County Executive Office

Memorandum

May 23, 2018

To: Clerk of the Board of Supervisors

From: Frank Kim, County Executive Officer

Subject: Exception to Rule 21

S29A

The County Executive Office is requesting a Supplemental Agenda Staff Report for the June 5, 2018, Board Hearing.

Agency: John Wayne Airport
Subject: Approve Commuter Airline Operating License with Delux Public Charter, LLC
Districts: 2

Reason for supplemental: This Agenda Staff Report (ASR) is being brought back to the Board to be heard on June 5, 2018, at the direction of the County Executive Officer. This ASR and attachments were finalized after the filing deadline to the Clerk of the Board.

Concur: _____
Chairman Andrew Do, Supervisor, First District

cc: Board of Supervisors
County Executive Office
County Counsel

Agenda Item 52 9A
Clerk's Use Only

SUPPLEMENTAL AGENDA ITEM
AGENDA STAFF REPORT

MEETING DATE:	6/5/18
LEGAL ENTITY TAKING ACTION:	Board of Supervisors
BOARD OF SUPERVISORS DISTRICT(S):	2
SUBMITTING AGENCY/DEPARTMENT:	John Wayne Airport
DEPARTMENT HEAD REVIEW:	*Department Head Signature*
DEPARTMENT CONTACT PERSON(S):	Barry A. Rondinella (949) 252-5183 David Pfeiffer (949) 252-5291

SUBJECT: ***Approve Commuter Airline Operating License with Delux Public Charter, LLC***

CEO CONCUR	**COUNTY COUNSEL REVIEW**	**CLERK OF THE BOARD**
CEO Signature	Approve Agreement to Form *Action* *County Counsel Signature*	Discussion 3 Votes Board Majority

Budgeted: N/A **Current Year Cost:** N/A **Annual Cost:** N/A

Staffing Impact: No **# of Positions:** **Sole Source:** N/A

Current Fiscal Year Revenue: See Financial Impact Section

Funding Source: Airport Operating Fund 280:100% **County Audit in last 3 years:** No

Prior Board Action: 10/17/2017 #6, 10/25/2016 #12

RECOMMENDED ACTION(S)

1. Find that Final EIR No. 617, previously certified by the Board of Supervisors on September 30, 2014, reflects the independent judgment of the County of Orange and satisfies the requirements of CEQA for this Commuter Airline Operating License with Delux Public Charter, LLC dba JetSuiteX Air, which is a necessarily included element contemplated as part of the whole of the action.

   a. The circumstances of the project are substantially the same as described in EIR No. 617 which adequately addressed the effects of the proposed project. No substantial changes have been made in the project, no substantial changes have occurred in the circumstances under which the project is being undertaken and no new information of substantial importance to the project which was not known or could not have been known when the previous EIR No. 617 was adopted has become known and no further environmental review is required.

   b. EIR No. 617 is adequate to satisfy the requirements of CEQA for the Operating License.

c. All mitigation measures are fully enforceable pursuant to CEQA (Public Resources Code) Section 21081.6(b) and have either been adopted as conditions, incorporated as part of the project design, or included in the procedures of project implementation.

2. Approve the Commuter Airline Operating License with Delux Public Charter, LLC dba JetSuiteX Air.

SUMMARY:

Approval of a Commuter Airline Operating License with Delux Public Charter, LLC dba JetSuiteX Air will allow Licensee to provide regularly scheduled air service from the Fixed Base Operator, ACI Jet leasehold beginning July 1, 2018.

BACKGROUND INFORMATION:

John Wayne Airport (JWA) seeks Board of Supervisors' (Board) approval of a Commuter Airline License with Delux Public Charter, LLC dba JetSuiteX Air, (Delux). On October 25, 2016, the Board authorized the Airport Director to allocate 96,180 passengers to Delux. Delux did not initiate operations in 2017 and returned all allocations in late third quarter of 2017. On October 17, 2017, the Board authorized the Airport Director to allocate 68,880 passengers to Delux. In January 2018, Delux returned 33,600 allocated passengers with a plan to begin operations by the end of June 2018. Delux informed JWA that it plans to begin regularly scheduled air service to Las Vegas, NV, Thermal, CA and Concord, CA on July 1, 2018, with seasonal trips to Mammoth, CA and has proposed to operate from ACI Jet (ACI) Fixed Based Operator (FBO) leasehold. Pursuant to Delux's request to conduct passenger operations from a FBO and consistent with Section 8.1.7 of the Phase 2 Commercial Airline Access Plan and Regulation, this operation will be the first instance of a regularly scheduled commercial user operating from a location other than the Thomas F. Riley Terminal. The term of the license will expire on December 31, 2018, in concurrence with the termination of the FBO lease.

ACI completed traffic and parking studies on behalf of Delux to analyze and address potential changes in traffic conditions, as a result of locating the Delux operation at the ACI Jet facility. The results of the studies verified that no traffic and parking impacts would occur beyond those addressed in previously Board-certified EIR 617.

Compliance with CEQA: This project is a necessarily included element of the project considered in Final EIR No. 617, certified by the Board of Supervisors on September 30, 2014, which adequately addressed the effects of the proposed project. No substantial changes have been made in the project, no substantial changes have occurred in the circumstances under which the project is being undertaken, and no new information of substantial importance to the project which was not known or could not have been known when the Final EIR No. 617 was certified has become known; therefore no further environmental review is required.

FINANCIAL IMPACT:

Revenues for the Commuter Airline Operating License were not included in the FY 2017-18 and FY 2018-19 Budget. However, landing and operation fees will be collected from Delux based on the frequency of flights generated, and if Delux parks planes at JWA overnight. The term of the operating license will end on December 31, 2018. Based on the foregoing assumptions, and in accordance with Delux's requested capacity allocation for the term of the license, estimated revenues are $124,163.

STAFFING IMPACT:

N/A

ATTACHMENT(S):

Attachment A - License between County of Orange and Delux Public Charter
Attachment B - Map of ACI Jet Eastside Leasehold
Attachment C - Section 8.1.7 of the Phase 2 Commercial Airline Access Plan and Regulation

COMMUTER AIRLINE OPERATING LICENSE

Dated _____

Between

County of Orange

and

Delux Public Charter, LLC dba JetSuiteX Air

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued)

LIST OF EXHIBITS

THIS COMMUTER AIRLINE OPERATING LICENSE ("LICENSE") is made and entered into this ___ day of _____, 2018, by and between the COUNTY OF ORANGE, a political subdivision of the State of California ("COUNTY"), and DELUX PUBLIC CHARTER, LLC dba JETSUITEX AIR, ("LICENSEE").

RECITALS

WHEREAS, the COUNTY, through its Board of Supervisors, is the owner and proprietor of John Wayne Airport ("JWA" or "the Airport"), located in the County of Orange, State of California, and operates and maintains the Airport as a governmental function for the primary purpose of providing air transportation to the public; and

WHEREAS, the LICENSEE is an airline engaged in the business of commuter air transportation of persons, property, cargo and mail as a scheduled air carrier and is certificated or otherwise authorized by the United States of America to engage in such business; and

WHEREAS, the LICENSEE desires to enter into a LICENSE addressing certain premises, facilities, rights, licenses, services and privileges at the Airport; and

WHEREAS, as part of its ongoing effort to operate the Airport in a manner sensitive to the residents who live under the airport's approach and departure corridors, the COUNTY has developed one of the most stringent access and noise abatement programs in the country. The Airport monitors all aircraft operations, both commercial and private, for compliance with the program. These noise abatement and access restrictions are embodied in the 1985 Settlement Agreement between the COUNTY, City of Newport Beach and other parties as well as in ordinances, resolutions (including Resolutions No. 85-255, 85-256, 85-259, 85-1231, 85-1232, and 85-1233), regulations (including the Phase 2 Commercial Airline Access Plan and Regulation) and policies of the COUNTY, as amended; and

WHEREAS, in 2003 and 2014, the 1985 Settlement Agreement was amended by the COUNTY and the parties and approved on February 25, 2005 by the United States District Court to, among other things, increase the number of authorized passenger levels at the Airport; and

WHEREAS, the 2014 amendments to the 1985 Settlement Agreement preserve and continue to implement the important restrictions on the use of JWA, "grandfathered" under the AIRPORT NOISE AND CAPACITY ACT OF 1990 ("ANCA"), which reflect and accommodate historical policy decisions of the Board of Supervisors regarding the appropriate point of balance between the competing interests of the air transportation and aviation community and local residents living in the vicinity of the Airport. These policy decisions address, among other issues, existing nighttime operations restrictions and maximum permitted single event noise levels; and

WHEREAS, the LICENSEE desires to operate as a Regularly Scheduled Commercial User at JWA from Fix-Based Operator, Aviation Consultants, Inc. dba ACI Jet (ACI Jet) Leasehold as a Commuter Air Carrier. Studies were completed on behalf of LICENSEE by ACI

Jet entitled “Focused Traffic Impact Analysis (FTIA) Report”, dated March 26, 2018 (attached as Exhibit B), and the “Parking Analysis for ACI Jet SNA – JetSuiteX Project”, dated December 20, 2017 (attached as Exhibit C).

WHEREAS, the COUNTY and the LICENSEE mutually desire to enter into a LICENSE in order to provide air transportation services to the community and its visitors; and

WHEREAS, the COUNTY has the right to permit and grant the use of its property at the Airport to the LICENSEE for the operation of the LICENSEE's air transportation services; and

WHEREAS, the LICENSEE acknowledges that this LICENSE is being entered into under the provisions of CAL. PUBLIC UTIL. CODE §§21690.5, *et seq.*, and in particular, §21690.9.

NOW, THEREFORE, in consideration of the promises and mutual covenants hereinafter contained to be observed and performed by the respective parties hereto,

THE PARTIES HERETO COVENANT, AGREE AND BIND THEMSELVES AS FOLLOWS:

ARTICLE I

DEFINITIONS

The following words, terms and phrases whenever used in this LICENSE shall have the meaning and significance attached to them in this Article, unless otherwise apparent from context.

SECTION 1.01 ACCESS PLAN

"Access Plan" shall mean the Phase 2 Commercial Airline Access Plan and Regulation for John Wayne Airport, Orange County, as that plan existed when originally adopted and approved by the Orange County Board of Supervisors in 1990, as it has been amended by the Board of Supervisors from time to time, and as it may be amended by the Board of Supervisors at any time during the term of this LICENSE.

SECTION 1.02 AIRLINE RATES AND CHARGES

"Airline Rates and Charges" shall mean all rates, fees and charges payable to the COUNTY by the LICENSEE as specified herein.

SECTION 1.03 AIRPORT

"Airport" shall mean the John Wayne Airport, Orange County, California.

SECTION 1.04 AIRPORT DIRECTOR

"Airport Director" shall mean the Director of John Wayne Airport, County of Orange, as appointed by the County Executive Office, or Director's designee.

SECTION 1.05 APRON AREA

“Apron Area” shall mean the land identified as Apron Area except as otherwise provided herein, all facilities, equipment and improvements now or hereafter located thereon.

SECTION 1.06 AUDITOR-CONTROLLER

"Auditor-Controller" shall mean the Auditor-Controller, County of Orange, or designee.

SECTION 1.07 BOARD OF SUPERVISORS

"Board of Supervisors" shall mean the elected (or duly appointed) members of the Board of Supervisors of the County of Orange, as governing body of the County and proprietor of the Airport through its Airport Director, or designees, as appropriate.

SECTION 1.08 CERTIFICATED MAXIMUM LANDING WEIGHT

"Certificated Maximum Landing Weight" shall mean the current maximum allowable gross landing weight of aircraft operated by the LICENSEE and certificated by the Federal Aviation Administration (FAA) for operation at the Airport.

SECTION 1.09 COUNTY

"COUNTY" shall mean the County of Orange, a political subdivision of the State of California.

SECTION 1.10 DOT

"DOT" shall mean the U.S. Department of Transportation.

SECTION 1.11 FAA

"FAA" shall mean the Federal Aviation Administration created under the FEDERAL AVIATION ACT of 1958, or such successor agency as may from time to time have similar jurisdiction over LICENSEE or its business, and the Airport.

SECTION 1.12 GROUND SERVICE EQUIPMENT

Ground Service Equipment ("GSE") shall mean any auxiliary power unit, mobile stairs, aircraft support equipment, machinery, spare parts, or other equipment used or stored by any qualified air carrier in support of its operations at JWA.

SECTION 1.13 HAZARDOUS SUBSTANCES

"Hazardous Substances" are defined in Article VI, Section 6.01.

SECTION 1.14 INTERNATIONAL ARRIVAL FACILITY

International Arrival Facility ("IAF") shall mean the areas of the terminal that house U.S. Customs and Border Protection and are for the use of arriving international passengers.

SECTION 1.15 NON STORM WATER DISCHARGE

“Non Storm Water Discharge” shall mean any discharge to storm sewer systems that is not entirely composed of storm water. “Non Storm Water Discharge” includes “Unauthorized Non Storm Water Discharges” and “Authorized Non Storm Water Discharges” as defined by the State Water Resources Control Board's National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.

SECTION 1.16 OPERATING AREA

“Operating Area” shall mean the areas of the Airport available to LICENSEE for the operation of its schedule airline service, attached hereto as Exhibit A (ACI Jet Eastside Leasehold).

SECTION 1.17 PASSENGER CAPACITY ALLOCATION

Passenger Capacity, Passenger Capacity Allocation and Commuter Passenger Capacity, as defined in the Access Plan, shall mean an allocation to a Qualified Commuter Carrier of the legal approvals necessary to operate at JWA and to serve a specific maximum number of Commercial Passengers during a specific Plan Year, or a specified portion of a Plan Year.

SECTION 1.18 PFC

“PFC” shall mean federally approved Passenger Facility Charges or passenger facility fees, as authorized by 49 U.S.C. § 40117 and regulated by 14 CFR Part 158, as such statute and regulation currently exist or as they may be amended during the term of this LICENSE.

SECTION 1.19 RON

"RON" shall mean Remain Overnight positions where LICENSEE's aircraft are required to park when they "remain overnight" at the Airport.

SECTION 1.20 STORM WATER

“Storm Water” shall mean storm water runoff, snowmelt runoff, and storm water surface runoff and drainage.

SECTION 1.21 TERMINAL

"Terminal" shall mean the Thomas F. Riley commercial passenger terminal and concourses at John Wayne Airport, as may be modified at any time during the term of this LICENSE.

SECTION 1.22 TSA

"TSA" shall mean the Transportation Security Administration of the U.S. Department of Homeland Security, the federal agency responsible for regulation of airport security, or any such successor agency**.**

ARTICLE II

TERM OF LICENSE

SECTION 2.01 TERM OF LICENSE

The term of this LICENSE shall commence on _____, 20__, and shall continue in effect until December 31, 2018.

SECTION 2.02 TERMINATION FOR CONVENIENCE

This LICENSE may be terminated for convenience by the Airport Director for any reason, and without cause, upon thirty (30) days written notice.

SECTION 2.03 HOLDING OVER

In the event LICENSEE shall continue after the term of this License with prior Airport Director approval, such operation shall not be considered an extension or renewal of this License but a tenancy from month to month and shall be governed by the conditions and covenants contained in this License.

ARTICLE III

FEES AND CHARGES

SECTION 3.01 FEES AND CHARGES

The fees and charges contained in this LICENSE are established in accordance with (i) Resolution 02-062 dated March 12, 2002 (or as subsequently amended), which reasserts and establishes the John Wayne Airport Revenue Planning Policy, and (ii) the Bond Indenture for the Airport Revenue Bonds, Series 1987, and the First Supplemental, Second Supplemental, Third Supplemental, Fourth Supplemental and Fifth supplemental Indenture, Series 1993, 1997, 2003 and 2009.

A. The LICENSEE shall make payment of the following fees and charges which shall be due and payable monthly in arrears on or before the twentieth (20th) day of each month with no grace period. The LICENSEE agrees that the COUNTY will not invoice for such fees and charges.

(1) Landing fees based on the latest schedule established by the COUNTY covering the operation of scheduled airlines and commercial operations at Airport. Landing fees shall be expressed in terms of a rate per one thousand (1,000) pounds of maximum gross landing weight of aircraft certified by the FAA.

(2) Aircraft parking fees based upon the latest schedule established by COUNTY. Aircraft parking fees shall be expressed in dollars per night.

B. Upon thirty (30) days written notice from the Airport Director, the COUNTY may modify the fees and charges described in Paragraph A of this section. Said modification of rates and charges may not occur more often than every six (6) months. Changes may include fee revisions, establishment of new fee classifications or such other changes as needed to respond to the LICENSEE's use of Airport, the need for the COUNTY to receive fair and equitable fees and charges for all uses of Airport and to insure Airport is operated at no cost to the local taxpayer. With regard to any dispute as to what may constitute reasonable fees, and charges, the LICENSEE shall first exhaust all remedies provided by applicable federal law and FAA regulations.

Notwithstanding anything contained in this LICENSE to the contrary, all amounts payable by the LICENSEE to or on behalf of the COUNTY under this LICENSE, whether or not expressly denominated as rent, shall constitute rent for the purposes of the U. S. BANKRUPTCY CODE, 11 U.S.C. §502(b)(6). The LICENSEE shall notify the Airport in writing within thirty (30) days of filing a petition for Bankruptcy.

SECTION 3.02 PAYMENT PROCEDURE

A. **Place of Payment and Filing**. Payments and statements required by Sections 3.01 and 4.06 in this LICENSE shall be delivered to the County of Orange, Office of the Auditor-Controller, John Wayne Airport Accounting Services, 3160 Airway Avenue, Costa Mesa, California 92626. The designated place of payment, mode of payment and filing may be changed at any time by the COUNTY upon ten (10) days' written notice to LICENSEE. Payments may be remitted by wire transfer, automated clearing house (ACH)/Direct deposit to the airport's designated bank account or made by check payable to the County of Orange. The LICENSEE assumes all risk of loss if payments are made by mail.

A. **Form of Payment**. All sums due under this LICENSE shall be paid in lawful money of the United States of America without offset or deduction or prior notice or demand. No payment by the LICENSEE or receipt by the COUNTY of a lesser amount than the payment due shall be deemed to be other than on account of the payment due, nor shall any endorsement or statement on any check or any letter accompanying any check or

payment be deemed an accord and satisfaction, and the COUNTY shall accept such check or payment without prejudice to the COUNTY's right to recover the balance of the amount due or pursue any other remedy in this LICENSE. All electronic payments must be remitted by Automated Clearing House (ACH) / direct deposit to the County-Airport's designated bank account or any future mode prescribed by the County. Any fees assessed to the County's bank account due to the use of other form of payment (e.g. wire transfer) not prescribed or approved by the County, shall be passed through to the LICENSEE plus $20 processing fee.

B. Penalty for NSF Check. In the event a check submitted by TENANT is returned for non-sufficient funds ("NSF"), TENANT agrees to pay COUNTY a service charge in the amount of twenty-five dollars ($25) for the first check, and thirty-five dollars ($35) for each subsequent check. TENANT liable for treble damages pursuant to California Civil Code Section 1719.

SECTION 3.03 CHARGE FOR LATE PAYMENT

The LICENSEE hereby acknowledges that the late payment of fees and charges or any other sums due hereunder will cause the COUNTY to incur costs not contemplated by this LICENSE, the exact amount of which will be extremely difficult to ascertain. Such costs include, but are not limited to, administrative processing of delinquent notices, increased accounting costs, lost interest income.

Accordingly, if any payment of fees and charges as specified in Section 3.01 in this LICENSE entitled "FEES AND CHARGES" or of any other sum due to the COUNTY is not received by COUNTY by the due date, a late charge of one and one-half percent (1.5%) of the payment due and unpaid plus one hundred dollars ($100) shall be added to the payment, and the total sum shall become immediately due and payable to the COUNTY. An additional charge of one and one-half percent (1.5%) of said payment, excluding late charges, shall be added for each additional month that said payment remains unpaid.

The LICENSEE and the COUNTY hereby agree that such late charges represent a fair and reasonable estimate of the costs that the COUNTY will incur by reason of the LICENSEE's late payment. Acceptance of such late charges (and/or any portion of the overdue payment) by the COUNTY shall in no event constitute a waiver of the LICENSEE's default with respect to such overdue payment, or prevent the COUNTY from exercising any of the other rights and remedies granted hereunder.

SECTION 3.04 PASSENGER FACILITY CHARGE

The COUNTY expressly reserves the right to impose PFCs on airline passengers for the use of the Airport in accordance with 49 U.S.C. §40117 and applicable implementing regulations adopted by the FAA, 14 C.F.R. Part 158, as they may be amended from time to time (the "PFC Regulations").

The LICENSEE shall hold in trust for the COUNTY the net principal amount of all PFCs that

are collected by the LICENSEE or its agents on behalf of the COUNTY. For the purposes of Section 3.04, net principal amount shall mean the total principal amount of all PFCs that are collected by the LICENSEE or its agents on behalf of the COUNTY, reduced by any amount that the LICENSEE is permitted to retain pursuant to 49 U.S.C. § 40117 and the PFC Regulations. Monthly PFCs collected by the LICENSEE shall be remitted to the COUNTY no later than the last day of the following calendar month or if that date falls on a weekend or holiday, the first business day thereafter. In addition, PFCs collected by the LICENSEE shall be remitted to the COUNTY at the address specified in Section 3.02, Part A, "Place of Payment and Filing" or at such other place as designated by the COUNTY.

Should the LICENSEE fail to remit the net principal amount of all PFCs to the COUNTY within five (5) days following the remittance date specified above, the LICENSEE shall be deemed to be in default pursuant to Article VIII hereof. In addition, any late payment of PFCs shall be subject to late fees computed at the rate of one and one-half percent (1.5%) per month of the payment due and unpaid plus one hundred dollars ($100) or the highest rate allowable under applicable state law from the due date until paid in accordance with Section 3.03 of this LICENSE.

Nothing contained herein shall be construed to supercede the rights and obligations provided in 14 C.F.R. Part 158 regarding PFCs. In the event that a conflict exists between such federal regulation and this LICENSE, the federal regulation shall govern.

PFC Reporting and Auditing Requirement: Airlines are required to comply with Part 158 Subpart D Reporting, Recordkeeping and Audits of PFC accounts maintained by the collecting carriers, specifically refer to Part §158.65, §158.69 and §158.71. The PFC report must be filed by the last day of the month following the calendar quarter by the collecting carrier to the County/Airport. The collecting air carrier's quarterly report must state:

(i) The collecting air carrier and airport involved
(ii) The total PFC revenue collected
(iii) The total PFC revenue refunded to passengers
(iv) The collected revenue withheld for reimbursement of expenses under §158.53
(v) The dates and amounts of each remittance for the quarter

SECTION 3.05 PROVISION AGAINST SET-OFFS

It is the obligation of the LICENSEE to pay all fees and charges, free of any set-offs or claims, in the amount and at the times specified in this LICENSE. In the event that the LICENSEE desires to contest the validity or amount of any such fees and charges, the LICENSEE shall first pay the same to the COUNTY and may then seek a refund in any appropriate forum.

SECTION 3.06 SECURITY DEPOSIT

The LICENSEE, prior to the commencement of operations, shall deposit with COUNTY a security deposit approximately three (3) times the estimated monthly rent, fees and charges as

determined by the Airport Director.

Concurrently with each revision of the fees and charges pursuant to Section 3.01 in this LICENSE, the security deposit to be provided by the LICENSEE shall be adjusted to approximately three (3) times the estimated monthly fees and charges as determined by the Airport Director to guarantee the faithful performance by the LICENSEE of its obligations under this LICENSE and the payment of all fees and charges due hereunder. PFCs shall be excluded from the fees and charges used to determine the LICENSEE's security deposit.

The security deposit shall guarantee the LICENSEE's full and faithful performance of all the terms, covenants, and conditions of this LICENSE, and shall take the form of an instrument or instruments of credit from one or more financial institutions, subject to regulation by the State of California or federal government, pledging that funds necessary to secure performance of the LICENSE terms, covenants, and conditions are on deposit and guaranteed for payment, and agreeing that said funds shall be trust funds securing the LICENSEE's performance and that all or any part shall be paid to the COUNTY, or order upon demand by the Airport Director. Both the financial institution(s) and the form of the instrument(s) must be approved by the Airport Director.

All or any portion of the security deposit shall be available unconditionally to the COUNTY for correcting any default or breach of this LICENSE by the LICENSEE, its successors or assigns, or for payment of expenses incurred by the COUNTY as a result of the failure of the LICENSEE, its successors or assigns, to faithfully perform all terms, covenants, and conditions of this LICENSE.

Instrument of Credit to fulfill the security deposit requirements of this LICENSE, shall have the effect of releasing depository or creditor therein from liability on account of the payment of any or all of the principal sum due to the COUNTY, or order upon demand by the Airport Director.

In the event the Airport Director withdraws all or any portion of the security deposit as provided herein, the LICENSEE shall, within ten (10) days of any withdrawal by Airport Director, replenish the security deposit to maintain it at amounts herein required throughout the LICENSE term. Failure to do so shall be deemed a default and shall be grounds for immediate termination of this LICENSE, as per Article VIII of this LICENSE.

The LICENSEE shall be obligated to maintain the security deposit in effect until the termination of the LICENSE.

The security deposit, after deduction of all amounts due COUNTY, shall be rebated, reassigned, released or endorsed by the COUNTY to the LICENSEE or order, as applicable, after one hundred twenty (120) days have elapsed or at a time to be determined by the Airport Director, following the termination of the LICENSE, provided LICENSEE has fully and faithfully performed each and every term, covenant, and condition of this LICENSE.

SECTION 3.07 NEW ENTRANT DEPOSIT

A cash security deposit in the sum of Ten Thousand Dollars ($10,000.00) shall be provided by a new entrant LICENSEE prior to the commencement of operations.

This deposit shall be returned after six (6) months of continuous operation.

ARTICLE IV

USE, OPERATION, MAINTENANCE AND CONDITION OF PREMISES

SECTION 4.01 USE

The COUNTY hereby grants to the LICENSEE the authorization to conduct a regularly scheduled commuter airline operation at Airport tenant ACI Jet's Eastside Leasehold (Exhibit A) and for no other purposes whatsoever. Said operation shall be subject to the terms and conditions contained in the Lease between the COUNTY and ACI Jet. Said operation shall also be conducted in accordance with an agreement and any amendments thereto, between the LICENSEE and ACI Jet, which is subject to the COUNTY's prior approval. The terms and conditions of this LICENSE shall prevail in the event of any conflict with said agreement between LICENSEE and ACI Jet. Subject to the limitations set forth in Sections 4.03 and 4.05 in this LICENSE, this operation may include any or all of the following uses at ACI Jet Eastside leasehold only, and no other uses whatsoever:

AUTHORIZED USES:

A. Loading and unloading of passengers.

B. Loading and unloading of baggage.

C. Passenger processing operations.

D. Flight operations office.

E. The LICENSEE shall have the right to have its aircraft and other equipment serviced by suppliers of its choice. Such suppliers may provide materials and services, including, but not limited to, aviation fuel, ground vehicle fuel, lubricating oil, greases, parts, and all other materials and supplies and services required by the LICENSEE in the conduct of its air transportation service.

F. Mail, freight and cargo operations but only when such activity is incidental to, and conducted in connection with, regularly scheduled commercial passenger operations. The LICENSEE shall not conduct any operations at the Airport with aircraft which are:

1) Used at the Airport exclusively or primarily for mail, freight or cargo services; or

2) Which have been modified in any manner for the purpose or the primary effect of reducing the passenger carrying capacity and increasing the cargo or freight carrying capacity of the aircraft.

G. Air charter activities in compliance with the Access Plan.

H. Commissary services for the LICENSEE's employees at the Airport and in-flight catering services in support of the LICENSEE's air operations at the Airport. This does not permit the LICENSEE to conduct commissary or in-flight services for any other airline or other person at Airport without first obtaining a separate license to allow commissary or in flight services for other airlines.

I. Employee training incidental to the other uses permitted under this Section.

J. The LICENSEE is required to operate within the parameters set forth in the "Focused Traffic Impact Analysis (FTIA) Report", dated March 26, 2018 (Exhibit A), and the "Parking Analysis for ACI Jet SNA – JetSuiteX Project", dated December 20, 2017 (Exhibit B).

K. Other uses as authorized by the Airport Director.

SECTION 4.02 USE OF PUBLIC AIRPORT FACILITIES

The COUNTY grants the LICENSEE a LICENSE for the nonexclusive use of all public non-Terminal Airport facilities including, but not limited to, taxiways, runways, navigational aids and facilities relating thereto for purposes of landings, takeoffs and taxiing of the LICENSEE's and the LICENSEE's client aircraft. All such use shall be in accordance with the laws of the United States of America, the State of California, and the rules and regulations promulgated by their authority with reference to aviation and air navigation, and in accordance with all reasonable and applicable rules, regulations, and ordinances of the COUNTY now in force or hereafter prescribed or promulgated by ordinance or by law, including the Access Plan. The use of these areas shall be subject to the control and regulation of the Airport Director.

SECTION 4.03 RULES AND REGULATIONS

The COUNTY may adopt and enforce Rules and Regulations that the LICENSEE agrees to observe and obey, with respect to the use of the Airport and its appurtenances, facilities, improvements, equipment and services; provided that such rules and regulations shall not be inconsistent with safety, with applicable rules, regulations and orders including those of the FAA and TSA with respect to all operations of the Airport and with the terms of the LICENSEE's rights under this LICENSE. Except in the case of emergency, the COUNTY shall give the LICENSEE written notice and opportunity to comment on any proposed changes or additions to the rules and regulations that could impact the LICENSEE's operations at the Airport before such proposed rules and regulations are adopted by the COUNTY. If requested, the COUNTY shall promptly provide a copy of such rules and regulations to the LICENSEE.

The LICENSEE's operations under the LICENSE shall comply with all Airport Rules and Regulations and shall observe, obey, comply with and not otherwise hinder or obstruct any and all rules, regulations, laws, ordinances, statutes or orders of any governmental authority, whether federal, state or local, lawfully exercising authority over the Airport or the activities thereon, including compliance with FAA, TSA and Airport security rules, regulations and plans.

To the fullest extent authorized by law, the LICENSEE shall be liable to the COUNTY for any and all claims, demands, damages, fines or penalties of any nature whatsoever which may be imposed upon the COUNTY due to the LICENSEE's violation of any governmental rules, regulations or standards as now or may hereafter be promulgated or enacted, related to LICENSEE's operation under this LICENSE, including, but not limited to, the payment of any fines or penalties for any breach of security, arising from the unauthorized entry of any person or vehicle onto the Airport or from any other violations caused directly or indirectly by the act, omission, negligence, abuse or carelessness on the part of the LICENSEE, its employees, subtenants, agents or suppliers related to LICENSEE's operation under this LICENSE.

The COUNTY shall not be liable to the LICENSEE for any diminution or deprivation of possession, or of its rights hereunder, on account of the exercise of such right or authority provided in this LICENSE, nor shall the LICENSEE be entitled to terminate the whole or any portion of the LICENSE herein created by reason of the exercise of such right or authority, unless the exercise thereof shall so interfere with the LICENSEE's use and occupancy of the Airport so as to constitute a termination in whole or in part of this LICENSE by operation of law in accordance with the laws of the State of California.

SECTION 4.04 ACCESS PLAN LIMITATIONS ON USE

The LICENSEE agrees that:

A. Notwithstanding any provision in this LICENSE to the contrary, the LICENSEE shall conduct all of its operations and activities at the Airport in strict conformity with the Access Plan and each of its regulations and limitations on the LICENSEE's activities and operations at the Airport.

B. The operating privileges made to the LICENSEE under the Access Plan are a privilege which may be revoked or modified by the COUNTY at any time during the terms of this LICENSE, and that such privileges do not constitute property rights of the LICENSEE.

C. The operating privileges made to the LICENSEE under the Access Plan are not transferable, assignable or delegable by the LICENSEE to any other person or entity, by operation of law or otherwise, and such operating privileges may not be pledged, hypothecated or transferred by the LICENSEE at any time for any purpose.

D. That the remedies specified in the Access Plan for any Access Plan violation by the LICENSEE are not the exclusive remedies of the COUNTY, but shall constitute

additional nonexclusive remedies that the COUNTY may enforce separately or cumulatively with other remedies under the enforcement provisions of this LICENSE.

