally characterized as a cumulative problem (i.e., the incremental contributions of multiple sources across the entire planet influence global climate change).

The criterion selected for evaluating the significance of the Project's forecasted GHG emissions is conformance with the goal established by the State of California in Executive Order S-3-05 and Assembly Bill 32, i.e. the achievement of 1990 GHG emission levels by 2020, and quantified in the CARB 2008 Scoping Plan as 2020 emissions being 28.5 percent less than 2020 Business as Usual/No Action Taken ("NAT") emissions. The GHG emissions reductions for the (the Proposed Project, Alternatives A through C, and the No Project Alternative in 2020, when compared to 2020 NAT would each be less than 28.5 percent. (Threshold 4.3-1 in Section 4.3). Therefore, even with the incorporation of mitigation measures (AQ/GHG-1 through AQ/GHG-15), the Project's GHG emissions impacts would be cumulatively considerable and would be cumulatively significant.

5.3.4 HAZARDS AND HAZARDOUS MATERIALS

Because hazardous materials are often site-specific and localized, the potential for cumulative impacts is limited. For cumulative hazards and hazardous materials impacts to occur the projects would need to be relatively close to each other so project-related impacts would be collectively pose a significant impact. There are no cumulative projects immediately adjacent to the Airport where combined hazardous materials impacts would occur. Therefore, the hazards and hazardous materials cumulative study area for the Project is the Project site (i.e., the Airport boundary) and considers the cumulative projects identified on JWA.

The Proposed Project and all the alternatives (Alternatives A through C and the No Project Alternative) would result in an increase in fueling activities at JWA's commercial fuel farm; however, as discussed in Section 4.4, this increase in activity at the fuel farm would not result in a significant hazard to the public or environment. The Airport is regulated by State and federal laws that pertain to hazardous materials, and include stringent fuel safety protocols, regulations, and permits. These regulations would apply not only to the existing operations but also to all future activities at the Airport.

The John Wayne Airport New Jet Fuel Pipeline and Tank Farm proposal by Wickland Pipelines LLC, is the cumulative project with the greatest potential to contribute to a significant impact. This project proposes to build a fuel pipeline connecting JWA to the existing Kinder Morgan main jet fuel line located near Edinger Avenue, and to construct 2 new 1.5 million gallon fuel storage tanks within the Airport boundary and located south of the existing Airport fuel tanks. This project is still in the planning phase and has not received all necessary approvals. The project

was conditionally approved by the Director, OC Planning in May 2014 subject to applicable Findings and Conditions of Approval ("COA"). However, the Encroachment permit will not be issued until all applicable COAs are satisfied.

An operational constraint of the proposed pipeline connection is that JWA would only be able to receive weekly fuel deliveries. Total weekly delivery would be approximately 1.7 million gallons. The new tanks would connect directly to the existing fuel tanks on the Airport. Fuel cannot be distributed directly from the large tanks to the hydrant fueling system in place; it must first be transferred into one of the smaller tanks and allowed to settle. A number of project design features and mitigation measures are proposed to reduce the potential impacts of the New Jet Fuel Pipeline and Tank Farm to less than significant (County of Orange 2013).

If implemented, the New Jet Fuel Pipeline and Tank Farm project would increase the fuel storage capacity at JWA. The intent of this project is to reduce the need to truck fuel from refineries to the Airport. Annually, the pipeline would provide sufficient fuel to serve 12.0 MAP. However, as discussed in Section 4.4, Hazards and Hazardous Materials, and Section 4.5, Land Use and Planning, the analysis of the fuel capacity is done for the average day peak month ("ADPM"). An evaluation was prepared to assess the effects of the new fuel pipeline on the fuel delivery at the Airport. The evaluation assumed only one of the new large tanks would be available for useable fuel. The second tank would be used as a flex tank; transferring fuel and storing fuel that does not pass quality inspections. After the 2 large tanks and pipeline are constructed and connected to the rest of the fuel farm, 2 of the smaller tanks would then be available for daily use, increasing the daily working capacity to between 374,000 gallons and 508,000 gallons (existing capacity and with tank modifications, respectively).

As shown in Table 5-7, the Jet Fuel Pipeline and Tank Farm would minimize the number of trucks transporting jet fuel to the Airport. However, supplemental fuel delivered via tanker truck would still be required for the Proposed Project and Alternatives A through C. It is assumed that truck deliveries would occur during the nighttime hours as currently happens, with a maximum of 32 truck deliveries any 1 night. These deliveries would occur near the end of the week as fuel availability dwindles. Since the large tanks would not be directly connected to the truck unloading positions, the trucked fuel would be offloaded directly to one of the small tanks for settling.

Item	Baseline 2013	Proposed Project	Alternative A	Alternative B	Alternative C	No Project Alternative
Phase 1						
MAP Level	9.17	10.8	10.8	10.8	16.9	10.8
ADPM Passengers ^a	27,451	32,742	32,742	32,742	51,258	32,742
Required Daily Working Capacity	203,000	242,000	242,000	242,000	379,000	242,000
Days of Capacity ^b		7.0	7.0	7.0	4.5	7.0
Remaining Capacity at Weeks' End		6,000	6,000	6,000	(953,000)	6,000

