



CITY OF ALBUQUERQUE

Albuquerque, New Mexico

Office of the Mayor

Mayor Timothy M. Keller

INTER-OFFICE MEMORANDUM

10/7/2024

TO: Dan Lewis, President, City Council

FROM: Timothy M. Keller, Mayor



SUBJECT: Mayor's Recommendation of Award for Financial Services and Strategic Planning Consultant, RFP-2024-581-AVI-CG

The City of Albuquerque's Aviation Department, in conjunction with the Department of Finance and Administration Services, Purchasing Division, issued the RFP for Financial Services and Strategic Planning Consultant.

The RFP was posted on the Purchasing e-Procurement, Bonfire website on June 13, 2024 and advertised in the Albuquerque Journal on June 16, 2024.

The City received two (2) responses to this solicitation. The ad hoc evaluation committee evaluated and scored the proposals received in accordance with the evaluation criteria published in the RFP. After thoroughly reviewing and scoring the proposals, The Research Associates and WJ Advisors LLC scored the highest of all responsive offerors. The ad hoc committee found the Research Associates and WJ Advisors LLC to be both responsive and qualified and recommends an award to both offeror's named.

I concur with this recommendation.

The City of Albuquerque's Aviation Department will manage this contract.

Mayor's Recommendation of Award for Financial Services and Strategic Planning Consultant, RFP-2024-581-AVI-CG

Approved:

Approved as to Legal Form:


Samantha Sengel, EdD Date
Chief Administrative Officer

10/25/24

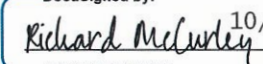
DocuSigned by:

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City Attorney

10/21/2024 | 3:40
Date

DS
M M
PM EDT
ME

Recommended:

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10/9/2024 | 7:29 AM PDT
4E327F3E2466405... Date



Cover Analysis

- 1. What is it?**
Approval of the award for Financial Services and Strategic Planning Consulting RFP for Aviation.
- 2. What will this piece of legislation do?**
The action will award the contract to both WJ Advisors and The Research Associates.
- 3. Why is this project needed?**
Aviation needs the contract in order to establish the yearly RAC and Airline Rates and Charges. This will also allow the Sunport to conduct feasibility studies and enhance commercial development.
- 4. How much will it cost and what is the funding source?**
These contracts will cost \$700k annually and are already contemplated in the FY25 Aviation Budget, as well as in previous years budgets.
- 5. Is there a revenue source associated with this contract? If so, what level of income is projected?**
This is strictly an expense contract and has no revenue component.
- 6. What will happen if the project is not approved?**
Aviation will have to reestablish all rate models and not be able to ensure that the next Airline agreement meets current industry standards.
- 7. Is this service already provided by another entity?**
Yes, the service is currently being done by WJ Advisors. Their contract is set to run out of funds in FY24.

FISCAL IMPACT ANALYSIS

TITLE: Financial Services and Strategic Planning RFP Award

R: O:
 FUND: 611
 DEPT: 1110000

- No measurable fiscal impact is anticipated, i.e., no impact on fund balance over and above existing appropriations.
- (If Applicable) The estimated fiscal impact (defined as impact over and above existing appropriations) of this legislation is as follows:

	Fiscal Years			
	2025	2026	2027	Total
Base Salary/Wages				-
Fringe Benefits at				-
Subtotal Personnel	-	-	-	-
Operating Expenses		-		-
Property			-	-
Indirect Costs	-	-	-	-
Total Expenses	\$ -	\$ -	\$ -	\$ -
<input checked="" type="checkbox"/> Estimated revenues not affected				
<input type="checkbox"/> Estimated revenue impact				
Revenue from program				0
Amount of Grant		-	-	
City Cash Match				
City Inkind Match				
City IDOH	-	-	-	-
Total Revenue	\$ -	\$ -	\$ -	\$ -

These estimates do not include any adjustment for inflation.
 * Range if not easily quantifiable.

Number of Positions created

COMMENTS: This will not have any change to the budget.

COMMENTS ON NON-MONETARY IMPACTS TO COMMUNITY/CITY GOVERNMENT:

This will allow the airport to remain competitive and recruit new routes and airlines that will help keep costs lower for the general public.

PREPARED BY:

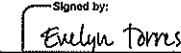
APPROVED:

DocuSigned by:

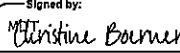
 FISCAL ANALYST

DocuSigned by:
 Richard McWhorter/9/2024 | 7:29 AM PDT
 DIRECTOR

REVIEWED BY:

Signed by:

 EXECUTIVE BUDGET ANALYST

DocuSigned by:
 Lawrence Davis/9/18/2024 | 5:02 PM
 BUDGET OFFICER

Signed by:

 CITY ECONOMIST



City of Albuquerque

Department of Finance and Administrative Services

Timothy M. Keller, Mayor

Interoffice Memorandum

Date 8/26/2024 | 10:12 AM MDT

TO: Kevin Sourisseau, Chief Financial Officer
FROM: Richard McCurley, Director, Department of Aviation
SUBJECT: **Recommendation of Award –**
RFP Number: RFP-2024-581-AVI-CG
RFP Name: Financial Services and Strategic Planning Consultant

DS
RM

The Department of Finance and Administrative Services, Purchasing Division, issued the subject solicitation in conjunction with the Department of Aviation for Financial Services and Strategic Planning Consultant.

The solicitation was posted on the Purchasing website and advertised in the Albuquerque Journal. The number of responses received for evaluation were two (2).

The Ad Hoc Evaluation Committee evaluated and scored the responses in accordance with the evaluation criteria published in the RFP and recommends award of contract to both WJ Advisors LLC and The Research Associates.

I concur with this recommendation. Listed below are the composite scores for the two (2) responses received:

COMPANY NAME	SCORE
WJ Advisors LLC	830
The Research Associates	738

The Department that will be managing this contract is Aviation Department

Approved:

DocuSigned by:

9/11/2024 | 7:27 AM MDT

Kevin Sourisseau

Kevin Sourisseau

Chief Financial Officer

Attachment: Scoring Summary



RFP-2024-581-AVI-CG - Financial Services and Strategic Planning Consultant Scoring Summary

	Total	A-1 - Experience	A-2 - Proposed Approach	A-3 - Proposed Project Management and Resources	A-4 - Training	C-1 - Cost Proposal
Supplier	/ 1,000.00 pts	/ 300 pts	/ 200 pts	/ 300 pts	/ 100 pts	/ 100 pts
WJ Advisors LLC	830	298	180	273	78	0
The Research Associates	738	208	142	217	72	100

City of Albuquerque

Request for Proposals

Solicitation Number: RFP-2024-581-AVI-CG

Financial Services and Strategic Planning Consultant
6/13/2024

THIS IS A FEDERALLY-FUNDED PROJECT



Deadline for Receipt of Proposals: July 16, 2024 4:00 p.m. (Mountain Time)
The City eProcurement System will not allow Proposals to be submitted after this date and time.

City of Albuquerque
Department of Finance and Administrative Services
Purchasing Division
V2024.04.15 JLB

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Suspension and Debarment Certification
Lobbying Certification
Certification of Bidder Regarding Equal Employment Opportunity

INTRODUCTION

The City of Albuquerque Aviation Department (“City”) is requesting proposals from all interested and qualified Offerors to provide Financial Services and Strategic Planning for the Albuquerque International Sunport and the Double Eagle II Reliever Airport (Albuquerque Airport System).

The purpose of this Request for Proposals (“RFP”) is to provide a format for the evaluation of proposals from Offerors meeting the qualifications and experience as described in Part 2, Proposal Format of this RFP, and other Offeror’s approach to services as described in Part 3, Scope of Services of this RFP.

The City plans to executed a Professional Services Agreement (Agreement) with the successful Offeror.

General Information Regarding the Albuquerque Airport System

Albuquerque International Sunport: The Albuquerque International Sunport (Sunport) is a leading center for worldwide transportation that advances local, regional and international commerce and creates an authentic southwestern travel experience. Its mission is to plan and deliver premier aviation services that contribute positively to Albuquerque and the State of New Mexico by assuring a safe, pleasurable airport experience for passengers and quality services for our customers.

The Sunport is the principal air carrier airport serving the Albuquerque Metropolitan Area and the State of New Mexico. Owned by the City of Albuquerque and operated by the City’s Aviation Department, the Sunport is comprised of 2,457 acres and is located 5 miles southeast of downtown Albuquerque.

The passenger facilities of the Sunport include a terminal complex with more than 550,000 square feet of interior space, including 22 air carrier aircraft gates as well as one regional/commuter gate area. The 22 air carrier gates are situated in a linear east-west concourse alignment, parallel to the terminal complex and connected to it via a terminal concourse connector. The eastern portion of the concourse is referred to as Concourse A and the western portion is referred to as Concourse B. An International gate is located at the west end of the terminal complex and is used for International arrivals only. The surrounding terminal area includes a two-level terminal loop roadway system, a 3,400 space 4 level parking garage, and two surface lots: 1) a 550 space uncovered lot, called the credit card lot and 2) a 450 space covered lot, called the economy lot.

The Sunport has two principal runways for air carrier use: Runway 8-26, the primary air carrier/military runway is 13,793 feet long and 150 feet wide; and Runway 3-21, the secondary runway is 10,000 feet long and 150 feet wide. The primary general aviation

runway is a cross wind air carrier, Runway 12-30, is 6,000 feet in length and 150 feet wide.

The City operates a Consolidated Rental Car Facility, which is located on approximately 76 acres of airport property southwest of the terminal complex. The facility is comprised of a customer service building, ready/return parking area, and service center facilities. The Consolidated Rental Car Facility is currently utilized by eight rental car companies including Advantage, Alamo/National, Avis, Budget, Dollar/Thrifty, Enterprise, Hertz and Payless.

Statistical Information: The Sunport is classified as a medium hub airport by the Federal Aviation Administration (FAA). In 2023, approximately 5.3 million passengers used the Sunport. The Sunport primarily serves an origination-destination (O&D) air traffic market, with approximately 90% of the passengers using the Sunport to begin or end their trips in the Albuquerque area and other parts of the State.

Historical Passenger Activity

Calendar Year	Enplanements	Deplanements
2019	2,712,464	2,692,623
2020	908,466	907,945
2021	1,719,618	1,704,485
2022	2,360,711	2,353,693
2023	2,658,750	2,652,214

Scheduled service at the Sunport is provided by six mainline airlines as well as regional affiliate and commuter airlines. Six airlines (the “Signatory Passenger Airlines”) operate under the Amended and Restated Airline Operating Agreement and Terminal Building Lease, each with five-year terms expiring June 30, 2025. Collectively, the Signatory Passenger Airlines lease approximately 80.4% of the available exclusive and preferential use space in the Terminal Building

In addition to these six mainline airlines and their affiliate regional carriers, Advanced Air, is the only commuter airline serving the Sunport, and serves smaller communities in New Mexico.

Three cargo airlines, Amazon, FedEx and UPS (the “Cargo Airlines”), provide air cargo service at the Sunport. FedEx and UPS have both entered into a new Amended and Restated Scheduled Cargo Airline Operating Agreement and Air Cargo Building Lease with the City expiring June 30, 2025 (the “Cargo Airline Agreement”). Amazon operates as a non-signature cargo airline.

Double Eagle II Reliever Airport: Double Eagle II Reliever Airport (DEII) is comprised of 4,400 acres at an elevation of 5,834 feet above sea level. DEII is located fifteen miles northwest of downtown Albuquerque and approximately six miles north of Interstate 40.

DEII is the City's primary general aviation airport providing private aircraft owners a viable alternative to operating at the Sunport. DEII is home to approximately 150 based private and corporate aircrafts, and accommodates more than 66,000 annual operations, which include training flights, military flights, air ambulance, and charter air service.

DEII has two active runways: Runway 4-22 is 7,398 feet in length by 100 feet wide, with full ILS and MALSR; and Runway 17-35 is 5,999 feet in length by 100 feet wide, and has REIL on each end.

The City reserves the right to award more than one contract under this RFP.

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PART 1

INSTRUCTIONS TO OFFERORS

1.1 RFP Number and Title: RFP-2024-581-AVI-CG,"Financial Services and Strategic Planning Consultant"

1.2 Proposal Due Date: July 16, 2024 - NLT 4:00 PM (Local Time)

The time and date Proposals are due shall be strictly observed.

1.3 Purchasing Division: This Request for Proposals ("RFP") is issued on behalf of the City of Albuquerque by its Purchasing Division, which is the sole point of contact during the entire procurement process.

1.4 Authority: Chapter 5, Article 5 of the Revised Ordinances of the City of Albuquerque, 1994, ("Public Purchases Ordinance"). The City Council, pursuant to Article 1 of the Charter of the City of Albuquerque and Article X, Section 6 of the Constitution of New Mexico, has enacted this Public Purchases Ordinance as authorized by such provisions and for the purpose of providing maximum local self-government. To that end, it is intended that this Public Purchases Ordinance shall govern all purchasing transactions of the City and shall serve to exempt the City from all provisions of the New Mexico Procurement Code, as provided in Section 13-1-98K, NMSA 1978.

1.5 Acceptance of Proposal: Acceptance of Proposal is contingent upon Offeror's certification and agreement by submittal of its Proposal, to comply and act in accordance with all provisions of the following:

1.5.1 City Public Purchases Ordinance

1.5.2 City Purchasing Rules and Regulations: These Rules and Regulations ("Regulations") are written to clarify and implement the provisions of the Public Purchases Ordinance. These Regulations establish policies, procedures, and guidelines relating to the procurement, management, control, and disposal of goods, services, and construction, as applicable, under the authority of the Ordinance.

1.5.3 Civil Rights Compliance: Acceptance of Proposal is contingent upon the Offeror's certification and agreement by submittal of its Proposal, to comply and act in accordance with all provisions of the Albuquerque Human Rights Ordinance, the New Mexico Human Rights Act, Title VII of the U.S. Civil Rights Act of 1964, as amended, and all federal statutes and executive orders, New Mexico statutes and City of Albuquerque ordinances and resolutions relating to the enforcement of civil rights and affirmative action. Questions regarding civil rights or affirmative action compliance requirements should be directed to the City of Albuquerque Human Rights Office.

1.5.4 Americans with Disabilities Act Compliance: The Offeror certifies and agrees, by submittal of its Proposal, to comply and act in accordance with all applicable provisions of the Americans With Disabilities Act of 1990 and federal regulations promulgated thereunder.

1.5.5 Insurance and Bonding Compliance: Acceptance of Proposal is contingent upon Offeror's ability to comply with the insurance requirements as stated herein. Please include a certificate or statement of compliance in your Proposal and bonds as required.

1.5.6 Ethics:

1.5.6.1 Fair Dealing. The Offeror warrants that its Proposal is submitted and entered into without collusion on the part of the Offeror with any person or firm, without fraud and in good faith. Offeror also warrants that no gratuities, in the form of entertainment, gifts or otherwise, were, or will be offered or given by the Offeror, or any agent or representative of the Offeror to any officer or employee of the City with a view toward securing a recommendation of award or subsequent contract or for securing more favorable treatment with respect to making a recommendation of award.

1.5.6.2 Conflict of Interest. The Offeror warrants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required under the contract resulting from this RFP. The Offeror also warrants that, to the best of its knowledge, no officer, agent or employee of the City who shall participate in any decision relating to this RFP and the resulting contract, currently has, or will have in the future, a personal or pecuniary interest in the Offeror's business.

1.5.7 Participation/Offeror Preparation: The Offeror may not use the consultation or assistance of any person, firm company who has participated in whole or in part in the writing of these specifications or the Scope of Services, for the preparation of its Proposal or in the management of its business if awarded the contract resulting from this RFP.

1.5.8 Debarment or Ineligibility Compliance: By submitting its Proposal in response to this RFP, the Offeror certifies that (i) it has not been debarred or otherwise found ineligible to receive funds by any agency of the federal government, the State of New Mexico, any local public body of the State, or any state of the United States; and (ii) should any notice of debarment, suspension, ineligibility or exclusion be received by the Offeror, the Offeror will notify the City immediately.

Any Proposal received from an Offeror that is, at the time of submitting its Proposal or prior to receipt of award of a contract, debarred by or otherwise ineligible to receive funds from any agency of the federal government, the State of New Mexico,

any local public body of the State, or any state of the United States, shall be rejected.

Upon receipt of notice of debarment of an Offeror awarded a contract as a result of this RFP ("Contractor"), or other ineligibility of the Contractor to receive funds from any agency of the federal government, the State of New Mexico, any local public body of the State, or any state of the United States, the City shall have the right to cancel the contract with the Contractor resulting from this RFP for cause in accordance with the terms of said contract.

1.5.9 Goods Produced Under Decent Working Conditions: It is the policy of the City not to purchase, lease, or rent goods for use or for resale at City owned enterprises that were produced under sweatshop conditions. The Offeror certifies, by submittal of its Proposal in response to this solicitation, that the goods offered to the City were produced under decent working conditions. The City defines "under decent working conditions" as production in a factory in which child labor and forced labor are not employed; in which adequate wages and benefits are paid to workers; in which workers are not required to work more than 48 hours per week (or less if a shorter workweek applies); in which employees are free from physical, sexual or verbal harassment; and in which employees can speak freely about working conditions and can participate in and form unions. [*Council Bill No. M-8, Enactment No. 9-1998*]

1.5.10 Graffiti Free: When required, the Contractor will be required to furnish equipment, facilities, or other items required to complete these services, that are graffiti-free. Failure of Contractor to comply with this requirement may result in cancellation of the contract resulting from this RFP.

1.6 City Contact: The sole point of contact for this RFP is the City of Albuquerque Purchasing Division. Questions regarding this RFP should be directed to the following Purchasing representative unless otherwise specified in the solicitation. The City Contact will communicate with Offerors through its e-procurement system, Bonfire. Offerors will receive e-mail notifications from Bonfire to the e-mail that Offeror included in its Bonfire registration. Offerors are responsible for monitoring any communications sent through Bonfire and responding to any requests for information or directives within stated deadlines. Offerors who fail to abide by this instruction may be deemed nonresponsive.

- Estevan Vargas, Assistant Procurement Officer, Department of Finance and Administrative Services, Purchasing Division
- Phone: (505) 768-4945 or E-Mail: efvargas@cabq.gov
- Post Office Box 1293, Albuquerque, New Mexico 87103

1.7 Contract Management: The contract resulting from this RFP will be managed by the Aviation Department, Finance Division.

1.8 Clarification: Any explanation desired by an Offeror regarding the meaning or interpretation of this RFP must be requested in writing not less than ten (10) working days prior to the deadline for the receipt of Proposals to allow sufficient time for a reply to reach all Offerors before the submission of their Proposals. No extension of time will be granted based on submission of inquiries subsequent to the required date nor will such inquiries be answered. All inquiries must be directed to the Purchasing Division as stated herein and must be submitted through the City's eProcurement system Bonfire. **The City will not respond to questions that are submitted by any other means than electronically through the City's eProcurement system.** Oral explanations or instructions given before the award of the contract or at any time will not be binding. Purchasing shall prepare answers to questions in the form of Addenda to this RFP and shall post all such Addenda to the online eProcurement System.

1.9 Submission of Proposals. The Offeror's sealed Proposal must be submitted **electronically** through the eProcurement system pursuant to the following requirements:

1.9.1 Electronic Copy. Submit your complete Proposal including all forms, attachments, exhibits, Technical Proposal, Cost Proposal, etc. using the eProcurement System at <https://cabq.bonfirehub.com/portal/?tab=openOpportunities>. Please allow a minimum of two (2) business days to submit your proposal. If you do not have a username and password, please register as this is the only method to submit electronically on the Bonfire portal. Please make sure to register on the system in order to receive notices and submit a response to a solicitation. For assistance, please contact support@gobonfire.com or 1-800-354-8010. **Failure to submit your proposal electronically through the City's eProcurement system shall result in your proposal being deemed nonresponsive.**

1.9.2 Format. Each file uploaded to the eProcurement System shall be in single PDF format unless otherwise indicated. The City's preferred format is Optical Character Recognition (OCR) searchable PDF format. Do not encrypt files and do not password protect the documents submitted.

1.9.3 ALL PROPOSALS MUST BE RECEIVED BY THE CITY PURCHASING DIVISION AS SPECIFIED HEREIN. IF YOU FAIL TO COMPLY WITH THE SUBMISSION REQUIREMENTS IN THIS SECTION 1.9, THE CITY SHALL DEEM YOUR PROPOSAL NONRESPONSIVE.