E. That LICENSEE shall not at any time, or for any reason, make any assertion to any court, administrative agency, administrative tribunal or other similar forum, that is in any respect inconsistent with the terms and provisions of this Section; except that nothing in this Section shall prevent the LICENSEE from making any argument or asserting any position to the COUNTY, as applicable in connection with any action by the COUNTY to revoke or modify allocations of operating privileges or any amendments to the Access Plan.

F. All provisions of Section 4.01 and Article VIII in this LICENSE are subject to the terms, provisions and limitations of this Section.

SECTION 4.05 OPERATIONAL REQUIREMENTS

The LICENSEE agrees to abide by the following operational conditions and requirements:

A. **Flight Operations and Reallocations**. The annual commuter passenger capacity shall be consistent with the Passenger Capacity set-aside as specified and determined under the Access Plan. Operations or passenger levels in excess of the amount authorized during any Plan Year shall constitute a serious and material breach of this LICENSE and this LICENSE shall be subject to immediate termination pursuant to Article VIII in this LICENSE. In addition to any and all remedies available to the COUNTY under this LICENSE and all provisions of the Access Plan, the COUNTY may reallocate Commuter Passenger Capacity or other operating privileges granted the LICENSEE under the provisions of the Access Plan.

The LICENSEE shall not operate at the Airport unless it conducts its operations with Passenger Capacity directly and formally allocated to the LICENSEE by action of the Board of Supervisors; the LICENSEE conducts all of its operations with aircraft which have been certified for operation at the Airport consistent with Access Plan requirements; and the LICENSEE has met, and continues to meet at all times, all other requirements of the COUNTY.

B. **Hours of Operation**. Except as expressly authorized, the LICENSEE's aircraft shall not depart from the Airport between the hours of 10:00 p.m. and 7:00 a.m. (8:00 a.m. on Sundays) (local time) and shall not arrive at the Airport between the hours of 11:00 p.m. and 7:00 a.m. (8:00 a.m. Sundays) (local time), as measured at any JWA noise monitoring station.

The LICENSEE acknowledges that the COUNTY may by regulation permit some operations by general aviation (nonscheduled, noncommercial) users of the Airport during the nighttime hours with certain specific aircraft types that have noise characteristics similar to the noise characteristics of aircraft that can operate as "Class E"

aircraft, as that term is defined in the Access Plan. The LICENSEE does now, or may during the term of this LICENSE, operate Class E aircraft at the Airport; nevertheless, the LICENSEE agrees that the limitations on hours of operations contained in this Section shall be applicable to all of its operations at the Airport, including its Class E operations.

The LICENSEE further acknowledges that there is a rational basis for the COUNTY to distinguish between general aviation operations and regularly scheduled operations by Class E (or noise equivalent) aircraft during the nighttime hours, and that this distinction does not constitute unlawful or unjustly discriminatory action by the COUNTY in its operation and management of the Airport. The COUNTY agrees that this provision is, and during the term of this LICENSE shall be included in all leases, operating agreements or other service operating agreements between the COUNTY and any person conducting regularly scheduled commercial operations at the Airport.

C. **Aircraft Types**. The LICENSEE agrees that it will not operate any aircraft at the Airport unless and until that aircraft type has been certified and qualified for operation by the COUNTY in accordance with the provisions and procedures of the Access Plan. The LICENSEE further agrees that it will abide by all aircraft-type restrictions and limitations contained in the Access Plan, as amended, or as it may hereafter be amended, and any other restrictions on aircraft types which may hereafter be adopted by the Board of Supervisors of the County of Orange.

D. **Noninterference**. The LICENSEE shall cooperate with and not interfere with the COUNTY's and other airlines' use of and operations at the Airport. The LICENSEE shall not place any ropes, barricades and/or stanchions on the public or common use area without prior written approval of the Airport Director.

SECTION 4.06 RECORDS AND ACCOUNTS

A. **Records**. The LICENSEE shall at all times keep true and complete records of all transactions in the operation of all business activities, of whatever nature, conducted in pursuance of the rights granted by this LICENSE. The LICENSEE shall maintain such records for a period of five years beyond the expiration or earlier termination of this LICENSE.

B. **Reports**. The LICENSEE shall provide to the Auditor-Controller and the Airport Director at the end of each calendar month, on forms to be supplied by the COUNTY, statistical information respecting the LICENSEE's operations at Airport including, but not limited to, the total number of all aircraft operations conducted by the LICENSEE; the total combined certificated gross landing weight of all such aircraft operations; the total number of enplaned, deplaned and through passengers; the total number of pounds of airmail, cargo and express mail enplaned and deplaned; and the total number of aircraft stored daily and monthly at the Airport. Such reports shall be submitted to the Airport Director no later than fifteen (15) calendar days following the last day of each

month. The LICENSEE must attest that the list is an accurate representation of the LICENSEE's activity for the month.

The LICENSEE shall also provide to the Airport Director, for each day, a copy of the LICENSEE's flight dispatch logs, or a listing made from such logs, certified as correct by a responsible station manager or dispatcher, showing the type of equipment used for each flight and the actual takeoff and landing times and not gate times. Said copy of logs or listing shall be made available for each day's activities by noon (12:00 p.m., local time) of the following day.

C. **Audits**. All the LICENSEE's records and supporting source documents related to rates and fees in this LICENSE or to business operations conducted within or from the Airport shall be kept and made available to the COUNTY at one location within the geographical limits of the COUNTY or shall be made available at offices in the COUNTY within ten (10) working days after notice to produce said records and source documents. The COUNTY shall, through its duly authorized agents or representatives, have the right to examine and audit said records and supporting source documents at any and all reasonable times for the purpose of determining the accuracy thereof, and of the monthly statements to the COUNTY.

The COUNTY, upon request of the LICENSEE, may authorize the above-referenced records and supporting source documents to be kept in a single location outside the limits of the COUNTY provided LICENSEE shall agree to pay all expenses including, but not limited, to transportation, food and lodging necessary for the COUNTY to send a representative to audit said records. Said right shall not, unless determined necessary by the COUNTY, be exercised by the COUNTY more than once each accounting year.

The full cost of said audit, as determined by the COUNTY, shall be borne by the LICENSEE if either or both of the following conditions exist:

(1) The audit reveals an underpayment of more than two percent (2%) between the fees and charges due as reported and paid by the LICENSEE in accordance with this LICENSE and all fees and charges due as determined by said audit; and/or

(2) The LICENSEE has failed to maintain true and complete records and supporting source documents in accordance with paragraph A. above. The adequacy of records shall be determined at the sole discretion of the COUNTY's Auditor-Controller.

Otherwise, the COUNTY shall bear the cost of said audit excluding the aforementioned expenses related to audit of documents kept outside the limits of the COUNTY. The cost of said audit, if due from the LICENSEE, shall be included as fees for the first month following invoice to the LICENSEE.

Upon the request of the Auditor-Controller, the LICENSEE shall promptly provide necessary data to enable the COUNTY to fully comply with requirements of the State of California or the United States of America for information or reports directly relating to this LICENSE and to the LICENSEE's use of the Operating Area.

D. **Failure to Maintain Adequate Records**. In addition to any other remedies available to the COUNTY under this LICENSE, at law or in equity, in the event that the LICENSEE fails to maintain and keep records and accounts from business operations conducted on or from the Airport and/or source documents relating thereto, or to make the same available to the COUNTY for examination and audit as required by this LICENSE, the COUNTY, at the COUNTY's option, may:

(1) Perform such examinations, audits and/or investigations itself or through agents or employees as the COUNTY and/or its auditors may deem appropriate to confirm the amount of fees and charges payable by the LICENSEE under this LICENSE; and any and all costs and/or expenses incurred by the COUNTY in connection therewith shall be promptly reimbursed to COUNTY by the LICENSEE upon demand.

(2) Require that the LICENSEE pay fees based on the COUNTY's best good faith estimate of the LICENSEE's activities from business operations conducted on or from the Airport; and any such determination made by the COUNTY shall be conclusive and binding upon the LICENSEE.

Costs payable by the LICENSEE pursuant to this Section shall include reimbursement to the COUNTY of the COUNTY provided services at such rates as the COUNTY may from time to time, in good faith, establish for such services. In the case of services provided by the COUNTY's employees, such rates shall be sufficient to reimburse the COUNTY for employees' salaries, including employee taxes and benefits and the COUNTY's overhead or, at the Auditor-Controller's option, may be the rate for such services that would be charged by a qualified third party or parties, approved by the Auditor-Controller, if engaged by the COUNTY to perform such services. Said costs payable by the LICENSEE shall be included as fees for the first month following invoice to the LICENSEE.

E. **Annual Audited Financial Statements.** Within one hundred twenty (120) days after the end of each accounting year, LICENSEE shall at its own expense submit to County Auditor-Controller an audited financial statements prepared in accordance with generally accepted accounting principles reflecting all business transacted by the LICENSEE on or from the ACI Jet Eastside Leasehold during the preceding accounting year. The LICENSEE shall attest in writing that the balance sheet and income statement submitted are true and accurate representation of LICENSEE's records.

SECTION 4.07 VEHICLES AND AUTOMOTIVE EQUIPMENT ON APRON

The COUNTY reserves the right to regulate, by adoption of ordinance, rules or other means, adopted consistent with Section 4.03, the use of vehicles and automotive equipment upon, over and across the apron and around the passenger terminal building. In the event of an emergency not specifically provided for in said rules and regulations, the Airport Director shall have power to take charge of the direction of such vehicle and automotive traffic in the area affected and regulate the same until the cause of such emergency has been removed. The existence of an emergency, other than aircraft emergency, shall be determined by the Airport Director.

SECTION 4.08 AIRCRAFT PARKING

The LICENSEE shall make separate arrangements with the Airport Director for each aircraft parking space that may be made available to the LICENSEE subject to Section 3.01 in this LICENSE.

If, in the judgment of the Airport Director, it becomes necessary to move the LICENSEE's aircraft in order to insure public safety, improve ramp area efficiency or otherwise, then the LICENSEE shall immediately move said aircraft to the location designated by the Airport Director.

Should any aircraft owned or operated by the LICENSEE, through accident or for any other reason, become disabled or be abandoned in any area which could interfere with the continuous, normal operations of any of the landing and field facilities at the Airport, the LICENSEE shall:

A. Immediately remove said aircraft to such location as shall be designated by the Airport Director, unless such aircraft is required to remain in place pending investigation by the appropriate regulatory agency or agencies of the federal government; and

B. In the event of any accident where federal investigation in place is required, immediately upon receiving clearance to do so from the appropriate federal agency, remove said aircraft and any wreckage or debris resulting therefrom to the area(s) designated by said federal agency authorizing such removal; otherwise, such aircraft wreckage and debris shall be immediately removed from Airport or stored at a location approved by the Airport Director.

Should the LICENSEE fail to remove said aircraft, or should aircraft owned or operated by the LICENSEE be abandoned on the Airport, the COUNTY shall have the right to remove such aircraft by any means the Airport Director deems necessary under the circumstances, and the LICENSEE shall keep and hold the COUNTY harmless from any and all costs, loss, liability, damage or expense incurred by the COUNTY or claimed by anyone by reason of removal of said aircraft, injury to persons or property or damages to such aircraft caused by such removal as well as moving and storage costs therefor. The LICENSEE agrees that the designation of any aircraft parking positions anywhere on the Airport, if any, made for the LICENSEE's use is presently regulated by the Access Plan, and that nothing in this Section obligates COUNTY to provide,

make available or consent to any aircraft parking spaces for the LICENSEE's use. The LICENSEE agrees that it may not independently make arrangements for aircraft parking space at the Airport without express written consent of the Airport Director, which may be withheld in the Director's sole discretion.

ARTICLE V

ENVIRONMENTAL COMPLIANCE AND INDEMNIFICATION

SECTION 5.01 HAZARDOUS SUBSTANCES AND ENVIRONMENTAL COMPLIANCE

As used herein, the term "Hazardous Substances" shall mean any hazardous or toxic substance, material or waste which is or shall become regulated by any governmental entity, including, but not limited to, the COUNTY acting in its governmental capacity, State of California or United States Government. The term "Hazardous Substances" includes, without limitation, any material or substance which is (i) defined or listed as a "hazardous waste," "extremely hazardous waste," "restrictive hazardous waste" or "Hazardous Substance" or considered a waste, condition of pollution or nuisance under any applicable Environmental Law; (ii) petroleum or a petroleum product or fraction thereof; (iii) asbestos or asbestos-containing materials; (iv) flammable or explosive substances; (v) mold, mold spores or fractions thereof; and/or (vi) substances designated by any governmental entity to cause cancer and/or reproductive toxicity.

As used herein, the term "Environmental Law" shall mean any federal, state or local law, statute, ordinance, code, judgment, order or regulation pertaining to the environment, Hazardous Substances, Pollutants, occupational safety and health, industrial hygiene or the environmental conditions on, under or about the Airport, and includes, without limitation the following; (i) CLEAN AIR ACT, 42 U.S.C. §§7401 *et seq*.; (ii) CLEAN WATER ACT, 33 U.S.C. §§1251 *et seq*.; (iii) COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980, as amended by the SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 ("CERCLA"), 42 U.S.C. §§9601 *et seq*.; (iv) 49 C.F.R. Parts 173 and 175; (v) SOLID WASTE DISPOSAL ACT, as amended by the RESOURCE CONSERVATION AND RECOVERY ACT OF 1986 and HAZARDOUS AND SOLID WASTE amendments of 1984 ("RCRA"), 42 U.S.C. §§6901 *et seq*.; (vi) OIL POLLUTION ACT OF 1990, 33 U.S.C. §§2701 *et seq*.; (vii) FEDERAL WATER POLLUTION CONTROL ACT, 33 U.S.C. §§1317 *et seq.;* (viii) SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986, CAL. HEALTH & SAF. CODE §§25249.5 *et seq*.; (ix) CAL. HEALTH & SAF. CODE §§25100, 25395.7, 25915, *et seq*.; (x) CAL. WATER CODE §§1300 *et seq*.; (xi) CAL. CIV. CODE §§3479 *et seq*.; (xii) Storm Water Discharge Rules, 40 C.F.R. §§122.26, 122.30-37; and, (xiii) all other state laws, rules, orders, directives, and codes, regulations judgments, and orders relating to (i) emissions, discharges, releases, or threatened releases of Hazardous Substances into the environment (including but not limited to ambient air, surface water, groundwater, land surface or subsurface strata); and (ii) the manufacture, processing, distribution, use, generation, treatment, storage, disposal, transport or handling of Hazardous Substances, as such laws are amended, and the regulations and administrative codes applicable thereto.

The LICENSEE agrees that it shall abide by all applicable Hazardous Substances laws, rules and regulations, relating to Hazardous Substances including, but not limited to, 49 C.F.R. Parts 171 *et seq*. The LICENSEE shall not cause any Hazardous Substances to be brought upon, kept, used, stored, generated, treated, managed or disposed of in, on or about or transferred to or from the Airport, except to the extent that such Hazardous Substances are (i) necessary for or useful to the LICENSEE's business and (ii) used, kept and stored in a manner that complies with all applicable Environmental Laws, the Airport Rules and Regulations, and all other applicable laws.

The LICENSEE shall comply with all applicable Environmental Laws and shall not engage in any activity on or about the Airport that violates any applicable Environmental Law. In conducting its operations and maintenance on the Airport under this LICENSE, the LICENSEE shall comply with such regulations regarding the storage, distribution, processing, handling and/or disposal, including the storm water discharge requirements, of Hazardous Substances including, but not limited to, gasoline, aviation fuel, jet fuel, diesel fuel, lubricants and/or solvents, whether the obligation for such compliance is placed on the owner of the land, owner of the improvements or user of the improvements.

The LICENSEE shall at its own expense take all investigatory and/or remedial action required or ordered by any governmental agency having jurisdiction or any applicable Environmental Law for clean-up and removal of any contamination involving any Hazardous Substances caused by the LICENSEE. In conducting a clean-up of a Hazardous Substance release under this LICENSE, the LICENSEE shall comply with applicable Environmental Laws.

The LICENSEE shall not allow or cause the entry of any Hazardous Substances under its control into the Airport Storm Water drainage system unless authorized by applicable Environmental Law and the Airport's Storm Water Discharge Permit. The LICENSEE shall not allow or cause the entry of any Unauthorized Non-Storm Water Discharge that is under its control into the Storm Water drainage system of the Airport or into the Storm Water drainage system of any of its surrounding communities, unless such substances are first properly treated by equipment installed with the approval of the COUNTY for that purpose, and the LICENSEE complies with recommendations made by the state and/or federal Environmental Protection Agency and the Airport's Storm Water Discharge Permit requirements. The LICENSEE shall bear all costs and any other expenses related to the prohibited entry of such oil, fuel or other Hazardous Substances into said drainage systems prohibited by any applicable Environmental Law.

The LICENSEE shall provide all notices required pursuant to the SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986, CAL. HEALTH & SAF. CODE § 25249 *et seq*. The LICENSEE shall provide prompt written notice to the COUNTY within three (3) days of receipt of all written notices of violation of any applicable Environmental Law received by the LICENSEE.

SECTION 5.02 ENVIRONMENTAL INDEMNIFICATION

To the fullest extent authorized by law, the LICENSEE shall indemnify, defend, and hold harmless the COUNTY, its officers, and employees, from and against any and all applicable

Environmental Law claims, judgments, damages, penalties, fines, costs, liabilities, losses, orders, and lawsuits arising out of any actions by the LICENSEE, the LICENSEE's operations at the Airport or any action arising from and which involve the LICENSEE's officers, agents, subcontractors, and employees, including the cost of defense arising therefrom, including but not limited to the following:

(1) The LICENSEE's placing, disposing, allowing or releasing of Hazardous Substances upon or within the Airport including any such claims, demands, liabilities and/or obligations related to the LICENSEE's release of Hazardous Substances on the Airport since the time the LICENSEE first occupied the Airport.

(2) The LICENSEE's release of Hazardous Substances upon or within the Airport.

(3) The LICENSEE's violation of any applicable Environmental Law, except that the LICENSEE's obligations under this paragraph shall not extend to known and pre-existing conditions that are, as of the date of this LICENSE, the subject of investigation and remediation by the COUNTY or others, or remediation conditions that arise from operations of third parties that are not affiliated with the LICENSEE that take place off of the Airport. For purposes of this provision, a party shall be deemed to be affiliated with the LICENSEE if it is an employee, officer, director, agent, subtenant, contractor or subcontractor of the LICENSEE or if it is controlled by or under common control with the LICENSEE.

(4) The LICENSEE's causing or allowing any discharge into the Airport Drainage System that is prohibited by Section 5.01 of this LICENSE.

This indemnification includes, without limitation, reasonable attorney's fees/costs and other costs incurred by the COUNTY in connection with any investigation of site conditions or any cleanup, remedial, removal or restoration work required by any federal, state or local governmental entity because of any Hazardous Substances being present in the soil or groundwater under the Airport. However, the LICENSEE's indemnity obligation shall not apply in the event of any claims for any loss, damage or expense arising from the sole or active negligence or willful misconduct of the COUNTY or agents, servants or independent contractors who are directly responsible to the COUNTY.

In the event the indemnitees described hereinabove are named as defendants or respondents in any lawsuit or administrative proceeding, the LICENSEE shall, at the request of the COUNTY, represent the indemnitee with qualified counsel that is acceptable to the COUNTY.

In the event that a monetary judgment is awarded against the COUNTY and the LICENSEE because of the concurrent negligence of the COUNTY and the LICENSEE or their respective officers, subcontractors, or employees, an apportionment of liability to pay such judgment shall be made by a court of competent jurisdiction. Both the COUNTY and the LICENSEE agree that neither party shall request a jury apportionment. Nothing stated in this LICENSE and in this

indemnity obligation shall be construed as authorizing any award of attorney's fees/costs in any action to enforce the terms of this LICENSE.

The rights and obligations set forth in this indemnification shall survive the termination of this LICENSE.

SECTION 5.03 CONFLICT WITH ENVIRONMENTAL LAW PROVISIONS

In the event that any of the terms of these environmental requirements codified in this Article conflict with any other terms of this LICENSE, the environmental requirements contained in Article V shall apply.

SECTION 5.04 ANTI-IDLING POLICY

Within six months of LICENSE execution, LICENSEE must develop, implement and submit to the Airport Director for approval a fleet-wide anti-idling policy. At a minimum, the anti-idling policy shall include the requirement that vehicle engines shall be turned off when vehicles are not occupied, and that occupied vehicles be turned off after no more than a five-minute idling period. LICENSEE's policy shall also include all third party vehicles that enter Airport property at the direction of LICENSEE.

ARTICLE VI

CONSTRUCTION AND IMPROVEMENTS

SECTION 6.01 CONSTRUCTION AND/OR ALTERATION BY COUNTY

The COUNTY may alter, repair, maintain, remodel, expand, remove or improve any of the facilities at the Airport or any of its appurtenances.

SECTION 6.02 DAMAGE TO OR DESTRUCTION OF IMPROVEMENTS

The LICENSEE shall be responsible for any damage caused by the LICENSEE, or the LICENSEE's aircraft, equipment, employees, agents, visitors or suppliers, to common use areas of the Terminal or Airport facilities, including but not limited to runways, taxiways, access roads, navigational aids, apron areas and loading bridges. Should such damage require immediate repairs or replacement and the LICENSEE is unable to respond immediately to complete said repairs or replacement, the Airport Director may cause to be made or make any necessary repairs or replacements and the cost thereof shall be paid by the LICENSEE. Said cost shall include all labor, materials, equipment and an administrative fee equal to fifteen percent (15%) of the sum of those items. Said cost shall be paid by the LICENSEE within fifteen (15) days of receipt of an invoice for costs from the Airport Director.

SECTION 6.03 HEALTH AND SAFETY

The LICENSEE shall comply with the California Occupational Safety & Health Administration (CAL OSHA) requirements, and all federal, state or local safety orders. The LICENSEE shall post on the Airport and at all construction sites a copy of "Construction Safety Orders" and "General Industry Safety Orders" issued by the California State Division of Industrial Safety. The LICENSEE shall within thirty (30) days after the execution of this LICENSE submit to the COUNTY a comprehensive Safety Plan outlining the code of safe work practices and procedures. The plan must include emergency response procedures, notification procedures, and personnel training procedures. The LICENSEE shall convene safety meetings at regularly scheduled times as described in its Safety Plan and as required by CAL OSHA. The LICENSEE and/or LICENSEE's contractor shall submit, prior to the start of any tenant improvements, the LICENSEE or LICENSEE's contractor required CAL OSHA Safety Plan for approval by the Airport.

The LICENSEE and/or LICENSEE's contractor shall submit prior to the start of any licensee improvements, the LICENSEE or LICENSEE's contractor required CAL OSHA Safety Plan for approval by the Airport.

The LICENSEE shall submit to the COUNTY an annual report detailing the status of all permits required and issued to the LICENSEE by CAL OSHA or any other federal, state or local government agency. Said report shall be due on or before January 31 of each calendar year.

ARTICLE VII

ASSIGNMENT

SECTION 7.01 ASSIGNING AND TRANSFERRING

The provisions of this Section are subject to, and subordinate to the limitations of Sections 4.04 and 4.05 of this LICENSE.

A. **Transfers**. The LICENSEE shall not transfer or assign (hereinafter referred to as "Transfer") any interest of the LICENSEE in this LICENSE, or any part thereof, without the prior written approval of the COUNTY. The LICENSEE shall give the COUNTY thirty (30) days prior written notice of all proposed Transfers. The LICENSEE shall not make any such Transfers for a period longer than the remaining term of the LICENSE.

If the COUNTY approves such Transfers, such approval does not constitute a waiver of any of the terms of the LICENSE. All Transfer documents shall be consistent with the terms, covenants, and conditions of the LICENSE, and in the event of any inconsistency, the provisions of this LICENSE shall govern.

If the LICENSEE is a corporation, an unincorporated association or a partnership, Transfers include the acquisition by any person other than the LICENSEE of any stock or

interest in said corporation, unincorporated association or partnership in the aggregate amount of fifty-one percent (51%) or more.

The failure by the LICENSEE to obtain the prior written approval by the COUNTY of any Transfer of the LICENSE or the Operating Area shall constitute a material breach of this LICENSE by, and shall not confer any rights to the Operating Area upon the transferee. Such failure shall be grounds for termination of this LICENSE for default per Article VIII, Section 8.02.

B. **Conditions of the COUNTY Approval**. The COUNTY agrees that it will not arbitrarily withhold consent to any Transfer, but the COUNTY may withhold consent at its sole discretion if any of the following conditions exist:

(1) The LICENSEE, its successors or assigns are in default of any term, covenant or condition of this LICENSE, whether notice of default has or has not been given by the COUNTY.

(2) The prospective assignee or transferee has not agreed in writing to keep, perform and be bound by all the terms, covenants, and conditions of this LICENSE.

(3) The prospective assignee or transferee is not financially capable or not experienced in performing the LICENSE obligations, as determined by the Airport Director.

(4) Assignee or transferee's use is in conflict with the terms of this LICENSE.

(5) All the terms, covenants and conditions of Transfer, including the consideration therefore, of any and every kind, have not been revealed in writing to the Airport Director.

(6) The LICENSEE has not provided Airport Director with a copy of all documents relating to the Transfer, including, but not limited to, appraisals, notes, trust deeds, title reports, escrow instructions, *etc*.

C. **Affiliate Transactions**. The COUNTY has adopted in the Access Plan policies and regulations regarding transactions and aircraft operations at the Airport involving affiliations of commercial airlines operating, or desiring to operate, at the Airport ("the affiliate policy"). The LICENSEE acknowledges that the COUNTY considers the affiliate policy to be an important and significant policy in support of the COUNTY's regulation of the Airport.

The LICENSEE acknowledges that there is a rational basis for this policy under the operational and historical circumstances affecting the Airport, that under such circumstances this policy maintains appropriate equity between the rights and privileges of competing commercial operators using the Airport, and that the affiliate policy does not constitute unlawful or unjustly discriminatory action by COUNTY in its operation and management of the Airport. LICENSEE agrees to comply fully and completely with

the affiliate policy and all related regulations which appear in the Access Plan and or this LICENSE.

Any affiliate transaction described and defined in the Access Plan, and any affiliate transaction between the LICENSEE and any other person which then has a written agreement with COUNTY to conduct regularly scheduled air service operations at the Airport, shall constitute a Transfer within the meaning of Paragraph A, above. In the event an affiliate transaction involving the LICENSEE is initiated, then not later than the time when the affiliate transaction is publicly announced:

(1) The LICENSEE shall notify the Airport Director of the fact of the initiation of the affiliate transaction.

(2) If the affiliate transaction is initiated by the LICENSEE, the LICENSEE shall promptly provide to the Airport Director copies of all agreements, or written offers or proposals, made with respect to the transaction, and copies of all documents filed with federal authorities with respect to the transaction. If the affiliate transaction is initiated by some other person in respect of the LICENSEE, the LICENSEE shall promptly and continuously provide such documentation or other information regarding the transaction as may be available to the LICENSEE.

(3) In addition to all other obligations of the LICENSEE, if the affiliate transaction involves the LICENSEE and any other person which then has a written agreement with the COUNTY to conduct regularly scheduled air service operations at the Airport, the LICENSEE shall promptly arrange to negotiate with the Airport Director regarding the terms and conditions upon which the Director would recommend consent by the Board of Supervisors to a Transfer of this LICENSE, or a Transfer of the written agreement(s) between the other person or entity involved in the affiliate transaction and the COUNTY.

Notwithstanding any other provision of this LICENSE, the LICENSE may be terminated by the COUNTY on thirty (30) days' notice to the LICENSEE without further obligation of the COUNTY, and without any liability of the COUNTY to the LICENSEE whatsoever, if:

(4) The LICENSEE fails to comply with Paragraph C. of this Section; or if

(5) The Airport Director fails to make a favorable recommendation to the Board of Supervisors regarding the Transfer within sixty (60) days after initiation and public announcement of the affiliate transaction, which contains terms and conditions agreed to by the LICENSEE and its affiliate(s); or if

(6) The Board of Supervisors fails to consent to the Transfer on terms and conditions which have been accepted by the LICENSEE within thirty (30) days after receipt

of the recommendations of the Airport Director.

D. **Bankruptcy Transaction**. If the LICENSEE assumes this LICENSE and proposes to assign the same pursuant to the provisions of the U.S. BANKRUPTCY CODE, 11 U.S.C. §§101, *et seq.*, then notice of such proposed assignment shall be given to COUNTY. The following information shall be provided to the COUNTY:

(1) The name and address of proposed assignee;

(2) All of the terms and conditions of such offer; and

(3) Adequate assurance to the COUNTY of the proposed assignee's future performance under the LICENSE, including, without limitation, the assurance referred to in the U.S. BANKRUPTCY CODE, 11 U.S.C. §365(b)(3).

Any person or entity to which this LICENSE is assigned pursuant to the provisions of the U.S. BANKRUPTCY CODE, 11 U.S.C. §§101, *et seq.*, shall be deemed without further act or deed to have assumed all of the obligations arising under this LICENSE on and after the date of such assignment. Any such assignee shall upon demand execute and deliver to the COUNTY an instrument confirming such assumption.

E. **Non-Transferable Privileges**. Commuter Passenger Capacity authorized by Section 4.05 in this LICENSE and the Access Plan are not property interests of the LICENSEE and are non-transferable in any form, and as such, are not subject to sale, assignment, hypothecation, and transfer, by the LICENSEE under the terms of this Section. Any such attempted assignment, sale or other such attempted transfer of operations, privileges or Commuter Passenger Capacity is in violation of the public policy of the COUNTY and shall be void and shall constitute a breach and default of this LICENSE.

SECTION 7.02 SUCCESSORS IN INTEREST

Unless otherwise provided in this LICENSE, the terms, covenants, and conditions contained herein shall apply to and bind the heirs, successors, executors, administrators, and assigns of all parties hereto, all of whom shall be jointly and severally liable hereunder.

ARTICLE VIII

TERMINATION AND DEFAULT

SECTION 8.01 TERMINATION OF PRIOR AGREEMENTS

It is mutually agreed that this LICENSE shall terminate and supersede any prior LICENSES or agreements between the parties hereto for the purpose of commercial air transportation and all related activities of the LICENSEE at the Airport.

SECTION 8.02 TERMINATION FOR DEFAULT

The COUNTY may terminate this LICENSE and all of its obligations hereunder with or without prior notice to the LICENSEE and may exercise all rights of entry for default and breach, if the LICENSEE fails to perform on any of its obligations under this LICENSE including but not limited to the following:

A. Payment of fees and/or charges and PFC's;

B. A general assignment for the benefit of creditors and any Transfer without the prior written approval by the COUNTY;

C. The issuance of any execution or attachment against the LICENSEE at the Airport that is undischarged within sixty (60) days of levy or seizure or if the Licensed Premises are occupied by someone other than the LICENSEE;

D. The voluntary vacation or abandonment by the LICENSEE of the conduct of air transportation business at the Airport;

E. The violation by the LICENSEE of any of the terms of any insurance policy referred to in the LICENSE;

F. If LICENSEE is found by the FAA, TSA, other government regulatory or successor agency to have violated specified safety standards in the conduct of the LICENSEE's business;

G. The violation or breach of any provision of this LICENSE or the Access Plan;

H. The violation of any written directions of the Airport Director;

I. The appointment of a receiver to take possession of all, or substantially all, the assets of the LICENSEE located at the Airport.

Where applicable, and unless otherwise stated in this LICENSE, or by written notice, the LICENSEE shall have fifteen (15) calendar days to cure any notices of default prior to termination of this LICENSE.

SECTION 8.03 DISPOSITION OF ABANDONED PERSONAL PROPERTY

If the LICENSEE abandons or terminates its operation or is dispossessed thereof by process of law or otherwise, title to any personal property belonging to the LICENSEE and left on the Airport fifteen (15) days after such event shall be deemed to have been transferred to the COUNTY. The COUNTY shall have the right to remove and to dispose of such property without liability therefor to the LICENSEE or to any person claiming under the LICENSEE, and shall have no need to account therefor. Personal property left on the Airport after termination,

expiration, or abandonment of the LICENSE shall not be construed as giving the LICENSEE possession of the Operating Area during the fifteen (15) days after termination, expiration or abandonment of the LICENSE.