TABLE 5-7 WEEKLY FUEL CAPACITY AND TRUCKING REQUIREMENTS DURING THE PEAK PASSENGER MONTH WITH FUEL PIPELINE

TABLE 5-7WEEKLY FUEL CAPACITY AND TRUCKING REQUIREMENTSDURING THE PEAK PASSENGER MONTH WITH FUEL PIPELINE

Item	Baseline 2013	Proposed Project	Alternative A	Alternative B	Alternative C	No Project Alternative
Additional Trucks Deliveries Required during the Week		0	0	0	120	0
Number of Nights Required to Provide Additional Fuel		0	0	0	4	0
Phase 2			•	•	•	
MAP Level	9.17	11.8	11.4	13.0	16.9	10.8
ADPM Passengers ^a	27,451	35,774	34,581	39,419	51,258	32,742
Required Daily Working Capacity	203,000	265,000	256,000	292,000	379,000	242,000
Days of Capacity ^b		6.4	6.6	5.8	4.5	7.0
Remaining Capacity at Weeks' End		(155,000)	(92,000)	(344,000)	(953,000)	6,000
Additional Trucks Deliveries Required during the Week		20	12	43	120	0
Number of Nights Required to Provide Additional Fuel		1	1	2	4	0
Phase 3					•	
MAP Level	9.17	12.5	12.8	15.0	16.9	10.8
ADPM Passengers ^a	27,451	37,903	38,806	45,484	51,258	32,742
Required Daily Working Capacity	203,000	280,000	287,000	337,000	379,000	242,000
Days of Capacity ^b		6.1	5.9	5.0	4.5	7.0
Remaining Capacity at Weeks' End		(260,000)	(309,000)	(659,000)	(953,000)	6,000
Additional Trucks Deliveries Required during the Week		33	39	83	120	0
Number of Nights Required to Provide Additional Fuel		2	2	3	4	0

MAP: million annual passengers; ADPM: Average Day Peak Month

Boldface text denotes a capacity exceedance.

^a The ADPM passengers levels are from the *Aviation Forecasts Technical Report* (Table 3.5) and are also provided in Section 3 of this EIR in Table 3-2.

^b Assumes weekly delivery of 1.7 million gallons of fuel from the pipeline.

Source: Data from *Aviation Forecasts Technical Report,* AECOM 2014a (Table 3-5) and from the *Capacity Analysis Technical Report,* AECOM 2014b (Table 4-2).

As seen in Table 5-7, the weekly shortfall of fuel during the peak month ranges from 260,000 gallons for the Proposed Project to 953,000 gallons for Alternative C. This translates into 33 to 120 fuel truck deliveries per week or 2 to 4 nights of fuel deliveries, respectively.

In conclusion, the Jet Fuel Pipeline and Tank Farm project would result in a greater capacity for fuel being stored at the Airport; however, all the regulations and safety requirements currently in place would apply to both the existing commercial fuel farm and to the new facilities. The Jet Fuel Pipeline and Tank Farm would reduce the dependence on fuel tanker truck deliveries. All truck deliveries could be done during the night hours, as is done currently. Therefore, it would reduce the potential risks associated with the truck deliveries. However, it should be noted that the risks associated with the fuel delivery are less than significant.

The construction of Parking Structure C2 would result in the short-term usage of materials classified as hazardous, such as fuel for equipment and paint. State and federal regulations have established protocols for handling and disposing of hazardous materials during construction. Given the nature of the potential impacts associated with cumulative projects on the Airport, the Project would not contribute to a cumulatively significant hazardous materials impact.

5.3.5 LAND USE AND PLANNING

As described in Section 4.5, Land Use and Planning, land use impacts are evaluated with respect to on-site land uses, off-site (surrounding) land uses, and policy consistency. This methodology is carried forward to evaluating the cumulative land uses impacts.

ON-SITE LAND USE EVALUATION

The Project would not require any physical improvements to the terminal or airfield facilities. However, there are two cumulative projects that would occur on site within the Airport boundaries. These are discussed in greater detail below.

Parking Structure C was evaluated in Supplemental EIR 582 and approved by the County in October 19, 2004. Phase 1 of Parking Structure C was completed in in 2011. Design plans for Phase 2 of Parking Structure C ("C2"), which would add 1,381 parking spaces, have been completed and construction will be initiated when the demand warrants.

The second cumulative project with potential for impacts to onsite land uses is the John Wayne Airport New Jet Fuel Pipeline and Tank Farm project proposed by Wickland Pipelines LLC. As previously discussed, this would construct a new, approximate 5-mile-long jet fuel pipeline that would connect the Airport to an existing 16-inch fuel pipeline located near Edinger Avenue and Tustin Ranch Road in Tustin. The intent of this project is to reduce/remove the need to truck fuel from refinery facilities (located in the cities of El Segundo and Carson) to the Airport. This project was conditionally approved by the Director, OC Planning in May 2014 subject to applicable Findings and Conditions of Approval ("COA"). However, the Encroachment permit will not be issued until all applicable COAs are satisfied.

No significant cumulative onsite land uses were identified with either of these two projects. Both of these cumulative projects identified constructing improvements on the Airport, where as there are no physical improvements to the terminal or airfield facilities associated with the Proposed Project and alternatives. Parking Structure C2 is the phased implementation of a planned activity, approved nearly a decade ago. The nature of the impacts associated with Parking Structure C2 would be short-term construction impacts (i.e., construction staging). Closure of existing facilities is not anticipated during construction. The Wickland Pipeline, LLC project, would also result in construction impact on the Airport; however, on the other side of

the airfield. The cumulative projects would not conflict with each other or with any of the Airport operations or ongoing land uses on the Airport. Ultimately, both cumulative projects, if implemented would have beneficial effects on the Airport land uses because they would provide increased efficiency of the Airport operations. Because no construction is proposed with Project, the impacts of the Project and cumulative projects would not be collectively significant and no cumulative land use impacts associated with this project would result.