1.9.4 No other methods of Proposal delivery. Neither telephone, facsimile, nor telegraphic Proposals shall be accepted.

1.9.5 Modification. Proposals may be modified or withdrawn only by written notice, provided such notice is received prior to the Proposal Due Date.

1.9.6 Receipt of Proposals. The only acceptable evidence to establish the time of receipt of Proposals by City Purchasing Office is the time-date stamp of the EProcurement System.

1.9.7 Acknowledgment of Addenda to the Request for Proposals. Receipt of Addenda to this RFP by an Offeror must be acknowledged in the City's eProcurement system. Failure to acknowledge an Addendum may result in your response being deemed non-responsive.

1.10 Modifications to Scope of Services: In the event that sufficient funds do not become available to complete each task in the Scope of Services, the Scope of Services may be amended, based upon the cost breakdown required in the Cost Proposal.

1.11 Required Contract Terms:

1.11.1: City Terms: The Required Contract Terms can be accessed at this link <https://www.cabq.gov/dfa/purchasing-division/vendor-services/terms-and-conditions> click on "Request for Proposals Required Contract Terms". The Offeror certifies that it accepts the Required Contract Terms, or has uploaded its exceptions to the Required Contract Terms in the City's e-Procurement system, under "Requested Information" "Exceptions to Section 1.11 Required Contract Terms." Any exceptions shall be identified by the RFP Section, Subsection, and must state the specific exception the Offeror has, as well as any alternative language. The City's receipt of exceptions in a response is not an acceptance of any requested changes to the Required Contract Terms. The Required Contract Terms may differ from the terms in the final contract awarded under this RFP.

1.11.2 Federal Terms: The Federally-Required Contract Provisions set forth in 2 CFR Section 200.327 are incorporated herein in as Appendix B and to the Contract awarded under this RFB by this reference. The Offeror shall affirmatively agree to comply with the Federally-Required Contract Provisions in the City's e-Procurement system, under the "Requested Information" "Agree to Federally-Required Contract Terms". **If you do not agree to these terms, the City will deem your Proposal nonresponsive.**

1.12 Contract Term: The contract resulting from this solicitation is anticipated to have a term of two (2) years with five (5) possible one (1) year extensions.

1.13 Evaluation Period: The City reserves the right to analyze, examine and interpret any Proposal for a period of ninety (90) days after the hour and date specified for the receipt of Proposals. The City reserves the right to extend the evaluation period if it feels, in its sole discretion, such an extension would be in the best interest of the City.

1.14 Evaluation Assistance: The City, in evaluating Proposals, reserves the right to use any assistance deemed advisable, including City contractors and consultants.

1.15 Rejection and Waiver: The City reserves the right to reject any or all Proposals and to waive informalities and minor irregularities in Proposals received.

1.16 Award of Contract:

1.16.1 When Award Occurs: Award of contract occurs when a Purchase Order is issued or other evidence of acceptance by the City is provided to the Offeror. A Recommendation of Award does not constitute award of contract.

1.16.2 Award: If a contract is awarded, it shall be awarded to the responsive and responsible Offeror whose Proposal conforming to this RFP will be most advantageous to the City as set forth in the Evaluation Criteria.

1.17 Cancellation: This RFP may be canceled for any reasons and any and all Proposals may be rejected in whole or in part when it is in the best interests of the City.

1.18 Negotiations: Negotiations may be conducted with the Offeror(s) recommended for award of contract.

1.19 City-Furnished Property: No material, labor, or facilities will be furnished by the City unless otherwise provided for in this RFP.

1.20 Proprietary Data:

1.20.1 The file and any documents relating to this RFP, including the Proposals submitted by Offerors, shall be open to public inspection after the recommendation of award of a contract has been approved by the Mayor, or his designee. An Offeror may designate material as Trade Secrets, Proprietary Data, and/or other Confidential Data by clearly marking that material as "Trade Secret", "Proprietary Data", or "Confidential Data" within the Proposal submitted (uploaded) in response to this RFP. **Pricing and makes and models or catalog numbers of items offered, delivery terms, and terms of payment shall not be so designated. Further, any Proposal in which a majority of pages are designated as Trade Secret, Proprietary Data, or Confidential Data may be deemed nonresponsive.**

1.20.2 The City will endeavor to restrict distribution of material designated as "Trade Secret", "Proprietary Data", or "Confidential Data" and provided separately to only those individuals involved in the review and analysis of the Proposals. However, Offerors are advised that, if a request for inspection of records under the New Mexico Inspection of Public Records Act (Sections 14-2-1 et seq, NMSA 1978) ("Act") is received for such materials, and they are not exempt under the Act, the City is required to disclose those records. The City shall, to the extent possible under the Act, provide the Offeror with notice before any disclosure to allow the Offeror an opportunity, within the Act's fifteen (15) day deadline, to initiate legal action (such as an injunction or other judicial remedy) to prevent the release of Trade Secret, Proprietary Data, or Confidential Data, should the Offeror wish to do so. **Notwithstanding anything to the contrary herein, the City shall not be responsible to the Offeror for any disclosure of records required by the Act or an order of a court or other tribunal with jurisdiction over the City.**

1.21 Preferences: THIS IS A FEDERALLY-FUNDED PROJECT. NO PREFERENCES SHALL BE APPLIED.

1.22 Request for Proposals Protest Process:

1.22.1 RFP Documents: If the protest concerns the specifications for the RFP or other matters pertaining to the solicitation documents, the protest must be filed with

the Chief Procurement Officer no later than 5:00 p.m., ten (10) business days prior to the deadline for the receipt of Proposals.

1.22.2 Recommendation of Award: If the protest concerns the Recommendation of Award, the protest must be filed with the Chief Procurement Officer no later than 5:00 p.m. of the tenth (10th) business day after the receipt of notice of the Recommendation of Award.

1.22.3 Timely Protests: Protests must be received by the Chief Procurement Officer prior to the appropriate deadline as set out herein, or they will be rejected. The Chief Procurement Officer may waive the deadline for good cause, including a delay caused by the fault of the City. Late delivery by the U.S. Postal Service or other carrier shall not be considered good cause.

1.22.4 How to File: Any Offeror who is aggrieved in connection with a competitive solicitation or recommendation of award of a contract may protest to the City Chief Procurement Officer. The protest shall be addressed to the Chief Procurement Officer, must be submitted in written form and must be legible. Protests may be electronically delivered via email or mailed. Facsimile, telephonic, telegraphic or any other type of electronic protests will not be accepted.

1.22.5 Required Information: The protest shall contain at a minimum the following:

1.22.5.1 The name and address of the protesting party;

1.22.5.2 The number of the competitive solicitation;

1.22.5.3 A clear statement of the reason(s) for the protest detailing the provisions believed to have been violated;

1.22.5.4 Details concerning the facts, which support the protest;

1.22.5.5 Attachments of any written evidence available to substantiate the claims of the protest; and

1.22.5.6 A statement specifying the ruling requested.

1.22.6 Delivery of Protests:

1.22.6.1 By Mail: Protests may be mailed in an envelope marked "PROTEST" with the solicitation number. Protests which are mailed should be addressed as follows:

Chief Procurement Officer
City of Albuquerque, Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103
PROTEST, RFP Number

1.22.6.2 By Electronic Mail: Protests may be emailed to:

Jennifer Bradley, Chief Procurement Officer
jlbradley@cabq.gov

The message should clearly indicate "PROTEST" and the RFP number in the subject line.

1.22.7 Protest Response by Chief Procurement Officer: The Chief Procurement Officer will, after evaluation of a protest, issue a response. Only the issues outlined in the written protest will be considered by the Chief Procurement Officer.

1.22.8 Protest Hearing: If a hearing is requested, the request must be included in the protest and received within the time limit. Only the issues outlined in the protest will be considered by the Chief Procurement Officer, or may be raised at a protest hearing. The granting of a hearing shall be at the discretion of the Chief Procurement Officer following review of the request.

1.23 Insurance:

1.23.1 General Conditions: The City will require the successful Offeror, referred to as the Contractor, to procure and maintain at its expense during the term of the contract resulting from the RFP, insurance in the kinds and amounts hereinafter provided with insurance companies authorized to do business in the State of New Mexico, covering all operations of the Contractor under the contract. Upon execution of the contract and on the renewal of all coverages, the Contractor shall furnish to the City a certificate or certificates in form satisfactory to the City as well as the rider or endorsement showing that it has complied with these insurance requirements. All certificates of insurance shall provide that thirty (30) days written notice be given to the Risk Manager, Department of Finance and Administrative Services, City of Albuquerque, P.O. Box 470, Albuquerque, New Mexico, 87103, before a policy is canceled, materially changed, or not renewed. Various types of required insurance may be written in one or more policies. With respect to all coverages required other than professional liability or workers' compensation, the City shall be named an additional insured. All coverages afforded shall be primary with respect to operations provided.

1.23.2 Approval of Insurance: Even though the Contractor may have been given notice to proceed, it shall not begin any work under the contract resulting from this RFP until the required insurance has been obtained and the proper certificates (or policies) are filed with the City. Neither approval nor failure to disapprove certificates, policies, or the insurance by the City shall relieve the Contractor of full responsibility to maintain the required insurance in full force and effect. If part of the contract is sublet, the Contractor shall include any or all subcontractors in its

insurance policies, or require the subcontractor to secure insurance to protect itself against all hazards enumerated herein, which are not covered by the Contractor's insurance policies.

1.23.3 Coverage Required: The kinds and amounts of insurance required are as follows:

1.23.3.1 Commercial General Liability Insurance. A commercial general liability insurance policy with combined limits of liability for bodily injury or property damage as follows:

\$2,000,000	Per Occurrence
\$2,000,000	Policy Aggregate
\$1,000,000	Products Liability/Completed Operations
\$1,000,000	Personal and Advertising Injury
\$ 5,000	Medical Payments

Said policy of insurance must include coverage for all operations performed for the City by the Contractor and contractual liability coverage shall specifically insure the hold harmless provisions of the contract resulting from this RFP.

1.23.3.2 Automobile Liability Insurance. A comprehensive automobile liability insurance policy with liability limits in amounts not less than \$1,000,000 combined single limit of liability for bodily injury, including death, and property damage in any one occurrence. The policy must include coverage for the use of all owned, non-owned, hired automobiles, vehicles and other equipment both on and off work.

1.23.3.3 Workers' Compensation Insurance. Workers' compensation insurance policy for the Contractor's employees, in accordance with the provisions of the Workers' Compensation Act of the State of New Mexico, (the "Act"). If the Contractor employs fewer than three employees and has determined that it is not subject to the Act, it will certify, in a signed statement, that it is not subject to the Act. The Contractor will notify the City and comply with the Act should it employ three or more persons during the term of the contract resulting from this RFP.

1.23.4 Increased Limits: During the life of the contract the City may require the Contractor to increase the maximum limits of any insurance required herein. In the event that the Contractor is so required to increase the limits of such insurance, an appropriate adjustment in the contract amount will be made.

1.23.5 Additional Insurance: The City may, as a condition of award of a contract, require a successful Offeror to carry additional types of insurance. The type and

limit of additional insurance is dependent upon the type of services provided via the contract by the successful Offeror.

1.24 Pay Equity Documentation. All Proposals shall include a Pay Equity Reporting Form that can be accessed at <https://www.cabq.gov/gender-pay-equity-initiative>. Offerors who believe they are exempt because they are an out-of-state contractor (meaning that you have no facilities and no employees working in New Mexico) are not required to report data, but must still submit a Pay Equity Reporting Form with the box verifying the exempt status checked. **Any Proposal that does not include a Pay Equity Reporting Form shall be deemed nonresponsive, as stated in the Public Purchases Ordinance, 5-5-31.** A Pay Equity Reporting Form will be automatically issued within two (2) business days of completing your information at the link above. To ensure you have your form before the deadline for solicitation close, please access the link at least three (3) business days prior to the solicitation deadline. Please contact the "City Contact" identified above in Section 1.6 with any questions about the Pay Equity Reporting Form.

PART 2 PROPOSAL FORMAT

A “Proposal” consists of two distinct sections—a “Technical Proposal” and a “Cost Proposal”—that are submitted separately in Bonfire. Failure to submit the Technical Proposal and Cost proposal separate, shall result in the City deeming your submission non-responsive.

The City reserves the right to award more than one contract under this RFP.

2.1 Technical Proposal Format, Section One

2.1.1 Offeror Identification: State name and address of your organization or office and nature of organization (individual, partnership or corporation, private or public, profit or non-profit). Subcontractors, if any, must be identified in a similar manner. Include name, email address and telephone number of person(s) in your organization authorized to execute the contract resulting from this RFP. Submit a statement of compliance with all laws stated herein. Submit a statement of agreement to the Required Contract Terms; state exceptions as directed in Section 1.11. Show receipt of Addenda if applicable. Provide a statement or show ability to carry the insurance specified.

2.1.2 Experience:

2.1.2.1 Current Experience. State relevant experience of the company and person(s) who will be actively engaged in the services, including experience of subcontractors. Submit resumes for the individuals who will be performing the services for the City.

2.1.2.2 Provide samples of business and marketing deliverables, cost-benefit analysis, and feasibility studies. You will be asked provide these services as part of the Scope of Services.

2.1.2.3 Past Experience. Describe a minimum of three (3) contracts for services of similar scope and size, which either are current or are now complete; state for whom the work was performed, year completed, and a letter of reference for each regarding the work. **References must be for work performed in the past three to five (3 to 5) years. DO NOT use City employees or any City elected officials as a reference. The City will not contact and will not assign any evaluation points for references from City employees or elected officials.** State relevant experience with other municipalities or government entities.

2.1.2.4 Specifically discuss your experience in the above sections as it relates providing services to airports and the aviation field in general.

2.1.3 Proposed Approach to Services: Discuss fully your proposed approach to each of the services described in Part 3, Scope of Services.

2.1.4 Proposed Project Management and Resources: Describe individual staff and subcontractor's responsibilities with lines of authority and interface with the City of Albuquerque staff. Describe resources to be drawn from in order to complete services. Include a sample management plan and a staffing plan. You will be asked to develop a management plan and a staffing plan as part of the Scope of Services.

2.1.5 Training. Demonstrate the Offeror's ability and experience in developing and training Sunport personnel in the use of consultant-prepared rates and charges models.

2.1.6 Federal Forms. Offerors shall upload the following required federal forms in the City's eProcurement system. **Any response that does not contain the fully-executed required forms shall be deemed nonresponsive.**

Suspension and Debarment Certification

Lobbying Certification

Certification of Bidder Regarding Equal Employment Opportunity

2.2 Cost Proposal Format, Section Two

2.2.1 Total Cost: Submit your Cost Proposal (Appendix A) separately from your Technical Proposal (upload Appendix A in the City's eProcurement system). **Failure to submit your cost separately from your Technical Proposal shall result in your proposal being deemed non-responsive.**

2.2.2 The Cost Proposal shall identify the hourly rates for the key personnel needed to provide the services in this RFP, to include an estimated yearly cost.

2.2.3 All Costs: All costs to be incurred and billed to the City should be described by the Offeror for each item, to allow for a clear evaluation and comparison, relative to other Proposals received. All costs should include any applicable gross receipts taxes. The Offeror should understand that the City will not pay for any amounts not included in the cost Proposal -- for example, insurance or taxes -- and that liability for items not included remains with the Offeror.

PART 3 SCOPE OF SERVICES

3.1 Financial Services. Provide financial services related to rates and charges for Sunport tenants, operators, and other users of the Sunport, including but not limited to, airlines and concessionaires.

3.1.1 Provide financial services related to the Albuquerque Airport System's capital programs, including but not limited to, analyzing, planning, forecasting and establishing the capital program.

3.1.2 Provide financial services, feasibility studies and reports, in depth analysis, and participation in rating agency meetings as they relate to airport bond sales and debt service for the Albuquerque Airport System's capital projects.

3.1.3 Provide services related to the development of leases and agreements, request for proposals, and procurement related to subjects for which financial services are required, including but not limited to, the rental car concession program, Customer Facility Charge (CFC), advertising concession program, retail concession program, and food and beverage concession program.

3.1.4 Participate in the selection and/or negotiation process related to leases and agreements developed for which financial services were rendered or analysis of concession activities and programs as provided.

3.1.5 Plan, develop, and present airport finance and related issues to Sunport personnel, including but not limited to, City Council and Airport Advisory Board.

3.1.6 Participate in planning and development of capital projects with other Albuquerque Airport System consultants, including but not limited to, consultants providing master plan, engineering, architectural, and environmental services.

3.1.7 Preparation of various cost benefit analysis to secure FAA grants-in-aid for eligible project costs, Sustainability efforts/programs and prepare Passenger Facility Charge (PFC) applications and assist with the FAA approval process. Prepare the competition plan as per AIR-21 requirements and submit to Federal Aviation Administration for approval. Prepare forecasting analysis and studies such as passenger activity, parking rates, and airline revenue projections.

3.1.8 Develop a management plan and a staffing plan to carry out the Financial Services identified in this Section.

3.1.9 Related services as may be required by the Albuquerque Airport System during the term of the Professional Services Agreement, provided that such related services are performed within the context and intent of the Professional Services Agreement.

3.2 Strategic Planning Services. Provide Strategic Planning services to include the following.

3.2.1 Prepare business and marketing, planning, in-depth analysis and studies for expansion of passenger commercial air service.

3.2.2 Prepare business and marketing, planning, in-depth analysis and studies for air cargo facilities and service.

3.2.3 Prepare non-aeronautical commercial real estate development programs for the Albuquerque Airport System Foreign Trade Zone, Aerospace Technology Park, and other revenue generating opportunities, taking into account future airport plans and needs.

3.2.4 Prepare and assist with development of the Air Carrier Incentive Program in accordance to the Federal Aviation Administration guidelines.

3.2.5 Prepare and assist with the development of the Common Use and Lease Agreement.

3.2.6 Plan, develop, and present airport finance and related issues to Sunport personnel, including but not limited to, City Council and Airport Advisory Board.

3.2.7 Provide feasibility studies and reports, business and marketing planning, and in-depth analysis of existing and future concession programs for the Sunport. The Offeror should participate in the development and establishment of these concession programs. This service shall include, but is not limited to, financial studies of facility needs, financial negotiations, and marketing forecasts.

3.2.8 Prepare feasibility studies and reports, in-depth analysis, and negotiation strategies required for the preparation and execution of airline leases and lease modifications. In addition, this service shall include, but is not limited to, the financial study of facility needs, financial negotiations, and marketing forecasts.

3.2.9 Develop a management plan and a staffing plan to carry out the Strategic Planning Services identified in this Section.

3.2.10 Related services as may be required by the Albuquerque Airport System during the term of the Professional Services Agreement, provided that such related services are performed within the context and intent of the Professional Services Agreement.

PART 4
EVALUATION OF PROPOSALS

4.1 Selection Process. The Mayor of Albuquerque shall name, for the purpose of evaluating the Proposals, an Ad Hoc Advisory Committee. On the basis of the evaluation criteria established in this RFP, the Committee shall submit to the Mayor a list of qualified firms in the order in which they are recommended. Proposal documentation requirements set forth in this RFP are designed to provide guidance to the Offeror concerning the type of documentation that will be used by the Ad Hoc Advisory Committee. Offerors should be prepared to respond to requests by the Purchasing Office on behalf of the Ad Hoc Advisory Committee for oral presentations, facility surveys, demonstrations or other areas deemed necessary to assist in the detailed evaluation process. Offerors are advised that the City, at its option, may award this request on the basis of the initial Proposals.

4.1.1 Selection of Finalist Offerors (If Applicable). The Ad Hoc Advisory Committee may select Finalist Offerors (also known as the “short list”). The Purchasing Office will notify the Finalist Offerors. Only Finalist Offerors will be invited to participate in the subsequent steps of the procurement if this Finalist process is used.

4.1.2. Oral Presentation or Demonstrations by Finalists (If Applicable). Finalist Offerors may be required to present their proposals to the Ad Hoc Advisory Committee (“Oral Presentation”). The Purchasing Office will schedule the time for each Finalist Offeror’s presentation. All Finalist Offeror Oral Presentations will be held remotely via Zoom unless notified otherwise. Each Oral Presentation will be limited to one (1) hour in duration unless notified otherwise. NOTE: The scores from the initial proposal evaluation will only carry over to the Oral Presentation evaluation in the case of a tie score after Oral Presentations.