ARTICLE IX

SECURITY

SECTION 9.01 AIRPORT SECURITY

In addition to FAA, TSA and Airport security rules, regulations and plans, AIRLINE shall comply with all applicable security requirements of the United States Customs and Border Protection (USCBP), and all applicable federal, state and local regulations regarding airport security. AIRLINE is responsible for fines imposed by any regulatory agency as a result of AIRLINE's failure to comply with applicable rules and regulations regarding airport security.

AIRLINE shall be required to obtain airport security clearance in order to perform work under this License. AIRLINE, its employees and contractors must complete a background clearance Security Identification Display Area (SIDA) class in order to obtain an I.D. badge for access to secure areas and a driver's permit to drive on the airfield.

A. **Local Security**. The LICENSEE shall be responsible for the security of gates or doors that are utilized in their commuter operations. Said gates and/or doors permitting entry to the restricted areas of the Airport shall be locked when not in use and/or under the LICENSEE's constant surveillance. The LICENSEE shall install such security equipment, including, but not limited to, video monitoring equipment, as may be required by the Airport Director to insure compliance with all regulations of the FAA, TSA or other governmental agencies having jurisdiction over Airport security. The LICENSEE shall exercise control over any person or vehicle escorted by the LICENSEE onto restricted or secure areas of the Airport, or issued an access badge by or at the request of the LICENSEE, and ensure the person or vehicle shall comply with all Airport security regulations.

B. **Federal Security**. As of the date of this LICENSE, the TSA provides for all passenger and baggage screening conducted at the Airport. The LICENSEE may be required to provide assistance to TSA in their efforts to carry out its federal mandates. At some point during the term of this LICENSE, the Airport or another entity may be authorized to provide these security services in lieu of the TSA.

C. **Penalties and Fines.** The LICENSEE shall promptly pay any penalties for which the LICENSEE is responsible. These penalties include but are not limited to, civil penalties or fines assessed against the Airport or LICENSEE, by the FAA, TSA or any other governmental agency for the violation of any security related laws, rules, policies or regulations at the Airport.

D. **Badge Acquisition.** Prior to issuance of a security badge(s), designated LICENSEE personnel who will be working onsite, and engaged in the performance of work under this LICENSE, must pass Airport's screening requirements, which includes an F.B.I. Criminal History Records Check and a Security Threat Assessment, and shall pay any applicable fees. Upon successful completion of the background checks, LICENSEE designated personnel will be required to attend a 3-hour SIDA class and pass a written test. Those personnel who may be permitted by the Airport to drive on the Airport Operations Area (AOA) perimeter road must also complete a Driver's Training class and written test. Airport identification badges are not issued until designated LICENSEE personnel have: 1) completed appropriate application forms and submitted proof of identity and employment eligibility, 2) passed both background checks, 3) completed and passed appropriate classroom training and 4) paid an identification badge fee for each badged person. LICENSEE should anticipate a minimum of ten (10) business days to complete the security badge process if all requirements listed above are fulfilled by individual badge applicants in a timely manner. LICENSEE's designated personnel must successfully complete the badge acquisition process, unless other arrangements have been approved by the Airport. LICENSEE shall be responsible for all applicable fees and costs associated with the background checks and badging process. The amount of such fees is subject to change without notice.

E. **Badge Holder Requirements and Responsibilities.** The Airport Security Plan (ASP) requires that each person issued an Airport security badge be made aware of his responsibilities regarding the privilege of access to restricted areas of the Airport.

LICENSEE and all LICENSEE personnel within an access controlled area (AOA, SIDA, secured area or sterile area) are required to display on their person an Airport security badge, unless they are escorted by a properly badged individual with escort privileges. When working in a secure area, each badged person is responsible for challenging any individual who is not properly displaying an Airport issued or approved and valid I.D. badge. Any person who is not properly displaying or who cannot produce a valid Airport security badge must immediately be referred to the Sheriff's Department – Airport Police Services Office for proper handling.

The Airport security badge is the property of the County of Orange and must be returned upon termination of LICENSEE personnel employment and/or termination of the LICENSE. The loss of a badge shall be reported within 24 hours to the Sheriff's Department–Airport Police Services by calling (949) 252-5000. LICENSEE or LICENSEE personnel who lose their badges shall be required to pay a fee before receiving a replacement badge. The charge for lost badge replacement will be posted in the Airport Administration Office and is subject to change without notice. A report shall be made before a replacement badge will be issued.
The Airport security badge is nontransferable.

In the event that LICENSEE's badge is not returned to the Airport upon termination of LICENSEE personnel employment and/or termination of the LICENSE, the LICENSEE

and/or LICENSEE personnel shall be liable to the County of Orange for a fine in the amount of $250.00 per unreturned badge. The amount of the fine is subject to change without notice. LICENSEE's security deposit may be applied to cover the cost of the fine.

ARTICLE X

INSURANCE AND INDEMNITY

SECTION 10.01 INSURANCE

LICENSEE agrees to purchase all required insurance at LICENSEE's expense and to deposit with the COUNTY certificates of insurance, including all endorsements required herein, necessary to satisfy the COUNTY that the insurance provisions of this License have been complied with and to keep such insurance coverage and the certificates and endorsements therefore on deposit with the COUNTY during the entire term of this License.

LICENSEE agrees that LICENSEE shall not operate on the License Area at any time the required insurance is not in full force and effect as evidenced by a certificate of insurance and necessary endorsements or, in the interim, an official binder being in the possession of Airport Director. In no cases shall assurances by LICENSEE, its employees, agents, including any insurance agent, be construed as adequate evidence of insurance. Airport Director will only accept valid certificates of insurance and endorsements, or in the interim, an insurance binder as adequate evidence of insurance. LICENSEE also agrees that upon cancellation, termination, or expiration of LICENSEE's insurance, COUNTY may take whatever steps are necessary to interrupt any operation from or on the License Area until such time as the Airport Director reinstates the License.

If LICENSEE fails to provide Airport Director with a valid certificate of insurance and endorsements, or binder at any time during the term of the License, COUNTY and LICENSEE agree that this shall constitute a material breach of the License. Whether or not a notice of default has or has not been sent to LICENSEE, said material breach shall permit COUNTY to take whatever steps necessary to interrupt any operation from or on the License Area, and to prevent any persons, including, but not limited to, members of the general public, and LICENSEE's employees and agents, from entering the License Area until such time as Airport Director is provided with adequate evidence of insurance required herein. LICENSEE further agrees to hold COUNTY harmless for any damages resulting from such interruption of business and possession, including, but not limited to, damages resulting from any loss of income or business resulting from the COUNTY's action.

LICENSEE may occupy the Premises only upon providing to County the required insurance stated herein and maintain such insurance for the entire term of this LICENSE. County reserves the right to terminate this LICENSE at any time LICENSEE's insurance is canceled or terminated and not reinstated within ten (10) days of said cancellation or termination. LICENSEE shall pay COUNTY a fee of $300.00 for processing the reinstatement of the

LICENSE. LICENSEE shall provide to County immediate notice of said insurance cancellation or termination.

All contractors performing work on behalf of LICENSEE pursuant to this License shall obtain insurance subject to the same terms and conditions as set forth herein for LICENSEE. LICENSEE shall not allow contractors or subcontractors to work if contractors have less than the level of coverage required by the COUNTY from the LICENSEE under this License. It is the obligation of the LICENSEE to provide written notice of the insurance requirements to every contractor and to receive proof of insurance prior to allowing any contractor to begin work within the License Area. Such proof of insurance must be maintained by LICENSEE through the entirety of this License and be available for inspection by a COUNTY representative at any reasonable time.

All self-insured retentions (SIRs) shall be clearly stated on the Certificate of Insurance. Any self-insured retention (SIR) in an amount in excess of Fifty Thousand Dollars ($50,000) shall specifically be approved by the County's Risk Manager, or designee, upon review of LICENSEE's current audited financial report. If LICENSEE's SIR is approved, LICENSEE, in addition to, and without limitation of, any other indemnity provision(s) in this License, agrees to all of the following:

1) In addition to the duty to indemnify and hold the County harmless against any and all liability, claim, demand or suit resulting from LICENSEE's, its agents, employee's or subcontractor's performance of this Agreement, LICENSEE shall defend the County at its sole cost and expense with counsel approved by Board of Supervisors against same; and

2) LICENSEE's duty to defend, as stated above, shall be absolute and irrespective of any duty to indemnify or hold harmless; and

3) The provisions of California Civil Code Section 2860 shall apply to any and all actions to which the duty to defend stated above applies, and the LICENSEE's SIR provision shall be interpreted as though the LICENSEE was an insurer and the County was the insured.

If the LICENSEE fails to maintain insurance acceptable to the COUNTY for the full term of this License, the COUNTY may terminate this License.

Qualified Insurer

The policy or policies of insurance must be issued by an insurer with a minimum rating of A- (Secure A.M. Best's Rating) and VIII (Financial Size Category as determined by the most current edition of the **Best's Key Rating Guide/Property-Casualty/United States or ambest.com).** It is preferred, but not mandatory, that the insurer be licensed to do business in the state of California (California Admitted Carrier).

If the insurance carrier does not have an A.M. Best Rating of A-/VIII, the CEO/Office of Risk Management retains the right to approve or reject a carrier after a review of the company's performance and financial ratings.

The policy or policies of insurance maintained by the LICENSEE shall provide the minimum limits and coverage as set forth below:

Coverages	**Minimum Limits**
Aviation General Liability (Including, but not limited to, General Liability, Passenger Legal Liability, Personal Injury, Contractual Liability, Premises, Products and Completed Operations, Hangarkeepers and liability for vehicles and Mobile equipment operated on restricted Airport premises)	$100,000,000 per occurrence $100,000,000 aggregate
Workers Compensation/Employers Liability	Statutory/ $1,000,000 per occurrence
Pollution Liability	$1,000,000 per claims-made or occurrence
Commercial Property Insurance on an "All Risk" or "Special Causes of Loss" Basis covering all contents and any tenant Improvements including Business Interruption/Loss of Rents with a 12-month limit	100% Replacement Cost with no coinsurance provision

Required Endorsements

The Aviation General and the Pollution Liability policies shall contain the following endorsements, which shall accompany the Certificate of insurance:

1) An Additional Insured endorsement using ISO form CG 20 26 04 13 or a form at least as broad naming the County of Orange, its elected and appointed officials, officers, employees, agents as Additional Insureds. Blanket coverage may also be provided which will state- As Required by Written Agreement.

2) A primary non-contributing endorsement using ISO form CG 20 01 04 13, or a form at least as broad, evidencing that the LICENSEE's insurance is primary and any insurance or self-insurance maintained by the County of Orange shall be excess and non-contributing.

The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against the County of Orange, its elected and appointed officials, officers, agents and employees. Blanket coverage may also be provided which will state- As Required by Written Agreement.

All insurance policies required by this license shall waive all rights of subrogation against the County of Orange, its elected and appointed officials, officers, agents and employees when acting within the scope of their appointment or employment.

The Commercial Property policy shall contain a Loss Payee endorsement naming the County of Orange as respects the County's financial interest when applicable.

If LICENSEE'S Pollution Liability policy is a claims-made policy, LICENSEE shall agree to maintain coverage for two (2) years following termination of the LICENSE.

LICENSEE shall notify County in writing within thirty (30) days of any policy cancellation and ten (10) days for non-payment of premium and provide a copy of the cancellation notice to County. Failure to provide written notice of cancellation may constitute a material breach of the LICENSE, upon which the County may suspend or terminate this LICENSE.

The Aviation General Liability policy shall contain a severability of interests clause, also known as a "separation of insureds" clause (standard in the ISO CG 001 policy).

Insurance certificates should be forwarded to the COUNTY address provided in the Clause (NOTICES) below or to an address provided by Airport Director. LICENSEE has ten (10) business days to provide adequate evidence of insurance or this License may be cancelled.

COUNTY expressly retains the right to require LICENSEE to increase or decrease insurance of any of the above insurance types throughout the term of this License. Any increase or decrease in insurance will be as deemed by County of Orange Risk Manager as appropriate to adequately protect COUNTY.

COUNTY shall notify LICENSEE in writing of changes in the insurance requirements. If LICENSEE does not deposit copies of acceptable certificates of insurance and endorsements with COUNTY incorporating such changes within thirty (30) days of receipt of such notice, this License may be in breach without further notice to LICENSEE, and COUNTY shall be entitled to all legal remedies.

The procuring of such required policy or policies of insurance shall not be construed to limit LICENSEE's liability hereunder nor to fulfill the indemnification provisions and requirements of this License, nor in any way to reduce the policy coverage and limits available from the insurer.

SECTION 10.02 INDEMNITY

LICENSEE agrees to indemnify, defend with counsel approved in writing by COUNTY, and hold COUNTY, its elected and appointed officials, officers, employees, agents and those special districts and agencies which COUNTY'S Board of Supervisors acts as the governing Board ("COUNTY INDEMNITEES") harmless from any claims, demands or liability of any kind or nature, including but not limited to personal injury or property damage, arising from or related to the services, products or other performance provided by LICENSEE pursuant to this LICENSE. If judgment is entered against LICENSEE and COUNTY by a court of competent jurisdiction because of the concurrent active negligence of COUNTY or COUNTY INDEMNITEES, LICENSEE and COUNTY agree that liability will be apportioned as determined by the court. Neither party shall request a jury apportionment.

LICENSEE, at its own expense shall defend, indemnify and hold harmless the COUNTY, its agents, officers and employees from and against any claim, action or proceeding brought against the COUNTY, its agents, officers, and employees to attack, set aside, void or annul the COUNTY's approval of LICENSEE to operate as a Regularly Scheduled Commercial User at John Wayne Airport at a Fix-Based Operation location pursuant to this LICENSE. This includes, but is not limited to, any claim or challenge made pursuant to the California Environmental Quality Act, National Environmental Policy Act, the 1985 Settlement Agreement and its Amendments and the Access Plan. LICENSEE shall reimburse the COUNTY for any court costs and attorneys' fees that the COUNTY may be requires to pay as a result of any claims, action or proceeding against the COUNTY. COUNTY shall have the right to approve any and all counsel retained by LICENSEE in said proceedings. COUNTY and LICENSEE shall cooperate in all aspects of the litigation and all litigation pleadings are subject to review, revision and approval by COUNTY's Office of County Counsel.

ARTICLE XI

FEDERAL GRANT ASSURANCES AND REQUIREMENTS

SECTION 11.01 NONDISCRIMINATION

A. The LICENSEE, for itself, its personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree that:

(1) No person on the grounds of race, creed, color, national origin, sex, age, or disability, shall be excluded from participation, denied the benefits of, or be otherwise subjected to discrimination in the use of, or services provided from the Airport.

(2) This LICENSE is subject to the requirements of the U.S. Department of Transportation's regulations, 49 C.F.R. Part 23. The LICENSEE agrees that it will not discriminate against any Airport Concession Disadvantaged Business

Enterprise (ACDBE) in connection with provision of service, or the award or performance of any agreement covered by 49 C.F.R. Part 23.

(3) In the construction of any improvements on, over or under the Operating Area and the furnishing of services thereon, no person on the grounds of race, creed, color, national origin, sex, age, or disability, shall be excluded from participation in, denied the benefits of or otherwise be subjected to discrimination.

(4) The LICENSEE conduct its operation at the Airport in compliance with all other requirements imposed by or pursuant to 49 C.F.R. Part 21, Subtitle A, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation-Effectuation of Title VI of the CIVIL RIGHTS ACT OF 1964, and as said regulations may be amended.

(5) In the event facilities are constructed, maintained or otherwise operated on the Airport for a purpose for which a DOT program or activity is extended or for another purpose involving the provision of similar services or benefits, the LICENSEE shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to 49 C.F.R. Part 21, Subtitle A, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation-Effectuation of Title VI of the CIVIL RIGHTS ACT OF 1964, and as said regulations may be amended.

B. In the event of breach of any of the above nondiscrimination covenants, the COUNTY shall have the right to terminate the LICENSE and to re-enter and repossess said land and the facilities thereon, and hold the same as if said LICENSE had never been made or issued. This provision does not become effective until the procedures of 49 C.F.R. Part 21, are followed and completed, including expiration of appeal rights.

C. The LICENSEE shall furnish its accommodations and/or services on a fair, equal and not unjustly discriminatory basis to all users thereof and it shall charge fair, reasonable and not unjustly discriminatory prices for each unit or service.

D. Noncompliance with the provisions found in Section 11 shall constitute a material breach thereof and, in the event of such noncompliance, the COUNTY shall have the right to terminate this LICENSE and the estate hereby created without liability therefor; or, at the election of the COUNTY or the United States, either or both said governments shall have the right to judicially enforce Paragraphs A, B, and C.

E. The LICENSEE agrees that it shall insert the above four paragraphs in any lease (agreement, contract, *etc.*) by which said LICENSEE grants a right or privilege to any person, firm or corporation to render accommodations and/or service to the public on the Airport.

SECTION 11.02 DEVELOPMENT/MAINTENANCE OF AIRPORT

The COUNTY reserves the right to further develop or improve the Airport as it sees fit, regardless of the desires or view of the LICENSEE, and without interference or hindrance.

The COUNTY reserves the right, but shall not be obligated to the LICENSEE, to maintain and keep in repair the landing area of the Airport and all publicly owned facilities of the Airport, together with the right to direct and control all activities of the LICENSEE in this regard.

SECTION 11.03 LICENSE SUBORDINATE TO AGREEMENT WITH U.S.A.

This LICENSE shall be subordinate to the provisions and requirements of any existing or future agreement between COUNTY and the United States or any lawful requirement of the United States relative to the development, operation or maintenance of the Airport.

SECTION 11.04 USE TO CONFORM WITH FEDERAL AVIATION REGULATIONS

The LICENSEE agrees that the LICENSEE's use of the Operating Area, including all construction thereon, shall conform to applicable FEDERAL AVIATION REGULATIONS.

The LICENSEE agrees to comply with the notification and review requirements covered in Part 77 of the FEDERAL AVIATION REGULATIONS (as same may be amended from time to time or such other regulation replacing Part 77 as may be adopted by Federal authority) prior to the construction of the improvements described herein and prior to the construction of any future structure or building upon the Airport or in the event of any planned modification or alteration of any present or future building or structure situated on the Airport.

SECTION 11.05 FEDERAL LAW PREEMPTION

Notwithstanding any provisions of this LICENSE, to the contrary and notwithstanding any provision of any other agreements, laws, or ordinances to the contrary, any requirement that is imposed on the LICENSEE in this LICENSE, or any local authorities shall not apply to the LICENSEE to the extent that such requirement is or would otherwise be preempted by federal law, including but not limited to the Airline Deregulation Act (49 U.S.C. § 41713).

SECTION 11.06 NONEXCLUSIVE RIGHT

It is understood and agreed that nothing herein contained shall be construed to grant or authorize the granting of an exclusive right within the meaning of §308a of the FEDERAL AVIATION ACT OF 1958 (49 U.S.C. §1349).

SECTION 11.07 RESERVATION OF AVIGATION EASEMENT

The COUNTY hereby reserves for itself, its successors and assigns, for the use and benefit of the

public, a right of flight for the passage of aircraft in the air space above the surface of the Operating Area, together with the right to cause in said air space such noise as may be inherent in the operation of aircraft now known or hereafter used for navigation of, or flight in the air, using said air space, or landing at, taking off from, or operating at the Airport.

SECTION 11.08 HEIGHT LIMITATION OF STRUCTURES

The LICENSEE by accepting this LICENSE expressly agrees for itself, its successors and assigns that it will not erect nor permit the erection of any structure or object nor permit the growth of any tree on the Operating Area (if any) which would penetrate the imaginary surfaces as defined in Part 77 of the FEDERAL AVIATION REGULATIONS (as same may be amended from time to time or as such regulation replacing Part 77 may be adopted by Federal authority) or such other lesser altitude as may be required by the COUNTY. In the event the aforesaid covenants are breached, the COUNTY reserves the right to enter upon the Operating Area and to remove the offending structure or object and cut the offending tree, all of which shall be at the expense of the LICENSEE. The LICENSEE shall be responsible for filing Form 7460 for any construction and/or height of construction equipment with the FAA, if required.

SECTION 11.09 NONINTERFERENCE WITH AIRCRAFT

The LICENSEE by accepting this LICENSE agrees for itself, its successors and assigns that it will not make use of the Operating Area in any manner which might interfere with the landing and taking off of aircraft from the Airport or otherwise constitute a hazard. In the event the aforesaid covenant is breached, the COUNTY reserves the right to enter upon the Operating Area and hereby cause the abatement of such interference at the expense of the LICENSEE.

SECTION 11.10 WAR OR NATIONAL EMERGENCY

This LICENSE and all the provisions hereof shall be subject to whatever right the United States Government now has or in the future may have or acquire, affecting the control, operation, regulation and taking over of Airport or the exclusive or nonexclusive use of Airport by the United States during the time of war or national emergency.

SECTION 11.11 AFFIRMATIVE ACTION REQUIREMENTS

The LICENSEE assures that it will undertake an affirmative action program as required by 14 C.F.R. Part 152, Subpart E, to insure that no person shall, on the grounds of race, creed, color, national origin, or sex, be excluded from participating in any employment activities covered in 14 C.F.R., Part 152, Subpart E. The LICENSEE assures that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this Subpart. The LICENSEE assures that it will require that its covered suborganizations provide assurances to the LICENSEE that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations, as required by 14 C.F.R. Part 152, Subpart E, to the same effect.

ARTICLE XII

MISCELLANEOUS PROVISIONS

SECTION 12.01 TIME

Time is of the essence in this LICENSE.

SECTION 12.02 LICENSE ORGANIZATION

The various headings and numbers herein, the grouping of provisions of this LICENSE into separate sections and paragraphs, and the organization hereof, are for the purpose of convenience only and shall not be considered otherwise.

SECTION 12.03 AMENDMENTS

This LICENSE sets forth all of the agreements and understandings of the parties with regard to its subject matter and any modification must be written and properly executed by both parties.

SECTION 12.04 SIGNS

The LICENSEE agrees not to construct, maintain or allow any sign upon the Operating Area except as approved by the Airport Director. Unapproved signs, banners, flags, etc., may be removed by the Airport Director without prior notice to the LICENSEE.

SECTION 12.05 PERMITS AND LICENSES

The LICENSEE shall be required to obtain any and all approvals, permits and/or licenses which may be required in connection with the operation of the Operating Area as set out herein. No permit approval or consent given hereunder by the COUNTY in its governmental capacity shall affect or limit the LICENSEE's obligations hereunder, nor shall any approvals or consents given by the COUNTY as a party to this LICENSE, be deemed approval as to compliance or conformance with applicable governmental codes, laws, ordinances, rules, or regulations.

SECTION 12.06 COUNTY OF ORANGE CHILD SUPPORT ENFORCEMENT

Contractor certifies it is in full compliance with all applicable federal and state reporting requirements regarding its employees and with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignments and will continue to be in compliance throughout the term of the Contract with the County of Orange. Failure to comply shall constitute a material breach of the Contract and failure to cure such breach within 60 calendar days of notice from the County shall constitute grounds for termination of the Contract."

SECTION 12.07 TAXES AND ASSESSMENTS

This LICENSE may create a possessory interest under California law that is subject to the payment of taxes levied on such interest. It is understood and agreed that all taxes and assessments (including but not limited to said possessory interest tax) that become due and payable upon the Airport or upon fixtures, equipment or other property installed or constructed thereon, shall be the full responsibility of the LICENSEE, and the LICENSEE shall cause said taxes and assessments to be paid promptly.

SECTION 12.08 CIRCUMSTANCES WHICH EXCUSE PERFORMANCE

If either party hereto shall be delayed or prevented from the performance of any act required hereunder by reason of acts of God, restrictive governmental laws or regulations or other cause without fault and beyond the control of the party obligated (financial inability excepted), performance of such act shall be excused for the period of the delay and the period for the performance of any such act shall be extended for a period equivalent to the period of such delay. However, nothing in this Section shall excuse the LICENSEE from the prompt payment of any fees and charges required of the LICENSEE except as may be expressly provided elsewhere in this LICENSE.

SECTION 12.09 PARTIAL INVALIDITY

If any term, covenant, condition, or provision of this LICENSE is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.

SECTION 12.10 WAIVER OF RIGHTS

The failure of the COUNTY or the LICENSEE to insist upon strict performance of any of the terms, covenants or conditions of this LICENSE shall not be deemed a waiver of any right or remedy that the COUNTY or the LICENSEE may have, and shall not be deemed a waiver of the right to require strict performance of all the terms, covenants and conditions of the LICENSE thereafter, nor a waiver of any remedy for the subsequent breach or default of any term, covenant or condition of this LICENSE. Any waiver, in order to be effective, must be signed by the party whose right or remedy is being waived.

SECTION 12.11 RESERVATIONS TO THE COUNTY

The Operating Area are accepted “as is” and the LICENSEE is subject to any and all existing easements and encumbrances. The COUNTY reserves the right to install, lay, construct, maintain, repair and operate sanitary sewers, drains, storm water sewers, pipelines, manholes and connections; water, oil and gas pipelines; telephone and telegraph power lines; and the appliances and appurtenances necessary or convenient in connection therewith, in, over, upon, through, across, under and along the Operating Area or any part thereof; and to enter the Operating Area for any and all such purposes. The COUNTY also reserves the right to grant

franchises, easements, rights of way and permits in, over, upon, through, across, under and along any and all of the Operating Area. No right reserved by the COUNTY in this Section shall be so exercised as to interfere unreasonably with the LICENSEE's operations hereunder or to impair the security of any secured creditor of the LICENSEE.

The COUNTY agrees that rights granted to third parties by reason of this Section shall contain provisions that the surface of the land shall be restored as nearly as practicable to its original condition upon the completion of any construction. The COUNTY further agrees that should the exercise of these rights temporarily interfere with the use of any or all of the Operating Area by the LICENSEE, the LICENSEE shall only be entitled to a reduction in the fees and charges payable to the COUNTY during the period of interference, which shall be reduced in proportion to the interference with the LICENSEE's use of the Operating Area. The LICENSEE shall not be entitled to any other form of compensation.

SECTION 12.12 AUTHORITY OF THE LICENSEE

If the LICENSEE is a corporation, each individual executing this LICENSE on behalf of said corporation represents and warrants that he is duly authorized to execute and deliver this LICENSE on behalf of said corporation, in accordance with the by-laws of said corporation, and that LICENSE is binding upon said corporation.

SECTION 12.13 PUBLIC RECORDS

The LICENSEE understands that written information submitted to and/or obtained by the COUNTY from the LICENSEE related to this LICENSE and/or the Operating Area, either pursuant to this LICENSE or otherwise, may be open to inspection by the public pursuant to the CAL. Records Act (CAL. GOV. CODE §§6250, *et seq.*) as now in force or hereafter amended, or any Act in substitution thereof, or otherwise made available to the public.

SECTION 12.14 RELATIONSHIP OF PARTIES

The relationship of the parties hereto is that of lessor and tenant, and it is expressly understood and agreed that the COUNTY does not in any way or for any purpose become a partner of the LICENSEE in the conduct of the LICENSEE's business or otherwise, or a joint venturer with the LICENSEE; and the provisions of this LICENSE and the agreements relating to fees and charges payable hereunder are included solely for the purpose of providing a method by which fees and charges payments are to be measured and ascertained. This LICENSE is intended for the sole benefit of the parties hereto and their successors, and, unless otherwise provided herein, or by law, no rights are created, or are intended to be created, for the benefit of, or enforceable by, any third parties.

SECTION 12.15 GOVERNING LAW AND VENUE

This LICENSE has been negotiated and executed in the state of California and shall be governed by and construed under the laws of the state of California. In the event of any legal action to

enforce or interpret this LICENSE, the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California, and the parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure Section 394. Furthermore, the parties specifically agree to waive any and all rights to request that an action be transferred for trial to another county.

SECTION 12.16 ATTORNEY FEES

In any action or proceeding to enforce or interpret any provision of this LICENSE, or where any provision hereof is validly asserted as a defense, each party shall bear its own attorney's fees, costs and expenses.

SECTION 12.17 NOTICES

All notices pursuant to this LICENSE shall be addressed to either party as set forth below and shall be sent through the United States Mail, in the State of California, duly registered or certified, return receipt requested with postage prepaid or by an overnight carrier service. If any notice is sent by an overnight carrier service, as aforesaid, the same shall be deemed to have been served or delivered twenty-four (24) hours after mailing thereof. Notwithstanding the above COUNTY may also provide notices to the LICENSEE by personal delivery or by regular mail postage prepaid and any such notice so given shall be deemed to have been given upon the date of personal delivery or three (3) days after the date of deposit in the United States Mail, respectively.

TO: COUNTY	TO: LICENSEE
John Wayne Airport 3160 Airway Avenue Costa Mesa, CA 92626	Delux Public Charter, LLC dba JetSuiteX Air 550 N. Fifth St., Suite 101 Rapid City, SD 57702

Either party hereto may from time to time, by written notice to the other in the method described above, designate a different address which shall be substituted for the one above specified.

IN WITNESS WHEREOF, the parties have executed this LICENSE the day and year first above written.

DELUX PUBLIC CHARTER, LLC
dba JETSUITEX AIR

By: _____

By: Alex Wilcox
CEO

APPROVED AS TO FORM:

County Counsel

By: Lauren Kramer

APPROVED AS TO AUDIT AND ACCOUNTING:

Auditor-Controller

By: _____

RECOMMENDED FOR APPROVAL:

John Wayne Airport

By: _____
Barry Rondinella
Airport Director

Signed and certified that a copy of this
document has been delivered to the Chair
of the Board per G.C. Sec. 25103, Reso 79-1535
Attest:

COUNTY

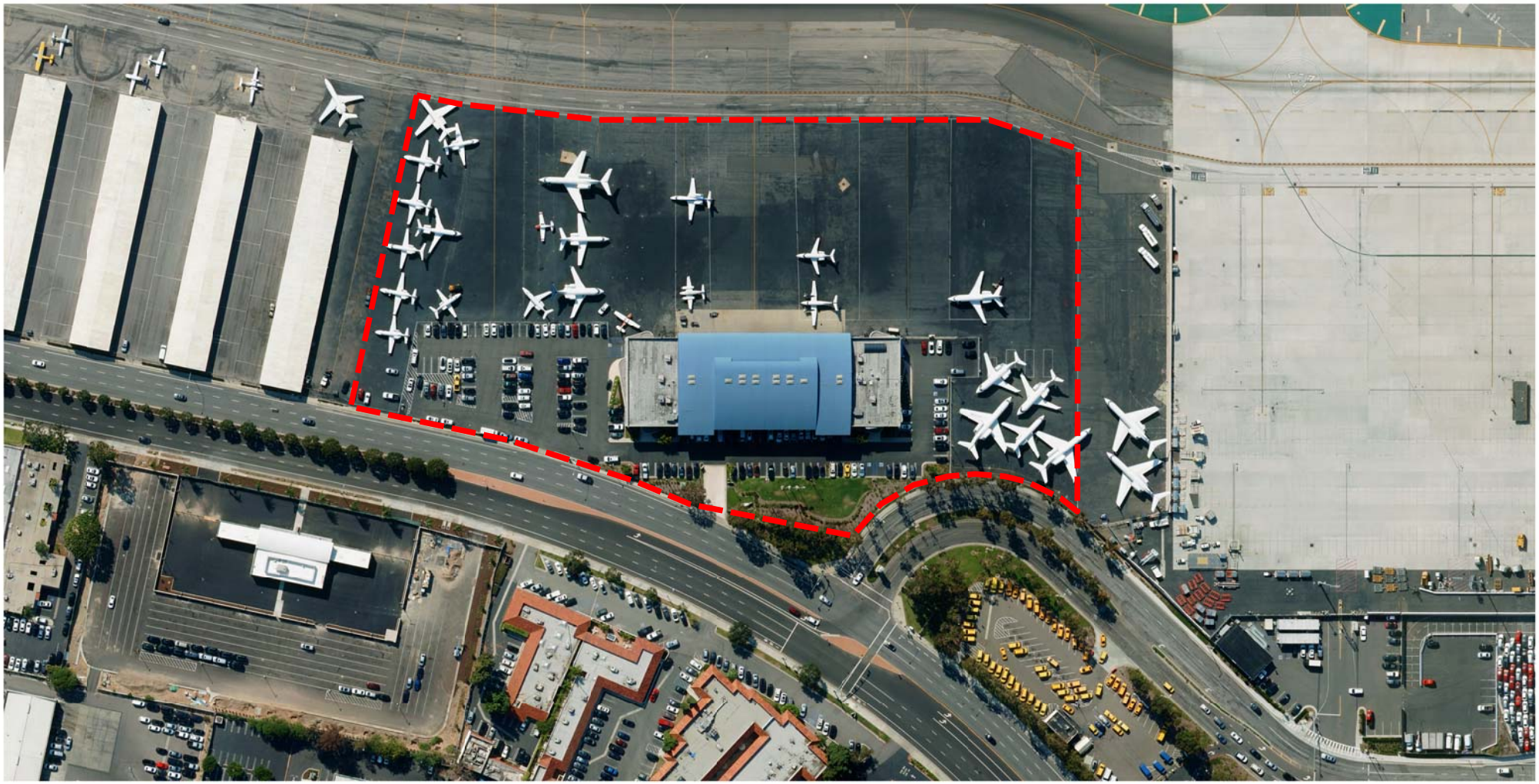
COUNTY OF ORANGE

By: _____
Board of Supervisors

_____
Robin Stieler Chair,
Clerk of the Board of Supervisors
of Orange County, California

EXHIBIT A

ACI JET EASTSIDE LEASEHOLD



ACI JET EASTSIDE LEASEHOLD		
EXHIBIT A		

JOHN WAYNE AIRPORT
ORANGE COUNTY

Focused Traffic Impact Analysis (FTIA)

for

ACI Jet SNA – JetSuiteX Project

Located at

19301 Campus Drive #100
John Wayne Airport (SNA), Orange County

PREPARED FOR:

ACI Jet SNA
19301 Campus Drive #100
Santa Ana, CA 92707

PREPARED BY:

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25 Years of Excellence

March 26, 2018

Focused Traffic Impact Analysis (FTIA) Report

ACI Jet SNA – JetSuiteX Project
John Wayne Airport, County of Orange

March 26, 2018

I, Fred Minagar do hereby certify that this Focused Traffic Analysis was performed under my supervision. The study has been conducted in strict compliance with guidelines contained in the most current versions of the City, County, State and Federal.