SURROUNDING LAND USE EVALUATION

The cumulative study area for the surrounding land uses includes the jurisdictions immediately surrounding the Airport. This includes the cities of Newport Beach, Costa Mesa, Irvine, Tustin, and Santa Ana, in addition to the islands of unincorporated areas south of the Airport. As discussed above, these jurisdictions were all contacted and a listing of cumulative projects have been identified in Tables 5-1 through 5-6.

The cumulative projects were evaluated to determine which projects, which when combined with the impacts associated with the Project, would result in collectively significant impacts. The Project's land use compatibility analysis focuses on the creation of incompatible land uses based on changes to the noise environment. As discussed in Section 4.5, the 65 Community Noise Equivalency Level ("CNEL") is generally considered the upper threshold for noise-sensitive uses (e.g., residences, places of worship, and schools/childcare facilities) to be considered compatible, unless noise-attenuation measures (such as insulation) have been implemented. Significant unavoidable land use impacts were identified for the Proposed Project and all alternatives as it pertained to the County's exterior noise standard for noise-sensitive uses. Potential significant impacts for interior noise have also been identified. Though mitigation has been recommended that would reduce interior noise impacts to a level considered less than significant, there is the potential that, based on the Federal Aviation Administration ("FAA") criteria for providing sound attenuation, not all noise sensitive uses with interior noise levels in excess of 45 CNEL will be eligible for sound attenuation. To be eligible for sound insulation funded by the Airport or FAA, the FAA Program Guidance Letter 12-09, indicates the windows-closed interior noise level of a structure must be 45 dB or greater. The measurement of interior noise levels is an average of all habitable spaces in a particular residential unit, or educational spaces in a school. (FAA 2012) There may be noise-sensitive uses where some rooms exceed the 45 CNEL interior noise levels, but the overall average of the habitable rooms is less than 45 CNEL In these cases, the noisesensitive use would not be eligible for sound attenuation and the impact would remain a significant and unavoidable impact based on the County of Orange criteria. These significant land use impacts were associated with the increased number of aircraft operations. The noise analysis (presented in Section 4.6) also identified the potential for traffic noise impacts.

Since the Project's land use impacts are noise-related, the cumulative projects with the greatest potential to result in cumulative impacts would be those projects that add to the cumulative noise levels or ones that introduce new noise-sensitive uses within the 65 CNEL or greater noise contour. In evaluating the cumulative impacts to surrounding land uses, none of the other projects would influence the number of aircraft operations. Therefore, there is no potential for cumulative land use impacts associated with aircraft noise. The analysis then focuses on land use incompatibility associated with increased noise levels from traffic. As discussed below in Section 5.3.8, Transportation/Traffic, the traffic analysis takes into consideration the long-range background growth, which would include the cumulative projects. The analysis provided for Threshold 4.6-3 (in Section 4.6, Noise) determined traffic noise would be less than significant for

the Proposed Project and all the alternatives. Therefore, no cumulative surrounding land use compatibility impacts associated with traffic noise are anticipated.

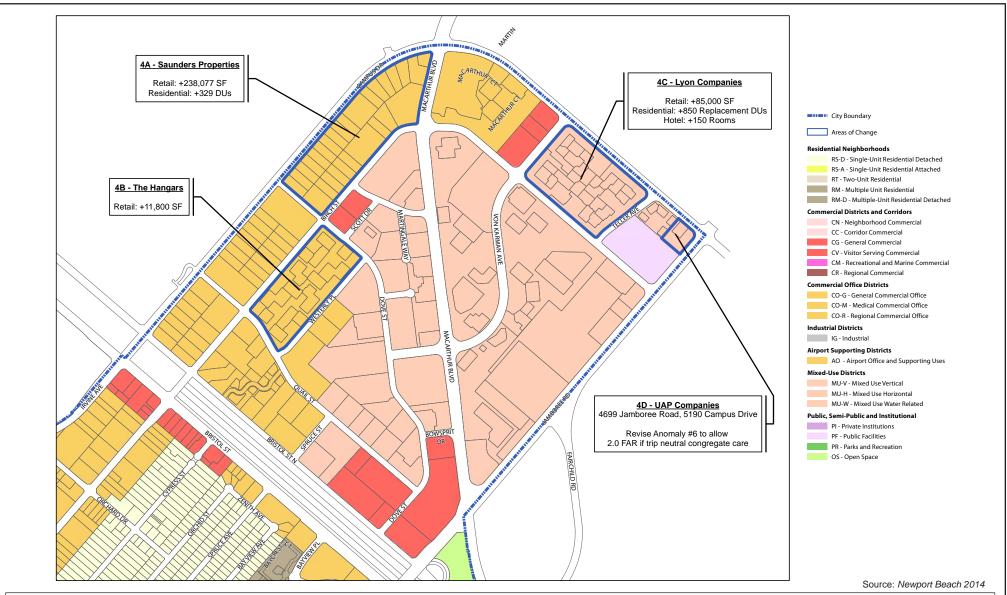
The other potential factor is the introduction of noise-sensitive uses within the Airport 65 CNEL contour. Of the cumulative projects, only the revisions to the Airport Area component of the *City of Newport Beach General Plan's* Land Use Element ("LUE") Amendment would propose noise-sensitive uses within the Airport 65 CNEL contour. As indicated in Table 5-2, the LUE Amendment proposes to increase the development intensity in the Airport Area. As shown on Exhibit 5-7 the subareas proposed for change by the LUE Amendment that are within the JWA Planning Area include the following four projects (Newport Beach 2014):

- **The Hangars:** add 11,800 square feet ("sf") of retail space located at the southwestern corner of the intersection of Dove Street and Birch Street.
- **Saunders Properties:** add 238,077 sf of retail space and add 329 residences located at the southwestern corner of the intersection of Campus Drive and MacArthur Boulevard.
- **Lyon Communities:** add 85,000 sf of retail; add 850 replacement residences; and a 150-room hotel located at the southeastern corner of the intersection of Campus Drive and Von Karman Avenue.
- **UAP Companies:** allow 2.0 Floor Area Ratio ("FAR") of trip-neutral congregate care located at 4699 Jamboree Road and 5190 Campus Drive.