4.2 Evaluation Criteria. The following general criteria, not listed in order of significance, will be used by the Ad Hoc Advisory Committee in recommending contract award to the Mayor. The Proposal factors will be rated on a scale of **0-1000** with weight relationships as stated below.

4.2.1 Evaluation Factors:

POINTS	EVALUATION FACTORS	SECTION IN PART 2
300	Experience	Section 2.1.2
200	Proposed Approach	Section 2.1.3
300	Proposed Project Management and Resources	Section 2.1.4
100	Training	Section 2.1.5
100	Cost Proposal	Section 2.2

4.2.2 Cost/Price Factors: The evaluation of cost factors in the selection will be determined by a cost/price analysis using your proposed figures. Please note that the lowest cost is not the sole criterion for recommending contract award.

4.2.3 Cost Evaluation. The cost/price evaluation will be performed by the City Purchasing Division or designee. A preliminary cost review will ensure that each Offeror has complied with all cost instructions and requirements. In addition, Proposals will be examined to ensure that all proposed elements are priced and clearly presented. Cost Proposals that are incomplete or reflect significant inconsistencies or inaccuracies will be scored accordingly or may be rejected by the Ad Hoc Advisory Committee if lacking in information to determine the value/price/cost relative to the services proposed.

APPENDIX B
FEDERALLY-REQUIRED CONTRACT PROVISIONS
 IN COMPLIANCE WITH 2 CFR PART 200, APPENDIX II

All Contractors with Agreements funded in whole or in part with federal funds shall be required to comply with 2 CFR Part 200, Appendix II, as follows:

1.	<p>Equal Employment Opportunity</p> <p>During the performance of this contract, the Contractor agrees as follows:</p> <p>(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:</p> <p>Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.</p> <p>(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.</p> <p>(3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.</p>	<p>All contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3; construction work.</p>
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(4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

	<p>The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.</p> <p>The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.</p> <p>The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.</p>	
<p>2.</p>	<p>Davis Bacon Act</p> <p>The Contractor agrees to place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or sub-contract must be conditioned upon the acceptance of the wage determination. The Contractor must report all suspected or reported violations to the City, who will report the same to the federal awarding agency.</p> <p>All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) and the requirements of 29 CFR Part 5, as applicable.</p>	<p>All prime construction contracts in excess of \$2,000 awarded by non-Federal entities; construction work</p>

	<p>Contractor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in wage determination made by the Secretary of Labor. Additionally, Contractor is required to pay wages not less than once a week.</p>	
<p>3.</p>	<p>Copeland Anti-Kickback Act</p> <p>Contractor shall comply with 18 U.S.C. §874, 40 U.S.C. §3145, and the requirements of 29 CFR Part 3 as may be applicable, which are incorporated by reference into this contract.</p> <p>The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA or other applicable federal agency may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor with all of these contract clauses.</p> <p>A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor or subcontractor as provided in 29 CFR §5.12.</p>	<p>For construction work over \$2,000</p>
<p>4.</p>	<p>Contract Work Hours and Safety Standards Act</p> <p>Overtime requirements: No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.</p> <p>Violation; liability for unpaid wages; liquidated damages: In the event of any violation of the clause set forth in paragraph (b)(1) of this section, the Contractor or any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States, for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section.</p> <p>Withholding for unpaid wages and liquidated damages: The City shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any</p>	<p>For contracts over \$100,000 or that involve mechanics or laborers</p>

	<p>other federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.</p> <p>Subcontracts: The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of 29 CFR §5.5, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of 29 CFR §5.5.</p>	
5.	<p>Rights to Inventions Made under a Contract or Agreement</p> <p>If the award meets the definition of “funding agreement” under 37 CFR §401.2(a) and the City wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the City must comply with the requirements of 37 CFR Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by FEMA or other applicable federal agency.</p>	For funding agreements under 37 CFR 401.2(a)
6.	<p>Clean Air Act and Federal Water Pollution Control Act</p> <p>The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §7401 <i>et seq.</i></p> <p>The Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to FEMA or other applicable federal agency, and the appropriate Environmental Protection Agency Regional Office.</p> <p>The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal assistance provided by FEMA or other applicable federal agency.</p>	For contracts over \$150,000
7.	<p>Debarment and Suspension</p> <p>This Agreement is a covered transaction for purposes of 2 CFR</p>	For all contracts: 1) over \$25,000,

	<p>Part 180 and 2 CFR Part 3000. As such, the Contractor is required to verify that none of the Contractor's principals (defined at 2 CFR §180.995) or its affiliates (defined at 2 CFR §180.905) are excluded (defined at 2 CFR §180.940) or disqualified (defined at 2 CFR §180.935).</p> <p>Contractor must comply with 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.</p> <p>This certification is a material representation of fact relied upon by the City. If it is later determined that the Contractor did not comply with 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C, in addition to remedies available to the City, the federal government may pursue available remedies, including but not limited to, suspension and/or debarment.</p> <p>The bidder or proposer agrees to comply with the requirements of 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C, while this offer is valid and throughout the period of any contract that may arise from this offer. This bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.</p>	<p>2) requiring federal agency approval, 3) for federally required audit services, or 4) a subcontract meeting requirement 1 or 2</p>
<p>8.</p>	<p>Byrd Anti-Lobbying Amendment</p> <p>Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. §1352. Each tier shall also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certifications to the awarding agency.</p> <p>If the Agreement exceeds \$100,000, the Contractor must certify compliance with the Byrd Anti-Lobbying Amendment.</p>	<p>For all contracts; contracts over \$100,000 must certify compliance</p>
<p>9.</p>	<p>Procurement of Recovered Materials</p> <p>In the performance of this Agreement, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:</p> <ol style="list-style-type: none"> 1. Competitively within a time frame providing for compliance 	<p>For state or political subdivision of the state, if the purchase price of an item exceeds</p>

	<p>with the Agreement performance schedule;</p> <p>2. Meeting Agreement performance requirements; or</p> <p>3. At a reasonable price.</p> <p>Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.</p> <p>The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.</p>	<p>\$10,000 (including value of item acquired over the year)</p>
<p>10.</p>	<p>§ 200.216 Prohibition on certain telecommunications and video surveillance services or equipment.</p> <p>(a) Recipients and sub recipients are prohibited from obligating or expending loan or grant funds to:</p> <p>(1) Procure or obtain;</p> <p>(2) Extend or renew a contract to procure or obtain; or</p> <p>(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).</p> <p>(i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).</p> <p>(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.</p> <p>(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign</p>	<p>For all contracts</p>

	<p>country.</p> <p>(b) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.</p> <p>(c) See Public Law 115-232, section 889 for additional information.</p> <p>(d) See also § 200.471.</p>	
<p>11.</p>	<p>§ 200.322 Domestic preferences for procurements.</p> <p>(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.</p> <p>(b) For purposes of this section:</p> <p>(1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.</p> <p>(2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.</p>	<p>For all contracts</p>

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS – PRIMARY COVERED TRANSACTIONS

The _____, certifies to the best of its
knowledge and

(Company/Contractor)

belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this Agreement been convicted or had a civil judgment against them for commission or fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or Agreement under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
- (4) Have not within a three-year period preceding this agreement had one or more public transactions (Federal, State or Local) terminated for cause or default.

Where the Contractor is unable to certify to any of the statements in this certification, such Contractor shall attach an explanation to this certification.

THE COMPANY/CONTRACTOR, _____
CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS
OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION.

Executed on this date: _____.

By

(Signature of authorized official)

(Title of authorized official)

INSTRUCTIONS FOR SUSPENSION DEBARMENT CERTIFICATION

1. By signing and submitting this form, the prospective lower-tier participant is providing the certification set out on the previous page in accordance with these instructions.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower-tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower-tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower-tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms “transaction”, “debarred”, “suspended”, “ineligible”, “lower-tier covered transaction”, “participant”, “person”, “primary covered transaction”, “principal”, “proposal”, and “voluntarily excluded”, as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower-tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower-tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower-tier participant further agrees by submitting this form that he or she will include this clause titled Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion – Lower-Tier Covered Transactions, without modification, in all lower-tier covered transactions and in all solicitations for lower-tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower-tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non□procurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant are not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower-tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment

CERTIFICATION OF RESTRICTIONS ON LOBBYING

I, _____, hereby
certify on behalf of
(Name and title of Official)

_____ that;
(Name of Company)

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee or Member of Congress in connection with the awarding of any Federal Agreement, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Agreement, grant, loan or cooperative agreement.

(2) If any funds other the Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Agreement, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-agreements, sub-grants, and Agreements under grants, loans and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

For purposes of this Certification, the Agreement shall be considered a federal Agreement. This certification is a material representation of fact upon which reliance is placed when this transaction was made or entered into. Submission of this certification is prerequisite for making or entering into this transaction imposed by Section 1352, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Executed on this date: _____.

By _____
(Signature of authorized official)

(Title of authorized official)

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

This certification is required pursuant to Executive Order 11246 (30 F. R. 12319-25). The implementing rules and regulations provide that any bidder or perspective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract or subcontract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION OF BIDDER

Bidder's Name: _____

Address: _____

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes ____ No ____

2. Compliance reports were required to be filed in connection with such contract or subcontract. Yes ____ No ____

Certification -- The information above is true and complete to the best of my knowledge and belief.

NAME AND TITLE OF SIGNER (PLEASE TYPE)

SIGNATURE

DATE

City of Albuquerque

Solicitation Number: RFP-2024-581-AVI-CG

Financial Services and Strategic Planning Consultant

Proposal Prepared By:

The Research Associates

165 Broadway, Suite 2301

New York, NY 10006

Primary Contact

Sung Lee, CEO

Dir. 212.868.5178

Main. 212.868.5100

Email. swlee@Theresearch.com





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COMPANY BACKGROUND/QUALIFICATIONS/EXPERIENCE

TRA is a New York City-based market research and consulting firm. TRA is one of the leaders in destination research and feasibility analysis services for various transportation and travel assets. Since the 1990s, TRA consultants have been engaged in many transportation / city / state / country projects, including MTA, Long Island Railroad, Walt Disney Parks and Resorts, Universal Parks and Resorts, the City of New York, the State of New York, the State of Connecticut, the State of South Carolina, the State of Arizona, US International Trade Administration, US Census Bureau, Orlando International Airport, Las Vegas, and Myrtle Beach to name a few. Our experience within the industry has allowed us to optimize our methodology for collecting, monitoring, analyzing, and reporting economic opportunity and feasibility-related variables that would be of keen interest to the City of Albuquerque (the City or Albuquerque).

Recently, TRA was awarded by INC magazine as one of the top 500 Companies in the USA.

TRA will be able to provide the most innovative feasibility research and consulting services to the City for the following reasons:

- We have one of the most sophisticated destination, transportation and airport feasibility tools.
- Our size and select client base of prestigious companies and organizations allow us to be extremely responsive.
- As a boutique firm with low overhead, TRA provides services cost-efficiently and with flexibility in pricing.
- TRA values the relationships it builds with its clients through constant client communication, regular client visits, and client involvement in every project phase. TRA will provide a high level of personal service to the City. In addition, we regularly offer clients our home and cell phone numbers so they can reach us anytime they need to, including weekends.

Finally, TRA would like to assure the City that the services outlined in this proposal will not be jeopardized by previously established commitments or potential commitments that TRA may engage in the future.

RELEVANT EXPERIENCE

UNIVERSAL PARKS AND RESORTS – FEASIBILITY STUDY AND FINANCIAL PROJECTIONS

- **Situation:** Universal Parks and Resorts (UPR) hired TRA to perform product feasibility, forecasting, optimal mix and pricing studies for its newest water park, Volcano Bay.
- **Scope:** TRA first ran feasibility scenarios by simulating various guest and product options. After we identified optimal scenarios, we used our advanced analytical tools to recommend most appropriate and strategic 1) themes, 2) price options, 3) product mix, 4) target markets, and 5) economic impact to UPR.
- **Results:** Volcano Bay was built based on our analysis and product and price mix recommendations.

STATE OF NEW YORK / NEW YORK RACING ASSOCIATION (NYRA) – NEW RESORTS AND SPORTS AND ENTERTAINMENT DISTRICT IN NEW YORK CITY

- **Situation:** The State of New York has obtained The Research Associates to perform feasibility studies and develop product strategies to expand its product offerings and customer base by establishing new sports and entertainment venues
- **Service Modules:** TRA conducted primary market research on potential and current customers and developed product and business strategies, including the New York Islanders, Entertainment Complex, and Hotels. TRA worked closely with NYRA's key executives, including its CEO/President.
- **Results:** TRA's recommendations were well received by NYRA's executives and stakeholders, and NYRA has recently initiated our key recommendations – the New York Islander Complex – UBS Arena.

UNIVERSAL ORLANDO – EXPANSION PLAN STUDY IN ORLANDO

- **Summary of Scope and Services Provided:** We assessed Universal Orlando's current products, analyzed the Florida environment, identified vital gaps, and suggested ways to expand its products strategically. TRA worked closely with key executives, including its CEO/Chairman, CFO, and Chief Strategy Officer.
- **Related to Florida:** TRA analyzed the value of having additional products and facilities within/near the property. More importantly, we aligned our demand projections with "a goal of reaching **xxx million visitors to Florida by 2025.**"
- **Results:** Universal executives and stakeholders utilized TRA's recommendations.

RESORT HOTEL IN FLORIDA – EXPANSION STUDY AND FORECASTING

- **Summary of Scope and Services Provided:** We are currently working with Florida-based resorts and hotels to optimize its product and room offerings, including various sports facilities, including golf and tennis.
- **Related to Florida:** Analyzed the impact of resorts/hotels in the greater xxx area. Projected income generated by additional sports facilities.
- **Results:** TRA plans to recommend the optimized product structure.

WALT DISNEY WORLD PARKS AND RESORTS

- Strategic Planning and Directions for Walt Disney World
 - Walt Disney World 5-Year Plans
 - Under-penetrated Marketing Plans
- Walt Disney World Guest Profiling
 - Walt Disney World Guest Attitudes and Perceptions
 - Walt Disney World Guest Geographical Research and Analysis
 - Walt Disney World Guest Segmentation based on Demographics and Psychographics
 - Walt Disney World Guest Price Sensitivity Analysis
 - New Attractions and Resorts' Impact on Guest Visitation and Satisfaction
- Walt Disney World Key Visitation Metrics Development, Monitoring, and Analysis
 - Key Guest Visitation Factors and Metrics
 - Optimal Visitation Performance Scenario Given the Capacity and Revenue
- Walt Disney World Visitation by Parks
 - Visitation Data Tabulation and Analysis by Each Park
 - Visitation Forecast by Theme Park
- Walt Disney World Marketing Media Mix and Effectiveness
 - By each key region
 - By each strategic guest segment
- Walt Disney World New Guest Segmentation
 - Segments
 - Attendance and VPG by demographic segments
 - The lifetime value of segments
 - Vacation planning cycle
 - Planning behavior by segments
- Travel Destination Research and Analysis
 - Myrtle Beach
 - Las Vegas
 - Branson, MO
 - 10 Ski Resorts in the US
 - Universal Orlando

SUFFOLK COUNTY, NEW YORK – LONG ISLAND RAILROAD FEASIBILITY AND ECONOMIC IMPACT STUDY

Suffolk County Economic Development and Planning (SCEDP) hired The Research Associates to prepare a focused study of the regional economic benefits that Suffolk County would realize from a modernization investment in electrifying, double tracking and potential yard expansion/relocation on the Port Jefferson Branch of the Long Island Rail Road (LIRR) from Huntington through and including the Branch terminus at Port Jefferson, which would provide a reliable and consistent single-seat ride to and from New York City.

First, TRA reviewed issues and concerns, including 1) Strategic opportunities and organizational strengths, 2) operational obstacles/risks and organizational weaknesses, 3) core internal operational services, processes, and activities to meet customers'/stakeholders' expectations, 4) Opportunities based on strengths and weaknesses, and 5) potential challenges and issues.

Second, TRA conducted in-depth market research, surveying over 3,000 residents.

Third, TRA 1) analyzed various market demand and impact scenarios and 2) recommended key customer experience enhancement strategies.

PROJECT APPROACH

As mentioned in the previous section, The Research Associates (TRA) has developed and provided many financial services and strategic planning tools to leading destinations and local/state/federal entities. Our financial services and strategic planning tools have been used for organizations such as:

- Universal Orlando Hotels and Resorts
- Universal Studios Hollywood
- Universal Studios Japan
- Royal Caribbean Cruise
- Belmont Entertainment Center – UBS Arena
- Long Island Railroad/MTA (NYS)

Similarly, we fully understand that the City is positioned to continue experiencing strong growth in the coming years. We are confident that our tools and methodology (you will see in the following pages) will allow the City to assess and strategically position its airport and related product concepts.

TRA will undertake specific tasks that will enable us to realize the following goals of this project as required by the City.

MODULE 1: STRATEGIC AUDIT

We will gather the information that will enable us to develop an optimal plan. To fully understand the City's goals and objectives, we will first conduct a strategic audit that will include the following activities:

- Identify assets and strengths in targeted manners
- Visit or do frequent video conferences with the City staff to determine any specific asset dynamic that may be in play
- Review key issues and concerns (SWOT) based on interviews and reviews.
 - o Strategic opportunities and strengths.
 - o Operational obstacles/risks and weaknesses
 - o Future expectations of primary customers/stakeholders
 - o Core internal operational services, processes, and activities to meet customers' / stakeholders' expectations.
 - o Opportunities based on airport strengths and weaknesses.
- Identify the issue/problem
 - o Critical issues facing various elements
 - o Short-term and long-term goals

Data Audit

TRA will review and examine any information that may be available for this project, including but not limited to any previous project deliverables and research.

1. Review and examine all existing plans and research data
2. Assess the relevance, timeliness, and comprehensiveness of existing data
3. Analyze the current research data gaps
4. Investigate the availability of secondary research not available

MODULE 2: MARKET RESEARCH/SURVEY

We will collect primary data research (including market surveys) to analyze and define market demand.

We will gather data such as:

- Demographic/Psychographic/Affinity Data:
 - o Geography (Albuquerque and Surrounding Area)
 - o Demographics
 - o Airport experience and affinity for the area

- Airport Needs and Behaviors
 - o General product needs and behaviors
 - o Community needs
 - o Preferred product types
 - o Seasonality
 - o Competitors
 - o Drivers
 - o Influencers/planning factors
 - o Obstacles
 - o Location preference

Data Collection

For this module, we recommend surveying stakeholders such as the area businesses, residents, and elected leaders. Our steps include:

- Qualitative research (virtual and phone interviews)
- Quantitative research (online surveys)

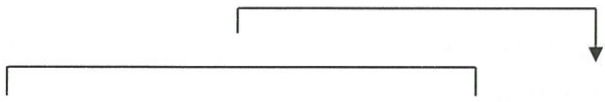
Environment Research

We will scan the current environment near the City area by:

- Exploring current or similar local competitor inventory
- Benchmarking other similar Aquatic Parks and their strategies and activities

MODULE 3: DATA ANALYTICS

Overview – Demand Analysis



	Size	Growth	Key Drivers	Intent	Travel Time	Demand
Geographic						
Demographic						
Needs						
Other Key Factors						
Behaviors						

Based on market assessment data, we will identify the following:

Product Demand/Scenario Analysis: We will conduct analytics such as regression and factor analysis to define those variables that drive demand based on different product scenarios (types and features). Demand will be evaluated not only for geographic location but also by customer demographics and behaviors.

Market Segment Analysis: We will identify where visitors should come from. Subsequently, we will discover markets that have high potentials.

Demand

Approach

TRA will use proprietary techniques and AI models and provide insights into the following factors:

- Target Segment Identification
- Key Driver Exploration
- New Demand
- New/Key (and Optimal) Product Features and Benefits

Overall, we will determine and analyze the above factors by...

- Investment Options
 - o Tier 1
 - o Tier 2
 - o Tier 3
- Identifying target segments
 - o Albuquerque
 - o Local/Regional/National
 - o Airport Affinity Group
- Calculating demand curves
- Calculating price elasticity of demand
- Running sensitivity analysis
- Running product simulations
- Running market simulations (if needed)

Please note that this framework will be amended based on guidance and feedback from post-award consultation with the City officials.