Fred Minagar, MS, RCE, PE, Registered Engineer

MINAGAR & ASSOCIATES, INC.
ITS – Traffic/Civil/Electrical Engineering – Transportation Planning
25 Years of Excellence

TABLE OF CONTENTS

1.0 Introduction

The John Wayne Airport (JWA) is the only airport in Orange County which provides commercial passenger and cargo service. JWA also provides general aviation services for private planes. The service area for JWA includes over 3 million people currently and includes 34 cities along with the unincorporated areas of Orange County. The County of Orange owns and operates JWA. Capacity of operations at JWA are governed by a series of settlement agreements entered into among the following parties: The County of Orange, the City of Newport Beach, the Airport Working Group (AWG), and Stop Polluting Our Newport (SPON). A synopsis of the Settlement Agreement with respect to million-annual-passenger (MAP) capacities and history of planned/approved phases is provided below and summarized in ***Table 1***.

- 1985 Settlement Agreement. Adjudicated in 1985, the original Settlement Agreement formalized consensus between the County of Orange, the City of Newport Beach, the Airport Working Group (AWG) and Stop Polluting Our Newport (SPON) on the nature and extent of facility and operational improvements that could be implemented at John Wayne Airport (JWA) through 2005.

- 2003 Settlement Agreement Amendment. In 2003, the four signatories listed above approved a series of amendments to the Settlement Agreement that allowed for additional facilities and operational capacity, and continued to provide environmental protections for the local community through 2015.

- 2014 Settlement Agreement Amendment. In early 2012, the four signatories began discussing a second extension of the Settlement Agreement, since the 2003 was set to expire in December 2015. The parties reached agreement and approved a series of amendments to the Settlement Agreement that allowed for additional operational capacity while continuing to provide the environmental protections for the local community through 2030.

TABLE 1
Summary of Current JWA Settlement Agreement

	1985 Agreement	2003 Amendments	2014 Amendments
Signators	County of Orange City of Newport Beach Airport Working Group Stop Polluting Our Newport	Same	Same
Term	*Phase 1:* April 1, 1985 through September 30, 1990	January 1, 2003 through December 31, 2015	*Phase 1:* January 1, 2016 through December 31, 2020
	Phase 2: October 1, 19901 through December 31, 2005		*Phase 2:* January 1, 2021 through December 31, 2025
			Phase 3: January 1, 2026 through December 31, 2030
Million Annual Psgrs. (MAP)	*Phase 1:* **4.75** MAP	**10.3** MAP through 12/31/2010	*Phase 1:* **10.8** MAP through 12/31/2020
	Phase 2: **8.4** MAP	**10.8** MAP through 12/31/2015	*Phase 2:* **11.8** MAP through 12/31/2025
			Phase 3: **12.2** MAP from 1/1/2026 through 12/31/2030 If 11.21 MAP is not served between 1/1/2021 and 12/31/2025 ***OR*** **12.5** MAP from 1/1/2026 through 12/31/2030 If 11.21 MAP is served between 1/1/2021 and 12/31/2025

Source: John Wayne Airport (ocair.com)

ACI Jet is an aviation services provider, operating as a full-service fixed base operator (FBO) within a leased portion of the John Wayne Airport ("JWA" or SNA). ACI Jet SNA is located in the east side FBO building and the west side hangars in JWA, along Campus Drive. ACI Jet SNA is proposing to integrate a public charter air carrier service with commuter authority, *JetSuiteX* ("Project") into its existing facility at the Airport. The JetSuiteX Plan would include a request for an average of 68,000 additional annual passengers between Phases 1 and 2 of the JWA Settlement Agreement expansion.

ACI Jet SNA has indicated to Minagar & Associates, Inc. that the airport authority has requested a focused traffic analysis be conducted to address any potential impacts to the previously approved traffic impact analysis—including significant CEQA traffic impacts and subsequent mitigation measures—identified in the Environmental Impact Report (EIR No. 617 - *John Wayne Airport Settlement Agreement Amendment*, May 2014).

Therefore, in order to maintain full compliance with EIR 617 for JWA/SNA, this technical report provides a supporting analysis which verifies that no significant changes to the previously determined potential traffic-related impacts would occur as result of approving the proposed *JetSuiteX* project.

2.0 Regulatory Setting

2.1 City of Newport Beach. The City of Newport Beach's Level of Service (LOS) Standards require the planning arterial roadway system to accommodate projected traffic at the following levels:

- Level of Service (LOS) "D" throughout the City, unless otherwise noted
- LOS "E" at any intersection in the Airport Area shared with Irvine
- LOS "E" at Coast Highway (EW) and Dover Drive (NS) due to right-of-way Limitations
- LOS "E" at Marguerite Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of Corona del Mar
- LOS "E" at Goldenrod Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of Corona del Mar (Imp 16.3)

2.2 City of Irvine. The following Level of Service (LOS) Standards shall be the goal applied to arterial highways in the City of Irvine or its sphere of influence, and which are under the City's jurisdiction:

- LOS "E" or better shall be considered acceptable within the Irvine Business Complex (IBC-PA 36), Irvine Center (PA 33), and at the intersection of Bake Parkway and the I-5 northbound off-ramp.
- In conjunction with individual subdivision map level traffic studies for development proposed in Planning Areas 5B, 6, 8A and 9, a LOS "E" standard would be considered acceptable for application to intersections impacted in Planning Areas 13, 31, 32, 34, 35 and 39.
- In conjunction with individual subdivision map level traffic studies for development proposed in Planning Areas 30 and 51, a LOS "E" standard would be considered acceptable for application to intersections impacted in Planning Areas 13, 30, 31, 32, 34, 35 and 39.

2.3 City of Costa Mesa. The following policies are contained within the City of Costa Mesa's General Plan Circulation Element:

- Attempt to maintain or improve mobility within the City to achieve a standard level of service not worse than Level of Service "D" at all intersections under the sole control of the City. Intersection level of service analyses for General Plan conditions shall be updated periodically and presented to City Council.

- Cooperate with adjacent jurisdictions to maintain or improve mobility within the City to achieve a standard level of service no worse than "D" at all intersections under State or joint control. Intersection level of service analyses for General Plan conditions for locations under State or joint control shall be updated periodically and presented to City Council.

3.0 Existing Conditions

John Wayne Airport is located in Unincorporated Orange County, and is bound by the cities of Newport Beach, Irvine, and Costa Mesa, and several unincorporated County areas . As shown in ***Figure 1***, ACI Jet is located adjacent to the Airport Way entrance/exit to JWA along the Campus Drive edge of the airport, which is bordered by the City of Newport Beach to the south. The following roadways provide regional and local access to and from the Project Site:

3.1 Regional Roadways

- Interstate 405 Freeway (I-405) – I-405 is a north-south freeway that extends from Los Angeles County down to Orange County, terminating at Interstate 5 at both the northern and southern ends. In the study area, I-405 generally has ten general purpose lanes (five in each direction) as well as an HOV lane in each direction. Access to the project site is provided via the MacArthur Boulevard exit.

- State Route 55 (SR-55) – SR-55 is a north-south freeway within Orange County that extends from SR-91 in Anaheim to Costa Mesa just past John Wayne Airport. In the study area, SR-55 generally has eight lanes (four in each direction). Access to the project site is provided via direct ramps to the airport if traveling southbound, while northbound travelers must use the I-405 MacArthur Boulevard exit.

- State Route 73 (SR-73) –SR-73 is a north-south freeway that extends through Orange County, beginning in the north at the I-405 freeway just north of John Wayne Airport and terminating at I-5 in Mission Viejo. In the study area SR-73 generally has ten lanes (five in each direction). Access to the project site is provided via the Bristol Street ramps to Campus Drive.

3.2 Local Access Roads

- MacArthur Boulevard – MacArthur Boulevard runs in the east-west direction north of the project site and in the north-south direction south of the airport. MacArthur Boulevard is generally a six to eight lane facility with a center median and provides access via Airport Way or Campus Drive. On-street parking is not permitted along MacArthur Boulevard and the posted speed limit is 50-60 miles per hour (mph).

FIGURE 1 **Vicinity Map and Study Area**

- Campus Drive/Irvine Avenue – Irvine Avenue begins in Newport Beach running east-west towards the airport. At the SR-73 junction, Irvine Avenue turns into Campus Drive and eventually becomes a north-south facility that terminates a few miles south of the airport. Near the project site, Irvine Avenue is a 4-lane facility and Campus Drive is a 6-lane facility with a center median and provides direct access to the airport. On-street parking is not permitted near the airport and the posted speed limit is 35-50 miles per hour (mph).

- Airport Way – Airport Way is an internal circulation roadway at John Wayne Airport, providing counterclockwise access to departing and arriving terminals, as well as direct connections to MacArthur Boulevard, Campus Drive, and the State Route 55 Northbound Freeway.

3.3 Study Area and Traffic Volume Data

The study area with respect to the airport vicinity is illustrated in ***Figure 1***. Minagar and JWA staff met to define the study area, with due consideration for the study area previously delineated in EIR 617. The traffic study area prepared for EIR 617 was developed through a series of collaborative meetings with each of the jurisdictions which could potentially be impacted by the added project traffic, and thorough the extensive application of the OCTAM model. Traffic volume data used in Minagar's analysis was obtained from a variety of sources, including primarily the *John Wayne Airport Settlement Agreement Extension Final Transportation Analysis* (Fehr & Peers, April 30, 2014).

Intersection traffic counts from the referenced study were originally collected on typical September and October weekdays during the morning (7:00 AM to 9:00 AM) peak periods and the afternoon (4:00 PM to 6:00 PM) peak periods. While the peak of airport travel occurs during the summer, overall traffic counts are lower within this time period; therefore, the traffic counts as applied represent the highest level of traffic for the surrounding roadway system. A series of analysis scenarios were further developed in the referenced traffic study report, including: *Proposed Project Year 2016* (through Year 2020, associated with the increase to 10.8 MAP), *Proposed Project Year 2021* (through Year 2025, associated with the increase to 11.8 MAP), and *Proposed Project Year 2026* (through Year 2030, associated with the increase to 12.5 MAP).

Various sources reporting on JWA traffic in recent years have indicated that Year 2017 traffic levels at John Wayne Airport have remained effectively unchanged from levels observed in the prior year, with counts reducing by less than 1% between 2016 and 2017. Therefore, all of the developed traffic volumes resulting from the OCTAM travel demand modeling and scenario analysis in EIR 617 were also used in the analysis of the proposed JetSuiteX Project. Existing Year 2018 traffic volumes were conservatively adjusted to reflect an annual increase in ambient traffic of 1% between the Years 2017 and 2018.

The intersection count data and traffic forecasts are provided in ***Appendix A***.

3.4 Existing Year 2018 Intersection Operations

Table 2 summarizes the existing intersection Level of Service (LOS) based on methodologies outlined in Section 4 as related to the study area cities. As shown in the table, under the existing conditions each of the four (4) study intersections are operating at an acceptable LOS based on the application of the ICU methodology. Level of Service worksheets are provided under ***Appendix B***.

TABLE 2
Intersection Level of Service (LOS)
Existing Year 2018 Conditions

Study Intersection	Traffic Control	Peak Hour	V/C	LOS
1. MacArthur Boulevard at I-405 SB Ramps[1,3]	Signal	AM	0.663	B
		PM	0.720	C
2. MacArthur Boulevard at Michelson Drive[1]	Signal	AM	0.727	C
		PM	0.855	D
3. MacArthur Boulevard at Campus Drive[1,2]	Signal	AM	0.695	B
		PM	0.751	C
4. Campus Drive at Airport Way[2]	Signal	AM	0.358	A
		PM	0.623	B

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on CMP intersection analysis methodology.

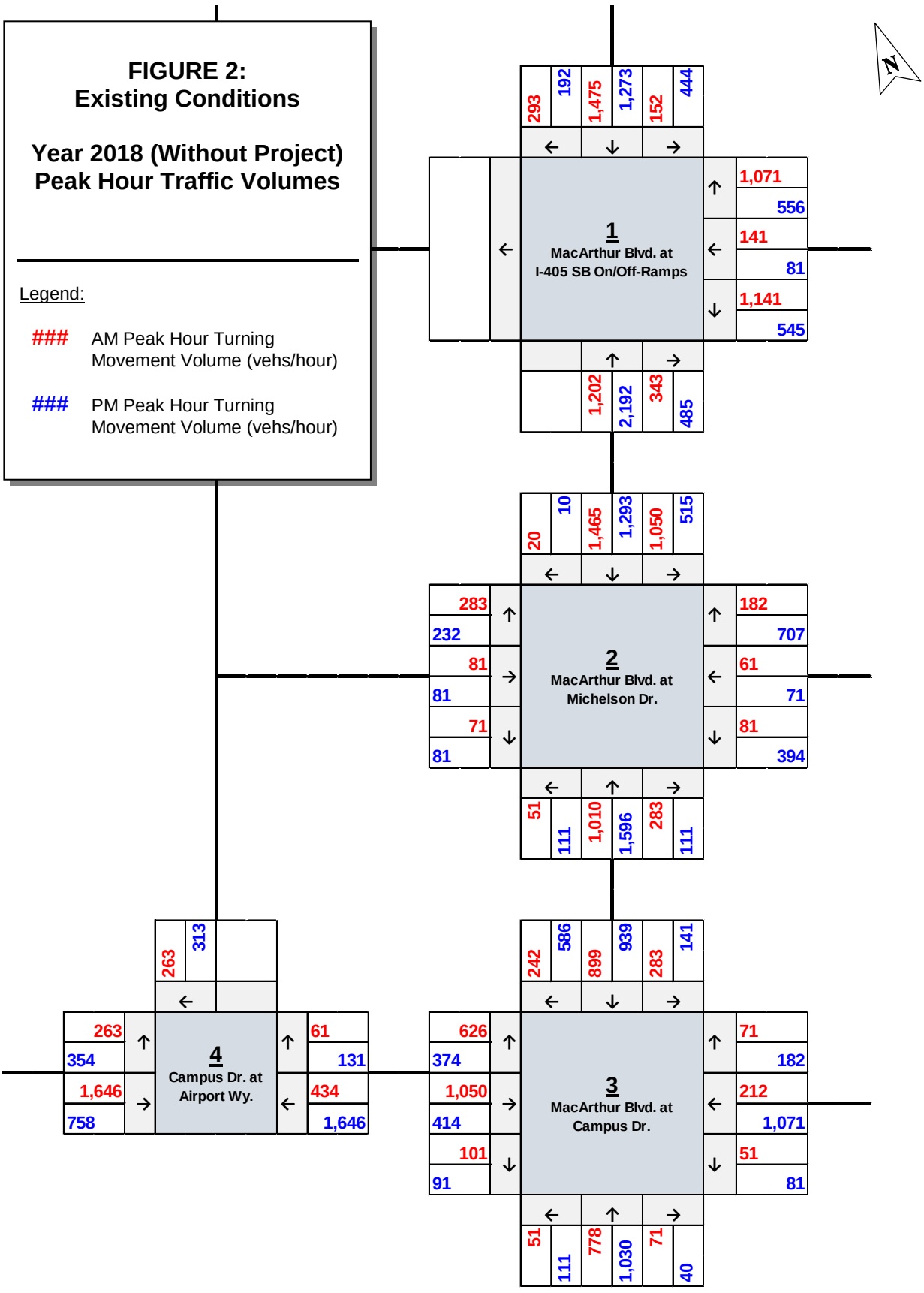


FIGURE 2:
Existing Conditions
Year 2018 (Without Project)
Peak Hour Traffic Volumes
Legend:
AM Peak Hour Turning Movement Volume (vehs/hour)
PM Peak Hour Turning Movement Volume (vehs/hour)
N
1
MacArthur Blvd. at I-405 SB On/Off-Ramps
293 192 1,475 1,273 152 444
1,071 556 141 81 1,141 545
1,202 2,192 343 485
2
MacArthur Blvd. at Michelson Dr.
20 10 1,465 1,293 1,050 515
283 232 81 81 71 81
182 707 61 71 81 394
51 111 1,010 1,596 283 111
3
MacArthur Blvd. at Campus Dr.
242 586 899 939 283 141
626 374 1,050 414 101 91
71 182 212 1,071 51 81
51 111 778 1,030 71 40
4
Campus Dr. at Airport Wy.
263 313
263 354 1,646 758
61 131 434 1,646

4.0 Methodology

4.1 Level of Service (LOS) Methodologies

The primary performance measure applied in the analysis is level of service, or "LOS", which is reported for the four (4) study intersections evaluated in this study. Intersection level of service evaluates the capacity of an intersection as compared to the volume of traffic traveling through the intersection. The main approach used for intersection LOS that was focused on in this analysis is the *Intersection Capacity Utilization* (ICU) method. ICU approaches are commonly used throughout Orange County, including agencies such as the Orange County Transportation Authority, and the Cities of Newport Beach, Irvine, and Costa Mesa. ICU calculates LOS based on the ratio of intersection volume to capacity. Minagar & Associates, Inc. used Trafficware's Synchro software program to evaluate the ICU rating of each intersection under the various analysis scenarios and peak hour periods.

Table 3 below summarizes the LOS threshold ranges for the ICU volume/capacity analysis:

TABLE 3
Signalized Intersection LOS Criteria
Intersection Capacity Utilization (ICU) Method

Level of Service	Description	ICU Volume / Capacity
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	<0.60
B	Operations with low delay occurring with good progression and/or short cycle lengths.	0.61–0.70
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	0.71–0.80
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	0.81–0.90
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	0.91–1.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	>1.00

Source: *Highway Capacity Manual* (Transportation Research Board, 2001).

4.2 Analysis Scenarios

One specific aspect of the Settlement Agreement Extension is the numerical thresholds of passengers and flights, which are tied to specific years. As with the 2003 Settlement Agreement, the 2014 Amendment includes limits on the number of annual passengers and daily flights. This analysis evaluates the primary "Proposed Project" scenario developed in the EIR, and modified to accommodate the entry of ACI Jet's JetSuiteX service into the projected expansion of flight operations at JWA. The analysis presented in this report assumes that the Project request for 68,000 annual passengers will correlate to the Phase 2 projected MAP increases at JWA in the Year 2021. The following five (5) scenarios were analyzed as a part of this focused traffic impact study:

- I. Existing Year 2018 (Without Project) – Developed from Year 2016 traffic volume projections in the EIR, increased by a +1% ambient traffic growth factor to reflect current traffic volumes.

- II. Existing Plus Project – Includes Year 2018 traffic volumes, plus the modified addition of peak hour airport trips under Phase 1 of the Settlement Agreement extension. Since (1) the JWA Settlement Agreement Extension Final Transportation Analysis (April 30, 2014) does not reflect ACIJet's proposed JetSuiteX Plan, and (2) the MAP ceiling is fixed under each phase, no new trips would be added to the system. Only a redistribution of projected commercial airline trips to the private ACIJet terminal on Campus Drive would occur as a result of the JetSuiteX Project. JetSuiteX's 45,000 annual passengers (i.e., 45,000 of the proposed 68,000 annual passengers are assumed through year 2020) constitute 2.8% of the total MAP increase of +1.6 MAP at the airport; therefore, in order to analyze the Existing Plus Project conditions, 2.8% of the total in/out Project Traffic distributions in the EIR for the Year 2018 (i.e., 2016 through 2020) have been reallocated from the main terminals to the ACI Jet access driveway on Campus Drive.

- III. Future Year 2021 (Without Project) – Forecast traffic conditions developed as part of the JWA EIR for the Year 2021-2025 scenario were used.

- IV. Future Year Plus Project – Includes Future Year traffic volumes developed for Scenario III, plus the modified addition of peak hour airport trips under Phase 2 of the Settlement Agreement extension. JetSuiteX's request for 68,000 annual passengers constitutes a 6.8% proportion of the total MAP increase of +1.0 MAP at the airport under this scenario; therefore, in order to analyze the Future Plus Project conditions, 6.8% of the total in/out Project Traffic distributions in the EIR for the Year 2021 have been reallocated from the main terminals to the ACI Jet access driveway on Campus Drive.

- V. Future Year Plus Project Plus Mitigation – Includes Future Year Plus Project traffic volumes, plus the addition of any needed improvement measures to mitigate any potentially significant peak hour traffic impacts at any of the four study intersections.

4.3 Airport Trip Distribution and Trip Generation

A key aspect of the analysis is the distribution of trips, which refers to the starting point or ending point of trips associated with JWA. As a regional destination, JWA draws traffic from the overall region, although most trips begin or end in Orange County. The basis of the trip distribution pattern was the Settlement Agreement Extension EIR 617, which was originally developed through a three-step process using OCTAM select zone/link analysis in comparison with supporting origin-destination data from recent passenger surveys. Trip distribution percentages were then modified to reallocate passenger origins, destinations and trips from the three public access points into and out from the airport (i.e., MacArthur/I-405 SB Ramps, MacArthur/Michelson, Campus/Airport Way) to the ACI Jet driveway located on Campus Drive.

The anticipated trip generation associated with JWA is derived from a variety of sources identified in the EIR, including: existing available traffic counts, projected increases in MAP, and projected increases in the number of flights. Project trips are composed of traffic origins and destinations grouped by the following geographic locations:

- *Terminal*- This location includes rental car, passenger cars parking, and drop-off vehicles.
- *Main Street Passengers*- This location is an off-site location for passenger use only.
- *Employee Lot*- This location is also an off-site location for employee use only. This facility is located near to the Main Street Passenger lot
- *Cargo*- This driveway provides accessibility for service and cargo facilities located on Paularino Avenue.

Table 4 provides the estimated increase in traffic volumes by location that would result from a projected increase in MAP from the previous levels (approximately 9.2 MAP) to 10.8 MAP, the MAP ceiling under the current Settlement Agreement. As shown in the table, an additional 442 AM Peak Hour and 448 PM Peak Hour trips would result as the MAP increases to 10.8. ***Figure 3*** illustrates the projected JWA Project traffic assignment, with trip redistributions for JetSuiteX, under this scenario for the Year 2018.

TABLE 4
JWA Incremental Trips Associated with 10.8 MAP Increase

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	204	195	399	193	208	401
Main Street (passengers)	5	2	7	3	6	9
Employee lot	11	6	17	6	12	18
Cargo	14	5	19	4	16	20
Total	**234**	**208**	**442**	**206**	**242**	**448**

MAP = Million Annual Passengers
Source: Fehr & Peers, 2014

As shown in ***Table 5***, in 2021, the incremental increase in MAP to 11.8 over existing levels would result in an additional 711 trips in the AM Peak Hour and 720 trips in the PM Peak Hour. ***Figure 4*** illustrates the projected JWA Project traffic assignment, with trip redistributions for JetSuiteX, under this scenario for the Year 2021.

TABLE 5
Proposed Project 2021 - 11.8 MAP (Increase from Existing)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	332	317	649	314	337	651
Main Street (passengers)	8	3	11	5	10	15
Employee lot	16	9	25	9	16	25
Cargo	19	7	26	6	23	29
Total	**375**	**336**	**711**	**334**	**386**	**720**

FIGURE 3

Year 2018 Project Traffic
JWA Increase to 10.8 MAP
(including JetSuiteX)

Peak Hour Traffic Volumes

Legend:

AM Peak Hour Turning Movement Volume (vehs/hour)

PM Peak Hour Turning Movement Volume (vehs/hour)

No additional Project Trips

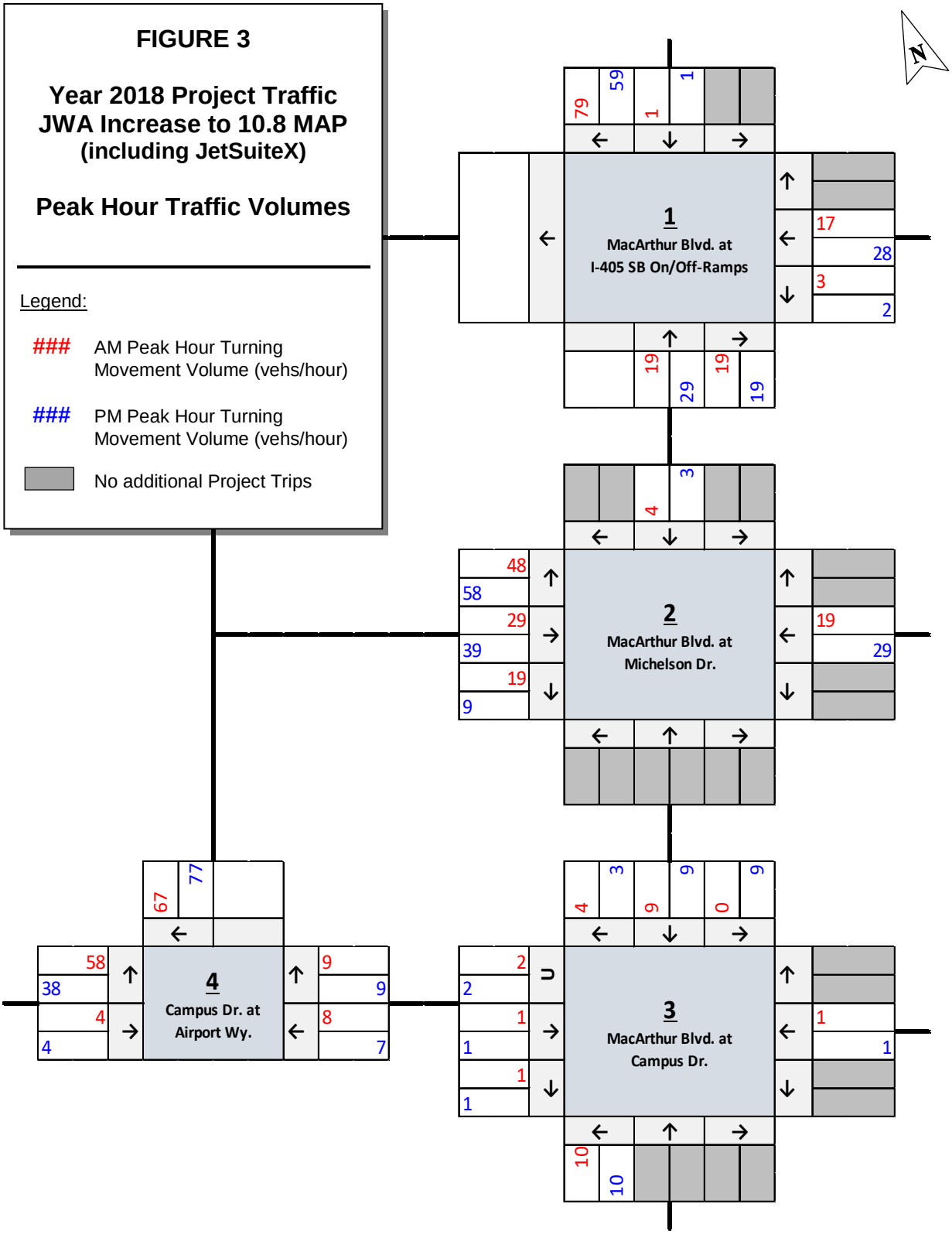


FIGURE 4

Year 2021 Project Traffic
JWA Increase to 11.8 MAP
(including JetSuiteX)

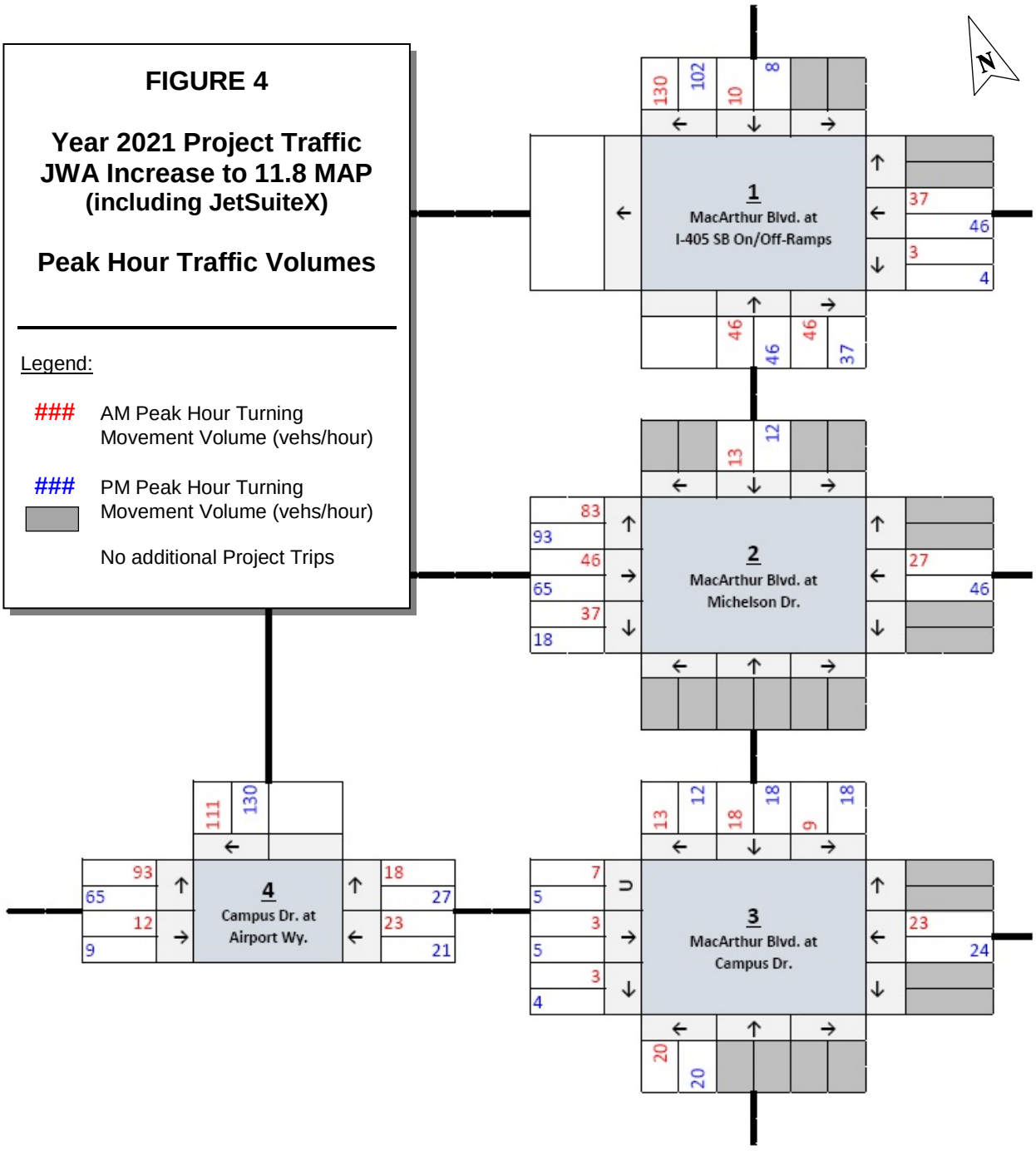
Peak Hour Traffic Volumes

Legend:

AM Peak Hour Turning Movement Volume (vehs/hour)

PM Peak Hour Turning Movement Volume (vehs/hour)

No additional Project Trips



5.0 Impact Thresholds

Significant impact thresholds for vehicular traffic for the Cities of Irvine and Newport Beach were obtained from the City of Irvine's Traffic Impact Guidelines (City of Irvine, August 24, 2004) and the City of Newport Beach Traffic Phasing Ordinance (incorporated within the City's Municipal Code). A significant traffic impact occurs if any of the following conditions occur in the City of Irvine or Newport Beach under any of the following conditions:

- City of Irvine
    - In the City of Irvine outside of the Irvine Business Complex, the addition of project-generated trips increases the ICU at a study intersection by 0.01 or more of capacity, causing the intersection to change from an acceptable LOS D to LOS E or LOS F.
    - In the City of Irvine inside the Irvine Business Complex, the addition of project-generated trips increases the ICU at a study intersection by 0.01 or more of capacity, causing the intersection to change from an acceptable LOS E to LOS F.
    - In the City of Irvine outside of the Irvine Business Complex, the addition of project-generated trips increases the ICU by 0.02 or more at a study intersection operating at LOS E or F under baseline conditions.
    - In the City of Irvine inside the Irvine Business Complex, the addition of project-generated trips increases the ICU by 0.02 more at a study intersection operating at LOS E or F under baseline conditions.