When compared to existing conditions, the Proposed Project and all the alternatives would extend the 65 CNEL contour into areas designed for mixed-use development in the City of Newport Beach's Airport Area. The *City of Newport Beach General Plan's* Noise Element noise/land use compatibility matrix (see Table N2 in the Noise Element, page 12-23) lists mixed use land uses within the 65 CNEL contour as "normally incompatible;" new construction of noise sensitive uses would generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and noise insulation features must be included in the design.

Increasing the area considered unsuitable for residential development presents a conflict with the General Plan Land Use Element policies that call for a mix of housing types and buildings that integrate housing with ground-level convenience retail uses and would be developed at a sufficient scale to achieve a "complete" neighborhood. However, the City of Newport Beach uses the 1985 Master Plan contours (the basis for the Settlement Agreement) when assessing compatibility of land uses.

Two of the developments considered as part of the LUE Amendment that would increase housing in the Airport Area have portions of the property within the 65 CNEL contour (the Saunders Properties and the Hangars). Developing the residential uses on the portion of the properties that are located within the 60 CNEL contour would be feasible and not present a cumulative land use impact for all the scenarios other than Alternative C, Phases 2 and 3. With these phases of Alternative C, all of the Saunders property would be located within the 65 CNEL contour, which if developed with residential uses would result in potential land use incompatibility based on exterior noise levels. Alternative C, Phases 2 and 3 would increase the size of the 65 contour in the area covered by the LUE, resulting in a potential cumulative impact of increasing the amount of incompatible residences adjacent to the Airport.



City of Newport Beach General Plan Land Use Element Amendment Airport Area Proposed Changes

John Wayne Airport Settlement Agreement Amendment

Exhibit 5–7

The Airport Land Use Commission ("ALUC") has evaluated the LUE Amendment project for consistency with the Airport Environs Land Use Plan ("AELUP") for JWA. The ALUC suggested wording changes to existing policies and suggested creating new policies to address the land use adjacency of the LUE Amendment project to the Airport. With suggested changes, the ALUC would find the LUE Amendment Project consistent with the AELUP for JWA. Policy Consistency Evaluation

The cumulative analysis for policy consistency evaluation would focus on applicable land use plan, policy, or regulation of an agency with jurisdiction over the project, which are the County of Orange and the City of Newport Beach.

Table 4.5-11 in Section 4.5, Land Use and Planning, provides a policy consistency analysis of the Project to relevant planning programs as described in detail in Section 4.5. The County of Orange and City of Newport Beach have jurisdiction over the Project. Alternatives B and C and the No Project Alternative were found to be inconsistent with goals and/or policies from the City of Newport Beach General Plan. These impacts were determined to be significant and unavoidable in Section 4.5. The inconsistency stemmed from impacts associated with the aviation activities or policies regarding maintaining the protections in the Settlement Agreement Amendment. None of the cumulative projects would result in further inconsistencies with these policies. None of the cumulative projects under consideration by the County of Orange would not be inconsistent with any of the applicable County policies. Though design plans for the development projects identified as part of the Newport Beach LUE have not been prepared, it is reasonable to assume that the City of Newport Beach would evaluate each of the cumulative projects whough the entitlement process. Therefore, the Project would not contribute to any cumulative impacts associated with plan or policy inconsistency.

5.3.6 NOISE

The study areas for cumulative noise impacts are the areas within the 65 CNEL aircraft noise contour for Alternative C, which represents the largest 65 CNEL contour for the Project.

For purposes of CEQA, "cumulative impacts" refer to individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts. Because of the way noise levels are combined, in order for two noise sources to result in a cumulative impact, the noise levels generated by the sources need to generate similar noise levels that are just below or that exceed an applicable noise standard (i.e., 65 CNEL for residences). Two noise sources that generate equal noise levels will result in a cumulative noise level that is 3 decibels ("dB") higher than the level that would occur from only one of the sources. Therefore, the noise levels from the louder of two individual sources would generally need to be within 3 dB of the standard for a cumulative impact to be possible. If the noise levels from two sources differ by 10 dB or more, the cumulative noise level is approximately the same as the louder noise source. Two noise levels must be within 4 dB of each other for the cumulative noise level to be 1.5 dB greater than the loudest noise level. These facts considerably limit the situations where cumulative noise impacts could occur (Noise Analysis Technical Report, Landrum & Brown 2014). With the Project, the two primary environmental noise sources are aircraft (both from JWA and from other air traffic passing over the area) and roadway traffic. State and federal laws prohibit local municipalities from directly controlling these noise sources. The only practical ways for local municipalities to control noise from these sources is through planning; separating noise-sensitive uses from major roadways and airports; and by establishing noise standards for new developments located near these noise sources.

Local municipalities can regulate noise sources on private property, such as generators, heating, ventilation, and air conditioning ("HVAC") units, or other noise-generating equipment. The County of Orange and all of the cities in the Project area have adopted noise ordinances that provide noise limits that cannot be exceeded at neighboring properties. These standards limit noise levels on an hourly or shorter basis (e.g., Newport Beach's standards are based on 15 minute average [" L_{eq} "] noise levels). Further, noise level standards in residential areas during the nighttime are 10 dB less than the daytime standards. Facilities operating in compliance with these standards would need to generate the maximum allowable noise levels 24 hours a day at an adjacent residential area to generate a noise level approaching the 65 CNEL residential noise standard. In general, the types of facilities that could cause such impacts are located in industrial areas, away from residential areas; however, the noise consultant is not aware of any existing or proposed facilities located near residential areas that operate under such conditions.