Market Sizing Analytics

- Market Sizing (Regression, Factor Analysis, and Predictive Modeling)
 - o Affinity Market | Incremental Market
 - o Albuquerque
 - o Geo-Based
 - o Others

Key Variables

Behaviors

- Types of facilities
- Past airport-related behaviors: type, location, and price point
- Airport/transportation needs in the area
- How to attract visitors
- Airport intent
- Preferred location
- Influencers

Product

- Type of facility
- Themes
- Optimal spaces and sizes

Key Indicators/Variables

- Airport notables and factors
- Price
- Positioning
- Product features and value
- Location
- Partnership opportunities

TASK 4 ECONOMIC ISSUES AND INVESTMENT

We will quantify and evaluate the economic value, co-benefits, and other positive effects, such as social and environmental benefits and sustainable growth. Specifically, we will explore (but not limited to):

Economic Benefits

- Economic activities, including revenues, job creation, employment income, non-job-related expenditures, etc.
- The potential for economic improvement or development, including resources (labor, investment, and others), in-direct employment opportunities, recruiting, inequality, infrastructure needs, development possibilities, etc.
- The constraints or problems the City may face.

We will review each question and its flow. In addition, we will uncover and revise any significant weaknesses. This phase will bring out fine points that might not otherwise be uncovered.

Integrated Economic Diagnostics

TRA can also deliver and present an "Integrated Economic Diagnostics" to the City, which will include our audit of the current situation and relevant information on its target stakeholders' views and insights. TRA will develop insights that will enable the City to select and deliver the right programs and structures to the community. Specifically, we will explore the following related to the target segment profiles and barriers.

- Size, Market Structure, and Profile of Businesses
 - o Revenue forecast
 - o Return on Investment
 - o Capital investment requirements
- Needs, Challenges, and Benefits
 - o Financial Factors and Barriers
 - o Demand
 - o Unmet Needs and Gaps

- Key Drivers and Deliverables
 - o We will identify key drivers for airport development by applying our predictive index and key driver models. For instance, we will show what factors contribute to the increase (and decrease) in ROI and performance scores. Furthermore, we will be able to predict what programs/factors/audiences generate higher lifetime value.

- Investment and Financial Strategies to consider
 - o Financial projections and outlook
 - Projected revenues
 - Different options
 - Utilization
 - Pros and cons
 - o ROI optimization
 - o Direct and variable costs
 - o Investment amounts

TASK 5: REPORTING AND SUMMARY OF DELIVERABLES

Results from the data collection and economic impact analysis will be communicated in a clear and concise manner. The reports typically have the following necessary information:

- Research Methodology
- Key Issues & Trends
- Analysis Framework
 - Market Demand
 - o Target segments
 - o Projected demand
 - o Projected revenue
 - o Best ways to generate demand
 - Market Feasibility
 - o Recommended product mix
 - o ROI (Return on Investment)
 - o Utilization
 - Optimal Facility: Tier 1, Tier 2 and Tier 3 Options
 - o Types/Themes
 - o Programs and events
 - o Size
 - o Key features
 - Economic Impact
 - o Economic feasibility and impact
 - o Competitor analysis
 - o Industry notables
 - Overall Recommendations

Summary of Deliverables

- Kick-off and Strategic Audit
- Research
- Analysis
- Recommendations
- Draft Report
- Final Report and Presentation(s)

PROJECT MANAGEMENT AND TEAM RESOURCES

Project Management

TRA provides all necessary personnel, administrative, financial, and managerial resources required to support various task orders. TRA also provides highly skilled personnel to propose, develop, coordinate, implement, maintain, monitor, and evaluate management control mechanisms. Examples of management control mechanisms include ADP tools, performance management systems, schedules, dashboards, metrics, website databases, and web pages. Personnel is also needed to develop, deliver, present, coordinate, and maintain supporting documents and materials.

TRA will assign highly qualified and experienced research personnel to each of the tasks. Our organization will allow for efficiency, flexibility, and adaptability. Our goal is to provide the right staffing for the right tasks at the right time. The team's resource allocation processes underpin our capacity to meet program and reporting task schedules, whether they occur as a single task or multiple concurrent tasks. TRA can organize quickly and bring ample resources to bear in the fulfillment of requirements.

Sung Lee, the team's Project Manager (and the TRA CEO), will assign personnel, allocate resources, and monitor program timelines and milestones to ensure efficient and effective completion of tasks associated with specific task orders. The program execution begins with a consultation between Mr. Lee and designated personnel, who will thoroughly analyze requirements and coordinate program-dependent resource allocation. Mr. Lee will develop a project plan by assigning the appropriate team member for each specific task to ensure that an optimal mix of strategy and research expertise is provided to the program.

STAFF QUALIFICATIONS

Sung Lee – Project Manager

Selected Expertise / Qualifications:

- Expertise in analyzing property/infrastructure assets and portfolio for hospitality, theme parks, and destination organizations

Key Experience:

- Hotel, Theme Park and Transportation Development Strategy
- Convention/Expo and Hospitality Product Optimization Modeling
- Tourism Economic Impact Study

Sung is the CEO of The Research Associates. He is viewed as one of the leading experts in data analytics and optimization. He is frequently invited to speak about advanced tourism assets and infrastructure assessment and strategy. In the past few months, he has lectured about these topics in cities such as Boston, New York, Orlando, and Seoul. He has been advising his clients on tourism/destination product feasibilities, public-sector-based economic impact drivers, transportation and hospitality market scenarios, and stakeholder/customer insights related to transportation and hospitality products.

Notable projects include the City of New York (sharing economy study and city park development planning), Universal Studios Hollywood (development planning), Loews Hotels/Resorts (product development in Los Angeles), the State of New York (feasibility and expansion of various properties including sports complex) and destination benchmarking/analysis (New York, Orlando, Ski Resorts, Las Vegas and San Francisco).

Relevant Experience:

- **Universal Studios Orlando and Hollywood – Product Expansion and Optimization Analysis.** TRA was hired to perform its guest and product metrics development and optimization scenarios. By closely working with its Chairman/CEO and CFO, Mr. Lee focused on developing 1) key guest visitation and product factors, 2) visitation forecast scenarios based on various product and spending/investment options, and 3) optimized visitation scenarios based on capacity spending and revenue options.
- **Major Hotel Feasibility Projects – Product Planning and ROI Analytics**
 - Analyzed visitation data and developed ROI by each key product/asset
 - Performed key revenue factors



- Performed product/asset expansion analysis and strategy by identifying key new market segments and developing product strategy
- **The City of New York – eFHV (Uber/Lyft) Impact Study and Planning:** Mr. Lee worked closely with NYC EDC and McKinsey to analyze the impact of eFHV by researching both eFHV drivers and taxi cab drivers. We focused on issues including:
 - How drivers choose among modes and companies
 - What are key effects
 - How eFHVs change transportation access
 - What are eFHVs perceived
 - What are key decision-making drivers
 - Key challenges and benefits for drivers
- **Leading Cruise Company - Strategic Opportunity Identification.** TRA was chosen to identify a series of short-term strategic initiatives that RCCL could employ to differentiate its service offering from other cruise lines, and Mr. Lee spearheaded its project management efforts.
 - Provided Royal Caribbean Cruise Lines executive management with a summary document that identified a series of strategic options that could be employed to optimize RCCL business
 - The strategic options were based on new trends/needs, uses of technology, and "wow factors" in other travel destinations worldwide.

Education

Institution	Degree or Certification
Columbia Business School	MBA.
Carnegie Mellon University	BS, Engineering

David Gechjian

Selected Expertise / Qualifications:

- Expertise in advanced analytics, including product simulations and ROI analysis for hospitality and transportation organizations

Key Experience:

- Data Collection Optimization
- Policy Research including Tourism and Hospitality
- Market and Branding Research and Modeling

David has extensive experience in planning and conducting consumer research initiatives as well as performing advanced analytics. A few recent transportation/hospitality-related research projects include Universal Parks and Resorts, Royal Caribbean Cruise, Hertz, and Walt Disney World Parks Resorts. His other notable clients include Sony, Comcast, University at Buffalo, University of South Carolina, Stony Brook University, United Medical and several private equity firms.

Relevant Experience:

- **Customer Segmentation:** Defined customer types based on product needs, behaviors and lifetime value, and recommended key product strategies by key customer types and spending level
- **Product Innovations:** Identified the latest and most innovative theme parks and resorts products and technologies based on client ROI
- **Industry/Market Expansion Assessment:** Defined characteristics of key transportation industry/market forces and described how players are positioned
- **Product Prioritization:** Prioritized products and markets based on lifetime value and product ROI

Education

Institution	Degree or Certification
M.I.T. Sloan School of Management	MBA.
NYU. Stern School of Business	BS, Accounting

Steven Struhl

Selected Expertise / Qualifications:

- Expertise in advanced analytics, including a complex theme park and hotel simulations

Key Experience:

- Segmentation and big data mining

Dr. Struhl has more than 25 years' experience in consulting and research, specializing in providing effective, practical solutions based on statistical models of decision-making and behavior. Steven's experience includes running his own analytical consulting business, Converge Analytic. Before this serving for 15 years as Senior Vice President, Senior Methodologist at Total Research (later Harris Interactive), where he worked as head of analytics for the life sciences/pharmaceutical group. In this role, he responsible for all analytical work for a group whose revenues reached \$60 million. He focused on strategy and analytics for pricing, product/service optimization, tourism research, patient and medical database analytics, decision-making, customer loyalty, and consumer motivations. His work also addresses understanding consumer groups and their motivations, optimizing service delivery and product configurations, and finding the meaningful differences among products and services. Earlier experience includes working as Director of Market Research at SPSS, Inc.

He has written a book, *Market Segmentation: An Overview and Review*, and many articles on multivariate analysis, computer software, and psychology. He also frequently speaks at conferences and has given numerous seminars on pricing, choice modeling, market segmentation, and presenting data.

Education

Institution	Degree or Certification
Chicago School of Professional Psychology	Doctorate in Psychology
Booth School at the University of Chicago	M.B.A.
Boston University	MA and BA degrees

TRAINING TOOLS

TRA has the following “Training/Education Framework.”

Diagnose → Train → Monitor/Improve

I. Project Management Diagnostics

- Task and Process Review
 - Purpose – “Do you/your organization clearly define goals and objectives for your project?”
 - Tasks – “Do you/your organization clearly define all the necessary tasks for your project?”
 - Time – “Do you/your organization clearly set your project deadlines?”
 - Budget – “Do you/your organization clearly understand your project resources? (human, \$ and others)”
 - Result – “Do you/your organization clearly understand your desired project outcome?”

- Teamwork Audit
 - Team building:
 - “Are the roles and responsibilities of each member made clear?”
 - “Does each of the team members support the leader and the other members?”
 - “How is the atmosphere of the team’s activities?”
 - Communication and coordination
 - “How were disagreement been solved?”
 - “Were open lines communication maintained?”
 - “Is decision making done objectively?”

- Existing Project Roadblocks.

Identify and discuss roadblocks for the successful project management via surveys/interviews prior to the training session or on-site surveys/interviews during the beginning of the training session.

- Training Program Design

Based on findings from “Project Management Diagnostics,” we will design customized project management training material.

II. Training Session.

Our customized project management training course normally focuses on the following elements:

1. Project Design.

We will communicate strategic components related to project design.

- Define purpose – “Why are we doing this?”
- Define project scope – “What do focus on?”
- Define and brainstorm all the necessary tasks – “Tasks and sub-tasks”
- Define responsibility – “Who is going to do it?”
- Define time frame – “What is the estimated timeframe?”
- Define budget – “What is the human and \$ budget required.
- *Project Design Exercise.* We will together design project plan by using our framework.

2. Project Implementation

We will teach how to implement and manage project

- Show how to manage project by applying key design components via tools such as process mapping and Gantt chart:
 - How to continuously implement project purpose
 - How to maintain focus
 - How to manage tasks and sub-tasks
 - How to manage people
 - How to manage time and \$
 - How to use key project implementation tools.
 - Gantt Chart and Process Map
 - *Project Implementation Exercise*
- Key project implementation considerations:
 - Schedule management is the responsibility of not only the leaders, but also the team members. Plans and tasks in progress should be co-owned
 - Swift response to delays/allocation of resources, removal of obstacles and delays
 - Remember the time constraints and limited resources
 - Remember to stay focused
 - Learn as you go. Apply new learning in the next phase
 - Manage your time efficiently (See Time Management Module)

- o *Project implementation exercise/review.*

3. Project Enablers

We will focus on key project success factors and enablers

- **Teamwork Management.** We will discuss team development dynamics by communicating:
 - o Stages of team selection and development
 - o Team roadblocks
 - o Methods of overcoming conflicts
 - o Trust building by sharing the vision, responsibility and glory – “Effective Team Communication”
- **Time Management** (see Time Management Class for more Detail)
 - o Establish goals and purpose
 - o Prioritize tasks
 - o Increase your efficiency
 - o Delegate
 - o Conduct time management exercise

III. Monitor and Improve

- **Project Monitoring and Tracking System**
 - o Capture actual data vs. planned data
 - o Analyze the disparity between actual vs. plan to understand the cause behind the gap
 - o Recommend ways to narrow/remove the gap
 - o Conduct project monitoring and tracking system exercise
- **Post Project Review System**
 - o Capture actual project results
 - o Identify successes and failures
 - o Celebrate successes
 - o Study failures
 - o Define key success metrics and factors
 - o Recommend subsequent project(s) based on learning gained from the project to IMPROVE organization’s performances
 - o Conduct post project review system exercise
- **Wrap-Up**

APPENDIX A

Cost Proposal

Position	Hourly Rate (\$)*
Principal	\$ 186.00
Administrator	\$ 84.00
Partner	\$ 224.00

** Rates shall be fully loaded and inclusive of all overhead, tax, insurance, etc.*



RESPONSE TO REQUEST FOR PROPOSALS

TECHNICAL PROPOSAL

**FINANCIAL SERVICES AND
STRATEGIC PLANNING CONSULTANT
SOLICITATION NUMBER: RFP-2024-581-AVI-CG
July 12, 2024**

**PREPARED FOR
The City of Albuquerque and its Department of Aviation**

**PREPARED BY THE WJA TEAM
WJ Advisors LLC
ASM Global Route Development
Kutchins & Groh, LLC
O'Donnell Economics & Strategy, LLC
Sycamore Associates, LLC
Vantage Group
Webber Air Cargo, Inc.**





July 12, 2024

Estevan Vargas
 Office of the City Clerk
 Post Office Box 1293
 Albuquerque, New Mexico 87103

Re: Technical Proposal, Financial Services and Strategic Planning Consultant (RFP-2024-581-AVI-CG), Albuquerque Airport System

Dear Mr. Vargas,

WJ Advisors LLC and its subconsultants (ASM Global Route Development; Kutchins & Groh, LLC; O'Donnell Economics & Strategy; Sycamore Associates, LLC; Vantage Group; and Webber Air Cargo, Inc.; collectively, the WJA Team) are pleased to submit this technical proposal to provide Financial Services and Strategic Planning for the Albuquerque Airport System, consisting of Albuquerque International Sunport (ABQ or the Sunport) and Double Eagle II Airport (DE II Airport). The Airport System is owned by the City of Albuquerque and managed and operated through the City's Aviation Department (the Department). The WJA Team includes two local firms that bring specific and unique Albuquerque and New Mexico experience to the services we would provide to the Department.

Airport System Cycles of Events and Focus

Over the last 20 years, four distinct cycles of economic and passenger events have affected the Airport System, facility redevelopment, and Department management's focus on operating and managing the Airport System, as follows:

Event	Effects	Department Management Focus
1. 2008 credit crisis and national recession	Significant declines in Sunport passenger traffic	Increasing Sunport liquidity and financial margins
2. National route and air carrier consolidation	Continued declines in passenger traffic	Creating stronger ABQ balance sheet; generating additional nonairline revenues and managing expenses
3. 2014 expiration of the Wright Amendment	Continued realignment of air service routes by Southwest Airlines	Maintaining competitive rates and implementing airline incentive program
4. 2020 COVID-19 pandemic	Travel restriction resulting in over 90% reduction in ABQ enplaned passengers	Maintaining strong ABQ cash position and strategically deployed COVID grants

Mr. Esteban Vargas
July 12, 2024

The Sunport has begun a fifth cycle characterized by the renovation, innovation, and transformation of Sunport facilities, much of which was constructed over 30 years ago and are nearing the end of their useful life. Over the next 5 – 10 years, investments in infrastructure will be necessary and aligning funding plans and commercial strategies to meet those needs will be critical.

Transitioning Challenges Into Successes

- ***The COVID-19 pandemic created major disruptions at the Sunport and across the national air transportation system.*** Success: Created a management dashboard to track and monitor key financial metrics for the Sunport. Incorporated the projected use of COVID-19 grants to ensure the financial health of the Sunport as well as other key stakeholders (e.g., airlines, concessionaires).
- ***Expiration of airline agreement in 2021 during the height of the COVID-19 pandemic.*** Success: Negotiated two 2-year extensions that allowed the Sunport and airlines to recover from the COVID-19 pandemic while securing additional pre-approved capital projects that included the Dream of Flight renovation project.
- ***Excess pre-security space and aging concessions program created opportunity to reimagine passenger journey.*** Success: Dream of Flight renovation project was unveiled that shifts space post security making room for a completely new, locally focused concessions program and other post-security improvements.
- ***Aging ConRAC infrastructure, less than optimal rental car passenger bussing experience, and parking capacity constraints.*** Success: Initiation of a landside assessment to address infrastructure and capacity constraints and transform Sunport passenger experience.

Continuity with a Proven Commitment

The WJA Team would be led by Warren Adams, Managing Partner of WJ Advisors LLC, who has 35 years of experience as an airport management consultant and has been providing strategic Airport System planning assistance to Department management since 1989. The WJA Team includes the following subconsultants:

- **Vantage Group** has a proven commitment to the Department in providing strategic advisory services for the “Dream of Flight” redevelopment of the concessions program and would provide continuity to the Department in the operation and management of the program following its opening.
- **ASM Global Route Development** would provide expertise in air service development and is a firm WJ Advisors has worked with for years.
- **Webber Air Cargo, Inc.** has prepared cargo strategic plans for the Department and has experience across the nation on air cargo development and the flow of goods and services into and out of a community, such as Albuquerque.

W J A D V I S O R S

Mr. Esteban Vargas
July 12, 2024

- **Kutchins & Groh, LLC** is nationally recognized in applying to and securing aviation grants, a funding source that will become increasingly important given the amount of capital investments the Department expects to make into Airport System infrastructure in the next 5- to 10-years.
- **O'Donnell Economics & Strategy** is a local business with expertise on Albuquerque economy. O'Donnell will help us in assessing future Albuquerque economic and other trends that could result in higher passenger numbers.
- **Sycamore Associates, LLC** is a local business with experience in Albuquerque real estate development. As the Department continues the redevelopment of Aviation Center of Excellence (ACE), expertise in real estate development will become important.

The WJA Team offers industry-wide and Airport System specific experience, continuity, and a long-term proven commitment to the success of the Airport System. We appreciate the opportunity to submit this proposal and to serve as the Department's financial and strategic advisor.

Sincerely,



Warren Adams
Managing Partner
WJ Advisors LLC

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Attachment 1 – WJA Team Resumes

Attachment 2 – Business and Marketing Deliverables Work Sample

Attachment 3 – Cost-Benefit Analysis Work Sample

Attachment 4 – Bond Feasibility Study Work Sample

Attachment 5 – Economic Impact Study Work Sample

Attachment 6 – Letters of Reference

2.1.1 OFFEROR IDENTIFICATION

Name of organization: WJ Advisors LLC

Address: 11354 East Ida Avenue, Englewood, CO 80111

Nature of organization: LLC

Person authorized to execute contract: Warren J. Adams, Managing Partner

Email address: warren.adams@wj-advisors.com

Phone number: (720) 542-8692 (office); (650) 218-8538 (mobile)

Subcontractors (listed in alphabetical order):

ASM Global Route Development

125 Deansgate

Manchester M3 2BY

United Kingdom

Incorporated in Manchester, United Kingdom; private, for-profit organization

Kutchins & Groh, LLC

7 Trailside Ct

Mansfield, TX 76063

O'Donnell Economics & Strategy, LLC

Corrales, New Mexico

Incorporated in the State of New Mexico; LLC

Sycamore Associates, LLC

PO Box 90608

Albuquerque, New Mexico 87199-0608

Incorporated in the State of New Mexico, LLC

Vantage Group

#1410 – 1200 West 73rd Avenue

Vancouver, British Columbia

Canada V6P 6G5

Incorporated in British Columbia, Canada; private, for-profit organization

Webber Air Cargo, Inc.