- City of Newport Beach
    - In the City of Newport Beach outside of the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips causes the LOS at a study intersection to change from LOS D to LOS E or F.
    - In the City of Newport Beach inside the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips causes the LOS at a study intersection to change from an acceptable LOS E to LOS F.
    - In the City of Newport Beach outside of the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips increases the ICU by 0.010 or more at a study intersection operating at LOS E or F under baseline conditions.
    - In the City of Newport Beach inside of the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips increases the ICU by 0.010 or more at a study intersection operating at LOS F under baseline conditions.

6.0 Proposed Project

6.1 Existing (Year 2018) Plus Project

6.1.1 Description

Minagar & Associates, Inc. conducted an analysis of project traffic impacts by comparing "pre-project" existing traffic conditions and "with-project" traffic conditions. This method complies with CEQA impact analysis procedures and documents project-related trips and their addition to the transportation system prior to implementing the Project in order to identify potential traffic impacts. This analysis is referred to as the "Existing Plus Project" scenario, and evaluates the potential impacts associated with an increase in vehicle trips attributable to the proposed project during the Year 2018, which anticipates a MAP level of 10.8.

6.1.2 Results

Table 6 illustrates the intersection V/C ratio and corresponding incremental change, as well as LOS for each of the four study intersections under the Existing Plus Proposed Project scenario. As shown in this table, none of the study locations are expected to degrade from acceptable conditions (LOS "D" or better) to unacceptable conditions (LOS E or F). Intersection LOS results for all No Project and Plus Project scenarios are provided in Appendix B.

TABLE 6
Intersection Level of Service (LOS) – Existing Plus Project Conditions

Study Intersection	Traffic Control	Peak Hour	V/C (change)	LOS
1. MacArthur Boulevard at I-405 SB Ramps[1,3]	Signal	AM	0.667 (+0.004)	B
		PM	0.725 (+0.005)	C
2. MacArthur Boulevard at Michelson Drive[1]	Signal	AM	0.740 (+0.013)	C
		PM	0.872 (+0.017)	D
3. MacArthur Boulevard at Campus Drive[1,2]	Signal	AM	0.695 (+0.000)	B
		PM	0.759 (+0.008)	C
4. Campus Drive at Airport Way[2]	Signal	AM	0.359 (+0.001)	A
		PM	0.648 (+0.025)	B

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on CMP intersection analysis methodology.

6.1.3 Impacts

Based on the impact significance thresholds summarized in Section 5, no significant traffic impacts are anticipated for any locations within the City of Irvine or Newport Beach.

6.2 Future (Year 2021) Plus Project

6.2.1 Description

This scenario analyzes the increase in vehicle trips attributable to the proposed project during the Year 2021, quantified by a change in MAP from previous levels (10.8 MAP) to 11.8 MAP as shown in Table 5.

6.2.2 Results

Table 7 illustrates the intersection V/C ratio and corresponding incremental change, as well as LOS for each of the four study intersections under the Future Year 2021 and Future Plus Proposed Project scenarios. As shown in this table, under the Plus Project scenario the proposed Project, as a component of the total Phase 2 expansion of the JWA Settlement Agreement, would result in a significant impact at Intersection #2, MacArthur Boulevard at Michelson Drive, during the PM peak hour.

TABLE 7
Intersection Level of Service (LOS) – Future (Year 2021) vs. Future Plus Project Conditions

Study Intersection	Traffic Control	Peak Hour	Future Year 2021		Future Plus Project	
			V/C	LOS	V/C (change)	LOS
1. MacArthur Boulevard at I-405 SB Ramps	Signal	AM	0.666	B	0.674 (+0.008)	B
		PM	0.726	C	0.733 (+0.007)	C
2. MacArthur Boulevard at Michelson Drive	Signal	AM	0.729	C	0.758 (+0.029)	C
		PM	0.879	D	0.906 (+0.027)	E
3. MacArthur Boulevard at Campus Drive	Signal	AM	0.708	C	0.714 (+0.006)	C
		PM	0.771	C	0.794 (+0.023)	C
4. Campus Drive at Airport Way	Signal	AM	0.376	A	0.383 (+0.007)	A
		PM	0.631	B	0.677 (+0.046)	B

6.2.3 Impacts

Operations at the intersection of Macarthur Boulevard/Michelson Drive in the City of Irvine are anticipated to decrease from LOS D to LOS E with the addition of project traffic, with an increase in V/C ratio of 0.027 from the acceptable baseline level of service. Within the Irvine Business Complex (IBC), a significant impact is triggered either by a project generated change in LOS from "E" to "F", or an increase in ICU of +0.02 or greater where the study intersection is operating at a Pre-Project LOS "E" or "F". Since neither of these two conditions are satisfied for this location, a significant impact would not occur under this scenario.

7.0 Mitigation

Based on the above analyses, no mitigation measures are required for the four (4) study intersections evaluated for the weekday peak hour periods under the Year 2018 Plus Project or Year 2021 Plus Project scenarios.

Appendix A
Traffic Count Data

CAMPUS DRIVE INTERSECTION VOLUMES

Existing (With Irvine Developments Project Traffic, 2014-2106)																								
LOCATION	NORTH LEG						EAST LEG						SOUTH LEG						WEST LEG					
	SBL	SBT	SBR	SB	NB	Total	WBL	WBT	WBR	WB	EB	Total	NBL	NBT	NBR	NB	SB	Total	EBL	EBT	EBR	EB	WB	Total
MacArthur & Campus																								
AM PEAK HOUR	318	906	216	1440	1360	2800	56	183	45	284	1303	1587	39	816	68	923	1020	1943	499	917	58	1474	438	1912
PM PEAK HOUR	135	1119	508	1762	1760	3522	119	1024	170	1313	569	1882	113	1279	51	1443	1317	2760	311	383	79	773	1645	2418
Campus & Airport																								
AM PEAK HOUR	0	386	64	450	1416	1866				0	0	0	301	1416	0	1717	666	2383	0	0	280	280	365	645
PM PEAK HOUR	0	1666	87	1753	741	2494				0	0	0	328	741	0	1069	2145	3214	0	0	479	479	415	894

CAMPUS DRIVE INTERSECTION VOLUMES

Existing (JWA traffic study, 2013)																								
LOCATION	**NORTH LEG**						**EAST LEG**						**SOUTH LEG**						**WEST LEG**					
	SBL	**SBT**	**SBR**	**SB**	**NB**	**Total**	**WBL**	**WBT**	**WBR**	**WB**	**EB**	**Total**	**NBL**	**NBT**	**NBR**	**NB**	**SB**	**Total**	**EBL**	**EBT**	**EBR**	**EB**	**WB**	**Total**
MacArthur & Campus																								
AM PEAK HOUR	273	884	230	1387	1385	2772	40	190	66	296	1446	1742	42	737	60	839	1006	1845	582	1113	82	1777	462	2239
PM PEAK HOUR	137	898	561	1596	1554	3150	74	1131	180	1385	442	1827	99	1013	29	1141	1055	2196	361	276	83	720	1791	2511
Campus & Airport																								
AM PEAK HOUR	0	412	49	461	1564	2025				0	0	0	260	1564	0	1824	667	2491	0	0	255	255	309	564
PM PEAK HOUR	0	1576	120	1696	720	2416				0	0	0	344	720	0	1064	1869	2933	0	0	293	293	464	757
Campus & Quail																								
AM PEAK HOUR	50	439	5	494	2047	2541	14	0	17	31	154	185	30	2027	104	2161	456	2617	3	0	3	6	35	41
PM PEAK HOUR	56	1895	3	1954	755	2709	76	0	44	120	117	237	13	705	60	778	1983	2761	6	1	12	19	16	35
Campus & Bristol N.																								
AM PEAK HOUR	0	248	208	456	2164	2620	163	983	155	1301	0	1301	501	2009	0	2510	411	2921				0	1692	1692
PM PEAK HOUR	0	935	1140	2075	859	2934	264	2273	198	2735	0	2735	506	661	0	1167	1199	2366				0	3919	3919
Campus & Bristol S.																								
AM PEAK HOUR	84	330	0	414	2516	2930				0	1912	1912	0	1120	227	1347	787	2134	1396	1601	457	3454	0	3454
PM PEAK HOUR	138	1065	0	1203	1161	2364				0	1322	1322	0	730	225	955	1655	2610	431	959	590	1980	0	1980

CAMPUS DRIVE INTERSECTION VOLUMES

Existing (With Newport Beach Development Projects Traffic)																								
LOCATION	NORTH LEG						EAST LEG						SOUTH LEG						WEST LEG					
	SBL	SBT	SBR	SB	NB	Total	WBL	WBT	WBR	WB	EB	Total	NBL	NBT	NBR	NB	SB	Total	EBL	EBT	EBR	EB	WB	Total
MacArthur & Campus (NB, 2016)																								
AM PEAK HOUR	331	943	225	1499	1415	2914	58	190	47	295	1356	1651	41	849	71	961	1061	2022	519	954	60	1533	456	1989
PM PEAK HOUR	140	1164	529	1833	1832	3665	124	1065	177	1366	591	1957	118	1331	53	1502	1370	2872	324	398	82	804	1712	2516
Campus & Dove (NB, 2009)																								
AM PEAK HOUR	91	504	7	602	1639	2241	39	2	82	123	287	410	18	1555	196	1769	548	2317	2	0	5	7	27	34
PM PEAK HOUR	68	1667	17	1752	845	2597	119	2	149	270	137	407	6	693	68	767	1790	2557	3	1	4	8	25	33
Campus & Quail (NB, 2009)																								
AM PEAK HOUR	88	456	4	548	1769	2317	20	2	27	49	227	276	37	1736	138	1911	485	2396	6	1	9	16	43	59
PM PEAK HOUR	108	1681	1	1790	767	2557	105	1	60	166	159	325	61	698	47	806	1808	2614	9	4	22	35	63	98

CAMPUS DRIVE INTERSECTION VOLUMES

Existing (ATC merged and balanced to represent 2016)

LOCATION	NORTH LEG						EAST LEG						SOUTH LEG						WEST LEG					
	SBL	SBT	SBR	SB	NB	Total	WBL	WBT	WBR	WB	EB	Total	NBL	NBT	NBR	NB	SB	Total	EBL	EBT	EBR	EB	WB	Total
MacArthur & Campus																								
AM PEAK HOUR	331	943	225	1499	1415	2914	58	190	47	295	1356	1651	41	849	71	961	1061	2022	519	954	60	1533	456	1989
PM PEAK HOUR	140	1164	529	1833	1832	3665	124	1065	177	1366	591	1957	118	1331	53	1502	1370	2872	324	398	82	804	1712	2516
ADT	35,000			AM % ADT	8.3%		19,000			AM % ADT	8.7%		30,000			AM % ADT	6.7%		27,000			AM % ADT	7.4%	
				PM % ADT	10.5%					PM % ADT	10.3%					PM % ADT	9.6%					PM % ADT	9.3%	
Campus & Airport																								
AM PEAK HOUR	0	407	49	456	1533	1989				0	0	0	260	1533	0	1793	662	2455	0	0	255	255	309	564
PM PEAK HOUR	0	1592	120	1712	804	2516				0	0	0	344	804	0	1148	1885	3033	0	0	293	293	464	757
ADT	30,000			AM % ADT	6.6%								32,000			AM % ADT	7.7%		8,000			AM % ADT	7.1%	
				PM % ADT	8.4%											PM % ADT	9.5%					PM % ADT	9.5%	
Campus & Dove																								
AM PEAK HOUR	91	564	7	662	1793	2455	39	2	82	123	287	410	18	1709	196	1923	608	2531	2	0	5	7	27	34
PM PEAK HOUR	68	1800	17	1885	1148	3033	119	2	149	270	137	407	6	996	68	1070	1923	2993	3	1	4	8	25	33
ADT	32,000			AM % ADT	7.7%		5,000			AM % ADT	8.2%		33,000			AM % ADT	7.7%		1,000			AM % ADT	3.4%	
				PM % ADT	9.5%					PM % ADT	8.1%					PM % ADT	9.1%					PM % ADT	3.3%	
Campus & Quail																								
AM PEAK HOUR	50	553	5	608	1923	2531	14	0	17	31	154	185	30	1903	104	2037	570	2607	3	0	3	6	35	41
PM PEAK HOUR	56	1864	3	1923	1070	2993	76	0	44	120	117	237	13	1020	60	1093	1952	3045	6	1	12	19	16	35
ADT	33,000			AM % ADT	7.7%		3,000			AM % ADT	6.2%		34,000			AM % ADT	7.7%		1,000			AM % ADT	4.1%	
				PM % ADT	9.1%					PM % ADT	7.9%					PM % ADT	9.0%					PM % ADT	3.5%	
Campus & Bristol N.																								
AM PEAK HOUR	0	362	208	570	2037	2607	163	983	155	1301	0	1301	501	1882	0	2383	525	2908				0	1692	1692
PM PEAK HOUR	0	812	1140	1952	1093	3045	264	2273	198	2735	0	2735	506	895	0	1401	1076	2477				0	3919	3919
ADT	34,000			AM % ADT	7.7%		25,000			AM % ADT	5.2%		28,000			AM % ADT	10.4%		28,000			AM % ADT	6.0%	
				PM % ADT	9.0%					PM % ADT	10.9%					PM % ADT	8.8%					PM % ADT	14.0%	
Campus & Bristol S.																								
AM PEAK HOUR	84	441	0	525	2383	2908				0	1912	1912	0	987	227	1214	898	2112	1396	1601	457	3454	0	3454
PM PEAK HOUR	138	938	0	1076	1401	2477				0	1322	1322	0	970	225	1195	1528	2723	431	959	590	1980	0	1980
ADT	28,000			AM % ADT	10.4%		25,000			AM % ADT	7.6%		26,000			AM % ADT	8.1%		28,000			AM % ADT	12.3%	
				PM % ADT	8.8%					PM % ADT	5.3%					PM % ADT	10.5%					PM % ADT	7.1%	

Green cells - input values, Colored cells - balance volumes.

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-003 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 SB Ramps			I-405 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 4	NR 1	SL 2	ST 4	SR 1	EL 0	ET 0	ER 0	WL 2	WT 1	WR 1	TOTAL
7:00 AM	0	123	64	43	204	72	0	0	0	229	28	232	995
7:15 AM	0	142	67	24	242	61	0	0	0	244	21	217	1018
7:30 AM	2	199	62	29	271	61	0	0	0	251	15	211	1101
7:45 AM	3	251	90	27	358	64	0	0	0	281	18	276	1368
8:00 AM	1	282	75	33	333	66	0	0	0	253	29	291	1363
8:15 AM	2	283	84	36	354	66	0	0	0	268	22	267	1382
8:30 AM	1	296	88	30	353	73	0	0	0	282	39	241	1403
8:45 AM	1	291	85	43	345	69	0	0	0	323	44	254	1455
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	10	1867	615	265	2460	532	0	0	0	2131	216	1989	10085
APPROACH %'s :	0.40%	74.92%	24.68%	8.14%	75.53%	16.33%	#DIV/0!	#DIV/0!	#DIV/0!	49.15%	4.98%	45.87%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	5	1152	332	142	1385	274	0	0	0	1126	134	1053	5603
PEAK HR FACTOR :		0.967			0.985			0.000			0.931		0.963

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	2	0	0	0
	3	0	0	0
	1	0	0	0
	2	0	0	0
	1	0	0	0
	1	0	0	0
	NB	SB	EB	WB
	10	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-003 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 SB Ramps			I-405 SB Ramps				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
LANES:	NL 0	NT 4	NR 1	SL 2	ST 4	SR 1	EL 0	ET 0	ER 0	WL 2	WT 1	WR 1	TOTAL	NB	SB	EB	WB
4:00 PM	6	481	117	137	171	64	0	0	0	132	30	86	1224	6	0	0	0
4:15 PM	4	522	130	75	241	62	0	0	0	109	21	95	1259	4	0	0	0
4:30 PM	2	458	131	115	227	48	0	0	0	124	30	88	1223	2	0	0	0
4:45 PM	3	490	119	84	219	44	0	0	0	132	14	119	1224	3	0	0	0
5:00 PM	4	514	141	149	315	48	0	0	0	126	17	143	1457	4	0	0	0
5:15 PM	5	600	118	100	322	40	0	0	0	110	12	118	1425	5	0	0	0
5:30 PM	5	520	99	92	268	42	0	0	0	148	25	135	1334	5	0	0	0
5:45 PM	5	482	116	91	293	53	0	0	0	145	22	145	1352	5	0	0	0
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	34	4067	971	843	2056	401	0	0	0	1026	171	929	10498	34	0	0	0
APPROACH %'s :	0.67%	80.19%	19.14%	25.55%	62.30%	12.15%	#DIV/0!	#DIV/0!	#DIV/0!	48.26%	8.04%	43.70%					
PEAK HR START TIME :	500 PM												TOTAL				
PEAK HR VOL :	19	2116	474	432	1198	183	0	0	0	529	76	541	5568				
PEAK HR FACTOR :		0.902			0.885			0.000			0.918		0.955				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-004 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 3.5	SR 0.5	EL 1	ET 2	ER 1	WL 2	WT 1	WR 1	TOTAL
7:00 AM	47	103	23	215	222	0	70	6	6	10	8	14	724
7:15 AM	22	144	29	239	248	2	46	7	9	8	6	31	791
7:30 AM	37	201	34	246	277	1	47	14	19	6	9	21	912
7:45 AM	41	265	59	274	363	0	53	10	20	11	12	36	1144
8:00 AM	39	227	65	253	325	2	60	17	11	17	14	33	1063
8:15 AM	27	267	70	238	373	2	57	14	13	14	18	50	1143
8:30 AM	33	222	57	286	346	6	76	25	16	20	13	40	1140
8:45 AM	42	257	62	261	402	1	81	18	26	19	14	41	1224
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	288	1686	399	2012	2556	14	490	111	120	105	94	266	8141
APPROACH %'s :	12.14%	71.05%	16.81%	43.91%	55.78%	0.31%	67.96%	15.40%	16.64%	22.58%	20.22%	57.20%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	141	973	254	1038	1446	11	274	74	66	70	59	164	4570
PEAK HR FACTOR :		0.940			0.939			0.828			0.893		0.933

UTURNS

NB	SB	EB	WB
5	50	0	0
5	56	0	0
7	42	0	0
0	61	0	0
1	43	0	0
2	41	0	0
2	41	0	0
1	45	0	0
NB	SB	EB	WB
23	379	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-004 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 3.5	SR 0.5	EL 1	ET 2	ER 1	WL 2	WT 1	WR 1	TOTAL
4:00 PM	40	325	19	114	190	3	102	25	22	86	34	151	1111
4:15 PM	40	333	14	114	237	6	126	26	45	68	21	138	1168
4:30 PM	35	311	20	115	233	2	150	32	44	87	21	126	1176
4:45 PM	26	324	22	113	233	6	60	9	28	71	8	158	1058
5:00 PM	22	435	25	102	335	2	39	9	17	87	10	167	1250
5:15 PM	18	446	22	120	319	2	71	17	23	94	17	178	1327
5:30 PM	17	354	28	135	285	0	59	18	13	107	18	154	1188
5:45 PM	50	345	27	147	296	4	59	29	23	93	22	159	1254
TOTAL VOLUMES :	248	2873	177	960	2128	25	666	165	215	693	151	1231	9532
APPROACH %'s :	7.52%	87.11%	5.37%	30.84%	68.36%	0.80%	63.67%	15.77%	20.55%	33.40%	7.28%	59.33%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	107	1580	102	504	1235	8	228	73	76	381	67	658	5019
PEAK HR FACTOR :		0.920			0.977			0.849			0.957		0.946

UTURNS	NB	SB	EB	WB
	1	22	0	0
	2	32	0	0
	4	20	0	0
	7	25	1	0
	3	24	0	0
	1	21	0	0
	1	31	3	0
	3	39	0	0
	NB	SB	EB	WB
	22	214	4	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-005 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 1	ST 4	SR 1	EL 2	ET 3	ER 0	WL 2	WT 3	WR 1	TOTAL
7:00 AM	2	86	7	54	133	43	63	78	13	5	20	5	509
7:15 AM	6	92	5	44	116	24	90	129	9	3	28	9	555
7:30 AM	6	140	7	65	171	40	88	134	6	7	34	14	712
7:45 AM	8	158	9	64	177	42	189	227	15	4	53	16	962
8:00 AM	8	183	16	77	224	43	122	259	17	9	42	16	1016
8:15 AM	13	172	13	70	211	48	191	307	17	13	58	19	1132
8:30 AM	10	182	9	71	198	58	142	218	18	8	49	20	983
8:45 AM	11	200	22	55	251	81	127	224	30	10	41	11	1063
TOTAL VOLUMES :	NL 64	NT 1213	NR 88	SL 500	ST 1481	SR 379	EL 1012	ET 1576	ER 125	WL 59	WT 325	WR 110	TOTAL 6932
APPROACH %'s :	4.69%	88.86%	6.45%	21.19%	62.75%	16.06%	37.30%	58.09%	4.61%	11.94%	65.79%	22.27%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	42	737	60	273	884	230	582	1008	82	40	190	66	4194
PEAK HR FACTOR :		0.900			0.896			0.812			0.822		0.926

UTURNS

NB	SB	EB	WB
1	0	0	0
1	0	0	0
1	1	1	0
1	0	1	0
1	0	0	0
2	0	5	1
0	1	2	0
2	3	3	0
NB 9	SB 5	EB 12	WB 1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-015 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Airport Way			Airport Way			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 0	ST 0	SR 2	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
7:00 AM	0	0	0	0	0	57	52	154	0	0	50	6	319
7:15 AM	0	0	0	0	0	39	40	212	0	0	63	4	358
7:30 AM	0	0	0	0	0	40	29	252	0	0	76	7	404
7:45 AM	0	0	0	0	0	34	64	398	0	0	92	6	594
8:00 AM	0	0	0	0	0	75	68	415	0	0	83	8	649
8:15 AM	0	0	0	0	0	43	56	451	0	0	105	14	669
8:30 AM	0	0	0	0	0	64	71	354	0	0	106	9	604
8:45 AM	0	0	0	0	0	73	65	344	0	0	118	18	618
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	425	445	2580	0	0	693	72	4215
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	14.71%	85.29%	0.00%	0.00%	90.59%	9.41%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	0	0	0	0	255	260	1564	0	0	412	49	2540
PEAK HR FACTOR :	0.000			0.850			0.899			0.847			0.949

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-015 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

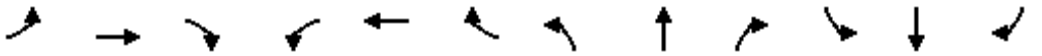
NS/EW Streets:	Airport Way			Airport Way			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 0	ST 0	SR 2	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
4:00 PM	0	0	0	0	0	99	81	156	0	0	242	30	608
4:15 PM	0	0	0	0	0	132	83	161	0	0	240	33	649
4:30 PM	0	0	0	0	0	147	67	152	0	0	353	30	749
4:45 PM	0	0	0	0	0	64	73	169	0	0	282	26	614
5:00 PM	0	0	0	0	0	70	118	201	0	0	389	45	823
5:15 PM	0	0	0	0	0	84	74	177	0	0	418	23	776
5:30 PM	0	0	0	0	0	61	65	200	0	0	439	26	791
5:45 PM	0	0	0	0	0	78	87	142	0	0	330	26	663
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	735	648	1358	0	0	2693	239	5673
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	32.30%	67.70%	0.00%	0.00%	91.85%	8.15%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	0	293	344	720	0	0	1576	120	3053
PEAK HR FACTOR :	0.000			0.872			0.834			0.912			0.927

UTURNS

NB	SB	EB	WB
2	0	0	0
1	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
1	0	0	0
NB	SB	EB	WB
6	0	0	0

CONTROL : Signalized

Appendix B
Level of Service (ICU LOS) Worksheets



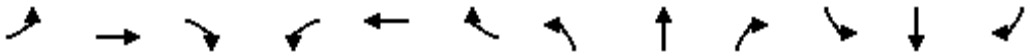
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1141	141	1071	0	1202	343	152	1475	293
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	1141	141	1071	0	1202	343	152	1475	293
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	32.6	7.4	66.3	0.0	17.4	21.2	4.3	21.4	18.1
Adj Reference Time (s)	0.0	0.0	0.0	36.6	11.4	70.3	0.0	21.4	25.2	8.3	25.4	22.1
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		406.9	7.4		0.0	17.4		54.2	21.4	
Adj Saturation B (vph	NA	NA		0	1900		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		40.6	7.4		NA	NA		NA	NA	
Reference Time (s)		0.0			40.6			17.4			54.2	
Adj Reference Time (s)		8.0			44.6			21.4			58.2	
Split Option												
Ref Time Combined (s)	0.0	0.0		32.6	7.4		0.0	17.4		4.3	21.4	
Ref Time Seperate (s)	0.0	0.0		32.6	7.4		0.0	17.4		4.3	21.4	
Reference Time (s)	0.0	0.0		32.6	32.6		17.4	17.4		21.4	21.4	
Adj Reference Time (s)	0.0	0.0		36.6	36.6		21.4	21.4		25.4	25.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.6	29.8	
Permitted Option (s)	44.6	58.2	
Split Option (s)	36.6	46.8	
Minimum (s)	36.6	29.8	66.3

Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	70.3	25.2	22.1
Cross Thru Ref Time (s)	0.0	0.0	11.4
Oncoming Left Ref Time (s)	0.0	8.3	0.0
Combined (s)	70.3	33.6	33.6

Intersection Summary			
Intersection Capacity Utilization	66.3%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



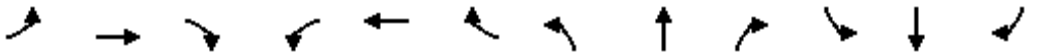
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	283	81	71	81	61	182	51	1010	283	1050	1465	20
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	283	81	71	81	61	182	51	1010	283	1050	1485	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	8.1	4.3	4.4	2.3	3.2	11.3	2.8	14.6	17.5	30.0	21.6	0.0
Adj Reference Time (s)	12.1	8.3	8.4	8.0	8.0	15.3	8.0	18.6	21.5	34.0	25.6	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1722	
Reference Time A (s)	100.9	4.3		28.9	3.2		35.3	14.6		374.4	21.6	
Adj Saturation B (vph	0	1900		0	1900		NA	NA		NA	NA	
Reference Time B (s)	16.1	4.3		10.3	3.2		NA	NA		NA	NA	
Reference Time (s)		16.1			10.3			35.3			374.4	
Adj Reference Time (s)		20.1			14.3			39.3			378.4	
Split Option												
Ref Time Combined (s)	8.1	4.3		2.3	3.2		2.8	14.6		30.0	21.6	
Ref Time Seperate (s)	8.1	4.3		2.3	3.2		2.8	14.6		30.0	21.3	
Reference Time (s)	8.1	8.1		3.2	3.2		14.6	14.6		30.0	30.0	
Adj Reference Time (s)	12.1	12.1		8.0	8.0		18.6	18.6		34.0	34.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	20.1	52.6	
Permitted Option (s)	20.1	378.4	
Split Option (s)	20.1	52.6	
Minimum (s)	20.1	52.6	72.7

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	8.4	15.3	21.5
Cross Thru Ref Time (s)	25.6	18.6	8.3
Oncoming Left Ref Time (s)	8.0	12.1	34.0
Combined (s)	42.0	46.0	63.7

Intersection Summary			
Intersection Capacity Utilization	72.7%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



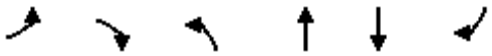
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	626	1050	101	51	212	71	51	778	71	283	899	242
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	626	1151	0	51	212	71	51	778	71	283	899	242
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5107	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	17.9	22.5	0.0	1.5	4.1	4.4	2.8	11.3	4.4	15.7	13.0	15.0
Adj Reference Time (s)	21.9	26.5	0.0	8.0	8.1	8.4	8.0	15.3	8.4	19.7	17.0	19.0
Permitted Option												
Adj Saturation A (vph)	140	1702		140	1725		144	1725		144	1725	
Reference Time A (s)	223.2	22.5		18.2	4.1		35.3	11.3		196.0	13.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		223.2			18.2			35.3			196.0	
Adj Reference Time (s)		227.2			22.2			39.3			200.0	
Split Option												
Ref Time Combined (s)	17.9	22.5		1.5	4.1		2.8	11.3		15.7	13.0	
Ref Time Seperate (s)	17.9	20.6		1.5	4.1		2.8	11.3		15.7	13.0	
Reference Time (s)	22.5	22.5		4.1	4.1		11.3	11.3		15.7	15.7	
Adj Reference Time (s)	26.5	26.5		8.1	8.1		15.3	15.3		19.7	19.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.5	35.0	
Permitted Option (s)	227.2	200.0	
Split Option (s)	34.6	35.0	
Minimum (s)	34.5	35.0	69.5

Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	8.4	8.4	19.0
Cross Thru Ref Time (s)	0.0	26.5	8.1
Oncoming Left Ref Time (s)	0.0	19.7	8.0
Combined (s)	8.4	54.6	35.1

Intersection Summary			
Intersection Capacity Utilization	69.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



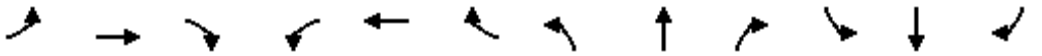
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	263	263	1646	434	61
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	263	263	1646	495	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.98	0.85
Saturated Flow (vph)	0	2859	1805	5176	5080	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		9.2	14.6	31.8	9.7	0.0
Adj Reference Time (s)		13.2	18.6	35.8	13.7	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1693	
Reference Time A (s)	0.0		182.1	31.8	9.7	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				182.1	9.7	
Adj Reference Time (s)				186.1	13.7	
Split Option						
Ref Time Combined (s)	0.0		14.6	31.8	9.7	
Ref Time Seperate (s)	0.0		14.6	31.8	8.5	
Reference Time (s)	0.0		31.8	31.8	9.7	
Adj Reference Time (s)	0.0		35.8	35.8	13.7	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	35.8	
Permitted Option (s)	Err	186.1	
Split Option (s)	0.0	49.5	
Minimum (s)	0.0	35.8	35.8