Aircraft and traffic noise could result in cumulative impacts along major roadways that have adjacent residential uses which are exposed to noise levels that approach or exceed the 65 CNEL standard. This would only be expected to occur in the first row of residences along a major roadway. South of the Airport, most of the roadways with adjacent residential uses are not major arterials that would be expected to result in noise levels approaching or exceeding the 65 CNEL standard.

CUMULATIVE NOISE IMPACTS BASED ON COUNTY OF ORANGE SIGNIFICANCE THRESHOLDS

Irvine Avenue has adjacent residences and generates moderate traffic noise levels. However, all of the residences along Irvine Avenue face the roadway and do not have any private outdoor living areas directly exposed to traffic noise. The 65 CNEL standard is not applicable in front yards, but is limited to private outdoor living areas. In this case, the house structure itself is a very effective noise barrier that considerably reduces traffic noise levels in rear yards. Therefore, it is likely that traffic noise levels would be less than 55 CNEL in rear yards and, when added to aircraft noise levels of less than 65 CNEL (outside of the 65 CNEL aircraft noise contour), would not exceed 65 CNEL.

The roadways with considerable traffic noise and adjacent noise-sensitive uses are Jamboree Road and Pacific Coast Highway. The noise contours for Phases 2 and 3 of Alternative C show that aircraft noise levels will approach 59 CNEL along these roadways. Residences exposed to traffic noise levels of 64 CNEL or higher would have a cumulative noise exposure of 65 CNEL or greater. However, the noise level increase would be less than 1.2 dB (less than the 1.5 dB threshold) and, therefore, would not result in a significant cumulative impact. The aircraft noise levels from the other Project alternatives (i.e., Proposed Project, Alternatives A and B, and the No Project Alternative) are much lower in these areas and would not result in a significant cumulative impact.

Phases 2 and 3 of Alternative C would have aircraft noise increases that would significantly impact residences that are located around the edge of Newport Back Bay near Noise Monitoring Stations ("NMS") 4S, 5S, 6S, and 7S. As discussed in Section 4.6, Noise, there are no mitigation measures available to reduce this impact to a less than significant level. While these residences

are not directly exposed to other considerable individual sources, they are subject to the general background din from traffic and other noise sources in the area. Because of this, these residences would be subject to a significant cumulative noise impact.

Phase 3 of Alternative B and all Phases of Alternative C would have aircraft noise increases that would significantly impact residences in the greater Santa Ana Heights area near NMS 1S, 2S, and 3S. However, these residences would be exposed to aircraft noise levels greater than 65 CNEL and, therefore, would be eligible for acoustic insulation funded by the Airport or FAA (federal regulations prohibit the FAA or an airport from funding Acoustic Insulation Programs outside the 65 CNEL contour) (*Noise Analysis Technical Report*, Landrum & Brown, 2014). Mitigation measures N-1 and N-3 (Section 4.6) prescribe an acoustic insulation program ("AIP") where applicable. While noise levels from other noise sources impacting these residences are moderate or low, these residences would be subject to a significant cumulative noise impact without mitigation. With implementation of an AIP, this cumulative impact would be reduced to a less than significant level; however, as discussed above in Section 5.3.5, Land Use and Planning, there is the potential that some noise-sensitive uses would be exposed to noise levels that exceed County standards, but do not qualify for sound attenuation based on FAA criteria. Since this cannot be known until sound readings are taken, this EIR has found the interior noise levels to be a potential significant, unavoidable impact.

<u>CUMULATIVE NOISE IMPACTS BASED ON CITY OF NEWPORT BEACH SIGNIFICANCE</u> <u>THRESHOLDS</u>

The City of Newport Beach has adopted more stringent significance thresholds than those recommended by the FAA (i.e., that that are used for this analysis). This results in more areas being identified as significantly impacted. The Proposed Project, Phase 3, Alternative A, Phase 3, Alternative B, Phases 2 and 3, and all three phases of Alternative C are projected to impact residences around NMS 1S, 2S, and/or 3S. These residences would be exposed to aircraft noise levels that exceed 65 CNEL under these scenarios. Therefore, using the reasoning discussed above, these alternatives would result in significant cumulative noise impacts to the residences around the NMS. As discussed above, these residences would be eligible for an AIP in accordance with mitigation measures N-2 and N-3 that would mitigate the cumulative impact to a less than significant level; however, there is the potential that these residences would not qualify based on the FAA criteria. Therefore, it is assumed that there would be a significant, unavoidable impact related to interior noise impacts.

All three Phases of Alternative C would result in significant impacts at the residences around NMS 4S, 5S, 6S, and/or 7S. Therefore, using the reasoning discussed above, these alternatives would result in significant cumulative noise impacts to the residences around the NMS. As these residences would not be eligible for an AIP, this cumulative impact would be significant and unavoidable.