7808 Cheno Cortina Trail

Austin, Texas 78749

Incorporated in the State of Texas; private, for-profit organization

Statement of Compliance with All Laws Stated in RFP

By submitting this proposal, WJ Advisors certifies and agrees to comply and act in accordance with all provisions of the following ordinances, rules, regulations, requirements, and laws:

1.5.1 City Public Purchases Ordinance

1.5.2 City Purchasing Rules and Regulations

1.5.3 Civil Rights Compliance. WJ Advisors certifies and agrees to comply and act

1.5.4 Americans with Disabilities Act Compliance

1.5.5 Insurance and Bonding Compliance

1.5.6.1 Fair Dealing

1.5.6.2 Conflict of Interest

1.5.7 Participation/Offeror Preparation

1.5.8 Debarment or Ineligibility Compliance

1.5.9 Goods Produced Under Decent Working Conditions

1.5.10 Graffiti Free

Statement of Agreement to the Contract Terms (City Terms and Federal Terms)

WJ Advisors certifies that it accepts the Required Contract Terms (City Terms), and has no exceptions. WJ Advisors also agrees to comply with Federally-Required Contract Provisions, and has submitted our agreement with such provisions online using the City's e-Procurement system.

Receipt of Addenda

As of July 12, 2024, the date this proposal was submitted, no addenda to the RFP had been issued.

WJ Advisors Meets the Insurance Requirements Identified in the RFP

The Offeror agrees to carry the required insurance as stated within the Request for Proposals for Financial Services and Strategic Planning Consultant, Solicitation Number RFP-2024-581-AVI-CG (with proper rider or endorsement, provision for 30-day notice, City named as additional insured, etc.). WJ Advisors LLC requests an exemption to two insurance provisions (1) automobile insurance, since none of the requested services would require driving on airport property and (2) workers compensation insurance, since WJ Advisors LLC is a sole proprietor firm, with no employees.

WJ Advisors LLC will provide the requested insurance certificate upon request, as we have done with the other contract we have with the City.

Pay Equity Reporting Form

The Pay Equity Reporting Form was completed online, and a copy is provided below.

Pay Equity Reporting Form



City of Albuquerque
www.cabq.gov



Bernalillo County
www.berncogov



Water Authority
www.abcwua.org

Company Details

Company Name	WJ Advisors LLC	Mailing Address	11354 East Ida Avenue, Englewood Colorado 80111
Phone	6502188538	NM Employees?	no
Email Address	warren.adams@wj-advisors.com		

Job Category	No. Females	No. Males	Gap (Abs. %)
1.1 Exec/Senior Level Officials/Mgrs			
1.2 First/Mid Level Officials/Mgrs			
2 Professionals			
3 Technicians			
4 Sales Workers			
5 Office and Admin. Support			
6 Craft Workers (Skilled)			
7 Operatives (Semi-Skilled)			
8 Laborers (Unskilled)			
9 Service Workers			
Overall Total			

Total # of Females (all categories)	Total # of Males (all categories)
Total # Female Only Job Categories	Total # Male Only Job Categories
Total # Part Time Females	Total # Part Time Males
Female % Workforce	Male % of Workforce
Total # Employees	Total # Non-Binary Employees

Must be signed by a representative of the company. Signature certifies that all employees working in New Mexico are included, the data is for one year ending when the form is signed, and any challenges to your information may require you to get third party verification at your own expense.

Warren Adams, Managing Partner Warren Adams Jun 25, 2024
 Name and Title Signature Date Submitted

Following your submission, the system will calculate and certify your Overall Total Pay Gap. A copy of the Pay Equity Reporting Form will be emailed to you for inclusion with your bid or proposal. If the Overall Total Pay Gap on your form is 0%, you are eligible for a 5% preference. Please keep in mind that a completed Pay Equity Reporting Form must be submitted with all bids and proposals, regardless of the Overall Total Pay Gap. Please contact the contact person identified in the applicable Agency's solicitation documents with any questions about the Pay Equity Reporting Form.

2.1.2 EXPERIENCE

The WJA Team will provide the Scope of Services requested by the City in Section 3.2 of the RFP. Our team members are led by and include individuals and firms who are known by Department and City management and have demonstrated their commitment to successfully achieving Department stated goals and objectives. Our Team also includes nationally recognized firms who are subject matter experts in specific areas as well as Albuquerque-based firms that provide valuable local perspectives.

The WJA Team will be led by Warren Adams, Managing Partner, WJ Advisors LLC, who has been assisting Department management for over 35 years in strategic, tactical, business and financial planning, has successfully collaborated with the Finance and Administrative Services Department and the Mayor’s Office of the City of Albuquerque, and has effectively worked with other Sunport consultants. Under Warren’s oversight and management, the WJA Team has assisted with the following at the Sunport and DEII Airport (in descending order from most recent). It is important to understand that while the Sunport is part of the City, it functions as an “enterprise fund” of Albuquerque and is not subsidized by taxes or other general fund sources of revenues. As such, the revenue increases, and federal grants received by the Department as a result of the actions below are significant and important to the ongoing operation of the Sunport and DEII Airport.

- Lead in the assessment, planning, and implementation of the Dream of Flight concessions redesign. WJ Advisors and Vantage completed initial benchmarking and assessments to identify opportunities in the concessions program, collaborated with the Department and designers to plan out the passenger journey of the redesigned concessions program, and drafted the request for proposals and associated concession lease documents. We produced briefing documents for the Department management and Mayor’s Office of the City of Albuquerque to keep all parties informed on the project status and key areas of focus. **We also secured \$66.5M of PFC funding for PFC eligible portions of the \$87.4M concessions program.**
- Preparing four passenger facility charge (PFC) applications. WJ Advisors completed the evaluation of PFC eligible projects, drafted airline and public notices, conducted the airline consultation, and prepared all required PFC documents for submission to the FAA. All four PFC applications received FAA approval **securing over \$120M in funding for the Sunport.**
- Negotiating the business terms and provisions for the existing passenger airline and cargo airline use and lease agreements and the two 2-year extensions. WJ Advisors represented Department management during the negotiation of similar agreements in 2006 and in 2012. As such, **WJ Advisors is very familiar with the reasons why certain provisions exist in the current agreements and areas of focus for the negotiation of the new agreements.**
- Developing the business terms and conditions, and overall business plan structure for the consolidated rental car facility at the expiration of the initial 20-year rental car concession and lease agreements, combining the facility and concessions leases

together and transitioning ConRAC facilities to fair market value rents, **increasing non-airline revenue to the Airport System by approximately \$13M** over the term of the agreement.

- Establishing the plan for use of the Coronavirus Aid, Relief, and Economic Security (CARES) Act grants, Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA) grants, and American Rescue Plan Act (ARPA) grants, (collectively, the COVID-19 Grants). WJ Advisors advised the Department on **optimizing the \$45.8 million COVID-19 Grants between stakeholder groups**. Annual monitoring of the use of the COVID-19 grants to ensure full use prior to grant expiration.
- Negotiating the terms of a new cargo facility lease with Amazon.com Services LLC. Evaluating the size of both the land lease and associated air cargo ramp expansion. **Establishing associated rates, fees, and charges** for both the land and expanded air cargo ramp.
- Preparing a strategy to increase public parking rates at the Sunport—one of the largest sources of nonairline revenue. Historically, the level of public parking revenue per enplaned passenger at the Sunport in comparison to other similarly sized airports has ranked very low. Given this, **it is important for the Department to continually increase nonairline revenues to meet the maintenance and other needs of the Albuquerque Airport System**.
- Developing a business and financial plan that ensures the Airport System maintains its strong financial position. **Recommending specific financial targets and establishing specific steps for maintaining and achieving those targets, consistent with best practices of similarly sized airports in the nation**
- Issuing the last airport revenue bonds of the Airport System and while the Airport System has not needed additional airport revenue bonds, WJ Advisors has assisted in the issuance of numerous airport revenue bonds within the past 5-years at Denver International Airport, Los Angeles International Airport, and Seattle-Tacoma International Airport **with principal amounts totaling \$9.5 billion**.

In addition, WJ Advisors has assisted with and/or represented Department management with airlines, tenants, Downtown officials, and other key stakeholders in discussions related to rates and charges, lease negotiations, and other financial and commercial matters, including, but not limited to, the Dream of Flight concession redevelopment program at the Sunport.

As stated in our transmittal letter, the “fifth cycle” of challenges and opportunities for Department management will occur as the Airport System transitions to a period of renovation, innovation, and transformation. As the Department begins its evaluation of the best way address its aging infrastructure, the following challenges could be in:

- **Addressing aging ConRAC infrastructure.** This could result in the need for a new ConRAC requiring (1) consideration for an improved customer journey that does not require a less-than-optimal bussing experience, (2) airport revenue bonds to pay for

required improvements, and (3) possible changes to customer facility charge (CFC) ordinances to increase CFC rates and broaden the use of CFCs.

- ***Parking capacity constraints and aging parking garage.*** This could result in the need for an additional parking garage and/or the replacement of the existing parking garage that must be carefully phased to protect one of the Airport System’s primary non-airline revenue sources. This also requires careful evaluation of the Airport System key financial metrics to ensure strong financial health into the future.
- ***Innovative development of Airport System property.*** This could include evaluating the strategic use of Airport System property to complement the use of property for aviation with innovative non-aviation concepts that spur economic growth in Albuquerque.

The WJA Team understands these challenges, and has the Sunport-specific experience as well as a strong understanding of national trends, experience, and focus to recommend a “Airport System Action Plan”, which includes, but is not limited to, the following:

- ***Continued ConRAC Evaluation.*** Evaluation of the best physical, financial, and commercial solution for the ConRAC is vital for the best customer experience, success of the rental car companies, and success of the future transformation of the Sunport. ***WJ Advisors has specific experience successfully implementing these elements while developing the world’s largest ConRAC at LAX, as well as initiating this work at the Sunport, and has industry relationships with rental car companies that would be involved with a ConRAC development at the Sunport.***
- ***Landside Redesign.*** Along with the ConRAC evaluation, an innovative landside redesign would address the aging parking garage, resolve parking capacity issues, improve ground transportation operations, and plan for current and future airport landside traffic. ***WJ Advisors has initiated this work at the Sunport and also has experience helping airports with similar considerations successfully address these issues.***
- ***Innovative Property Development.*** Continued collaboration with Department partners to evaluate the highest and best use of Airport System land resources. ***The WJA Team includes local real estate development subconsultants to participate in this process and provide local expertise.***
- ***Establish Key Financial Metrics to Guide Future Decisions.*** Warren Adams has and continues to assist Department management in establishing financial targets for current unrestricted cash (“liquidity”), costs per airline enplaned passenger (an important metric in the aviation industry and a measure of competitiveness), operating margins, and infrastructure reinvestment rates, all of which provides a series of tools to guide Department management-decision making. These tools would be evaluated, and results would be monitored in comparison to other medium-hub airports as well as a review of Sunport-specific results to ensure continued financial strength during the Airport Systems renovation, innovation, and transformation. ***WJ Advisors would develop these key metrics and work with Department management to integrate this into the existing decision-making process.***

Figure 1 shows each Scope of Service and the key WJA Team members who would assist the City.

Figure 1
MATRIX OF WJA TEAM BY SCOPE OF SERVICE ITEM

		WJA Team					
		WJ Advisors	ASM	Kutchins & Groh	O'Donnell Economics	Sycamore Associates	Vantage Group
Services listed in Request for Proposal for Financial Services and Strategic Planning Consultant (RFP-2024-581-AVI-CG)							
Financial Services							
3.1	Rates and charges	✓					
3.1.1	Capital programs	✓					
3.1.2	Feasibility for bond sales	✓	✓		✓		
3.1.3	Lease and RFP development	✓				✓	
3.1.4	Lease negotiations	✓				✓	
3.1.5	Airport finance presentations	✓					
3.1.6	Finance planning for master plan	✓					
3.1.7	Grants and PFCs	✓		✓			
3.1.8	Management plan and staffing plan	✓					
3.1.9	Other related services	✓			✓		
Strategic Services							
3.2.1	Expansion of passenger air service	✓	✓				
3.2.2	Air Cargo Facilities and service	✓					✓
3.2.3	Commercial development plans	✓			✓		
3.2.4	Air carrier incentive program	✓	✓				
3.2.5	Common use agreements	✓				✓	
3.2.6	Airport strategic presentations	✓	✓				
3.2.7	Concessions plans	✓				✓	
3.2.8	Airline negotiations	✓					
3.2.9	Develop management plan and staffing plan	✓					
3.2.10	Other related services	✓	✓				

2.1.2.1 CURRENT EXPERIENCE

The sections that follow provide the information requested in the RFP for current experience for WJ Advisors and its subcontractors. WJ Advisors would be directly involved in assisting Department management in accomplishing the requested services and would oversee the work of other firms.

Detailed resumes for key individuals performing the services are included in Attachment 1.

WJ Advisors LLC

WJ Advisors LLC, Aviation Management Consultants, provides strategic and management advisory services, financial and business planning, financial feasibility services, assistance with tenant lease negotiations, organizational governance analyses, and brand management services for airport operators. WJ Advisors has served airport clients from offices in Denver, Colorado

since 2013 and has served as the aviation management consultant providing all of the same services as those required in the RFP since 2013.

The table below describes the WJ Advisors selected experience with airport clients:

EXPERIENCE AND EXPERTISE—WJ ADVISORS LLC														
Selected Domestic and International Airports														
	Air Service Incentive Programs	Airline Negotiations	Airline Rates and Charges	Alternative Management Structures	Bond Feasibility Reports	Cargo and Maintenance Lease Negotiations	CR Funding Strategies and Analysis	General Aviation Business Plans	Management Reviews	Passenger Facility Charge Applications	Public Private Partnerships and Privatization	Hotel Development	Rental Car Facility Leases	Strategic Plans
A. B. Won Pat International Airport at Guam														
Albuquerque International Sunport														
Austin Bergstrom International Airport														
Baltimore/Washington International Thurgood Marshall Airport														
Colorado Springs Airport														
Denver International Airport														
Double Eagle II Airport														
DuPage Airport														
Fresno Yosemite International Airport														
John F. Kennedy International Airport														
Juan Santamaria International Airport (Costa Rica)														
Kansas City International Airport														
Central Terminal Building, LaGuardia Airport														
Los Angeles International Airport														
Las Vegas McCarran International Airport														
Midway International Airport														
Minneapolis-St. Paul International Airport														
Montreal-Pierre Elliott Trudeau International Airport														
Ontario International Airport														
Orlando International Airport														
Perth Airport														
Santa Monica Airport														
Seattle-Tacoma International Airport														
Sydney (Kingsford Smith) Airport														
Tulsa International Airport														
Vancouver International Airport														

WJ Advisors bases its professional services on the following principles: (1) the provision of truly independent advisory services related to the strategic, financial, and business planning of airports, (2) dedicated airport industry experience and expertise, and (3) the successful achievement of client-defined goals. More information on WJ Advisors LLC is available at www.wj-advisors.com.

The following are some of the selected key individuals on the WJ Advisors team that would be providing the services for the City:

Warren Adams, Managing Partner

Warren Adams negotiated, developed, or managed the following since 1989:

- Financial and business plans for small-, medium-, and large-hub airports, including 10-year financial plans
- Business terms and leases for existing and new stand-alone or consolidated rental car facilities
- Strategies for structuring airport capital programs
- Bond feasibility reports in support of the issuance of approximately \$9.5 billion in revenue bonds within the past 5-years to fund airport capital improvements, including participation in rating agency and investor presentations
- Airline use and lease agreements and related business terms, including new leases and lease amendments as well as common use programs
- Airport senior staff strategic planning retreats
- Organizational governance analyses of the transition to an authority structure
- Alternative management structures, privatization analyses, and valuation analyses for small- and medium-hub airports
- Air service incentive programs and cooperative marketing agreements

Phil Hill, Associate Director

Phil has over 30 years of airport-related financial consulting experience. Phil would be available to Department management to prepare any of the financial analysis requested in the financial section of the RFP. Phil has experience analyzing and forecasting airport financial results, developing airline rates and charges models, assisting in the preparation of bond feasibility studies, assisting with airline lease negotiations, preparing PFC applications and amendments, preparing financing capacity analyses, and developing/analyzing capital program financial plans. Phil has provided financial consulting services to a variety of airport operators, including (among others): Los Angeles World Airports; the City of San Jose, California; the County of Sacramento; the Greater Orlando Aviation Authority; the Kent County, Michigan, Department of Aeronautics; the Port of Portland (Oregon); the Port of Seattle; and the Rhode Island Airport Corporation (Providence).

Steve Martin, Associate Director

Steve Martin has over 40 years of airport management and development experience in both executive and private sector roles. Most recently, he served as Chief Development Officer at Vantage Group, overseeing negotiations and private financing for JFK's Terminal 6 and the P3 delivery of Terminal B at LGA. Previously, he was an executive at Los Angeles World Airports, where he led strategic developments including the LAX international terminal, a \$5 billion automated people mover, and a \$2 billion ConRAC project. From 1996-2004, Steve was a Principal at Leigh Fisher Associates, advising on international and U.S. airport privatizations, including the IPO of Auckland International Airport Limited. Earlier in his career, Steve served

at U.S. DOT during the FAA's AIPP incubation and spent over a decade at Massport, where he managed significant third-party developments at BOS.

Tyler Jessel, Senior Consultant

Tyler has more than 13 years of airport-related financial and strategic consulting experience. Tyler has experience producing annual rates and charges budgets and year-end reconciliations, analyzing and updating capital programs and funding sources, assisting in the preparation of airport revenue bond feasibility studies, participating in airline, rental car, and concessions lease drafting and negotiations, and managing PFC application and associated processes. Tyler has also assisted in the analysis of commercial air service and review of air service incentive programs, assisted in the transition of portions of airport gates to common use, and assisted in the development of non-airline airport real estate. Tyler has provided these services for Albuquerque International Sunport, Denver International Airport, LaGuardia Airport, Los Angeles International Airport, Oakland International Airport, Portland International Airport, and Seattle-Tacoma International Airport.

Ryan Haldi, Senior Consultant

Ryan has 13 years of airport related financial consulting experience. Ryan would be available to assist Department Management with any of the financial and strategic analyses requested as part of the scope of services. Ryan has experience analyzing and forecasting airport financial results, including the development of rates and charges models, assisting with airline and other airport tenant lease negotiations, assisting in the preparation of bond feasibility studies, and developing capital program analyses. Ryan has provided financial and strategic consulting services at the Sunport, Los Angeles International Airport, Denver International Airport, Sarasota Bradenton International Airport, and at LaGuardia Airport Terminal B.

Adam Giombetti, Senior Consultant

Adam has extensive experience in airport financial management and strategic consulting. Before 2020, he held roles at Denver International Airport (DEN), including Deputy Chief Financial Officer and Acting Chief Financial Officer, where he managed multiple teams and led a \$2.5 billion bond transaction. Currently, Adam oversees strategic financial planning projects such as managing Terminal B at LaGuardia Airport (LGA), leading airline use and lease negotiations, and supporting Los Angeles International Airport with financial analyses. He is also involved in the development of a new terminal at John F. Kennedy International Airport and the airline engagement process for McKinney National Airport. Prior to his roles at DEN and WJ Advisors, Adam worked at Merrill Lynch Bank of America in FP&A Global Equities and Derivatives Finance.

Angeline Schreiber, Senior Consultant

Angeline has over a decade of experience in airport operations, strategic planning, and marketing. Since joining the WJ Advisors team in 2022, Angeline has contributed to negotiating airline use and lease agreements and developing a new gate allocation framework for a ground boarding facility at Sarasota-Bradenton International Airport (SRQ). At McKinney National Airport (TKI), Angeline played a key role in developing marketing strategies, creating digital

content, and messaging to support potential development opportunities. She has also supported air traffic initiatives at Paris Charles de Gaulle and Scandinavian Mountains Airport. Before joining WJ Advisors, Angeline was a Senior Marketing and Sales Analyst at Saab, where she oversaw user groups, sales training, and content production for the Air Traffic Management portfolio.