Right Turns	EBR
Adj Reference Time (s)	13.2
Cross Thru Ref Time (s)	13.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	26.9

Intersection Summary			
Intersection Capacity Utilization	35.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	545	81	556	0	2192	485	444	1273	192
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	545	81	556	0	2192	485	444	1273	192
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	15.5	4.3	34.4	0.0	31.8	30.0	12.7	18.4	11.9
Adj Reference Time (s)	0.0	0.0	0.0	19.5	8.3	38.4	0.0	35.8	34.0	16.7	22.4	15.9
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		194.3	4.3		0.0	31.8		158.3	18.4	
Adj Saturation B (vph	0	0		0	1900		NA	NA		NA	NA	
Reference Time B (s)	0.0	0.0		23.5	4.3		NA	NA		NA	NA	
Reference Time (s)		0.0			23.5			31.8			158.3	
Adj Reference Time (s)		8.0			27.5			35.8			162.3	
Split Option												
Ref Time Combined (s)	0.0	0.0		15.5	4.3		0.0	31.8		12.7	18.4	
Ref Time Seperate (s)	0.0	0.0		15.5	4.3		0.0	31.8		12.7	18.4	
Reference Time (s)	0.0	0.0		15.5	15.5		31.8	31.8		18.4	18.4	
Adj Reference Time (s)	0.0	0.0		19.5	19.5		35.8	35.8		22.4	22.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	19.5	52.4	
Permitted Option (s)	27.5	162.3	
Split Option (s)	19.5	58.2	
Minimum (s)	19.5	52.4	72.0

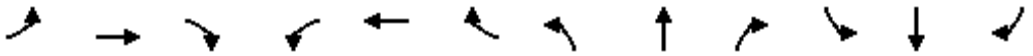
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	38.4	34.0	15.9
Cross Thru Ref Time (s)	0.0	0.0	8.3
Oncoming Left Ref Time (s)	0.0	16.7	0.0
Combined (s)	38.4	50.7	24.2

Intersection Summary			
Intersection Capacity Utilization	72.0%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

2: MacArthur Blvd. & Airport Wy./Michelson Dr.
I. Existing Year 2018 w/o Project (PM Pk Hr)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	81	81	394	71	707	111	1596	111	515	1293	10
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	232	81	81	394	71	707	111	1596	111	515	1303	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6893	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	6.6	4.3	5.0	11.2	3.7	43.8	6.1	23.1	6.9	14.7	18.9	0.0
Adj Reference Time (s)	10.6	8.3	9.0	15.2	8.0	47.8	10.1	27.1	10.9	18.7	22.9	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1723	
Reference Time A (s)	82.7	4.3		140.5	3.7		76.9	23.1		183.6	18.9	
Adj Saturation B (vph	0	1900		0	1900		NA	NA		NA	NA	
Reference Time B (s)	14.6	4.3		19.2	3.7		NA	NA		NA	NA	
Reference Time (s)		14.6			19.2			76.9			183.6	
Adj Reference Time (s)		18.6			23.2			80.9			187.6	
Split Option												
Ref Time Combined (s)	6.6	4.3		11.2	3.7		6.1	23.1		14.7	18.9	
Ref Time Seperate (s)	6.6	4.3		11.2	3.7		6.1	23.1		14.7	18.8	
Reference Time (s)	6.6	6.6		11.2	11.2		23.1	23.1		18.9	18.9	
Adj Reference Time (s)	10.6	10.6		15.2	15.2		27.1	27.1		22.9	22.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	23.5	45.8	
Permitted Option (s)	23.2	187.6	
Split Option (s)	25.9	50.0	
Minimum (s)	23.2	45.8	69.1

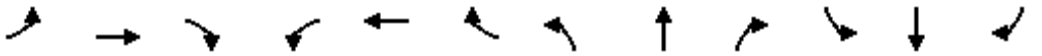
Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	9.0	47.8	10.9
Cross Thru Ref Time (s)	22.9	27.1	8.3
Oncoming Left Ref Time (s)	15.2	10.6	18.7
Combined (s)	47.2	85.5	37.8

Intersection Summary			
Intersection Capacity Utilization	85.5%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

3: MacArthur Blvd. & Campus Dr.
I. Existing Year 2018 w/o Project (PM Pk Hr)



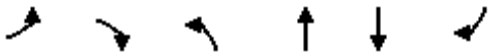
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	374	414	91	81	1071	182	111	1030	40	141	939	586
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	374	505	0	81	1071	182	111	1030	40	141	939	586
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5036	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	10.7	10.0	0.0	2.3	20.7	11.3	6.1	14.9	2.5	7.8	13.6	36.3
Adj Reference Time (s)	14.7	14.0	0.0	8.0	24.7	15.3	10.1	18.9	8.0	11.8	17.6	40.3
Permitted Option												
Adj Saturation A (vph)	140	1679		140	1725		144	1725		144	1725	
Reference Time A (s)	133.4	10.0		28.9	20.7		76.9	14.9		97.6	13.6	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		133.4			28.9			76.9			97.6	
Adj Reference Time (s)		137.4			32.9			80.9			101.6	
Split Option												
Ref Time Combined (s)	10.7	10.0		2.3	20.7		6.1	14.9		7.8	13.6	
Ref Time Seperate (s)	10.7	8.2		2.3	20.7		6.1	14.9		7.8	13.6	
Reference Time (s)	10.7	10.7		20.7	20.7		14.9	14.9		13.6	13.6	
Adj Reference Time (s)	14.7	14.7		24.7	24.7		18.9	18.9		17.6	17.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.4	30.7	
Permitted Option (s)	137.4	101.6	
Split Option (s)	39.4	36.5	
Minimum (s)	39.4	30.7	70.1

Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	15.3	8.0	40.3
Cross Thru Ref Time (s)	0.0	14.0	24.7
Oncoming Left Ref Time (s)	0.0	11.8	10.1
Combined (s)	15.3	33.8	75.1

Intersection Summary			
Intersection Capacity Utilization	75.1%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



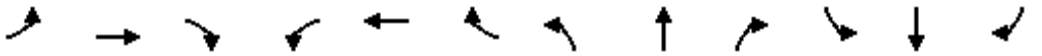
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	313	354	758	1646	131
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	313	354	758	1777	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.99	0.85
Saturated Flow (vph)	0	2859	1805	5176	5118	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		10.9	19.6	14.6	34.7	0.0
Adj Reference Time (s)		14.9	23.6	18.6	38.7	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1706	
Reference Time A (s)	0.0		245.2	14.6	34.7	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				245.2	34.7	
Adj Reference Time (s)				249.2	38.7	
Split Option						
Ref Time Combined (s)	0.0		19.6	14.6	34.7	
Ref Time Seperate (s)	0.0		19.6	14.6	32.2	
Reference Time (s)	0.0		19.6	19.6	34.7	
Adj Reference Time (s)	0.0		23.6	23.6	38.7	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	62.3	
Permitted Option (s)	Err	249.2	
Split Option (s)	0.0	62.3	
Minimum (s)	0.0	62.3	62.3

Right Turns	EBR
Adj Reference Time (s)	14.9
Cross Thru Ref Time (s)	38.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	53.7

Intersection Summary			
Intersection Capacity Utilization	62.3%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1144	158	1071	0	1221	362	152	1476	372
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	1144	158	1071	0	1221	362	152	1476	372
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	32.6	8.3	66.3	0.0	17.7	22.4	4.3	21.4	23.0
Adj Reference Time (s)	0.0	0.0	0.0	36.6	12.3	70.3	0.0	21.7	26.4	8.3	25.4	27.0
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		408.0	8.3		0.0	17.7		54.2	21.4	
Adj Saturation B (vph	NA	NA		0	1900		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		40.6	8.3		NA	NA		NA	NA	
Reference Time (s)		0.0			40.6			17.7			54.2	
Adj Reference Time (s)		8.0			44.6			21.7			58.2	
Split Option												
Ref Time Combined (s)	0.0	0.0		32.6	8.3		0.0	17.7		4.3	21.4	
Ref Time Seperate (s)	0.0	0.0		32.6	8.3		0.0	17.7		4.3	21.4	
Reference Time (s)	0.0	0.0		32.6	32.6		17.7	17.7		21.4	21.4	
Adj Reference Time (s)	0.0	0.0		36.6	36.6		21.7	21.7		25.4	25.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.6	30.0	
Permitted Option (s)	44.6	58.2	
Split Option (s)	36.6	47.1	
Minimum (s)	36.6	30.0	66.7

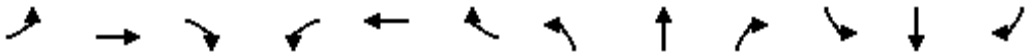
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	70.3	26.4	27.0
Cross Thru Ref Time (s)	0.0	0.0	12.3
Oncoming Left Ref Time (s)	0.0	8.3	0.0
Combined (s)	70.3	34.8	39.3

Intersection Summary			
Intersection Capacity Utilization	66.7%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

2: MacArthur Blvd. & Airport Wy./Michelson Dr.
II. Existing Year 2018 Plus Project (AM Pk Hr)



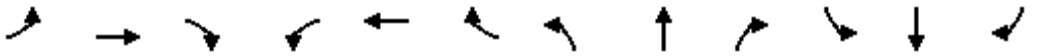
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	331	110	90	81	80	182	51	1010	283	1050	1469	20
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	331	110	90	81	80	182	51	1010	283	1050	1489	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	9.4	5.8	5.6	2.3	4.2	11.3	2.8	14.6	17.5	30.0	21.6	0.0
Adj Reference Time (s)	13.4	9.8	9.6	8.0	8.2	15.3	8.0	18.6	21.5	34.0	25.6	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1722	
Reference Time A (s)	118.0	5.8		28.9	4.2		35.3	14.6		374.4	21.6	
Adj Saturation B (vph	0	1900		0	1900		NA	NA		NA	NA	
Reference Time B (s)	17.4	5.8		10.3	4.2		NA	NA		NA	NA	
Reference Time (s)		17.4			10.3			35.3			374.4	
Adj Reference Time (s)		21.4			14.3			39.3			378.4	
Split Option												
Ref Time Combined (s)	9.4	5.8		2.3	4.2		2.8	14.6		30.0	21.6	
Ref Time Seperate (s)	9.4	5.8		2.3	4.2		2.8	14.6		30.0	21.3	
Reference Time (s)	9.4	9.4		4.2	4.2		14.6	14.6		30.0	30.0	
Adj Reference Time (s)	13.4	13.4		8.2	8.2		18.6	18.6		34.0	34.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	21.7	52.6	
Permitted Option (s)	21.4	378.4	
Split Option (s)	21.7	52.6	
Minimum (s)	21.4	52.6	74.0

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	9.6	15.3	21.5
Cross Thru Ref Time (s)	25.6	18.6	9.8
Oncoming Left Ref Time (s)	8.0	13.4	34.0
Combined (s)	43.2	47.3	65.3

Intersection Summary			
Intersection Capacity Utilization	74.0%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



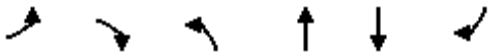
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	628	1051	102	51	213	71	61	778	71	283	908	246
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	628	1153	0	51	213	71	61	778	71	283	908	246
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5107	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	17.9	22.6	0.0	1.5	4.1	4.4	3.4	11.3	4.4	15.7	13.2	15.2
Adj Reference Time (s)	21.9	26.6	0.0	8.0	8.1	8.4	8.0	15.3	8.4	19.7	17.2	19.2
Permitted Option												
Adj Saturation A (vph)	140	1702		140	1725		144	1725		144	1725	
Reference Time A (s)	223.9	22.6		18.2	4.1		42.2	11.3		196.0	13.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		223.9			18.2			42.2			196.0	
Adj Reference Time (s)		227.9			22.2			46.2			200.0	
Split Option												
Ref Time Combined (s)	17.9	22.6		1.5	4.1		3.4	11.3		15.7	13.2	
Ref Time Seperate (s)	17.9	20.6		1.5	4.1		3.4	11.3		15.7	13.2	
Reference Time (s)	22.6	22.6		4.1	4.1		11.3	11.3		15.7	15.7	
Adj Reference Time (s)	26.6	26.6		8.1	8.1		15.3	15.3		19.7	19.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.6	35.0	
Permitted Option (s)	227.9	200.0	
Split Option (s)	34.7	35.0	
Minimum (s)	34.6	35.0	69.5

Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	8.4	8.4	19.2
Cross Thru Ref Time (s)	0.0	26.6	8.1
Oncoming Left Ref Time (s)	0.0	19.7	8.0
Combined (s)	8.4	54.7	35.3

Intersection Summary			
Intersection Capacity Utilization	69.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



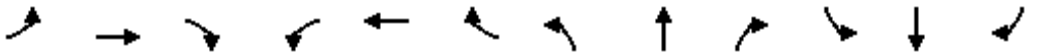
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	330	321	1650	442	70
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	330	321	1650	512	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.98	0.85
Saturated Flow (vph)	0	2859	1805	5176	5069	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		11.5	17.8	31.9	10.1	0.0
Adj Reference Time (s)		15.5	21.8	35.9	14.1	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1690	
Reference Time A (s)	0.0		222.3	31.9	10.1	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				222.3	10.1	
Adj Reference Time (s)				226.3	14.1	
Split Option						
Ref Time Combined (s)	0.0		17.8	31.9	10.1	
Ref Time Seperate (s)	0.0		17.8	31.9	8.7	
Reference Time (s)	0.0		31.9	31.9	10.1	
Adj Reference Time (s)	0.0		35.9	35.9	14.1	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	35.9	
Permitted Option (s)	Err	226.3	
Split Option (s)	0.0	50.0	
Minimum (s)	0.0	35.9	35.9

Right Turns	EBR
Adj Reference Time (s)	15.5
Cross Thru Ref Time (s)	14.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	29.6

Intersection Summary			
Intersection Capacity Utilization	35.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	547	109	556	0	2221	504	444	1274	251
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	547	109	556	0	2221	504	444	1274	251
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	15.6	5.7	34.4	0.0	32.2	31.2	12.7	18.5	15.5
Adj Reference Time (s)	0.0	0.0	0.0	19.6	9.7	38.4	0.0	36.2	35.2	16.7	22.5	19.5
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		195.1	5.7		0.0	32.2		158.3	18.5	
Adj Saturation B (vph	0	0		0	1900		NA	NA		NA	NA	
Reference Time B (s)	0.0	0.0		23.6	5.7		NA	NA		NA	NA	
Reference Time (s)		0.0			23.6			32.2			158.3	
Adj Reference Time (s)		8.0			27.6			36.2			162.3	
Split Option												
Ref Time Combined (s)	0.0	0.0		15.6	5.7		0.0	32.2		12.7	18.5	
Ref Time Seperate (s)	0.0	0.0		15.6	5.7		0.0	32.2		12.7	18.5	
Reference Time (s)	0.0	0.0		15.6	15.6		32.2	32.2		18.5	18.5	
Adj Reference Time (s)	0.0	0.0		19.6	19.6		36.2	36.2		22.5	22.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	19.6	52.9	
Permitted Option (s)	27.6	162.3	
Split Option (s)	19.6	58.6	
Minimum (s)	19.6	52.9	72.5

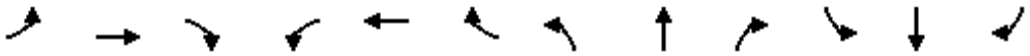
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	38.4	35.2	19.5
Cross Thru Ref Time (s)	0.0	0.0	9.7
Oncoming Left Ref Time (s)	0.0	16.7	0.0
Combined (s)	38.4	51.9	29.3

Intersection Summary			
Intersection Capacity Utilization	72.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

2: MacArthur Blvd. & Airport Wy./Michelson Dr.
II. Existing Year 2018 Plus Project (PM Pk Hr)



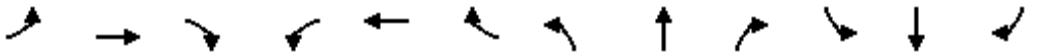
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	290	120	90	394	100	707	111	1596	111	515	1296	10
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	290	120	90	394	100	707	111	1596	111	515	1306	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6893	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	8.3	6.3	5.6	11.2	5.3	43.8	6.1	23.1	6.9	14.7	18.9	0.0
Adj Reference Time (s)	12.3	10.3	9.6	15.2	9.3	47.8	10.1	27.1	10.9	18.7	22.9	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1723	
Reference Time A (s)	103.4	6.3		140.5	5.3		76.9	23.1		183.6	18.9	
Adj Saturation B (vph	0	1900		0	1900		NA	NA		NA	NA	
Reference Time B (s)	16.3	6.3		19.2	5.3		NA	NA		NA	NA	
Reference Time (s)		16.3			19.2			76.9			183.6	
Adj Reference Time (s)		20.3			23.2			80.9			187.6	
Split Option												
Ref Time Combined (s)	8.3	6.3		11.2	5.3		6.1	23.1		14.7	18.9	
Ref Time Seperate (s)	8.3	6.3		11.2	5.3		6.1	23.1		14.7	18.8	
Reference Time (s)	8.3	8.3		11.2	11.2		23.1	23.1		18.9	18.9	
Adj Reference Time (s)	12.3	12.3		15.2	15.2		27.1	27.1		22.9	22.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.6	45.8	
Permitted Option (s)	23.2	187.6	
Split Option (s)	27.5	50.1	
Minimum (s)	23.2	45.8	69.1

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	9.6	47.8	10.9
Cross Thru Ref Time (s)	22.9	27.1	10.3
Oncoming Left Ref Time (s)	15.2	12.3	18.7
Combined (s)	47.8	87.2	39.9

Intersection Summary			
Intersection Capacity Utilization	87.2%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.



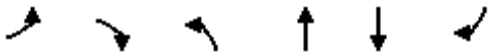
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	376	415	92	81	1072	182	121	1030	40	150	948	589
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	376	507	0	81	1072	182	121	1030	40	150	948	589
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5035	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	10.7	10.1	0.0	2.3	20.7	11.3	6.7	14.9	2.5	8.3	13.7	36.5
Adj Reference Time (s)	14.7	14.1	0.0	8.0	24.7	15.3	10.7	18.9	8.0	12.3	17.7	40.5
Permitted Option												
Adj Saturation A (vph)	140	1678		140	1725		144	1725		144	1725	
Reference Time A (s)	134.1	10.1		28.9	20.7		83.8	14.9		103.9	13.7	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		134.1			28.9			83.8			103.9	
Adj Reference Time (s)		138.1			32.9			87.8			107.9	
Split Option												
Ref Time Combined (s)	10.7	10.1		2.3	20.7		6.7	14.9		8.3	13.7	
Ref Time Seperate (s)	10.7	8.2		2.3	20.7		6.7	14.9		8.3	13.7	
Reference Time (s)	10.7	10.7		20.7	20.7		14.9	14.9		13.7	13.7	
Adj Reference Time (s)	14.7	14.7		24.7	24.7		18.9	18.9		17.7	17.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.4	31.2	
Permitted Option (s)	138.1	107.9	
Split Option (s)	39.4	36.7	
Minimum (s)	39.4	31.2	70.7

Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	15.3	8.0	40.5
Cross Thru Ref Time (s)	0.0	14.1	24.7
Oncoming Left Ref Time (s)	0.0	12.3	10.7
Combined (s)	15.3	34.4	75.9

Intersection Summary			
Intersection Capacity Utilization	75.9%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



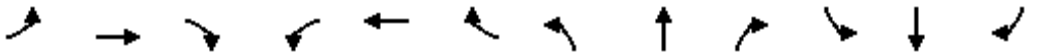
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	391	392	762	1653	140
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	391	392	762	1793	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.99	0.85
Saturated Flow (vph)	0	2859	1805	5176	5115	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		13.7	21.7	14.7	35.1	0.0
Adj Reference Time (s)		17.7	25.7	18.7	39.1	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1705	
Reference Time A (s)	0.0		271.5	14.7	35.1	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				271.5	35.1	
Adj Reference Time (s)				275.5	39.1	
Split Option						
Ref Time Combined (s)	0.0		21.7	14.7	35.1	
Ref Time Seperate (s)	0.0		21.7	14.7	32.3	
Reference Time (s)	0.0		21.7	21.7	35.1	
Adj Reference Time (s)	0.0		25.7	25.7	39.1	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	64.8	
Permitted Option (s)	Err	275.5	
Split Option (s)	0.0	64.8	
Minimum (s)	0.0	64.8	64.8

Right Turns	EBR
Adj Reference Time (s)	17.7
Cross Thru Ref Time (s)	39.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	56.7

Intersection Summary			
Intersection Capacity Utilization	64.8%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1140	140	1060	0	1230	340	150	1570	300
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	1140	140	1060	0	1230	340	150	1570	300
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	32.5	7.4	65.6	0.0	17.8	21.1	4.3	22.8	18.6
Adj Reference Time (s)	0.0	0.0	0.0	36.5	11.4	69.6	0.0	21.8	25.1	8.3	26.8	22.6
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		406.5	7.4		0.0	17.8		53.5	22.8	
Adj Saturation B (vph	NA	NA		0	1900		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		40.5	7.4		NA	NA		NA	NA	
Reference Time (s)		0.0			40.5			17.8			53.5	
Adj Reference Time (s)		8.0			44.5			21.8			57.5	
Split Option												
Ref Time Combined (s)	0.0	0.0		32.5	7.4		0.0	17.8		4.3	22.8	
Ref Time Seperate (s)	0.0	0.0		32.5	7.4		0.0	17.8		4.3	22.8	
Reference Time (s)	0.0	0.0		32.5	32.5		17.8	17.8		22.8	22.8	
Adj Reference Time (s)	0.0	0.0		36.5	36.5		21.8	21.8		26.8	26.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.5	30.1	
Permitted Option (s)	44.5	57.5	
Split Option (s)	36.5	48.6	
Minimum (s)	36.5	30.1	66.6

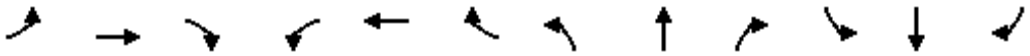
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	69.6	25.1	22.6
Cross Thru Ref Time (s)	0.0	0.0	11.4
Oncoming Left Ref Time (s)	0.0	8.3	0.0
Combined (s)	69.6	33.3	33.9

Intersection Summary			
Intersection Capacity Utilization	66.6%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

2: MacArthur Blvd. & Airport Wy./Michelson Dr.
III. Future Year 2021 w/o Project (AM Pk Hr)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	280	80	70	90	60	200	150	1050	310	1040	1450	20
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	280	80	70	90	60	200	150	1050	310	1040	1470	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	8.0	4.2	4.3	2.6	3.2	12.4	8.3	15.2	19.2	29.7	21.3	0.0
Adj Reference Time (s)	12.0	8.2	8.3	8.0	8.0	16.4	12.3	19.2	23.2	33.7	25.3	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1722	
Reference Time A (s)	99.8	4.2		32.1	3.2		103.9	15.2		370.9	21.3	
Adj Saturation B (vph	0	1900		0	1900		NA	NA		NA	NA	
Reference Time B (s)	16.0	4.2		10.6	3.2		NA	NA		NA	NA	
Reference Time (s)		16.0			10.6			103.9			370.9	
Adj Reference Time (s)		20.0			14.6			107.9			374.9	
Split Option												
Ref Time Combined (s)	8.0	4.2		2.6	3.2		8.3	15.2		29.7	21.3	
Ref Time Seperate (s)	8.0	4.2		2.6	3.2		8.3	15.2		29.7	21.1	
Reference Time (s)	8.0	8.0		3.2	3.2		15.2	15.2		29.7	29.7	
Adj Reference Time (s)	12.0	12.0		8.0	8.0		19.2	19.2		33.7	33.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	20.0	52.9	
Permitted Option (s)	20.0	374.9	
Split Option (s)	20.0	52.9	
Minimum (s)	20.0	52.9	72.9

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	8.3	16.4	23.2
Cross Thru Ref Time (s)	25.3	19.2	8.2
Oncoming Left Ref Time (s)	8.0	12.0	33.7
Combined (s)	41.7	47.6	65.1

Intersection Summary			
Intersection Capacity Utilization	72.9%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

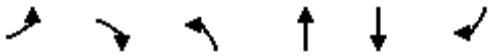
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	660	1080	120	50	230	70	60	810	70	280	890	240
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	660	1200	0	50	230	70	60	810	70	280	890	240
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5098	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.8	23.5	0.0	1.4	4.4	4.3	3.3	11.7	4.3	15.5	12.9	14.9
Adj Reference Time (s)	22.8	27.5	0.0	8.0	8.4	8.3	8.0	15.7	8.3	19.5	16.9	18.9
Permitted Option												
Adj Saturation A (vph)	140	1699		140	1725		144	1725		144	1725	
Reference Time A (s)	235.4	23.5		17.8	4.4		41.6	11.7		193.9	12.9	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		235.4			17.8			41.6			193.9	
Adj Reference Time (s)		239.4			21.8			45.6			197.9	
Split Option												
Ref Time Combined (s)	18.8	23.5		1.4	4.4		3.3	11.7		15.5	12.9	
Ref Time Seperate (s)	18.8	21.2		1.4	4.4		3.3	11.7		15.5	12.9	
Reference Time (s)	23.5	23.5		4.4	4.4		11.7	11.7		15.5	15.5	
Adj Reference Time (s)	27.5	27.5		8.4	8.4		15.7	15.7		19.5	19.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.5	35.3	
Permitted Option (s)	239.4	197.9	
Split Option (s)	36.0	35.3	
Minimum (s)	35.5	35.3	70.8

Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	8.3	8.3	18.9
Cross Thru Ref Time (s)	0.0	27.5	8.4
Oncoming Left Ref Time (s)	0.0	19.5	8.0
Combined (s)	8.3	55.4	35.3

Intersection Summary			
Intersection Capacity Utilization	70.8%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	260	250	1740	460	70
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	260	250	1740	530	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.98	0.85
Saturated Flow (vph)	0	2859	1805	5176	5073	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		9.1	13.9	33.6	10.4	0.0
Adj Reference Time (s)		13.1	17.9	37.6	14.4	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1691	
Reference Time A (s)	0.0		173.1	33.6	10.4	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				173.1	10.4	
Adj Reference Time (s)				177.1	14.4	
Split Option						
Ref Time Combined (s)	0.0		13.9	33.6	10.4	
Ref Time Seperate (s)	0.0		13.9	33.6	9.1	
Reference Time (s)	0.0		33.6	33.6	10.4	
Adj Reference Time (s)	0.0		37.6	37.6	14.4	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	37.6	
Permitted Option (s)	Err	177.1	
Split Option (s)	0.0	52.1	
Minimum (s)	0.0	37.6	37.6

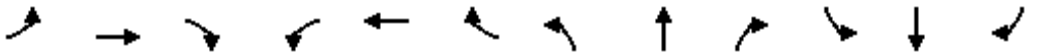
Right Turns	EBR
Adj Reference Time (s)	13.1
Cross Thru Ref Time (s)	14.4
Oncoming Left Ref Time (s)	0.0
Combined (s)	27.5

Intersection Summary			
Intersection Capacity Utilization	37.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

1: MacArthur Blvd. & Airport Wy./I-405 SB On/Off-Ramps
III. Future Year 2021 w/o Project (PM Pk Hr)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	550	80	550	0	2230	480	440	1340	190
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	550	80	550	0	2230	480	440	1340	190
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	15.7	4.2	34.1	0.0	32.3	29.7	12.6	19.4	11.8
Adj Reference Time (s)	0.0	0.0	0.0	19.7	8.2	38.1	0.0	36.3	33.7	16.6	23.4	15.8
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		196.1	4.2		0.0	32.3		156.9	19.4	
Adj Saturation B (vph	0	0		0	1900		NA	NA		NA	NA	
Reference Time B (s)	0.0	0.0		23.7	4.2		NA	NA		NA	NA	
Reference Time (s)		0.0			23.7			32.3			156.9	
Adj Reference Time (s)		8.0			27.7			36.3			160.9	
Split Option												
Ref Time Combined (s)	0.0	0.0		15.7	4.2		0.0	32.3		12.6	19.4	
Ref Time Seperate (s)	0.0	0.0		15.7	4.2		0.0	32.3		12.6	19.4	
Reference Time (s)	0.0	0.0		15.7	15.7		32.3	32.3		19.4	19.4	
Adj Reference Time (s)	0.0	0.0		19.7	19.7		36.3	36.3		23.4	23.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	19.7	52.9	
Permitted Option (s)	27.7	160.9	
Split Option (s)	19.7	59.7	
Minimum (s)	19.7	52.9	72.6

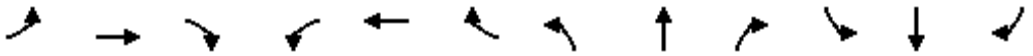
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	38.1	33.7	15.8
Cross Thru Ref Time (s)	0.0	0.0	8.2
Oncoming Left Ref Time (s)	0.0	16.6	0.0
Combined (s)	38.1	50.3	24.0

Intersection Summary			
Intersection Capacity Utilization	72.6%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

2: MacArthur Blvd. & Airport Wy./Michelson Dr.
III. Future Year 2021 w/o Project (PM Pk Hr)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	230	80	80	390	70	750	110	1580	110	510	1350	20
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	230	80	80	390	70	750	110	1580	110	510	1370	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6886	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	6.6	4.2	5.0	11.1	3.7	46.4	6.1	22.9	6.8	14.5	19.9	0.0
Adj Reference Time (s)	10.6	8.2	9.0	15.1	8.0	50.4	10.1	26.9	10.8	18.5	23.9	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1721	
Reference Time A (s)	82.0	4.2		139.1	3.7		76.2	22.9		181.9	19.9	
Adj Saturation B (vph	0	1900		0	1900		NA	NA		NA	NA	
Reference Time B (s)	14.6	4.2		19.1	3.7		NA	NA		NA	NA	
Reference Time (s)		14.6			19.1			76.2			181.9	
Adj Reference Time (s)		18.6			23.1			80.2			185.9	
Split Option												
Ref Time Combined (s)	6.6	4.2		11.1	3.7		6.1	22.9		14.5	19.9	
Ref Time Seperate (s)	6.6	4.2		11.1	3.7		6.1	22.9		14.5	19.6	
Reference Time (s)	6.6	6.6		11.1	11.1		22.9	22.9		19.9	19.9	
Adj Reference Time (s)	10.6	10.6		15.1	15.1		26.9	26.9		23.9	23.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	23.3	45.4	
Permitted Option (s)	23.1	185.9	
Split Option (s)	25.7	50.8	
Minimum (s)	23.1	45.4	68.6

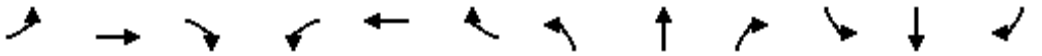
Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	9.0	50.4	10.8
Cross Thru Ref Time (s)	23.9	26.9	8.2
Oncoming Left Ref Time (s)	15.1	10.6	18.5
Combined (s)	48.0	87.9	37.6

Intersection Summary			
Intersection Capacity Utilization	87.9%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.