5.3.7 PUBLIC SERVICES

As defined in Section 4.7, public services includes fire protection and sheriff protection that serve JWA. As a Class I airport, JWA is required to meet certain fire protection safety standards regarding personnel training and equipment. For fire protection services on the airfield and police/security services (Transportation Safety Administration, U.S. Immigration and Customs Enforcement, and the Orange County Sheriff's Department) because of the specific requirements

for the Airport, the public services cumulative study area for the Project is the Project site (i.e., John Wayne Airport). These services are contained on the Airport and only serve JWA. The two on-site cumulative projects listed in Section 5.3.5 above (Parking Structure C2 and the Wickland Pipeline LLC project), would not place substantially increase the demand for these services. The addition of Parking Structure C2 would incrementally increase the facilities Sheriff's Department would service; however, as addressed in Section 4.7, staffing is based on area coverage and sufficient staffing is available to respond to multiple concurrent incidents at the Airport.

Fire and emergency medical service calls for non-airfield portions of the Airport are responded to by the Orange County Fire Authority ("OCFA") from Fire Station 28. However, since the local jurisdictions participate in a mutual agreement, the cumulative analysis considers the potential cumulative impact on first responders in the adjacent jurisdictions. The Project and cumulative projects are located in a developed area where fire stations have already been constructed. There are six fire stations within four miles of the Airport and substantially more stations within other portions of the adjacent cities. There are no known plans to provide an additional station to serve the Airport area. Therefore, no physical impacts associated with the construction of new facilities to address the cumulative projects are anticipated. The intensification of development may result in an increased number of service calls and place additional demands on staff in the existing stations. The mutual aid agreements are designed to provide additional back-up for the stations should a single station receive multiple calls. As development occurs, the need for additional staffing would be evaluated by OCFA and the local fire departments. The growth associated with the cumulative projects is consistent with the long-range projections for Orange County and is considered as the agencies evaluate appropriate staffing levels to meet the needs of the population. Increased staffing, which is paid for through taxes, would not result in an environmental impact.

5.3.8 TRANSPORTATION/TRAFFIC

Section 4.8 evaluated the Project's impact to traffic and circulation within the identified Project study area. By the nature of traffic studies, the analysis evaluates the potential long-range impacts on the circulation network. This system-wide evaluation ensures that regional growth and cumulative projects are included in the analysis. Prior to the completion of the *Transportation Impact Analysis Report*, the list of cumulative projects was reviewed to ensure the traffic associated with these projects were included in the transportation model for the time frames being evaluated. As discussed in Section 4.8, each jurisdiction in the study area was consulted when developing the thresholds of significance that were used for evaluating potential circulation/cumulative impacts within their jurisdiction. Therefore, the analysis presented in Section 4.8 includes the cumulative analysis.

The findings of the *Transportation Impact Analysis Report* concluded the Project would result in cumulative impacts at one intersection in the City of Newport Beach and at seven freeway/mainline segments under Caltrans jurisdiction; the cumulative impacts are summarized below and are shown in Table 5-8, Intersection Impact Summary, and Table 5-9, Freeway Impact Summary. The thresholds from the City of Newport Beach and Caltrans that were used to determine whether cumulative impacts would result are as follows:

• **City of Newport Beach Threshold T-5.** In the City of Newport Beach outside the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips

causes the Level of Service ("LOS") at a study intersection to change from LOS D to LOS E or F.

• **Caltrans Freeway Facilities (mainline, ramp, merge/diverge) Threshold T-13**. The addition of project-generated trips increases the traffic on a freeway mainline, freeway ramp, or merge/diverge section by two percent or more on a facility operating at LOS E or F prior to the addition of Project traffic.

Based on Threshold T-5, the following cumulative traffic intersection impact would occur:

• Campus Drive and Bristol Street North (No Project Alternative, Proposed Project, and Alternatives A through C –). Impacts associated with the No Project Alternative, the Proposed Project, and Alternatives A through C would contribute to an already deficient condition at this intersection. JWA has completed planning studies for this improvement and is currently in the process of preparing construction plans, which are approximately 70 percent complete as of March 2014. JWA has also agreed to fund necessary ancillary construction work at this location, including any utility relocation that might be required. This improvement (identified as Mitigation Measure ["MM"] T-3 in Section 4.8) is currently scheduled to be completed by 2016, which is the first year in which the impact would occur. With implementation of MM T-3, this cumulative impact would be less than significant.

Based on Threshold T-13, the following cumulative traffic freeway impacts would occur at the following locations:

- Northbound State Route ("SR") 55: Paularino Avenue On-Ramp (Alternative C Phases 1, 2, and 3).
- Northbound SR-55: Paularino Avenue On-Ramp to Interstate ("I") 405 Southbound On-Ramp (Alternative C Phases 1, 2, and 3).
- Northbound SR-55: On-Ramp from I-405 Northbound to the MacArthur Boulevard Off-Ramp (Proposed Project Phases 2 and 3; Alternative A Phase 3; Alternative B Phases 2 and 3; Alternative C Phases 1, 2, and 3).
- Southbound SR-55: MacArthur Boulevard Direct On-Ramp to I-405 Southbound Off-Ramp (Alternative C Phases 1, 2, and 3).
- Northbound SR-73: Bristol Street North On-Ramp to SR-55 Northbound Off-Ramp (Alternative C Phases 2 and 3).
- Northbound SR-73: On-Ramp from SR-55 Northbound (Alternative B Phase 2; Alternative C Phases 2 and 3).
- Southbound I-405: Jamboree Road Direct On-Ramp (Alternative C Phases 1, 2, and 3).

The majority of the identified significant freeway impacts result from a cumulative condition; that is, traffic from JWA is added to facilities that would operate at a deficient level even without

Project traffic. The contribution of additional JWA traffic volume (i.e., the Proposed Project and alternatives) to these segments is minimal, and ranges from two percent to five percent.