Cara Bollinger, Senior Consultant

Ms. Bollinger has more than 20 years of experience in airport financial, economic, and organizational analysis. She joined Airmac in 2013 as a senior consultant and specializes in financial forecasting for long-term capital programs, the preparation of financial feasibility studies supporting the sale of revenue bonds, nonairline revenue analyses including the compilation of rental car transaction data to support rental car facility planning and rental car lease negotiations, preparation of PFC applications, financial modeling to support airline negotiations and rates and charges analyses, and bench-marking analyses.

Airport Strategy & Marketing (ASM)

Established in 1993, ASM is a leading global airport consultancy providing forecasting, business strategy, route development, and airport transaction support. Our core clients are airport owners, operators, investors, financial institutions, governments, and their stakeholders.

We offer a range of short-term and long-term forecasts for airport passenger and cargo traffic, airlift capacity, operations, and financial performance. ASM also develops and implements air service development strategies as well as working with key stakeholders on airport business opportunities. We also work with airlines on network strategy and planning, fleet planning, financial and market analysis, route support agreements, and start up due diligence. Our capabilities are supported by an extensive array of industry data and insights available through our inclusion in the Aviation Week Network.

The diverse backgrounds and individual expertise of the ASM team qualify ASM to provide comprehensive consulting services for airports, the financial community, and destinations of all sizes. ASM's consultants average over 20 years of commitment to the aviation industry working in airline and airport leadership roles in addition to consulting.

Kutchins & Groh LLC

Kutchins and Groh, LLC (K&G) is a consulting firm dedicating its practice to the airport and aviation industry. Since its inception in 2003, K&G has offered a wide range of expertise and experience in all aspects of airport management consulting services including Capital Programming, Facility and Business Planning, Airport Master Planning, and Program Management and Implementation. The firm's members have experience at over 100 different airport facilities in all facets of airport planning and development. K&G is dedicated to providing its clients with high-quality service and value-added work at a fair and reasonable cost.

O'Donnell Economics & Strategy and Strategy LLC

O'Donnell Economics and Strategy LLC is an economic consultancy located in Corrales New Mexico that has been providing economic impact, benefit-cost, fiscal policy, and budgetary

analysis for governments, institutions and private industry throughout New Mexico since 2009. Current clients include the University of New Mexico, New Mexico Institute of Mining and Technology/ Air Force Research Laboratory and the New Mexico Environmental Law Center.

Dr. Kelly O'Donnell is an economist with over 25 years' experience in New Mexico public policy. Currently, she is Chief Research and Policy Officer at Homewise, a Santa Fe-based housing non-profit, and CEO of O'Donnell Economics and Strategy LLC, a consultancy specializing in economic and fiscal impact analysis for governments, businesses and institutions in New Mexico and nationwide. Prior to Homewise, Kelly was a research professor of public administration at the University of New Mexico. She has also served as a senior fiscal economist and in senior leadership roles throughout New Mexico state government, including Director of Tax Policy, Deputy Cabinet Secretary for Economic Development and Superintendent of the New Mexico Regulation and Licensing Department. Kelly holds a Ph.D. in economics from the University of New Mexico.

Sycamore Associates, LLC

Sycamore Associates, LLC has specialized in the industrial and office property disciplines since its inception. The firm provides brokerage, management, consulting, development and administration services with a primary emphasis on sales and leasing in the Albuquerque, New Mexico metro area.

Michael D. Leach, Qualifying Broker, Managing Member

Michael D. Leach co-founded Sycamore Associates, LLC with his father in 1980 following two years in sales with a prominent area land developer specializing in industrial land sales in the North I-25 corridor.

Michael has served a broad range of clients from Fortune 500 companies to Real Estate Investors, Tenants and Business owners with personal service, attention to detail and a high regard for ethical dealings. Since 2019, Michael's personal transaction volume has exceeded \$80 Million in over 240 sale and lease transactions. He is presently marketing 32 active property listings for sale or lease (see www.sycamore-associates.com). He is presently admissions chair for NM SIOR Chapter.

Greg Leach, Broker, MBOE

Greg Leach is a native New Mexican as well as a proud husband and father. After receiving a bachelor's degree in communications from the University of New Mexico in 2005, Greg spent the next 5 years in Ohio and completed a Master's in Business and Operational Excellence from The Ohio State University in December of 2009. Upon returning to New Mexico in the Fall of 2011, Greg completed his Real Estate license requirements to pursue work and experience in Commercial and Industrial Real Estate with the family business and began working with Sycamore Associates in 2012. Prior to Commercial Real Estate, Greg has over 10 years of experience in Business Operations, Sales and Customer Service. He has served as a committee member & Director on the Commercial Association of Realtors New Mexico (CARNM) for a period of 7 years (2016 – Current) and received the President's Award in 2021 in recognition and appreciation of his creativity, vision, and volunteer service as a Commercial Realtor in

representing the best interests of CARNM and its membership. Greg has served as President Elect for CARNM in 2023 and has been nominated by his peers in the Commercial Real Estate Industry as the incoming President of CARNM in 2024. Greg is proud to serve and has many passions outside of Commercial Real Estate, one being his latest commitment to the Encino Development and Management Mission. He has served on the Board of Directors of Encino Development and Management since 2018; and has been heavily involved in preparing the organization for its efforts to improve affordable housing for seniors in New Mexico through the Non-Profit's 4 properties. In 2024/2025 Encino Development and Management expects to complete their first rehab of the Encino Gardens Building via the LIHTC program.

Vantage Group

Vantage Group, established in 1994, is a global leader in airport and transportation investment, development, management, and advisory services. With a legacy rooted in North America, Vantage has managed an award-winning portfolio, integrating global expertise with local knowledge to solve complex transportation challenges. Originally founded as Vancouver Airport Services by Vancouver International Airport (YVR), Vantage has expanded its reach, becoming a wholly owned strategic platform of Investcorp Corsair Infrastructure Partners, focusing on capital deployment in the airport and transportation sectors.

Over its 30-year history, Vantage has enhanced operations at more than 30 airports, supporting over 80 million passengers annually across its network of 12 active airport and rail stations in the U.S., Canada, the Caribbean, and Europe.

Vantage excels in developing comprehensive airport concessions programs, from planning and managing RFPs to negotiating leases. Their approach ensures seamless integration of concessions, enhancing the passenger experience while driving substantial non-aero revenue. Vantage's high-caliber team combines commercial and aviation management expertise to execute successful airport redevelopment initiatives, ensuring reliability and efficiency across various scales of airport environments.

Notable projects include their work at John F. Kennedy International Airport (JFK) where Vantage has been instrumental in redeveloping Terminals 1, 6, and 7, managing everything from operational continuity to leading the procurement process for new concessions programs. At Chicago Midway International Airport (MDW), Vantage managed a \$75 million concessions redevelopment, significantly expanding dining and retail options and achieving high ACDBE participation rates. At the Sunport, Vantage partnered with WJ Advisors to redesign and expand commercial spaces, enhancing the overall guest experience.

2.1.2.2 WORK SAMPLES

Work samples completed by the WJA Team for the items requested in the RFP are outlined below and are provided in Attachments 2-5:

1. **Business and marketing deliverables** – sample provided for work completed at Killeen-Fort Hood Regional Airport in conjunction with an air service proposal for Breeze Airways.

2. **Cost-benefit analysis** – sample provided for work completed at Baton Rouge Metropolitan Airport in conjunction with the Runway 13/31 project.
3. **Bond feasibility study** – sample provided for work completed for the Los Angeles International Airport in conjunction with the issuance of the Series 2021DE airport revenue bonds (additional feasibility letter reports have been completed since 2021, however, the Series 2021DE report is included in Attachment 4 as it was the most recent full feasibility report).
4. **Economic impact study** – sample provided of statewide economic impact study completed for the University of New Mexico.

2.1.2.3 PAST EXPERIENCE

Members of the WJA Team have been providing services to ABQ for over 35 years and have provided similar services to other clients. The matrices below describe the WJA Team past client experience organized by scope of services element described in the RFP.

The letters of reference associated with certain clients below are included in Attachment 6.

Scope of Services Element 3.1: Financial Services Related to Rates and Charges

WJ Advisors LLC

Project 1: LAX—Evaluating Financial Impact and Rates at Los Angeles International Airport amidst COVID-19 pandemic challenges.

Project Description	Assisted with evaluating the financial consequences on LAX and individual rates and charges from the significant decline in passenger traffic resulting from the negative effects of the COVID-19 pandemic as well as to brief LAX executive management.
Name of client	Los Angeles World Airports
Year completed	2019 - 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 2: DEN—Optimizing Denver International Airport's Airline Rates and Charges Calculation.

Project Description	Assisted the department in the calculation of the airline rates and charges for 2024, including the distribution of the annual report distributed to the airlines. The calculations are prepared consistent with the Airline Agreements and the terms and conditions of the general bond ordinance (GBO) for DEN.
Name of client	City and County of Denver Department of Aviation
Year completed	2024
Client reference	Mike Nakornkhet, Chief Financial Officer

	City and County of Denver Department of Aviation (720) 882-7991 Mike.Nakornkhet@flydenver.com
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Project 3: Sarasota Bradenton International Airport (SRQ)—Rates and Charges for Expanding Facilities at Sarasota Bradenton International.

Project Description	Collaborated with the new CFO to develop a model for calculating airline rates and charges based on their updated airline agreement. WJ Advisors’ work integrated the airport's expansion, which introduced a ground boarding facility with five additional gates. This ensured precise, transparent, and adaptable rate calculations, aligning with SRQ’s growth and operational needs.
Name of client	Sarasota Manatee Airport Authority
Year completed	2024
Client reference	Pamela Kantor, EVP/CFO Sarasota Manatee Airport Authority (941) 359-2770 x4213 pamela.kantor@flysrq.com

Scope of Services Element 3.1.1: Capital Program Development

WJ Advisors LLC

Project 1: LAX—Advise on one of the largest capital programs in the United States, as measured by total project costs.

Project Description	Provide affordability and funding strategies with long-term strategic capital planning analysis, assessing the impact of proposed capital programs on LAX finances including impacts to CPE, debt service coverage, and days cash on hand.
Name of client	Los Angeles World Airports
Year completed	2019 - 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 2: DEN—Strategic planning for Denver International Airport’s landmark capital program.

Project Description	In 2024, the department disclosed its largest capital program (as measured in project costs) since the Airport was constructed. WJ Advisors prepared analyses to assist the department in long-term strategic capital planning analysis and assessing the impacts to the department’s key financial metrics. This includes preparing and assessing the Airport's capital program affordability and optimal funding plan, which has been required for defining their next capital plan.
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Name of client	City and County of Denver Department of Aviation
Year completed	2024
Client reference	Mike Nakornkhet, Chief Financial Officer City and County of Denver Department of Aviation (720) 882-7991 Mike.Nakornkhet@flydenver.com

Project 3: SEA—Comprehensive planning for Seattle-Tacoma International Airport’s \$5.6 billion capital program.

Project Description	Provided comprehensive financial services for the Port's capital programs, including analyzing, planning, forecasting, and establishing a robust five-year capital improvement plan valued at \$5.6 billion. WJ Advisors’ efforts ensured the strategic allocation of resources, optimized funding plans, and supported the Port’s long-term infrastructure goal.
Name of client	Port of Seattle
Year completed	2019 - 2024
Client reference	Hiedi Popochock Director, Aviation Finance & Budget Port of Seattle (206) 735-6565 Popochock.H@portseattle.org

Scope of Services Element 3.1.2: Feasibility Study for Bond Sales

WJ Advisors LLC

Project 1: LAX—Leading the Way: LAX's Groundbreaking Bond Issuances During the Pandemic (2018-2021).

Project Description	Prepared letter reports, short-form reports, and full bond feasibility reports (Bond Reports) for the issuance of bonds by LAX in 2018, 2019, 2020, and 2021. LAX was one of the first aviation departments in the United States to issue bonds during the COVID-19 pandemic.
Name of client	Los Angeles World Airports
Year completed	2019 - 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 2: DEN—Elevating DEN's Financial Future: Comprehensive Consultancy for 2022AB and 2022CD Bond Issuances.

Project Description	Prepared the Report of the Airport Consultant for the issuance of the 2022AB Bonds, and a Letter Report for the 2022CD Bonds. Participated in working group meetings, assisted with the rating agency strategy and materials, and participated in reviewing and commenting on other financing documents.
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Name of client	City and County of Denver Department of Aviation
Year completed	2022
Client reference	Mike Nakornkhet, Chief Financial Officer City and County of Denver Department of Aviation (720) 882-7991 Mike.Nakornkhet@flydenver.com

O'Donnell Economics and Strategy

Project 3: UNM—The Statewide Economic Impact of the University of New Mexico.

Project Description	The University of New Mexico (UNM) significantly contributes to New Mexico's economy through its main and branch campuses, enhancing workforce productivity, quality of life, innovation, and statewide economic growth. This project quantifies UNM's economic impact for the academic year 2022, updating the 2020 report. O'Donnell completed the report by conducting comprehensive economic analysis and providing detailed writing, ensuring an accurate and thorough representation of UNM's economic contributions. Dr. O'Donnell's expertise in economic impact assessment has been instrumental in highlighting the vital role UNM plays in the state's economic landscape.
Name of client	University of New Mexico Foundation Inc.
Year completed	2023
Client reference	Melanie Brueni, Senior Programmer/Analyst University of New Mexico Foundation Inc. 505-313-7624 melanie.brueni@unmfund.org

Scope of Services Element 3.1.3: Develop Leases / RFPs for RACs, Advertising, F&B, Retail

WJ Advisors LLC

Project 1: LAX—Project Feasibility and Concession Negotiation for Los Angeles International Airport's New ConRAC Facility.

Project Description	Developed project feasibility analysis for new ConRAC and represented LAX in the negotiation of a new concession and lease agreement. Provided supporting analyses and reporting for CFC.
Name of client	Los Angeles World Airports
Year completed	2019 and 2023
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Vantage

Project 2: Lynden Pindling International Airport (NAS)—Enhancing commercial programs.

Project Description	<p>Since 2006, Vantage has provided a diverse range of advisory services to support Nassau Airport Development Company (NAD) in enhancing its commercial programs. Services have included:</p> <ul style="list-style-type: none"> • Creation of procurement packages for food and beverage, retail, and lounge space in the terminal. • Conducting space planning evaluation for concessions. • Statistical and financial evaluation of the current concessions program with specific recommendations for the program based on statistical analyses. • Developing a “Concessions Dashboard” for reviewing sales on a monthly basis, resulting in a clearer, more detailed understanding of the program, allowing staff to proactively recognize and address performance issues early-on.
Name of client	Nassau Airport Development Company
Year completed	2023
Client reference	Vernice Walkine, President and Chief Executive Officer Nassau Airport Development Company (242) 702-1015 vernice.walkine@nas.bc

Project 3: LGA—Development of optimized concessions program at LGA.

Project Description	<p>Starting in 2014, Vantage’s advisory service efforts included leading the development of a concessions space plan, category mix, and thematic to optimize non-aeronautical revenue in both the existing and to-be-developed central terminal building. All procurement and lease negotiations for the program were led by Vantage directly. Vantage represented LGP interests regarding the commercial development of the terminal in meetings and negotiations with the Port Authority of New York & New Jersey and related stakeholders.</p> <ul style="list-style-type: none"> • For the new Terminal B, Vantage led the concessions program design, and leased all concessions using a collaborative and open competitive approach that included substantial community outreach. Vantage successfully managed the construction of concessions subtenants, ensuring both incredible design and full operational readiness prior to airline operations. • Vantage’s ongoing program responsibilities for the management of the concessions program include management of the day-to-day operations, marketing, guest service, monitoring pricing, lease compliance, integration of useful technology and innovative processes, and continually evolving the concessions offer, collection of rent, accounting, and financial reporting.
Name of client	LaGuardia Gateway Partners
Year completed	2022

Client reference	Suzette Noble, CEO LaGuardia Gateway Partners (718) 554-9206 suzette.noble@laguardiab.com
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Scope of Services Element 3.1.4: Lease Negotiations for Concessions

WJ Advisors LLC

Project 1: LAX—Navigating Concession and Lease Agreements: Landmark ConRAC Facility at Los Angeles World Airports.

Project Description	Represented LAX in the negotiation of a new concession and lease agreement for the largest, most expensive consolidated rental car facility in the world. At LAX, we completed two CFC reports required pursuant to State of California law, where the CFC rate was changed from \$10 per transaction (the current rate at the Airport) to \$7.50 per transaction day (up to the five-day maximum) and then again to \$9.00 per transaction day (up the five-day maximum). We understand what is required to negotiate new concession agreements as well as to change the CFC rate at the Airport.
Name of client	Los Angeles World Airports
Year completed	2019 - 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 2: LGA—Evaluation of a secondary checkpoint.

Project Description	The evaluation of a VIP screening lane at LGA involved analysing passenger throughput from TSA, B-Fast, and CLEAR lanes. A comprehensive analysis was prepared to detail the findings and recommendations, including an assessment of the operational costs for the VIP lane. Additionally, the project included participation in the negotiation processes related to leases and agreements between the concessions operator and the Port Authority of New York and New Jersey (PANYNJ).
Name of client	LaGuardia Gateway Partners
Year completed	2024
Client reference	Suzette Noble, CEO LaGuardia Gateway Partners 718-554-9206 suzette.noble@laguardiab.com

Vantage

Project 3: MCI—Implementation of new concessions program through solicitation, lease negotiation and tenant onboarding.

Project Description	In late 2021, Vantage began efforts to lead the development of the concessions program at MCI in preparation for the opening of an all-new terminal facility in February 2023. Using the base building space defined by the terminal developer and driven by Vantage financial forecasting of the new facility, Vantage identified the best and highest use of all space, created lease packages, awarded packages to tenants, and negotiated leases with each. In parallel with this effort, Vantage implemented an enabling works package designed to ensure that incoming tenants had the necessary services to function as designed. Vantage managed the tenant design process as well as the tenant site development until the on-time completion of the project. Vantage directly and regularly reported to the Kansas City Aviation Department as well as coordinated delivery efforts with other departments within the city to ensure relevant parties were informed of procurement, leasing, development, and delivery activity on a regular basis.
Name of client	Kansas City Aviation Department
Year completed	2023
Client reference	Melissa Cooper, Director of Aviation Kansas City Aviation Department (816) 243-3107 Melissa.Cooper@kcmo.org

Scope of Services Element 3.1.5: Plan, Develop, and Present Airport Finance and Related Issues

WJ Advisors LLC

Project 1: LAX—Airport Finance Analysis and Presentations.

Project Description	Played an integral role in developing LAX’s \$27 billion capital program for LAX by providing funding strategies and developing financial models to evaluate the effects on key airport metrics like CPE, outstanding debt per enplaned passenger, and days cash on hand. Developed various presentations for LAX management.
Name of client	Los Angeles World Airports
Year completed	2019 – 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 2: SEA—Capital Program Affordability Analysis.

Project Description	Assisted the Port with analysis and developing presentation materials related to capital program affordability. Assisted the Port in defining key financial metrics and associated constraints based on comparable data for peer airport group. Analyzed capital program affordability within agreed-upon constraints. Analyzed impacts of various sensitivity cases — interest rates, air traffic growth levels, expense growth rates, etc.
Name of client	Port of Seattle
Year completed	2019-2024
Client reference	Hiedi Popochock, Director, Aviation Finance & Budget Port of Seattle (206) 735-6565 Popochock.H@portseattle.org

Project 3: TKI—Presenting Strategic Financial Plans for Commercial Services at McKinney National Airport to City Council and Mayor.

Project Description	WJ Advisors has been developing and presenting comprehensive financial analyses and feasibility studies for introducing commercial service. This included making numerous presentations to the Mayor and City Council on the financial implications, bond debt sizing and costs associated with constructing the infrastructure needed for commercial service. Our work ensured that airport personnel and city officials were well-informed on the viability and strategic planning required for this significant development.
Name of client	City of McKinney
Year completed	2024
Client reference	Kenneth Carley, Airport Director City of McKinney (972) 562-4053 kcarley@flytki.com

Scope of Services Element 3.1.6: Development of Capital Projects with Other Consultants

WJ Advisors, LLC

Project 1: LAX—Concourse 0 and Consolidated Rental Car Facility Development.