Synchro 8 Report
Intersection Capacity Utilization

3: MacArthur Blvd. & Campus Dr.
III. Future Year 2021 w/o Project (PM Pk Hr)



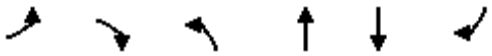
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	370	450	90	80	1100	180	110	1030	40	140	970	610
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	370	540	0	80	1100	180	110	1030	40	140	970	610
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5046	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	10.6	10.7	0.0	2.3	21.3	11.1	6.1	14.9	2.5	7.8	14.1	37.8
Adj Reference Time (s)	14.6	14.7	0.0	8.0	25.3	15.1	10.1	18.9	8.0	11.8	18.1	41.8
Permitted Option												
Adj Saturation A (vph)	140	1682		140	1725		144	1725		144	1725	
Reference Time A (s)	131.9	10.7		28.5	21.3		76.2	14.9		97.0	14.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		131.9			28.5			76.2			97.0	
Adj Reference Time (s)		135.9			32.5			80.2			101.0	
Split Option												
Ref Time Combined (s)	10.6	10.7		2.3	21.3		6.1	14.9		7.8	14.1	
Ref Time Seperate (s)	10.6	8.9		2.3	21.3		6.1	14.9		7.8	14.1	
Reference Time (s)	10.7	10.7		21.3	21.3		14.9	14.9		14.1	14.1	
Adj Reference Time (s)	14.7	14.7		25.3	25.3		18.9	18.9		18.1	18.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.8	30.7	
Permitted Option (s)	135.9	101.0	
Split Option (s)	40.0	37.0	
Minimum (s)	39.8	30.7	70.5

Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	15.1	8.0	41.8
Cross Thru Ref Time (s)	0.0	14.7	25.3
Oncoming Left Ref Time (s)	0.0	11.8	10.1
Combined (s)	15.1	34.5	77.1

Intersection Summary			
Intersection Capacity Utilization	77.1%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	330	350	800	1700	130
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	330	350	800	1830	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.99	0.85
Saturated Flow (vph)	0	2859	1805	5176	5120	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		11.5	19.4	15.5	35.7	0.0
Adj Reference Time (s)		15.5	23.4	19.5	39.7	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1707	
Reference Time A (s)	0.0		242.4	15.5	35.7	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				242.4	35.7	
Adj Reference Time (s)				246.4	39.7	
Split Option						
Ref Time Combined (s)	0.0		19.4	15.5	35.7	
Ref Time Seperate (s)	0.0		19.4	15.5	33.2	
Reference Time (s)	0.0		19.4	19.4	35.7	
Adj Reference Time (s)	0.0		23.4	23.4	39.7	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	63.1	
Permitted Option (s)	Err	246.4	
Split Option (s)	0.0	63.1	
Minimum (s)	0.0	63.1	63.1

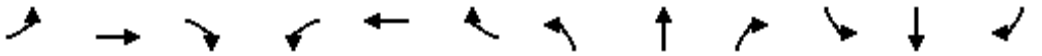
Right Turns	EBR
Adj Reference Time (s)	15.5
Cross Thru Ref Time (s)	39.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	55.3

Intersection Summary			
Intersection Capacity Utilization	63.1%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
1: MacArthur Blvd. & Airport Wy./I-405 SB On/Off-Ramps

3/16/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1143	177	1060	0	1276	386	150	1580	430
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	1143	177	1060	0	1276	386	150	1580	430
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	32.6	9.3	65.6	0.0	18.5	23.9	4.3	22.9	26.6
Adj Reference Time (s)	0.0	0.0	0.0	36.6	13.3	69.6	0.0	22.5	27.9	8.3	26.9	30.6
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		407.6	9.3		0.0	18.5		53.5	22.9	
Adj Saturation B (vph	NA	NA		0	1900		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		40.6	9.3		NA	NA		NA	NA	
Reference Time (s)		0.0			40.6			18.5			53.5	
Adj Reference Time (s)		8.0			44.6			22.5			57.5	
Split Option												
Ref Time Combined (s)	0.0	0.0		32.6	9.3		0.0	18.5		4.3	22.9	
Ref Time Seperate (s)	0.0	0.0		32.6	9.3		0.0	18.5		4.3	22.9	
Reference Time (s)	0.0	0.0		32.6	32.6		18.5	18.5		22.9	22.9	
Adj Reference Time (s)	0.0	0.0		36.6	36.6		22.5	22.5		26.9	26.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.6	30.8	
Permitted Option (s)	44.6	57.5	
Split Option (s)	36.6	49.4	
Minimum (s)	36.6	30.8	67.4

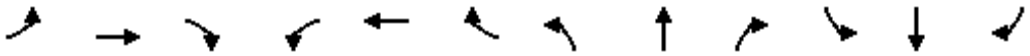
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	69.6	27.9	30.6
Cross Thru Ref Time (s)	0.0	0.0	13.3
Oncoming Left Ref Time (s)	0.0	8.3	0.0
Combined (s)	69.6	36.2	43.9

Intersection Summary			
Intersection Capacity Utilization	67.4%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
2: MacArthur Blvd. & Airport Wy./Michelson Dr.

3/16/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	363	126	107	90	87	200	150	1050	310	1040	1463	20
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	363	126	107	90	87	200	150	1050	310	1040	1483	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	10.4	6.6	6.6	2.6	4.6	12.4	8.3	15.2	19.2	29.7	21.5	0.0
Adj Reference Time (s)	14.4	10.6	10.6	8.0	8.6	16.4	12.3	19.2	23.2	33.7	25.5	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1722	
Reference Time A (s)	129.4	6.6		32.1	4.6		103.9	15.2		370.9	21.5	
Adj Saturation B (vph	0	1900		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	18.4	6.6		NA	NA		NA	NA		NA	NA	
Reference Time (s)		18.4			32.1			103.9			370.9	
Adj Reference Time (s)		22.4			36.1			107.9			374.9	
Split Option												
Ref Time Combined (s)	10.4	6.6		2.6	4.6		8.3	15.2		29.7	21.5	
Ref Time Seperate (s)	10.4	6.6		2.6	4.6		8.3	15.2		29.7	21.2	
Reference Time (s)	10.4	10.4		4.6	4.6		15.2	15.2		29.7	29.7	
Adj Reference Time (s)	14.4	14.4		8.6	8.6		19.2	19.2		33.7	33.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	22.9	52.9	
Permitted Option (s)	36.1	374.9	
Split Option (s)	22.9	52.9	
Minimum (s)	22.9	52.9	75.8

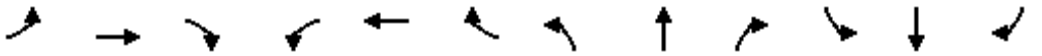
Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	10.6	16.4	23.2
Cross Thru Ref Time (s)	25.5	19.2	10.6
Oncoming Left Ref Time (s)	8.0	14.4	33.7
Combined (s)	44.2	50.0	67.5

Intersection Summary			
Intersection Capacity Utilization	75.8%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
3: MacArthur Blvd. & Campus Dr.

3/16/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	667	1083	123	50	253	70	80	810	70	289	908	253
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	667	1206	0	50	253	70	80	810	70	289	908	253
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5096	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	19.0	23.7	0.0	1.4	4.9	4.3	4.4	11.7	4.3	16.0	13.2	15.7
Adj Reference Time (s)	23.0	27.7	0.0	8.0	8.9	8.3	8.4	15.7	8.3	20.0	17.2	19.7
Permitted Option												
Adj Saturation A (vph)	140	1699		140	1725		144	1725		144	1725	
Reference Time A (s)	237.9	23.7		17.8	4.9		55.4	11.7		200.1	13.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		237.9			17.8			55.4			200.1	
Adj Reference Time (s)		241.9			21.8			59.4			204.1	
Split Option												
Ref Time Combined (s)	19.0	23.7		1.4	4.9		4.4	11.7		16.0	13.2	
Ref Time Seperate (s)	19.0	21.3		1.4	4.9		4.4	11.7		16.0	13.2	
Reference Time (s)	23.7	23.7		4.9	4.9		11.7	11.7		16.0	16.0	
Adj Reference Time (s)	27.7	27.7		8.9	8.9		15.7	15.7		20.0	20.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.7	35.7	
Permitted Option (s)	241.9	204.1	
Split Option (s)	36.6	35.7	
Minimum (s)	35.7	35.7	71.4

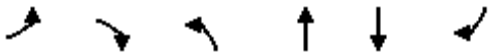
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	8.3	8.3	19.7
Cross Thru Ref Time (s)	0.0	27.7	8.9
Oncoming Left Ref Time (s)	0.0	20.0	8.4
Combined (s)	8.3	56.0	37.0

Intersection Summary			
Intersection Capacity Utilization	71.4%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
4: Campus Dr. & Airport Wy.

3/16/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	371	343	1752	483	88
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	371	343	1752	571	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.98	0.85
Saturated Flow (vph)	0	2859	1805	5176	5056	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		13.0	19.0	33.9	11.3	0.0
Adj Reference Time (s)		17.0	23.0	37.9	15.3	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1685	
Reference Time A (s)	0.0		237.5	33.9	11.3	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				237.5	11.3	
Adj Reference Time (s)				241.5	15.3	
Split Option						
Ref Time Combined (s)	0.0		19.0	33.9	11.3	
Ref Time Seperate (s)	0.0		19.0	33.9	9.6	
Reference Time (s)	0.0		33.9	33.9	11.3	
Adj Reference Time (s)	0.0		37.9	37.9	15.3	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	38.3	
Permitted Option (s)	Err	241.5	
Split Option (s)	0.0	53.1	
Minimum (s)	0.0	38.3	38.3

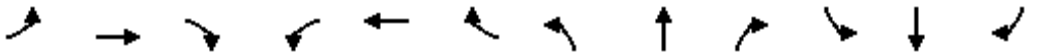
Right Turns	EBR
Adj Reference Time (s)	17.0
Cross Thru Ref Time (s)	15.3
Oncoming Left Ref Time (s)	0.0
Combined (s)	32.3

Intersection Summary			
Intersection Capacity Utilization	38.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
1: MacArthur Blvd. & Airport Wy./I-405 SB On/Off-Ramps

3/16/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	554	126	550	0	2276	517	440	1348	292
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	0	0	0	554	126	550	0	2276	517	440	1348	292
Lane Utilization Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	0	0	3505	1900	1615	0	6901	1615	3505	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	0.0	0.0	15.8	6.6	34.1	0.0	33.0	32.0	12.6	19.5	18.1
Adj Reference Time (s)	0.0	0.0	0.0	19.8	10.6	38.1	0.0	37.0	36.0	16.6	23.5	22.1
Permitted Option												
Adj Saturation A (vph)	0	0		140	1900		0	1725		140	1725	
Reference Time A (s)	0.0	0.0		197.6	6.6		0.0	33.0		156.9	19.5	
Adj Saturation B (vph	NA	NA		0	1900		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		23.8	6.6		NA	NA		NA	NA	
Reference Time (s)		0.0			23.8			33.0			156.9	
Adj Reference Time (s)		8.0			27.8			37.0			160.9	
Split Option												
Ref Time Combined (s)	0.0	0.0		15.8	6.6		0.0	33.0		12.6	19.5	
Ref Time Seperate (s)	0.0	0.0		15.8	6.6		0.0	33.0		12.6	19.5	
Reference Time (s)	0.0	0.0		15.8	15.8		33.0	33.0		19.5	19.5	
Adj Reference Time (s)	0.0	0.0		19.8	19.8		37.0	37.0		23.5	23.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	19.8	53.5	
Permitted Option (s)	27.8	160.9	
Split Option (s)	19.8	60.5	
Minimum (s)	19.8	53.5	73.3

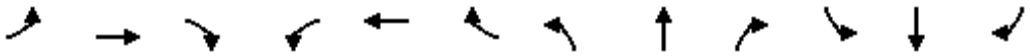
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	38.1	36.0	22.1
Cross Thru Ref Time (s)	0.0	0.0	10.6
Oncoming Left Ref Time (s)	0.0	16.6	0.0
Combined (s)	38.1	52.6	32.7

Intersection Summary			
Intersection Capacity Utilization	73.3%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
2: MacArthur Blvd. & Airport Wy./Michelson Dr.

3/16/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	323	145	98	390	116	750	110	1580	110	510	1362	20
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	323	145	98	390	116	750	110	1580	110	510	1382	0
Lane Utilization Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	1615	3505	1900	1615	1805	6901	1615	3505	6886	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	9.2	7.6	6.1	11.1	6.1	46.4	6.1	22.9	6.8	14.5	20.1	0.0
Adj Reference Time (s)	13.2	11.6	10.1	15.1	10.1	50.4	10.1	26.9	10.8	18.5	24.1	0.0
Permitted Option												
Adj Saturation A (vph)	140	1900		140	1900		144	1725		140	1721	
Reference Time A (s)	115.2	7.6		139.1	6.1		76.2	22.9		181.9	20.1	
Adj Saturation B (vph	0	1900		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	17.2	7.6		NA	NA		NA	NA		NA	NA	
Reference Time (s)		17.2			139.1			76.2			181.9	
Adj Reference Time (s)		21.2			143.1			80.2			185.9	
Split Option												
Ref Time Combined (s)	9.2	7.6		11.1	6.1		6.1	22.9		14.5	20.1	
Ref Time Seperate (s)	9.2	7.6		11.1	6.1		6.1	22.9		14.5	19.8	
Reference Time (s)	9.2	9.2		11.1	11.1		22.9	22.9		20.1	20.1	
Adj Reference Time (s)	13.2	13.2		15.1	15.1		26.9	26.9		24.1	24.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	26.8	45.4	
Permitted Option (s)	143.1	185.9	
Split Option (s)	28.3	51.0	
Minimum (s)	26.8	45.4	72.2

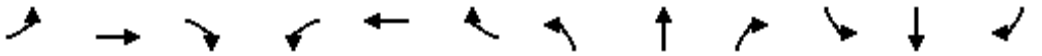
Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	10.1	50.4	10.8
Cross Thru Ref Time (s)	24.1	26.9	11.6
Oncoming Left Ref Time (s)	15.1	13.2	18.5
Combined (s)	49.3	90.6	41.0

Intersection Summary			
Intersection Capacity Utilization	90.6%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
3: MacArthur Blvd. & Campus Dr.

3/16/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	375	455	94	80	1124	180	130	1030	40	158	988	622
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			Yes			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100	100	100	100	100	100	100
Volume Combined (vph)	375	549	0	80	1124	180	130	1030	40	158	988	622
Lane Utilization Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	5043	0	3505	5176	1615	1805	6901	1615	1805	6901	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	10.7	10.9	0.0	2.3	21.7	11.1	7.2	14.9	2.5	8.8	14.3	38.5
Adj Reference Time (s)	14.7	14.9	0.0	8.0	25.7	15.1	11.2	18.9	8.0	12.8	18.3	42.5
Permitted Option												
Adj Saturation A (vph)	140	1681		140	1725		144	1725		144	1725	
Reference Time A (s)	133.7	10.9		28.5	21.7		90.0	14.9		109.4	14.3	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		133.7			28.5			90.0			109.4	
Adj Reference Time (s)		137.7			32.5			94.0			113.4	
Split Option												
Ref Time Combined (s)	10.7	10.9		2.3	21.7		7.2	14.9		8.8	14.3	
Ref Time Seperate (s)	10.7	9.0		2.3	21.7		7.2	14.9		8.8	14.3	
Reference Time (s)	10.9	10.9		21.7	21.7		14.9	14.9		14.3	14.3	
Adj Reference Time (s)	14.9	14.9		25.7	25.7		18.9	18.9		18.3	18.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.4	31.7	
Permitted Option (s)	137.7	113.4	
Split Option (s)	40.6	37.2	
Minimum (s)	40.4	31.7	72.1

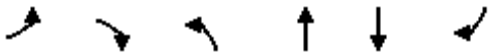
Right Turns	WBR	NBR	SBR
Adj Reference Time (s)	15.1	8.0	42.5
Cross Thru Ref Time (s)	0.0	14.9	25.7
Oncoming Left Ref Time (s)	0.0	12.8	11.2
Combined (s)	15.1	35.6	79.4

Intersection Summary			
Intersection Capacity Utilization	79.4%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization
4: Campus Dr. & Airport Wy.

3/16/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	460	415	809	1721	157
Pedestrians						
Ped Button						
Pedestrian Timing (s)						
Free Right		No				No
Ideal Flow	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	100	100	100	100	100	100
Volume Combined (vph)	0	460	415	809	1878	0
Lane Utilization Factor	1.00	0.89	1.00	0.91	0.91	1.00
Turning Factor (vph)	0.95	0.85	0.95	1.00	0.99	0.85
Saturated Flow (vph)	0	2859	1805	5176	5111	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)	0.00			0.00	0.00	
Protected Option Allowed	No			Yes	Yes	
Reference Time (s)		16.1	23.0	15.6	36.7	0.0
Adj Reference Time (s)		20.1	27.0	19.6	40.7	0.0
Permitted Option						
Adj Saturation A (vph)	0		144	1725	1704	
Reference Time A (s)	0.0		287.4	15.6	36.7	
Adj Saturation B (vph	NA		NA	NA	NA	
Reference Time B (s)	NA		NA	NA	NA	
Reference Time (s)				287.4	36.7	
Adj Reference Time (s)				291.4	40.7	
Split Option						
Ref Time Combined (s)	0.0		23.0	15.6	36.7	
Ref Time Seperate (s)	0.0		23.0	15.6	33.7	
Reference Time (s)	0.0		23.0	23.0	36.7	
Adj Reference Time (s)	0.0		27.0	27.0	40.7	

Summary	EB	NB SB	Combined
Protected Option (s)	NA	67.7	
Permitted Option (s)	Err	291.4	
Split Option (s)	0.0	67.7	
Minimum (s)	0.0	67.7	67.7

Right Turns	EBR
Adj Reference Time (s)	20.1
Cross Thru Ref Time (s)	40.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	60.8

Intersection Summary			
Intersection Capacity Utilization	67.7%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

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ITS - Traffic/Civil/Electrical Engineering - Transportation Planning - Homeland Security - CEM

2016	Winner of the ASCE's Outstanding Civil Engineer in the Private Sector Award in the State of California
2016	Winner of the ASCE Los Angeles Section's Outstanding Civil Engineer in the Private Sector Award
2016	Winner of the ASCE Orange County Chapter's Outstanding Civil Engineer in the Private Sector Award
2016	Certificate of Recognition for Dedication to Support the ELTP Program by Los Angeles County MTA/Metro
2016	Winner of the Orange County Engineering Council's Outstanding Engineering Service Award
2015	Orange County Business Journal's 2015 Excellence in Entrepreneurship Award Nominee
2014	Orange County Business Journal's 2014 Excellence in Entrepreneurship Award Nominee
2012	Winner of Cal-EPA/California Air Resources Board's Cool California Climate Leader
2011	Award of Excellence in Service by Los Angeles County MTA/Metro in the County of Los Angeles
2011	Award of Excellence in Service by Los Angeles County MTA/Metro in the County of Los Angeles
2010	Award of Excellence in Service by Los Angeles County MTA/Metro in the County of Los Angeles
2009	Winner of the ASCE's Outstanding Private Sector Civil Engineering Project in Metropolitan Los Angeles
2009	Winner of the Caltrans' 2009 Excellence in Transportation Award in the State of California
2007	Winner of the ASCE's Outstanding Public/Private Sector Civil Engineering Project in Metropolitan Los Angeles
2005	Winner of the APWA's Best Traffic Congestion Mitigation Project of the Year in Southern California
2004	Top Nominee of Transportation Foundation's Highway Management Program in the State of California
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2002	Winner of the ITS-CA's Best Return on Investment Project Award in the State of California
2000	Award of Excellence in Service by Los Angeles County MTA/Metro in the County of Los Angeles

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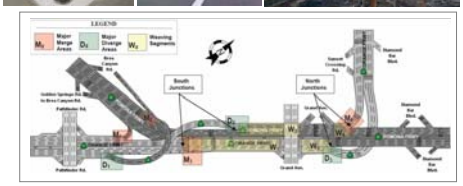


MINAGAR & ASSOCIATES, INC.

23272 Mill Creek Drive
Suite 240
Laguna Hills, CA 92653

Tel: (949)707-1199
Web: **www.minagarinc.com**

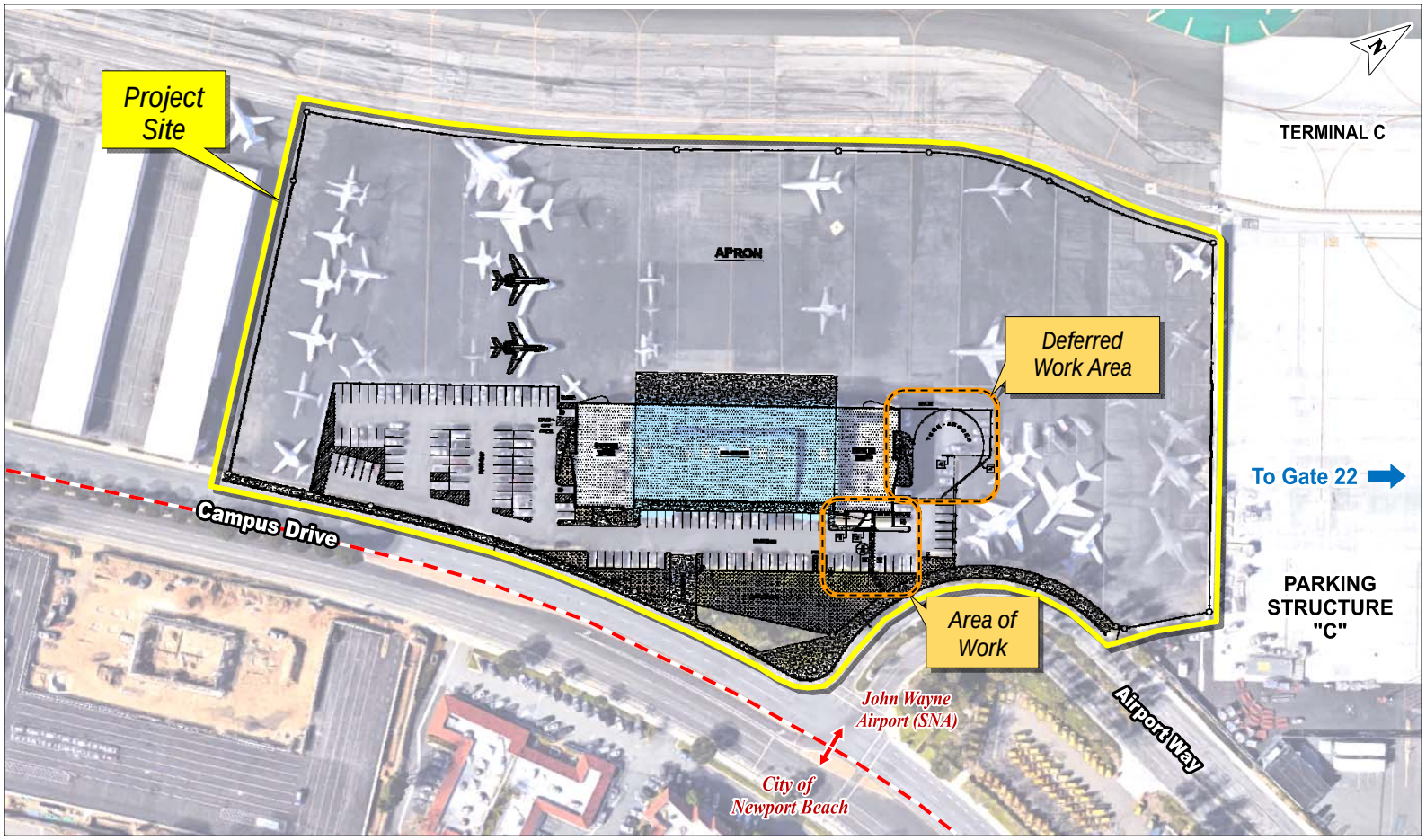
25 Years of Engineering & Planning Excellence

Parking Analysis for
ACI Jet SNA – JetSuiteX Project

Attachment A

Located at

19301 Campus Drive #100, John Wayne Airport (SNA), Orange County



PRESENTED TO:

John Wayne Airport
3160 Airway Avenue
Costa Mesa, CA 92626

PRESENTED TO:

ACI Jet SNA
19301 Campus Drive #100
Santa Ana, CA 92707

PREPARED BY:

MINAGAR & ASSOCIATES, INC.
ITS – Traffic/Civil/Electrical Engineering – Transportation Planning
23272 Mill Creek Drive, Suite 240
Laguna Hills, CA 92653
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25 Years of Excellence

December 21, 2017

ORANGE COUNTY, CA

PARKING STUDY

FOR

ACI JET SNA - JETSUITEX

Date Submitted: December 20, 2017

I, Fred Minagar do hereby certify that this Parking Study prepared for ACI Jet SNA was performed under my supervision. I certify that I am both experienced in performing surveys of this type and am duly registered in the State of California as a professional Civil Engineer. The on-site field data collection, parking occupancy surveys and subsequent analyses of the parking data were conducted in accordance with the methodologies and principles prescribed in the most current version of the Institute of Transportation Engineers' (ITE) Traffic Engineering Handbook and the industry standard practice for similar studies. Data contained in this report represents a true and accurate description of existing parking conditions at the surveyed site.

Fred Minagar, MS, RCE, PE, Registration No. 53466
Traffic Engineering Consultant

Technical Memorandum

To: Mr. Barry Rondinella
Airport Director, John Wayne Airport
3160 Airway Avenue, Costa Mesa, CA 92626

From: Fred Minagar, MS, PE, RCE, FITE
President, Minagar & Associates, Inc.
23272 Mill Creek Drive, Suite 240, Laguna Hills, CA 92653

Date: December 19, 2017

Re: Parking Analysis for the Proposed JetSuiteX Project for ACI Jet SNA at John Wayne Airport

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Introduction

ACI Jet is an aviation services provider, operating as a full-service fixed base operator (FBO) within a leased portion of the John Wayne Airport ("JWA" or SNA). ACI Jet SNA is located in the east side FBO building and the west side hangars in JWA, along Campus Drive. For this project, ACI Jet SNA is proposing to integrate a public charter air carrier service with commuter authority, *JetSuiteX*, into its existing facility at the Airport. ACI Jet SNA has indicated to Minagar & Associates, Inc. that the airport authority has raised concerns regarding potential parking overflow issues which could result from the proposed project. Minagar has prepared this analysis to identify any such parking shortage with the addition of the proposed *JetSuiteX* service to ACI Jet SNA.

Existing Conditions

Existing Facility / Site Location. John Wayne Airport is located in Unincorporated Orange County, and is generally bound by the cities of Newport Beach, Irvine, and Costa Mesa, as well as several unincorporated County islands. As shown in ***Exhibit 1***, ACI Jet is located at the Airport Way entrance/exit to the Airport along the Campus Drive edge of the airport, which is bordered by the City of Newport Beach to the south.

Existing Parking Supply/Demand. A parking accumulation count survey was first conducted to ascertain the number of vehicles currently parked on-site, on an hourly basis, at the existing ACI Jet SNA parking lot. A 14-hour parking count survey was conducted during the critical weekday hours of operation in December 2017. In total, the existing ACI Jet facility provides a total of 142 spaces, including 139 standard and 3 accessible spaces. ACI Jet additionally provides valet services for all passengers (note: approximate added capacity = 20 additional spaces within the valet circle) which allows for more efficient parking operations and also temporarily increases the maximum parking capacity as needed. Field observers documented the locations of occupied parking spaces at hourly intervals beginning from 6:00AM and ending at 8:00PM on a typical weekday in December 2017. This data is summarized on ***Exhibit 2***.

From the survey results shown on Exhibit 2, the average weekday peak parking demand is calculated as 95/142 occupied parking spaces (67% utilization rate) on-site within the ACI Jet facility study area.

Exhibit 1 **Local Vicinity**

The highest daily-peak parking utilization occurred at 12:00PM (107 spaces occupied, 75% utilization), leaving a 25% parking surplus during the worst weekday hour.

Exhibit 2
Existing Weekday Parking Utilization

Time	Capacity:	142
	Occupied	(Vacant)	Utilization
6:00 AM	87	(55)	61.3%
7:00 AM	94	(48)	66.2%
8:00 AM	96	(46)	67.6%
9:00 AM	104	(38)	73.2%
10:00 AM	105	(37)	73.9%
11:00 AM	104	(38)	73.2%
12:00 PM	**107**	**(35)**	**75.4%**
1:00 PM	105	(37)	73.9%
2:00 PM	104	(38)	73.2%
3:00 PM	95	(47)	66.9%
4:00 PM	92	(50)	64.8%
5:00 PM	89	(53)	62.7%
6:00 PM	87	(55)	61.3%
7:00 PM	85	(57)	59.9%
8:00 PM	78	(64)	54.9%

Daily Peak Parking Utilization

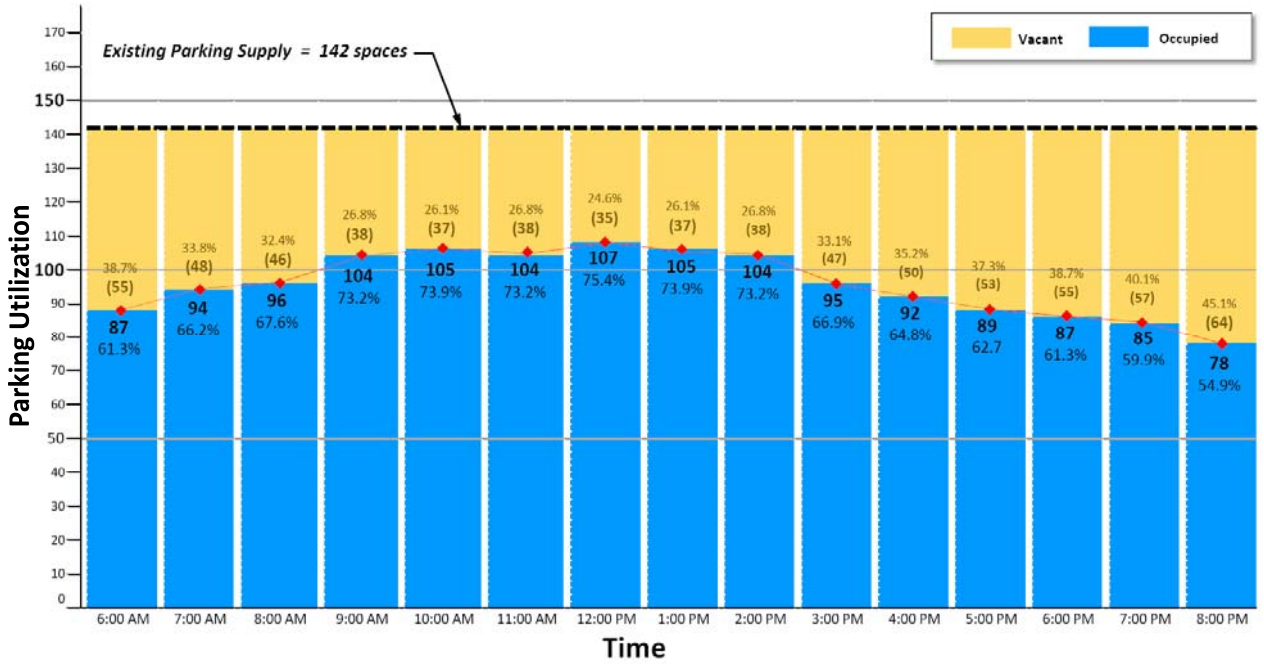
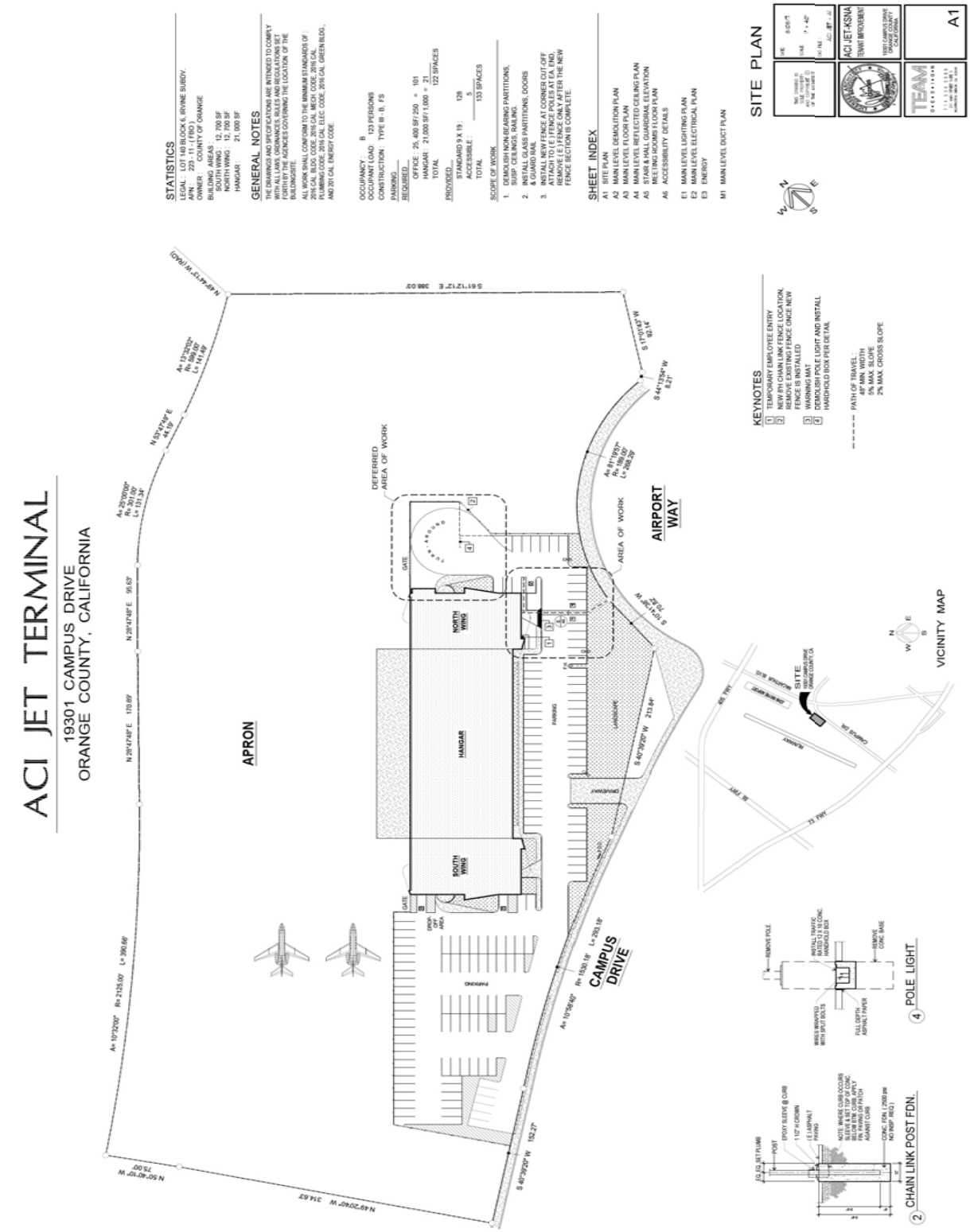


Exhibit 3 - Site Plan



With Project Conditions

Proposed Project. ***Exhibit 3*** illustrates the Project Site Plan. The proposed *JetSuiteX* service at ACI Jet SNA will be comprised of the following components:

- ERJ 135 regional jet aircraft:
  - 30 passengers per aircraft
- Proposed Operation(s):
  - 2 flights per day (opening)
  - 8 flights per day (long-term)—*basis of parking study*
- Range of Passenger Departures:
  - Minimum = 2 departures/day * 30 passengers/flight = 60 passengers/day
  - Maximum = 8 departures/day * 30 passengers/flight = 240 passengers/day

ACI Jet has provided Minagar with proprietary/empirical data recently collected for the existing JetSuite service currently in operation at the Hollywood Burbank Airport (BUR, formerly Bob Hope Airport), summarized below in ***Exhibit 4***. Based on this data, the JetSuite service at BUR yields an average parked car rate of 2.6 parked cars per flight departure. During the busiest month of the year (May), the peak parked car rate per departure was 3.5 cars per departure. ACI Jet projects a similar parking generation trend for its JetSuiteX services at SNA, based on the number of flight departures. The equivalent on-site parking rate per flight departures for the new JetSuiteX operations at ACI Jet SNA is 2.2 vehicles per departure.