As indicated in Section 4.8, mitigation measures to reduce impacts to freeways and mainline segments to less than significant levels would require a complete reconstruction of the SR-55, SR-73, and I-405 freeways to add travel lanes and upgrade each of the deficient ramp locations. Since the freeways in the study area are interconnected systems, it would not be possible, nor effective, to provide isolated spot improvements of one segment of the freeway where deficient operations are observed. Because the improvements necessary to mitigate the identified freeway impacts (i.e., providing increased capacity) are beyond the jurisdiction and control of the County, and because the agencies with jurisdiction and control over these facilities (i.e., Caltrans, OCTA, TCA) have no present plans to construct the necessary improvements in the timeframe necessary to mitigate the identified significant impacts, there is no mechanism by which the Project can contribute its fair-share towards the necessary improvements and, consequently, there is no evidence that, even with a fair-share payment, the necessary improvements would be constructed. As such, the mitigation necessary to reduce the identified significant impacts is infeasible and the Project would contribute to cumulative freeway impacts that are significant and unavoidable.

TABLE 5-8INTERSECTION IMPACT SUMMARY

		-	P	ropo	osed	Proj	ject				Al	tern	ative	e A					Alte	erna	ativ	e B					Alt	tern	ativ	e C					I	No P	roje	ct		
		Existing +	Project	Phase 1		Phase 2		Phase 3		Existing + Project		Phase 1	Phase 7	1 11036 2	Phase 3		Existing + Project		Phase 1		Dhace 7	L 1143C 2	Dhace 2	rnase 3	Existing +	Project	Dhaca 1	L IIdae I	Dhace 7	ruase z	5	rnase 3	Existing +	Project		Phase 1		Phase 2		Phase 3
#	Intersection Locations	AM	PM	AM	PM /	AM F	м	AM PM	1 A	M PM	1 AM	PM	АМ	РМ	AM P	M	AM P	M	AM	PM	AM	РМ	АМ	РМ	АМ	РМ	AM	РМ	АМ	РМ	AM	РМ	AM	РМ	AM	I PM	AM	I PM	I AM	I PM
4	MacArthur & Michelson							D							Γ)								D				D		D		D								
15	Campus & Airport																							D		D		D		D		D								
	Campus & Bristol N.		D		С		С	C		D		С		С		5	I	D		С		С		С		D		С		С		С		D		С		С		С
	Santa Ana & Del Mar																															D								
53	Von Karman & Alton							D							Γ)								D								D								
	Notes: D = Direct Impact; C = Cumulative Impact; Ex. = Existing + Project Source: Traffic Impact Analysis Report, Fehr & Peers 2014 (Table 12-1).																																							

TABLE 5-9 FREEWAY IMPACT SUMMARY

	l	Propose	d Projec	et		Altern	ative A			Alte	rnative	e B				Alter	nativ	ve C				N	lo Pr	oject	
	Existing + Project	Phase 1	Phase 2	Phase 3	Existing + Project	Phase 1	Phase 2	Phase 3	Existing + Project	Phase 1	Dhaca 7	1 11030 2	Phase 3	Existing +	Project	Phase 1		Phase 2	Phase 3		Existing + Project	7	Phase 1	Phase 2	Phase 3
Intersection Locations	AM PM	AM PM	AM PM	AM PM	I AM PM	AM PM	AM PM	AM PM	AM PN	I AM P	M AM	PM A	M PM	I AM	PM	AM PI	/ AM	I PM	AM I	PM A	M PN	/I AM	PM	AM P	M AM PM
Northbound SR-55																									
Paularino Ave On-ramp															С	С		С		С					
Paularino Ave On-ramp to I-405 SB On-ramp															С	C		С		С					
On-ramp from I-405 NB to MacArthur Blvd Off- ramp	C		C	С	С			C	С			С	C		С	C		С		С					
Southbound SR-55																									
MacArthur Blvd Loop On-ramp to MacArthur Blvd Direct On-ramp														D		D	D		D						
MacArthur Blvd Direct On-ramp to Off-ramp to I-405 SB														С		С	С		С						
Northbound SR-73				<u> </u>					<u> </u>	<u> </u>															<u> </u>
Jamboree Rd On-ramp																									
Jamboree Rd On-ramp to Bristol St N Off-ramp																									
Bristol St N On-ramp to SR-55 N Off-ramp									D					D			С		С						
Off-ramp to SR-55 SB															С										
On-ramp from SR-55 NB									D			(2	D	С		С		С						
Southbound SR-73																									
No Impacts																									
Northbound I-405																									
No Impacts																									

						1			I AC	1 3014		L								
	Р	ropose	d Projec	t		Altern	ative A			Altern	ative B			Altern	ative C			No P	roject	
	Existing + Project	Phase 1	Phase 2	Phase 3	Existing + Project	Phase 1	Phase 2	Phase 3	Existing + Project	Phase 1	Phase 2	Phase 3	Existing + Project	Phase 1	Phase 2	Phase 3	Existing + Project	Phase 1	Phase 2	Phase 3
Southbound I-405			<u> </u>	1	I	I	<u>I</u>	1		I	<u> </u>	I	I	I		1	I	1	I	
Jamboree Rd Loop On- ramp													C							
Jamboree Rd Direct On- ramp													C	С	С	C				
Notes: D = Direct Impact; Source: <i>Traffic Impact A</i>								·												·

TABLE 5-9FREEWAY IMPACT SUMMARY

5.3.9 UTILITIES AND SERVICE SYSTEMS

As defined in Section 4.9, utilities includes water and wastewater used at JWA. Although the Project does not propose any physical improvements to facilities, the increase in passengers in the terminals and increase in Airport operations would result in an increase in water/wastewater demand. For water services, the Mesa Water District boundary, which services the Project would be the cumulative study area. As indicated in Section 4.9, the Mesa Water District is in the process of updating their Water Master Plan. The District has indicated that they would incorporate the Project's future water demands into the Master Plan (Lauri 2014). By incorporating the Project as part of the long-range District planning, impacts associated with cumulative water demands would be less than significant.