Project Description	Worked with airline stakeholders to build consensus to ensure their commitment to LAX’s capital program. This included developing a term sheet with Southwest Airlines for the development of Concourse 0, a 1.3 million square foot facility. Members of WJ Advisors also worked with LAX and other consultants on the development of the multi-billion-dollar consolidated rental car complex (ConRAC) and APM projects which used innovative public-private-partnership (P3) delivery structures. For the ConRAC, WJ Advisors successfully negotiated a new concession and lease agreement with the on-airport rental cars at LAX, including the allocation of ConRAC facilities, and implemented a new CFC charge to support the financing of the ConRAC.
Name of client	Los Angeles World Airports
Year completed	2019 - 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 2: TKI—Collaborative Development for Commercial Service at McKinney National Airport.

Project Description	WJA is effectively collaborating with SkySynergy and Garver (McKinney’s consultants) to develop McKinney National Airport’s plan for introducing commercial service. Joint efforts involve coordinating on various aspects of the project, including master planning, engineering, architectural, and environmental services. Together, the consultants are participating in the comprehensive planning and development of capital projects to ensure the successful integration of commercial services at the airport. The collaborative approach ensures that each consultant’s expertise is effectively utilized, resulting in a cohesive and well-rounded development plan.
Name of client	City of McKinney
Year completed	2024
Client reference	Kenneth Carley, Airport Director City of McKinney (972) 562-4053 kcarley@flytki.com

Project 3: OAK—Potential New Terminal Project.

Project Description	Completed assessment of a potential new terminal project at Oakland International Airport. Work performed included financial discovery to determine a range of cost estimates based on the inclusion of various elements of project scope, evaluate availability of funding sources, review of possible alternative commercial arrangements with airlines.
Name of client	Port of Oakland
Year completed	2023

Client reference	Craig Simon, Director of Aviation Port of Oakland (510) 207-5147 csimon@portoakland.com
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Scope of Services Element 3.1.7: Cost Benefit analysis, Grants, PFCs, Competition Plans

WJ Advisors LLC

Project 1: DEN—Passenger Facility Charge Application.

Project Description	Outlined application process, calculated remaining PFC new authority, reviewed historical and future capital projects to determine PFC eligibility, drafted PFC application projects descriptions, sent PFC consultation and public notices, conducted air carrier consultation meeting, assembled PFC application, and submitted to FAA for review and approval.
Name of client	City and County of Denver Department of Aviation
Year completed	2021
Client reference	Mike Nakornkhet, Chief Financial Officer City and County of Denver Department of Aviation (720) 882-7991 Mike.Nakornkhet@flydenver.com

Project 2: OAK—Passenger Facility Charge Application.

Project Description	PFC Application #18 -- Calculated remaining PFC authority and anticipated new authority, reviewed capital improvement projects for eligibility, drafted application projects descriptions and associated supporting documents, drafted, and sent consultation and public notices, conducted air carrier consultation meeting, assembled PFC application, and submitted to FAA for review and approval.
Name of client	Port of Oakland
Year completed	2023
Client reference	Craig Simon, Director of Aviation Port of Oakland (510) 207-5147 csimon@portoakland.com

K&G

Project 3: Baton Rouge Metropolitan Airport (BTR)—Passenger Facility Charge Application.

Project Description	Successfully prepared and submitted a PFC application for BTR. This application aimed to secure funding for a variety of crucial projects that improve safety, security, capacity, and reduce noise. This process involved detailed financial evaluations, capital program planning, and seamless coordination with the FAA for environmental and airspace approvals.
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Name of client	Baton Rouge Metropolitan Airport
Year completed	2003 - 2024
Client reference	Mike Edwards, Director of Aviation Baton Rouge Metropolitan Airport (225)355-0333 mikeedwards@brla.gov

Scope of Services Element 3.1.8: Management Plan and Staffing Plan

WJ Advisors LLC

Project 1: DEN—Management Plan and Staffing Plan.

Project Description	Developed a Management Plan and Staffing Plan to support DEN’s financial services requirements. This included assembling a dedicated team led by an experienced manager and supported by skilled financial analysts and other industry experts. The team conducted thorough cost-benefit analyses, prepared PFC applications, and coordinated with FAA officials, ensuring all regulatory requirements and timelines were met. This structured approach ensured the efficient and effective delivery of all financial services.
Name of client	City and County of Denver Department of Aviation
Year completed	2024
Client reference	Mike Nakornkhet, Chief Financial Officer City and County of Denver Department of Aviation (720) 882-7991 Mike.Nakornkhet@flydenver.com

Project 2: SEA—Structured Approach to Financial Services Management and Staffing.

Project Description	Developed comprehensive Management Plan and Staffing Plan to support financial services, including the preparation of the Port's capital programs, including analysing, planning, forecasting, and establishing a robust five-year capital improvement plan valued at \$5.6 billion. Our Management Plan included a dedicated project management team to oversee all aspects of the project, ensuring timely and compliant execution. The Staffing Plan integrated experienced financial analysts and support staff responsible for conducting detailed financial analyses and coordinating with airport executives. This structured approach ensured efficient delivery of financial services, meeting the high standards expected by the airport.
Name of client	Port of Seattle
Year completed	2019
Client reference	Hiedi Popochock, Director, Aviation Finance & Budget Port of Seattle (206) 735-6565 Popochock.H@portseattle.org

Project 3: LAX—Executing Financial Services with a Targeted Management and Staffing Plan.

Project Description	Developed Management Plan and Staffing Plan to manage financial services, including the calculation of rates and charges. The WJ Advisors team provided affordability and funding strategies with long-term strategic capital planning analysis. This included assessing the impact of proposed capital programs on airport finances, such as effects on CPE, debt service coverage, and days cash on hand. The team was led by Warren Adams as the Primary Project Lead and Phil Hill as the Secondary Project Lead, understands the organizational and logistical needs to manage a large team of consultants effectively, ensuring all aspects of the project exceeded expectations.
Name of client	Los Angeles World Airports
Year completed	2019 - 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Scope of Services Element 3.1.9: Other Related Services

WJ Advisors, LLC

Projects 1-3: LAX—Related Services.

Project Description	Developed project feasibility analysis for new ConRAC. Provided supporting analyses and reporting for CFC. Helped LAX with an acreage study update and revisions to costs airlines pay for Access Cost Center, also helped developed a phase-in program for implementing the revised costs. We have also assisted LAX with federal grant funding, including all COVID relief grants, and have assisted with PFC strategy.
Name of client	Los Angeles World Airports
Year completed	2019 - 2024
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Scope of Services Element 3.2 Strategic Planning Services

Scope of Services Element 3.2.1: Expansion of Passenger Air Service

WJ Advisors LLC

Project 1: DEN—Preserve and quickly recover passenger capacity and traffic at Denver International Airport.

Project Description	Air service is playing a critical role in regional economic recovery, and competition among airports for airline capacity is increasing in intensity.
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	Airlines are adjusting their route networks to align with new demand patterns for leisure and business travel as a result of the COVID-19 pandemic. WJA worked with Denver International Airport to preserve and then quickly recover its passenger capacity and traffic, including preserving airline relationships and introducing new routes from incumbent carriers.
Name of client	City and County of Denver Department of Aviation
Year completed	2021
Client reference	Mike Nakornkhet, Chief Financial Officer City and County of Denver Department of Aviation (720) 882-7991 Mike.Nakornkhet@flydenver.com

ASM Global

Project 2: FAI—Air Service Development Support.

Project Description	<ul style="list-style-type: none"> • Developed an air service development strategy to guide all air service development activities. <ol style="list-style-type: none"> 1. Led to the successful delivery of new services to Minneapolis, Denver, San Francisco, Chicago O’Hare, and Dallas/Fort Worth 2. Supported SASDP grant applications. • Regularly provide airline meeting support and business case development. • Prepared economic impact study assessing the overall impact of air service on the airport and within the community. • Prepared and evaluated air carrier incentive program, including minimum revenue guarantee for an international airline. • Collaborate with airport and community groups to support air service development growth
Name of client	Fairbanks International Airport
Year completed	2018 – Present (ongoing)
Client reference	Angie Spear, Airport Director Fairbanks International Airport (907) 474-2529 angie.spear@alaska.gov

Project 3: Puerto Rico Tourism Company (PRTC) (covering Luis Muñoz Marín International Airport [SJU], Rafael Hernández Airport [BQN], Mercedita International Airport [PSE])—Air Service Development Support.

Project Description	<ul style="list-style-type: none"> • Developed an air service development strategy to guide all air service development activities. <ol style="list-style-type: none"> 1. Led to the successful delivery of more than twenty new services across multiple airlines and countries.
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	<p>2. SJU has ranked as one of the fastest growth markets in the US over the past two years.</p> <p>3. Supported the implementation of two new crew bases in Puerto Rico.</p> <ul style="list-style-type: none"> • Regularly provide airline meeting support and business case development, including airline headquarters meetings. • Prepared routine government and stakeholder reports on air service development KPIs and tourism metrics. • Prepared and evaluated air carrier incentive programs, including specific marketing support programs for key target airlines. • Collaborate with airport and community groups to support air service development growth.
Name of client	Puerto Rico Tourism Company (PRTC) – covering San Juan (SJU) and other regional airports (BQN, PSE)
Year completed	2022 – 2024
Client reference	Crystal Bell, Air and Cruise Access Director Puerto Rico Tourism Company (SJU, PSE, and BQN airports) (787) 394-2216 crystal.bell@tourism.pr.gov

Scope of Services Element 3.2.2: Air Cargo Facilities and Service

Webber Air Cargo, Inc.

Project 1: Milwaukee Mitchell International Airport (MKE)—Air Cargo Market Assessment.

Project Description	Webber held group workshops and individual interviews with MKE’s staff and on-airport cargo tenants, as well as off-airport allied interests. Webber assessed the adequacy of MKE’s air cargo operating environment (facilities and services), to meet existing and forecasted demand, informing strategic considerations for new facilities development. Webber produced a report covering the airport’s facilities capacity, regional competitive position, and growth outlook.
Name of client	Milwaukee County
Year completed	2022
Client reference	Matthew J. Hoffman, A.A.E., Director, Business & Commercial Development Milwaukee County (414) 552-6186 mhoffman@mitchellairport.com

Project 2: DEN—Air Cargo Market Study.

Project Description	Denver International Airport is faced with potential shortages of on-airport cargo facilities capacity to accommodate the airport’s growing international operations and E-commerce. DEN management needed
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	to determine what form new cargo facilities should take in the form of redevelopment of existing capacity versus new development. Webber completed a cargo facilities inventory and capacity analysis to be used in tandem with projected growth to establish priorities for cargo improvements. The effort required surveying and interviewing a comprehensive array of DEN cargo tenants, as well as moderating roundtables for on-airport and off-airport constituents.
Name of client	City and County of Denver Department of Aviation
Year completed	2023
Client reference	Neil Maxfield, A.A.E., Program Manager – Commercial Business City and County of Denver Department of Aviation (303) 342-2574 Neil.maxfield@flydenver.com (Mr. Maxfield was not the principal client contact (who has since left DEN) but was integrally involved)

Project 3: PANYNJ—On-Call Air Cargo Consulting Services.

Project Description	The Port Authority of New York and New Jersey manages a multi-airport system that includes the international gateways JFK International Airport and Newark Liberty International Airport (EWR). While JFK is one of the principal international cargo gateways in the world, EWR serves as a hub for United Airlines and a regional hub for FedEx, as well as a gateway for numerous other passenger airlines. While Webber has assisted the Port Authority on a variety of efforts over many years, most recently Webber helped to inform the Port Authority on critical cargo capacity considerations principally at EWR which has been confronted with capacity challenges in virtually all (warehouse, airside, and landside) elements.
Name of client	Port Authority of New York and New Jersey
Year completed	2022
Client reference	Teddy Minch, C.M., Manager, Airport Commercial Development Port Authority of New York & New Jersey (646) 539-8469 tminch@panynj.gov

Scope of Services Element 3.2.3: Commercial Development Plans

WJ Advisors

Project 1: LAX—Commercial Development for Los Angeles World Airports.

Project Description	Represented LAX in negotiating the world’s largest and most expensive consolidated rent-a-car (ConRAC) facility. The team understood LAX’s financial operations and commercial agreements with major tenants, allowing practical solutions to be offered. A project risk register was created and refined to identify and manage risks, ensuring projects
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	stayed on schedule and within budget. Strong client relationships and experience in developing memorandums of understanding and term sheets helped manage negotiations and coordinate feedback on technical and commercial terms for new agreements.
Name of client	Los Angeles World Airports
Year completed	2019 and 2023
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

O'Donnell Economics and Strategy

Project 2: New Mexico State and Land Office—Market Assessment & Land Use Planning.

Project Description	Dr. O'Donnell conducted an economic analysis to assess the benefits of remediating oil and gas wells in New Mexico. The study estimates that a comprehensive remediation effort would inject over \$8.2 billion into the state's economy, supporting 65,337 job-years and generating \$541 million in state and local tax revenue. O'Donnell's thorough research and analytical skills underscore the potential for remediation to stabilize employment and revenue during the transition away from fossil fuels, while also addressing significant environmental hazards.
Name of client	New Mexico State and Land Office
Year completed	2021
Client reference	Allison Marks, Director of Oil, Gas and Minerals New Mexico State and Land Office (505) 827-5745 amarks@slo.state.nm.us

Sycamore Associates, LLC

Project 3: Commercial Real Estate Experience.

Project Description	Sycamore Associates successfully facilitated the sale of undeveloped parcels of the Sunport NR-GM Land, located south of Sunport Blvd on University Blvd (Airtech Ct SE). Leveraging their extensive knowledge of the surrounding properties and demographics, Sycamore Associates expertly matched the parcels with interested clientele. Their familiarity with the area's market dynamics and client preferences was key to completing this transaction efficiently and effectively.
Name of client	Rock Air LLC and Miera Properties, LLC
Year completed	2021
Client reference	John Rockwell Sierra Peaks Corporation 4801 Lincoln Rd. NE Albuquerque, N.M. 87109 505-345-5577

Scope of Services Element 3.2.4: Air Carrier Incentive Program

ASM Global

Project 1: Fairbanks International Airport (FAI)—Air Carrier Incentive Program to attract scheduled air service and passenger traffic.

Project Description	Prepared and evaluated air carrier incentive program, including minimum revenue guarantee for an international airline.
Name of client	Fairbanks International Airport
Year completed	2018 – Present (ongoing)
Client reference	Angie Spear, Airport Director Fairbanks International Airport (907) 474-2529 angie.spear@alaska.gov

Project 2: PRTC (SJU, BQN, PSE)—Air Carrier Incentive Development & Marketing.

Project Description	Prepared and evaluated air carrier incentive programs, including specific marketing support programs for key target airlines.
Name of client	Puerto Rico Tourism Company (PRTC) – covering San Juan (SJU) and other regional airports (BQN, PSE)
Year completed	2022 – 2024
Client reference	Crystal Bell, Air and Cruise Access Director Puerto Rico Tourism Company (SJU, PSE, and BQN airports) (787) 394-2216 crystal.bell@tourism.pr.gov

Project 3: Salt Lake City International Airport (SLC)—Air Service Incentive Program Development and Implementation

Project Description	Incentive program development and implementation at Salt Lake City International Airport.
Name of client	City of Salt Lake City
Year completed	2021 – Present
Client reference	Brian Kinsey, Assistant Director - Marketing and Business Development City of Salt Lake City (314) 426-8079 bdkinsey@flystl.com

Scope of Services Element 3.2.5: Common Use Agreements

WJ Advisors LLC

Project 1: SEA—New Common Use Rate-Making Methodology at Seattle-Tacoma International Airport.

Project Description	Assisted the Port of Seattle in negotiating a new Airline Agreement (SLOA IV) that included the elimination of revenue sharing, the approval of \$3 billion in capital projects, and the negotiation of business terms related to
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	common use systems and space (e.g., baggage claim area). A major element of SLOA IV was the successful negotiation with the airlines serving Sea-Tac of new gate use provisions.
Name of client	Port of Seattle
Year completed	2019 - 2024
Client reference	Hiedi Popochock, Director, Aviation Finance & Budget Port of Seattle (206) 735-6565 Popochock.H@portseattle.org

Project 2: LAX—New Common Use Rate-Making Methodology and Agreements at Los Angeles International Airport.

Project Description	As part of the implementation of revisions to the passenger terminal tariff at LAX, WJ Advisors developed a new basis for establishing rates and charges for the use of common-use ticket counter, baggage systems, and gates for those airlines that operate on a month-to-month basis.
Name of client	Los Angeles World Airports
Year completed	2019 and 2023
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 3: JFK—Common-Use Facilities Assignment Protocol (CUFAP) for John F. Kennedy International Airport – Terminal 6.

Project Description	WJ Advisors has developed the framework for the Common-Use Facilities Assignment Protocol (CUFAP) which is designed to manage the efficient allocation of terminal facilities and gate assignments at JFK Terminal 6; while accommodating various airline schedules and operational needs. The CUFAP facilitates a systematic and fair approach to gate assignments, balancing the needs of the different airlines at Terminal 6.
Name of client	JFK Millennium Partners
Year completed	2024 – Ongoing
Client reference	Steve Thody, CEO JFK Millennium Partners (646) 321-2881 sthody@vantagegroup.com

Scope of Services Element 3.2.6: Airport presentation to Management / City Council / Advisory Board

WJ Advisors LLC

Project 1: OAK—Potential New Terminal Project.

Project Description	Completed assessment of a potential new terminal project at the Oakland International Airport. Presented key financial and commercial results initially to airport leadership. Presented summary results to broader group of leadership and stakeholders from additional departments across the Port of Oakland.
Name of client	Port of Oakland
Year completed	2023
Client reference	Craig Simon, Director of Aviation Port of Oakland (510) 207-5147 csimon@portoakland.com

Project 2: SRQ—Capital Improvement and Airline Agreement Update Presentations.

Project Description	Developed a series of presentations for SRQ airport management to communicate their capital improvement plan, including the addition of a new ground boarding facility. The presentations detailed key project information, timelines, and impact to rates and charges, ensuring clear communication with all stakeholders. Additionally, WJ Advisors assisted in updating the airport's airline agreement, providing necessary documentation and strategic insights to support the negotiation process with the airlines.
Name of client	Sarasota Manatee Airport Authority
Year completed	2024
Client reference	Pamela Kantor, EVP/CFO Sarasota Manatee Airport Authority (941) 359-2770 x4213 pamela.kantor@flysrq.com

Project 3: John F. Kennedy International Airport (JFK) New Terminal Airline Presentations.

Project Description	Prepared several tailored presentations for JFK’s management to communicate the benefits and features of the new terminal to various airlines. Collaborating closely with JFK’S management team, WJ Advisors ensured each presentation was customized to address each airline's specific needs and interests. The presentations highlighted the strategic advantages, operational efficiencies, and enhanced passenger experiences offered by the new terminal, facilitating informed decision-making, and fostering strong airline partnerships.
Name of client	JFK Millennium Partners
Year completed	2024 – Ongoing
Client reference	Steve Thody, CEO JFK Millennium Partners (646) 321-2881 sthody@vantagegroup.com

Scope of Services Element 3.2.7: Concessions Plans

Vantage Group

Project 1: NAS—Concessions Program Support.

Project Description	Vantage has supported Nassau Airport Development Company (NAD) in enhancing its concessions programs by providing a diverse range of advisory services. Vantage created procurement packages for food and beverage, retail, and lounge spaces, and conducted space planning evaluations for concessions. Additionally, Vantage performed statistical and financial evaluations, resulting in specific recommendations for program improvement, and developed a "Concessions Dashboard" for monthly sales review, allowing for proactive performance management.
Name of client	Nassau Airport Development Company
Year completed	2023
Client reference	Vernice Walkine, President and Chief Executive Officer Nassau Airport Development Company (242) 702-1015 vernice.walkine@nas.bc

Project 2: LGA—Concessions Program Development and Management.

Project Description	Provided feasibility studies, business and marketing planning, and in-depth analysis of the concessions program. The Vantage team also designed and leased all concessions for the new Terminal B and managed the construction of concession spaces, ensuring operational readiness. Their ongoing responsibilities include day-to-day management, marketing, guest service, lease compliance, and financial reporting.
Name of client	LaGuardia Gateway Partners
Year completed	2022
Client reference	Suzette Noble, CEO LaGuardia Gateway Partners (718) 554-9206 suzette.noble@laguardiab.com

Project 3: MCI—Development and Management of Concessions Program for New Terminal.