Exhibit 4
***JetSuite* 2017 Parking Demand Rate at BUR Airport**

Month	Departures per Month		Cars Parked		Parked Cars per Departure
	Monthly	Daily	Monthly	Daily	
Jan. 2017	138	4.6	260	8.7	1.9
Feb. 2017	118	3.9	311	10.4	2.6
Mar. 2017	135	4.5	406	13.5	3.0
Apr. 2017	128	4.3	370	12.3	2.9
May 2017	135	4.5	477	15.9	3.5
Jun. 2017	132	4.4	384	12.8	2.9
Jul. 2017	130	4.3	326	10.9	2.5
Aug. 2017	153	5.1	394	13.1	2.6
Sep. 2017	187	6.2	354	11.8	1.9
Oct. 2017	219	7.3	488	16.3	2.2

Parked Cars per Departure (cpd):

- Minimum = 1.9 cpd (January & September)
- Average = 2.6 cpd
- Maximum = 3.5 cpd (May)

Projected Parking Utilization Conditions. The projected on-site parking utilization with the proposed project was calculated by combining the estimated required parking demand for the proposed use (i.e., new JetSuiteX service) with the existing parking demand based on the present-day parking field observations. ACI Jet plans to open the JetSuiteX service with 2 flights per day. Applying the 2.2 cars/departure rate based on ACI Jet's data on the JetSuite parking generation data for the BUR Airport, the proposed addition of 2 flights per day would equate to an added parking demand of: ([2 departures] * [2.2 parked cars / departure] = 4.4 → 5 added parked cars per day]. The ultimate scenario proposed by ACI Jet is to provide for 8 JetSuiteX departures, which would similarly result in an added parking demand of: ([8 departures] * [2.2 parked cars / departure] = 17.6 → 18 added parked cars per day].

Therefore, based on the following factors:

- (1) Using the existing weekday hourly parked car accumulation of 107 vehicles at 12:00PM as the baseline peak-hour parking demand; and
- (2) Adding the additional peak parking demand of 18 cars per day (further assumed as 18 continuously parked cars per hour) reflecting 8 departures per day; and

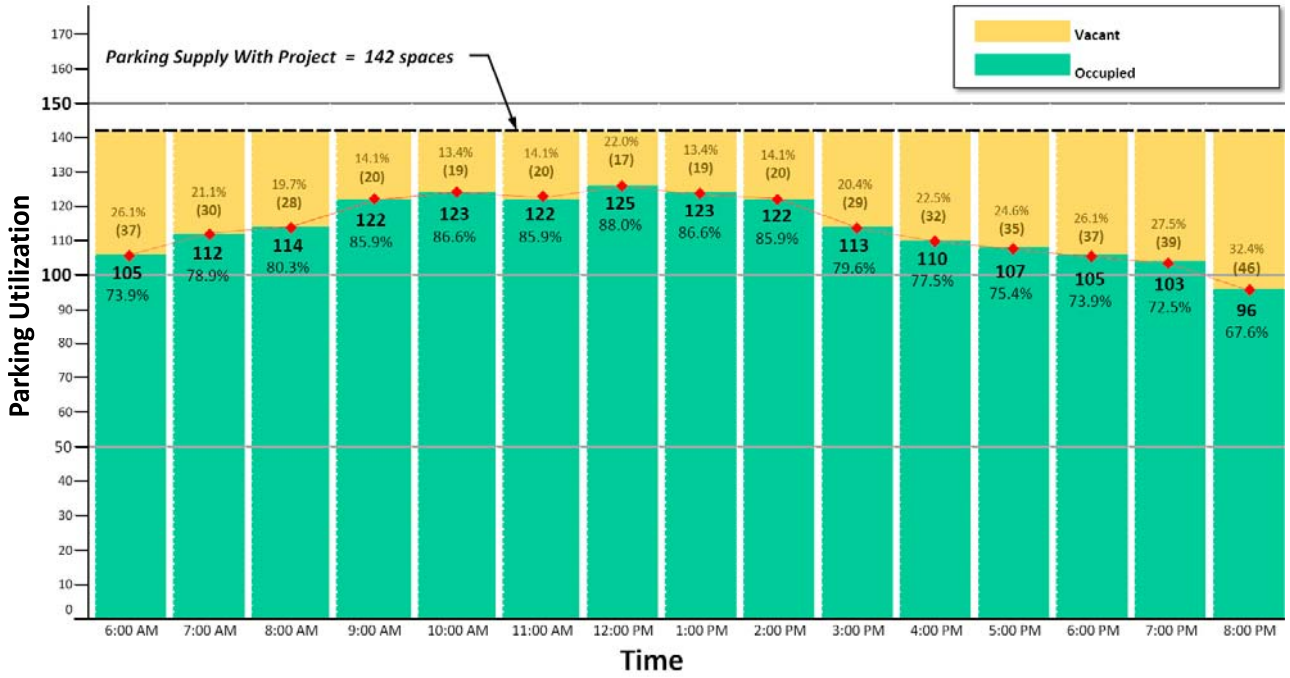
the total maximum projected parking demand on a typical weekday during the critical mid-day hour (12:00PM) would yield an ***88% peak-hour parking utilization*** ([107+18] / 142 = 88%) for the proposed condition. Prior to and following the 12:00PM hour during the week, the on-site parking utilization with the fully implemented proposed project (i.e., 8 flights per day) would range from as low as 68% at 8:00PM.

Exhibit 5 below summarizes the projected parking demand from 6:00AM to 8:00PM for ACI Jet with the full implementation (i.e., 8 flights/day) of the JetSuiteX program. As a general rule, a minimum 10% surplus buffer (i.e., maximum parking utilization of 90%) should be provided in a proposed parking supply plan so as to account for unexpected parking overages. Therefore, as shown in the table above, ***the proposed parking conditions with the JetSuiteX project reflect an anticipated parking utilization that is within an acceptable range*** to allow for sufficient parking for staff and patrons of the existing and proposed JetSuiteX uses.

Exhibit 5
Projected Weekday Parking Utilization With Project

Time	Occupied	Capacity: (Vacant)	142 Utilization
6:00 AM	105	(37)	73.9%
7:00 AM	112	(30)	78.9%
8:00 AM	114	(28)	80.3%
9:00 AM	122	(20)	85.9%
10:00 AM	123	(19)	86.6%
11:00 AM	122	(20)	85.9%
12:00 PM	**125**	**(17)**	**88.0%**
1:00 PM	123	(19)	86.6%
2:00 PM	122	(20)	85.9%
3:00 PM	113	(29)	79.6%
4:00 PM	110	(32)	77.5%
5:00 PM	107	(35)	75.4%
6:00 PM	105	(37)	73.9%
7:00 PM	103	(39)	72.5%
8:00 PM	96	(46)	67.6%

Critical Peak Hour of Projected Parking Utilization

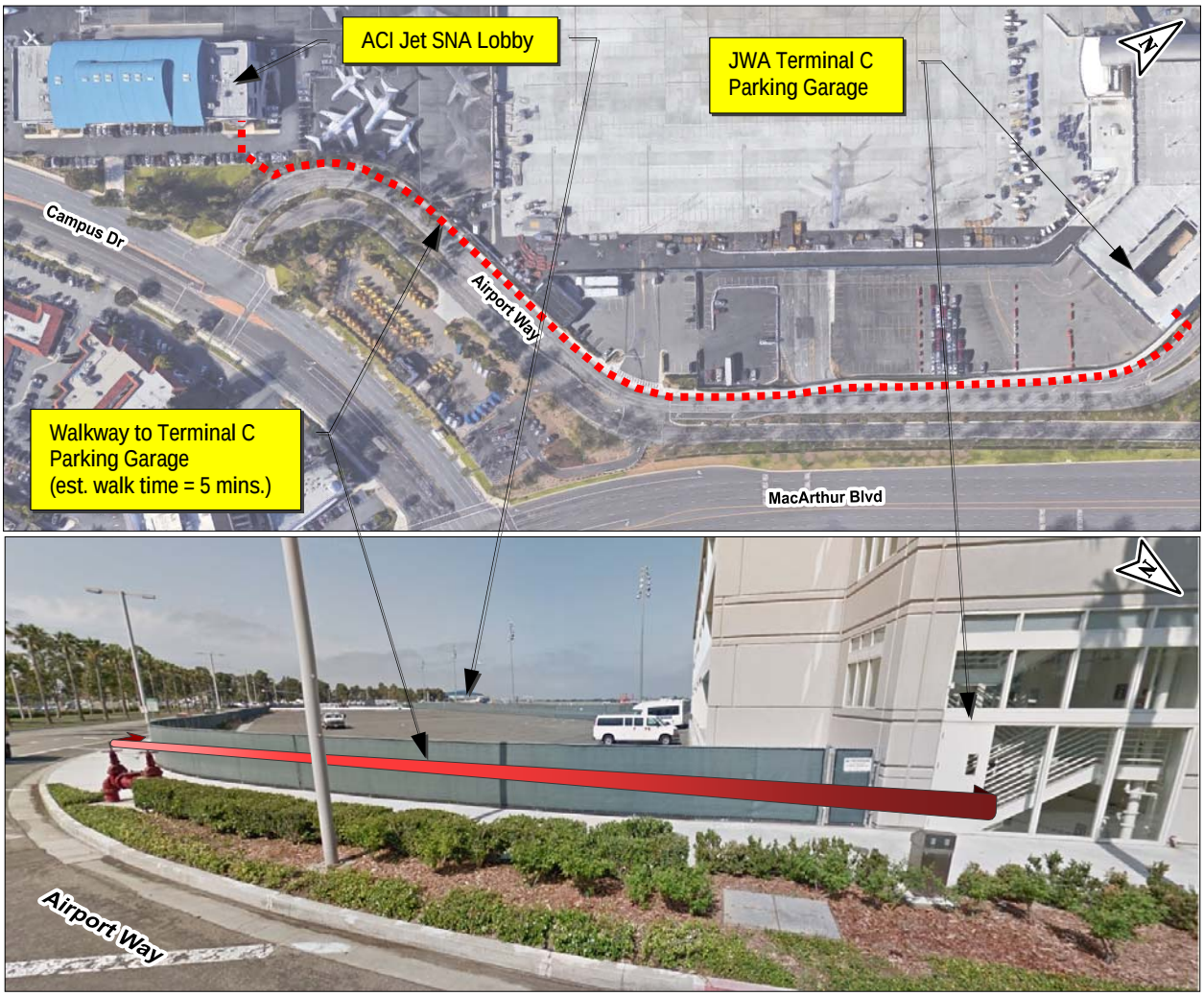


It should be noted that the following related project features would continue to lend to the additional conservation of on-site parking availability at various times of the day and days of the week on the ACI-Jet site:

- (1) Valet Services. ACI Jet provides valet services for all passengers which allows for more efficient parking management and also temporarily augments the parking supply by approximately 20 cars.

Existing ACI Jet On-Site Valet Parking Services

- (2) Airport Terminal Parking. The nearest public airport parking structure (Structure C) is a 5-minute walk away and consistently provides ample parking throughout the week.



Walking Distance/Connectivity between ACI Jet and JWA Terminal C

- (3) Ride-Hailing Services. ACI Jet reports that the majority of JetSuiteX passengers at other similar sites arrive by ride-hailing services such as Uber and Lyft. John Wayne Airport has reportedly estimated that over 50% of its passengers arrive at its terminal zones via curbside drop-off, taxis and/or cell phone ride-hailing services.

- (4) Corporate Commitment to Personalized Services. A stated primary goal of ACI Jet's remodeling project and added JetSuiteX services is to provide a "second-to-none experience for travelers, flight crews and aircraft owners". Therefore, by extension this includes a dedicated commitment to providing a highly efficient access and parking operations experience for its customers, at a level above what may be expected for other related uses.

In summary, based on the above analysis—including an evaluation of the existing parking accumulation conditions and parking generation data obtained from ACI Jet for the subject aircraft service—it is determined **that the JetSuiteX project as proposed by ACI Jet would not be expected to result in any parking shortages upon its ultimate planned implementation for 8 flights per day**. The worst-case parking utilization for the Project would be 88%, which sufficiently provides a 10% buffer for unexpected surges or parking overages.

If you have any questions or need additional information, please do not hesitate to contact me at Minagar & Associates, Inc.'s primary office at 23272 Mill Creek Drive in Laguna Hills; by telephone at (949)707-1199 ext. 2#; or by e-mail at minagarf@minagarinc.com.

Sincerely,

MINAGAR & ASSOCIATES, INC.
(A California Corporation)

Fred Minagar, MS, PE, RCE, FITE
Principal/President

cc: Joe Daichendt (jdaichendt@acijet.com)
Kyle Cassidy (kcassidy@acijet.com)

PARKING ACCUMULATION SURVEY - *Tuesday, December 5th, 2017*

Spot #	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
6		X		X	X	X	X	X	X	X		X			X
7		X	X	X	X	X	X	X	X	X	X			X	
8		X		X	X	X	X	X	X	X					
9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X						
11	X	X	X	X	X	X	X	X		X	X	X	X	X	X
12				X	X		X	X		X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X	X	X			X	X
14	X	X	X				X		X	X	X	X	X	X	X
15	X	X	X	X	X	X	X		X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X	X			X	X	X	X
17	X	X	X	X	X	X	X	X	X						
18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19		X	X			X	X			X	X				X
20	X			X	X	X	X	X	X	X	X	X	X	X	X
21		X	X	X	X	X	X					X	X	X	X
22	X	X	X						X						
23	X			X	X	X	X	X	X	X	X	X	X	X	
24	X	X	X							X	X	X	X	X	
25		X	X	X	X	X	X	X	X	X	X	X	X	X	X
26	X	X	X							X	X	X	X	X	X
27				X	X					X	X	X	X	X	X
28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29	X	X	X							X	X	X	X	X	X
30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
31	X	X	X	X	X	X	X			X	X	X	X	X	X
32	X	X	X	X	X	X	X			X	X	X	X	X	X
33				X	X	X	X	X	X			X	X	X	X
34				X	X	X	X	X	X						
35		X	X	X	X	X	X	X	X	X	X	X	X	X	X
36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
37	X	X	X	X	X					X	X	X	X	X	X
38	X	X	X					X	X	X	X	X	X	X	X
39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
40	X	X	X	X	X	X	X	X	X	X	X	X			X
41				X	X	X	X	X	X		X	X	X	X	X
42	X	X	X	X	X	X	X		X	X	X	X	X	X	
43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
44		X	X							X	X	X	X	X	
45	X	X	X							X	X	X	X	X	X
46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
47	X	X	X						X	X	X	X	X	X	X
48	X	X	X	X	X	X		X	X	X	X	X	X	X	X
49	X	X	X			X		X	X	X	X	X	X	X	
50						X			X			X	X	X	
51	X	X	X	X	X	X	X	X	X						
52	X	X	X	X	X	X	X	X	X						
53	X	X	X	X	X	X	X	X	X		X	X	X		
54	X	X	X	X	X	X	X	X	X	X	X				
55				X	X	X				X	X				
56				X	X	X	X	X	X	X	X				X
57	X	X	X	X	X	X	X	X	X	X					
58				X	X	X	X	X	X	X	X	X	X	X	X
59	X	X	X	X	X	X	X	X	X	X	X	X	X		
60	X	X	X	X	X	X	X	X	X	X		X	X		
61				X	X	X	X	X	X	X	X			X	X
62				X	X	X	X	X	X	X	X				
63				X	X	X	X		X	X	X	X	X	X	X
64	X	X	X	X	X	X	X	X	X			X	X	X	X
65				X	X	X	X	X	X			X	X		
66			X	X	X	X	X	X	X	X					
67	X	X	X	X	X	X	X	X	X					X	X
68				X	X	X	X	X	X	X	X	X	X	X	X
69				X	X	X	X	X	X	X	X	X	X	X	X
70	X	X	X			X	X	X	X	X	X	X	X	X	X
71				X	X	X	X	X	X	X	X	X	X	X	X
72	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

PARKING ACCUMULATION SURVEY - *Tuesday, December 5th, 2017*

Spot #	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
73	X	X	X	X	X	X	X	X	X			X	X	X	X
74	X	X	X	X	X	X	X	X	X						
75			X	X	X	X	X	X	X	X					
76	X	X	X					X	X	X	X	X	X	X	X
77				X	X		X	X	X	X	X	X	X		
78	X	X	X	X	X	X	X	X	X		X	X	X	X	X
79				X	X	X	X	X							
80	X	X	X	X	X	X	X	X	X						
81	X	X	X	X	X	X	X	X	X			X	X		
82				X	X	X	X	X	X	X	X	X	X		
83										X	X				
84	X	X	X							X	X	X	X	X	X
85				X	X	X	X	X	X	X	X				
86	X	X	X	X	X	X	X	X	X	X	X				
87	X	X	X	X	X	X	X	X	X	X		X	X	X	X
88	X	X	X	X	X	X	X	X	X			X	X	X	
89				X	X	X	X	X	X						
90				X	X	X	X	X	X	X	X				
91	X	X	X	X	X	X	X	X	X						
92				X	X	X	X	X	X						
93				X	X	X	X	X	X	X	X	X	X		
94	X	X	X	X	X	X	X	X	X	X	X			X	
95							X	X		X	X				
96	X	X	X	X	X			X	X	X	X			X	X
97	X	X	X							X	X	X	X	X	X
98	X	X	X	X	X	X					X	X	X	X	X
99	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
100		X	X	X	X	X	X	X	X	X	X				
101	X	X	X	X	X	X	X	X	X	X		X	X	X	X
102	X	X	X	X	X		X	X	X	X	X				
103				X	X	X				X		X	X	X	X
104									X			X	X		X
105	X	X	X				X	X	X						
106				X	X	X	X	X	X					X	X
107	X	X	X	X	X	X	X	X	X						
108	X	X	X					X	X		X	X	X	X	X
109	X	X	X				X	X		X	X	X	X	X	X
110		X	X	X	X	X	X	X		X	X				
111				X	X	X	X	X	X						
112	X	X	X					X	X	X	X	X	X	X	X
113				X	X	X	X	X		X	X				
114							X	X	X	X					
115	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
116	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
117	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
118									X						
119								X	X						
120												X	X	X	X
121				X	X	X	X	X	X	X	X				
122															
123			X									X	X	X	X
124	X	X	X	X	X	X	X	X	X	X		X	X	X	X
125	X	X	X							X	X	X	X	X	X
126	X	X	X	X	X	X	X	X		X	X	X	X	X	X
127	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
128	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
129	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
130	X	X	X												
131	X	X	X	X	X	X					X	X	X	X	X
132	X	X	X	X	X	X	X	X	X	X	X	X			
133	X	X	X	X	X	X	X	X	X	X	X				
134	X	X	X			X	X	X	X						
135	X	X	X				X	X	X		X	X	X	X	X
136	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
137	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
138					X	X	X	X	X		X			X	
139							X					X	X		

PARKING ACCUMULATION SURVEY - *Tuesday, December 5th, 2017*

Spot #	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
140										X					
141	X	X	X						X		X	X	X	X	X
142	X	X	X	X	X	X	X			X	X	X	X	X	X
143				X	X	X	X	X		X					
144	X	X	X	X	X	X	X	X	X			X	X	X	X
145	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
146				X	X	X	X	X							
147	X	X	X	X	X	X	X	X		X	X	X	X	X	X
Occupied	**87**	**94**	**96**	**104**	**105**	**104**	**107**	**105**	**104**	**95**	**92**	**89**	**87**	**85**	**78**
Vacant	55	48	46	38	37	38	35	37	38	47	50	53	55	57	64
Total Supply	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142
Utilization (%)	61.3%	66.2%	67.6%	73.2%	73.9%	73.2%	75.4%	73.9%	73.2%	66.9%	64.8%	62.7%	61.3%	59.9%	54.9%

ADDITIONAL PARKING ACCUMULATION SURVEY DATA - *Friday, December 8th, 2017*

Spot #	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
6				X	X										
7				X	X										
8	X				X										
9	X			X	X										
10	X			X	X										
11	X			X	X										
12					X										
13	X			X	X										
14															
15	X			X											
16				X	X										
17	X			X	X										
18	X			X	X										
19															
20	X				X										
21				X											
22	X														
23	X			X	X										
24	X														
25				X	X										
26	X														
27				X											
28	X			X	X										
29	X														
30				X	X										
31	X			X											
32	X			X											
33					X										
34					X										
35				X	X										
36	X			X	X										
37	X			X											
38	X				X										
39	X			X	X										
40	X			X	X										
41					X										
42	X			X											
43	X			X	X										
44															
45	X														
46	X			X	X										
47	X														
48	X			X	X										
49	X				X										
50															
51	X			X	X										
52	X			X	X										
53	X			X	X										
54	X			X	X										
55	X														
56				X	X										
57	X			X	X										
58				X	X										
59	X			X	X										
60	X			X	X										
61					X										
62					X										
63				X											
64	X			X	X										
65				X	X										
66				X	X										
67	X			X	X										
68				X	X										
69				X	X										
70	X														
71				X	X										
72	X			X											

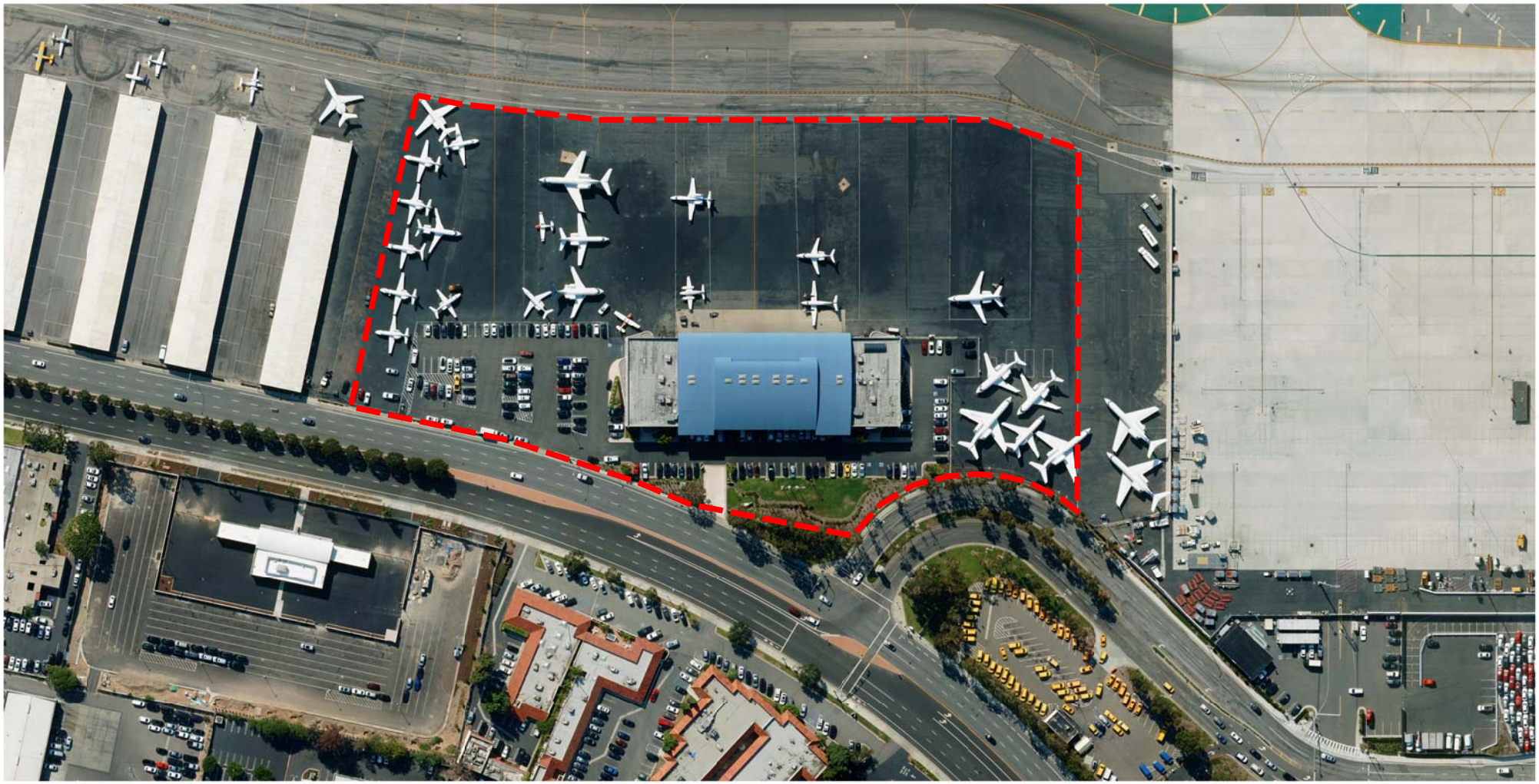
ADDITIONAL PARKING ACCUMULATION SURVEY DATA - *Friday, December 8th, 2017*

Spot #	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
73	X			X	X										
74	X			X	X										
75				X											
76	X				X										
77				X	X										
78	X			X	X										
79				X											
80	X			X	X										
81	X			X	X										
82				X	X										
83															
84	X														
85				X	X										
86	X			X	X										
87				X	X										
88	X			X	X										
89	X			X	X										
90				X	X										
91	X			X	X										
92				X	X										
93				X	X										
94				X	X										
95					X										
96	X			X	X										
97	X														
98				X											
99	X			X	X										
100				X	X										
101	X			X	X										
102	X			X	X										
103				X											
104															
105	X				X										
106				X	X										
107	X			X	X										
108	X				X										
109	X				X										
110				X	X										
111				X	X										
112	X				X										
113				X	X										
114					X										
115	X			X	X										
116	X			X	X										
117	X			X	X										
118															
119					X										
120															
121				X	X										
122															
123															
124				X	X										
125	X														
126	X			X	X										
127	X			X	X										
128	X			X	X										
129	X			X	X										
130	X														
131	X			X											
132	X			X	X										
133	X			X	X										
134	X				X										
135	X				X										
136	X			X	X										
137	X			X	X										
138					X										
139															

ADDITIONAL PARKING ACCUMULATION SURVEY DATA - *Friday, December 8th, 2017*

Spot #	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
140															
141	X														
142	X			X											
143	X			X	X										
144	X			X	X										
145	X			X	X										
146	X			X	X										
147	X			X	X										
Occupied	**85**	**0**	**0**	**95**	**101**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Vacant	57	142	142	47	41	142	142	142	142	142	142	142	142	142	142
Total Supply	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142
Utilization (%)	59.9%	0.0%	0.0%	66.9%	71.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

ACI JET EASTSIDE LEASEHOLD



ACI JET EASTSIDE LEASEHOLD

JOHN WAYNE AIRPORT
ORANGE COUNTY

SECTION 8 – PENALTIES AND PROHIBITIONS

8.1.7 USE OF AIR TERMINAL FOR PASSENGERS OR BAGGAGE REQUIRED

(a) Except as may be allowed under the authority of subsection (b), no *Air Carrier* or *Commuter Carrier* shall provide services or engage in activities related to the service of air passengers and their baggage except through and in facilities designated for that purpose by the *County* in the THOMAS F. RILEY TERMINAL.

(b) Any *Qualified Commuter Carrier* may apply to the *Airport Director*, in writing, for permission to conduct passenger or related operations at the location of a Fixed Base Operator ("FBO") which is a tenant of the *County*. The application shall provide such information as may be required or requested by the *Airport Director*. If the *Airport Director* or the *Board of Supervisors* authorizes *Commuter Carrier* operations at a FBO location, the authority of the applicant to conduct such operations shall be subject to such conditions as the *Airport Director* or the *Board* may impose on such operations.

HISTORICAL NOTE

December 1990 Amendments. **This section was added by the December 1990 amendments, although it is simply a restatement of preexisting policy of the *County* (and existing limitations on the carriers through their leases and otherwise). This limitation on use is an element of the City of Newport Beach "settlement agreement," and amending the PLAN to include this restatement of existing limitations is intended principally to make the PLAN itself a more complete and self-contained statement of *County* regulation of commercial use of *JWA*.**

8.2 AFFILIATE OPERATIONS – PROHIBITION

Except as expressly permitted by this section, and except as permitted by Sections 3.9 and 3.10 of this PLAN and any other relevant provisions of the PLAN relative to the operation of *Associated Operating Groups*, *Affiliated Carriers* shall not simultaneously conduct *Regularly Scheduled Air Service* at *JWA*.

HISTORICAL NOTE

October 1994 Amendments. **On October 4, 1994, the *Orange County Board of Supervisors* approved a series of amendments to the affiliate policy provisions of the ACCESS PLAN. These amendments included a number of regulations which apply to the formation of, allocations to, and general operation of *Associated Operating Groups*. This section was revised consistent with these approved amendments.**