The Project is served by the Orange County Sanitation District ("OCSD"); therefore, the District serves as the cumulative study area for wastewater services. OCSD conducts long-term planning studies to ensure they have sufficient capacity to serve the uses in their District. As part of those long-term studies, the OCSD has assumed flow rates consistent with the 1990 service agreement with the Airport. The agreement equates to approximately 12.96 Million Annual Passengers ("MAP") when water-efficient systems are used. As discussed in Section 4.9, the Proposed Project, Alternative A, and the No Project Alternative can all be accommodated in the wastewater discharge assumption already incorporated into the long-term planning for the District. Therefore, because this capacity has been planned for within the system, the Proposed Project and Alternative A would not contribute to cumulative impacts for wastewater services. Alternatives B (Phase 3) and C exceed the discharge amounts equivalent to the 1990 service agreement. The contribution of cumulative projects, especially any facilities that use the same conveyance lines as the Airport, would potentially contribute to a cumulative impact. Mitigation Measure U-1 could reduce Project impacts to a less than significant levelIn conjunction of implementing Mitigation Measure U-1; wastewater flows from cumulative projects would be considered when evaluating the service needs of the Airport area improvements. However, because full implementation of the subject improvement is outside the jurisdiction and control of the County of Orange/JWA and, therefore, implementation cannot be assured, in the event the improvement is not fully operational prior to JWA serving 12.96 MAP, the Project's and any cumulative impacts would remain significant.

5.3.10 WATER QUALITY

The cumulative study area for water quality would be the drainage areas for the Upper Newport Bay and the Santa Ana Delhi Channel, the two water bodies that receive flows from the Airport. As discussed in Section 4.10, the Project would have a less than significant impact on surface water quality as it would not violate water quality standards; would not contribute substantial additional sources of polluted runoff; and would not otherwise substantially degrade water quality. The Airport has appropriate Best Management Practices ("BMPs") for fuel-related pollutants already in place to meet National Pollutant Discharge Elimination System ("NPDES") permit requirements (i.e., the General Industrial Storm Water NPDES Permit and Orange County's Municipal Permit).For example, there are a number of oil-water separators located throughout the airfield that treat runoff from each of the aircraft parking aprons. Normal Airport maintenance requires high frequency sweeping of all airfield pavement to prevent possible jet engine damage due to foreign objects; this has the benefit of removing contaminants attached to surficial debris (i.e., dust and sediment that accumulates on paving between storm events). In the parking lots, a self-contained scrubbing machine is used to clean oil and grease from the parking lots, and accumulated wash water is disposed of into the industrial sewer system. Additionally, because the Project does not propose any construction or other changes to the nature of the Airport operations that would increase the extent of impervious surfaces, there would be no change in the volume of runoff generated at JWA. With the continuation of the existing BMPs, the quality of the water discharging from the site (including re-suspension of dust on both runways and roadways from airplane/vehicle traffic) would be comparable to current conditions. Thus the EIR need not address the effects of the discharges of the cumulative projects under consideration (PRC 21083(b)(2).

As discussed in Section 4.10, Water Quality, the pollutants identified in the 303(d)-listed water bodies for waters that receive flows from JWA can be grouped into the following categories: pesticides, metals, pathogens, nutrients and other organics, and sediment. These are typical pollutants generated by an urban area with dense land development and a wide variety of land uses. With the exception of sediment, the pollutants of concern for the waterways on the 303(d) list are not the pollutants associated with emissions from aviation activities. As discussed above, JWA has an extensive program to minimize the re-suspension of dust and other sediment. Significant cumulative impacts to water quality are not expected because, even though many of the cumulative projects would discharge into the same drainages, it is anticipated/expected that all future projects within the watersheds will implement treatment and mitigation programs that will reduce pollutants of concern to less than significant levels prior to downstream discharge, consistent with current regulations.

5.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Topical Area	Proposed Project	Alternative A	Alternative B	Alternative C	No Project Alternative
Air Quality	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact
Biological Resources	Cumulatively, less than significant impact				
Greenhouse Gas Emissions	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact
Hazards and Hazardous Materials	Cumulatively, less than significant impact				
Land Use and Planning	Cumulatively, less than significant impact				

Table 5-10 provides a summary of the findings of significance for cumulative impacts after implementation of the mitigation measures for each topical area.

Topical Area	Proposed Project	Alternative A	Alternative B	Alternative C	No Project Alternative
Noise	Cumulatively,	Cumulatively,	Cumulatively	Cumulatively	Cumulatively,
	less than	less than	significant	significant	less than
	significant	significant	unavoidable	unavoidable	significant
	impact	impact	impact	impact	impact
Public Services	Cumulatively,	Cumulatively,	Cumulatively,	Cumulatively,	Cumulatively,
	less than				
	significant	significant	significant	significant	significant
	impact	impact	impact	impact	impact
Transportation and Traffic	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact	Cumulatively significant unavoidable impact
Utilities	Cumulatively,	Cumulatively,	Cumulatively	Cumulatively	Cumulatively,
	less than	less than	significant	significant	less than
	significant	significant	unavoidable	unavoidable	significant
	impact	impact	impact	impact	impact
Water Quality	Cumulatively,	Cumulatively,	Cumulatively,	Cumulatively,	Cumulatively,
	less than				
	significant	significant	significant	significant	significant
	impact	impact	impact	impact	impact

5.5 References

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