Project Description	In late 2021, Vantage began developing the concessions program at MCI for the new terminal facility opened in February 2023. Vantage identified optimal uses for all spaces, created lease packages, awarded them to tenants, and negotiated leases. They also implemented an enabling works package to ensure incoming tenants had the necessary services and managed the tenant design and site development process. Regular reports were provided to the Kansas City Aviation Department and coordination with other city departments was maintained to keep all relevant parties informed.
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Name of client	Kansas City Aviation Department
Year completed	2023
Client reference	Melissa Cooper, Director of Aviation Kansas City Aviation Department (816) 243-3107 Melissa.Cooper@kcmo.org

Scope of Services Element 3.2.8: Airline Negotiations

WJ Advisors LLC

Project 1: SEA—Airline Lease Negotiations.

Project Description	WJ Advisors assisted the Port of Seattle in negotiating a new airline agreement, named the Signatory Lease and Operating Agreement (SLOA IV), that included the elimination of revenue sharing and the approval of \$3 billion in capital projects. A major element of SLOA IV was the successful negotiation with the airlines serving SEA of new gate use provisions. WJ Advisors is currently assisting the Port of Seattle in negotiating a new SLOA V.
Name of client	Port of Seattle
Year completed	2021 - 2024
Client reference	Hiedi Popochock Director, Aviation Finance & Budget Port of Seattle (206) 735-6565 Popochock.H@portseattle.org

Project 2: LAX—Airline Lease Negotiations.

Project Description	In 2019 and 2020, WJ Advisors assisted LAX with amending and extending the existing airline agreements at LAX. These changes included the addition of an extraordinary coverage protection charge to ensure that debt service coverage would not fall below 1.40x and extending the term of the airline agreement through 2032. The extension of the term through 2032 covered a period when LAX proposed to implement a multi-billion-dollar capital program, committing the signatory airlines to higher rents for the term of the agreement. In 2022 and 2023, the WJ Advisors assisted LAX with further amendments to the airline agreements at LAX, including a phase-in period for an update to the airline share of the Access Cost Center allocation and extending the airline agreement term through 2035.
Name of client	Los Angeles World Airports
Year completed	2022 – 2023 and 2019 – 2020
Client reference	Tatiana Starostina, Chief Financial Officer Los Angeles World Airports (424) 646-5251 tstarostina@lawa.org

Project 3: SRQ—Amendment of Airline Agreement.

Project Description	Assisted SRQ with amending their airline agreement, focusing on defining a gate and integrating the new ground boarding facility, which added five new gates and updated requirements for signatory airlines. The project involved conducting in-depth analyses on the rates and charges as a result of the new ground boarding facility and developing negotiation strategies for airline meetings to introduce the new terms. Adjustments were also made to cost centers to ensure optimized financial performance and alignment with SRQ's growth and long-term success.
Name of client	Sarasota Manatee Airport Authority
Year completed	2024
Client reference	Pamela Kantor, EVP/CFO Sarasota Manatee Airport Authority (941) 359-2770 x4213 pamela.kantor@flysrq.com

Scope of Services Element 3.2.9: Develop Management Plan and Staffing Plan

WJ Advisors LLC

Project 1: OAK—Management Plan and Staffing Plan for strategic services.

Project Description	Created extensive Management Plan and Staffing Plan to implement Strategic Planning Services at OAK. Utilizing WJ Advisors' broad industry expertise and the specialized skills of each team member, we ensured comprehensive support for the Port of Oakland across all project areas including their PFC application. The plan encompassed detailed resource allocation, timeline management, and stakeholder engagement to meet OAK's strategic goals.
Name of client	Port of Oakland
Year completed	2022
Client reference	Craig Simon, Director of Aviation Port of Oakland (510) 207-5147 csimon@portoakland.com

Project 2: McKinney National Airport (TKI)—Strategic Planning and Commercial Service Development.

Project Description	Developed strategic Management Plan and Staffing Plan to facilitate the introduction of commercial service at TKI. Leveraging our industry experience and the specialized skills of our team, we provided comprehensive support across all project areas. The plan included strategies for securing funding for commercial operations, efficient resource allocation, and proactive stakeholder engagement to ensure a
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	smooth and successful implementation of TKI's future commercial service objectives.
Name of client	City of McKinney
Year completed	2024
Client reference	Kenneth Carley, Airport Director City of McKinney (972) 562-4053 kcarley@flytki.com

Project 3: SRQ— Comprehensive Strategic Management and Staffing Plan for Sarasota Manatee Airport Authority (SRQ) Airline Agreement Negotiations.

Project Description	Developed strategic Management Plan and Staffing Plan to support the renegotiation of the airline use and lease agreement at SRQ. Leveraging specialized WJ Advisors skills and expertise, we provided assistance across all project facets, including updating the financial model, evaluating the existing agreement, and developing negotiation strategies. Our plan ensured efficient resource allocation and proactive stakeholder engagement, leading to successful renegotiation outcomes.
Name of client	Sarasota Manatee Airport Authority
Year completed	2023
Client reference	Pamela Kantor, EVP/CFO Sarasota Manatee Airport Authority (941) 359-2770 x4213 pamela.kantor@flysrq.com

Scope of Services Element 3.2.10: Other Related Services

WJ Advisors LLC

Projects 1-3: DEN— Related Services.

Project Description	From a strategic, commercial, business, and financial perspective, assisted department management with the planning of present Airport System facilities and those to be acquired or to be developed by the City in the future. Provided support and advisory capacity for the Hotel and Transit Center, Great Hall Program, ConRAC, and the airline concourse expansion projects. Understanding the importance of reviewing different proposals (e.g., private-public-partnerships), providing guidance on the potential impacts and need to assist executive leadership. Assisted department management in strategic planning efforts with the City regarding various topics over the years, which also included preparing peer airport benchmarking reviews.
Name of client	City and County of Denver Department of Aviation
Year completed	2019-2024
Client reference	Mike Nakornkhet, Chief Financial Officer City and County of Denver Department of Aviation

	(720) 882-7991 Mike.Nakornkhet@flydenver.com
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The letters of reference associated with certain clients below are included in Attachment 6.

2.1.2.4 AIRPORT SPECIFIC EXPERIENCE

The WJA Team has advised large, medium, and small-hub airports in the United States and airports internationally in developing financial and business plans, issuing debt and raising capital, negotiating airline and non-airline leases and agreements, and a multitude of other areas of advisory services to executive level management.

2.1.3 PROPOSED APPROACH TO SERVICES

Scope of Services Element 3.1: Financial Services Related to Rates & Charges

WJ Advisors

Understanding the Airline Agreement including any amendments, bond ordinances, changes in operations, space, rate maintenance covenants and project deliveries are key to calculate the annual, budgeted and mid-year rates and charges. It is important to track any changes in leaseholds and how the Department tracks its costs to ensure the fees are calculated accurately and fairly.

The framework for calculating annual, mid-year and year-end settlement airline rates and charges is provided in the Airline Agreement and within the broader business and financial plan of the Airport. Members of WJ Advisors have over 35 years of performing the specific calculation of airline rates and charges for Department management. The report prepared each year on behalf of the Department is well regarded with respect to its transparency and easy identification of key data and information. WJ Advisors would also assist with rates and charges calculations for other tenants.

- Prepare calculations and documents associated with annual, mid-year adjustment (if applicable), and year-end settlement of airline and other tenant rates and charges.
- Develop plan for rates and charges model use, including (1) the process for updating the model with budget year information, (2) key decisions to be made by Department management, (3) updating the model to reflect actual results, and (4) preparing the yearly report of airline rates and charges.
- Identify the annual costs that are included in the calculation of airline rates and charges and are used to establish the average rental rates, fees, and charges.
- Identify ways to streamline the annual calculation of airline rates and charges. Identifying ways to extract information from accounting and other systems that would streamline the process for calculating airline rates and charges.

- Manage the interrelationship between the yearly calculation of airline rates and charges and the broader goals and financial targets related to implementing the Department’s proposed capital plan.
- Managing with the airlines and other tenants the differences between the yearly calculation of airline rates and charges—which typically reflects the more immediate course of action—with the longer-term alternatives that management may be evaluating at the same time.
- Producing a yearly report that is easily understood by airline representatives and other tenants.

Scope of Services Element 3.1.1: Capital Program Development

WJ Advisors

Capital planning analysis requires understanding on-going and planned capital projects in order to accurately incorporate the impact of those projects on airport finances. By beginning the coordination process early on in the capital planning process, WJ Advisors is able to effectively and accurately advise staff. A medium level of assistance is required from the client to ensure that there is agreement on the projects and financial assumptions.

- Review projects in the capital program (costs, timing, cost centers, potential funding sources)
- Survey projected financial metric data for peer airports
- Develop financial metric constraints for ABQ with Department management
- Prepare capital program affordability analysis
- Identify sources of funds for capital program and projects
- Review which airline or nonairline cost center a project is in, and if that project is funded with cash will positively or negatively influence key financial metrics
- Analyze potential debt service structuring options for any airport debt that needs to be issued
- Develop 5- and 10-year financial projections of key ABQ financial metrics
- Evaluate the implications of the capital program, strategic initiatives, or specific projects on future financial results of the Airport
- Review different alternative CIP delivery proposals for key capital program projects (e.g., public-private-partnerships), provide guidance on potential impacts and need to assist Department management
- Balance Airport infrastructure needs with the impact of funding those needs on key ABQ financial metrics such as CPE, debt service coverage ratio, days cash on hand
- Sensitivity analysis—analyze impacts of changes in key assumptions (passenger growth, interest rates, expense growth, nonairline revenues) on key financial metrics

- Translate financial results into capital program decision-making

Scope of Services Element 3.1.2: Feasibility Study for Bond Sales

WJ Advisors & ASM Global

Our approach and philosophy will continue to recognize that the financial feasibility report is part of a broader set of disclosure documents and that our Team members are part of a broader group of key participants, including disclosure counsel, special tax counsel, the financial advisor, Airport and City management, underwriters and rating agencies.

- Assist with the development of new governing bond documents given the Department currently has no debt
- Obtain data associated with economic outlook, airline traffic forecast, historical and budgeted financial data, key contracts/agreements for various airport tenants (airlines, terminal concessionaires, etc.), capital program
- Develop key assumptions to be reviewed and agreed to by the Department (e.g., expense growth, certain nonairline revenue sources)
- Prepare financial projections
- Prepare airline traffic analysis section of report, including an overview of national and regional economic factors that will influence travel by residents or visitors
- Prepare Airport Facilities and Capital Program section of report, which provides an overview of current facilities and a description of the capital program
- Prepare Financial Analysis section, which would provide an in-depth discussion of the major legal documents governing the financial framework of the Airport, which includes the governing bond documents and the Airline Agreement, the proposed basis for funding the Airport capital program, major sources of revenues and the basis for those revenues and any sensitivity analyses
- Prepare executive summary for the report
- Participate in finance team meetings
- Prepare analysis associated with additional bonds test, if applicable
- Prepare feasibility on expedited basis if necessary if the Department needs to take advantage of favorable market conditions—on occasion it may be necessary to reevaluate and restructure the report format, approach, and purpose
- Assist with preparation of presentations used for rating agency meetings and investors

Scope of Services Element 3.1.3: Develop Leases and RFPs for RACs, Advertising, F&B, and Retail

WJ Advisors & Vantage

The Sunport concessions program will be ready to accommodate tenant turnover based on tenants exiting the program due to expiring leases or other unforeseen circumstances. We will

provide all services relating to the development of leases and agreements, requests for proposals, and procurements related to the subjects for which financial services are required. This includes the car rental program, the Customer Facility Charge (CFC), advertising concessions program, the retail concessions program, and the food and beverage program.

It is our understanding that, in order to advance the ConRAC project, ABQ will need to complete several critical tasks including development of a project scope and budget in alignment with ABQ's affordability parameters; identification of a forecast of rental car transaction days and associated CFC revenues needed to complete a CFC-backed financing; and negotiation of commercial terms for a new concession and lease agreement with the RACs. A low to medium level of assistance is required from the client during this process.

We will perform, at a minimum, the following tasks and when required by the Department, as it relates to developing RFPs and leases for car rental, advertising, and concessions:

- **Develop Request for Proposal Documents for Commercial Programs:** Based on the specific nature of each procurement, we will determine the clearest and most efficient architecture of an RFP deliverable. We will draw upon Department-preferred elements from prior procurement, including all regulatory information and Department-specific requirements, as well as all supporting documentation to articulate the procurement background, instructions, and goals. We will constantly evolve RFP documentation, including exhibits, attachments, and bespoke forms, using best practices and learnings from external procurement processes to ensure ABQ has strong foundational elements to support these efforts.
- **Prepare Packaging Recommendations and Best-in-Class Commercial Terms:** we will drive packaging recommendations to meet evolving Department goals. This means understanding and applying industry trends of similar procurements in other U.S. airports generally, as well as utilizing our first-hand best practice experiences of successful packaging at ABQ and airports of similar size. While packaging is often associated with concessions units, this approach can extend to other non-aeronautical procurements where practicable.
- **Develop Evaluation Criteria and Recommendation Strategies:** we will develop procurement-specific evaluation and scoring criteria commensurate with the Department policies for response evaluations, and similarly create cogent recommendation strategies for each procurement serving as the foundation for the Department approvals.

Scope of Services Element 3.1.4: Lease Negotiations for Concessions

WJ Advisors & Vantage

We recognize that lease negotiations are a continuous and important part of the commercial program at the Sunport. We will participate in the selection and/or negotiation process related to leases and agreements that were rendered as part of the prior phases of the concessions procurement process. We will similarly support or lead such negotiation efforts when analysis of concessions activities and programs warrant.

To ensure continuity and quality of an approach to procurement, we will provide services including, but not limited to:

- **Recommending Negotiation Strategies:** we will base these strategies on evolving current industry trends, best practices developed from prior Sunport negotiation efforts during procurement processes, and extensive negotiations with a wide range of rental car and concessions tenants as well as airport marketing agencies. We will review rental structures and lease clauses with the primary goal of representing the Department's interest.
- **Review RFP Submissions:** Prior to substantive lease negotiation in any procurement process, we will objectively review RFP response submissions with the aim of understanding if a response meets the core needs of ABQ as defined in the procurement's goals and objectives. We will also seek to understand if there are any stated contractual expectations and the extent to which they may materially impact the stated goals of the project. On this basis, they will provide a summary of any changes to the base contract, or stipulations noted in the main response document.
- **Negotiate Lease Terms:** To facilitate the completion of any procurement, we will directly negotiate or support the Department in negotiations of lease terms with any recommended external party. As part of this process, we will track the status of all procurements through the lease negotiation process for all assigned tasks.

Scope of Services Element 3.1.5: Presentation of Airport Finance and Related Issues to ABQ / City Council

WJ Advisors

The planning, developing, and presenting of financial materials to the Airport System management, including City Council and Airport Advisory Board is just as important as the financial tasks that are completed. A successful presentation would include the following:

- Coordinate with Department management on purpose and goals of presentations
- Present a clear and concise analysis of the given financial issue
- Highlight impacts on key financial metrics
- Use simple visual charts and graphs and minimize use of text (keep simple)
- Highlight any potential impacts to financial operations, funding sources, rates and charges, specific challenges, etc.
- Include comparisons to peer airports if applicable
- Anticipate questions or concerns related to the financial information being presented
- Provide solutions and recommendations
- Frame suggestions in a way that is actionable and beneficial to airport operations
- Provide a timeline and next steps

Scope of Services Element 3.1.6: Development of Capital Projects with Other Consultants

WJ Advisors

As the financial and strategic consultant to the Department, WJ Advisors would participate in the planning and development of capital projects with other Airport System consultants. Examples of projects where WJ Advisors collaborated with other Airport System consultants include the air cargo apron expansion project working with the Airport System on-call engineering firm and the Dream of Flight concessions program redesign working with the design and construction firm. Steps to successful collaboration include:

- Kickoff meeting with introductions of the team
- Review of the project goals and objectives
- Identification and assignment of tasks required for successful project completion
- Establish a timeline needed to meet the established goals and objectives
- On-going coordination meetings with the Airport System and teams
- Ad-hoc coordination directly among consultants as needed
- Closeout meeting to transition master copies project materials to the Airport System and among consultant teams for records

Scope of Services Element 3.1.7: Cost Benefit Analysis, Grants, PFCs, Competition Plans

WJ Advisors LLC & K&G:

Our approach includes creating a PFC process plan for the airport that identifies specific steps, timelines, and milestones. A successful PFC application requires early engagement of key stakeholders. A low to medium level of assistance is required from the client during this process.

- Initial project review for PFC eligibility
- Compile PFC project source information for PFC application description, objective, and justification
- Initial review with FAA to obtain initial feedback on PFC application timing and projects
- Draft airline consultation notice and public notice
- Conduct airline consultation meeting
- Prepare PFC application materials for submission
- Submit PFC application to the FAA
- Receive final agency decision and send airlines notice to collect PFCs

Scope of Services Element 3.1.8: Management Plan and Staffing Plan

WJ Advisors LLC

- Coordination with Department management regarding tasks and services required

- Develop Management Plan and Staffing Plan (including subcontractors) to carry out financial services described above
- Ensure that work completed is consistent with Management Plan and Staffing Plan

Scope of Services Element 3.1.9: Other Related Services

The WJA Team includes extensive experience in related services and other possible areas of interest to Department management. As requested, we would assist Department management in any other areas affecting the Airport, including performing qualitative and quantitative analyses on a variety of financial issues.

3.2 Strategic services

Scope of Services Element 3.2.1: Expansion of Passenger Air Service

WJ Advisors & ASM Global

The combined approach and number of hours for each firm is provided below. Warren would assist Department management in developing in the initial focus of this work, and would also participate, as requested, in this proposed Scope of Service.

- Evaluate Sunport market: refresh root cause analysis and SWOT, review and apply industry trends and economics to the Sunport
- Initial derivation and evaluation of industry data
- Generation/refresh of the Sunport strategy and prioritized tactical plan for marketing to airlines and passengers based on synthesizing Tasks 1 and 2
- Analysis in preparation for meetings at airline headquarters (assume 4 per year) (excludes attendance and follow-up if requested)
- Attend airline meetings (assume 4 per year)
- Airline follow up and tactical execution

Scope of Services Element 3.2.2: Air Cargo Facilities and Service

WJ Advisors and Webber Air Cargo

ABQ serves origin and destination air cargo demand for its local constituents but is not currently a major gateway or hub for regional traffic. Based on the most recent publicly available air cargo data from Airports Council International and the USDOT, ABQ ranks #67 among U.S. airports with about 50,000 metric tons of air cargo processed in calendar year 2023. ABQ's air cargo market is almost entirely controlled by the integrated carriers, led by UPS with a 49.1% market share, followed by FedEx (36.3%) and Amazon's contract carrier Sun Country Airlines (12.8%).

We are familiar with ABQ and its constituents, having completed an air cargo market study for ABQ in 2017. Consequently, Webber has met with most of ABQ's main cargo tenants and has visited most of its cargo facilities in-person.

We have completed cargo assessments of numerous airports in border states, we are particularly knowledgeable of multimodal cross-border transportation issues that may also be relevant to the ABQ market.

With the preceding at his disposal, we are uniquely prepared to offer ABQ pragmatic development recommendations that will be guided by analysis and consultations with corporate leadership and local station managers from ABQ's cargo tenants. We have decades-long relationships with many of these cargo operators.

Given the recent facility development for Amazon and tonnage decreases by other carriers, ABQ is primed for an evaluation of near to medium-term capacity and demand expectations but is unlikely to have pressing cargo expansion needs unless existing legacy facilities conflict with other aeronautical uses.

At the client's discretion, we suggest having an on-site workshop for airport management, on-airport cargo tenants, off-airport allied services (freight forwarders, trucking companies) and key contacts from the City, Chambers of Commerce and other economic development agencies. Through his network of national contacts, Webber can include cargo facilities developers, major real estate developers and others to participate remotely and who can contribute national perspectives. This workshop is usually timed to a cargo study kick-off and on-site interviews.

Typical elements of an air cargo market study include:

- Assessment of the Sunport's cargo carrier composition (including on-site interviews)
- Overview of the Sunport's recent (2018 – 2023 and year-to-date 2024) cargo trends
- Adequacy of existing cargo facilities and supporting services
- Competitive outlook
- Presentation/Report

Scope of Services Element 3.2.3: Commercial Development Plans

WJ Advisors, O'Donnell Economics & Strategy, and Sycamore Associates LLC

Commercial Development Plans aim to optimize residual properties' market potential and economic value. We will assess specific parcels, conduct market opportunity assessments, and develop strategic plans to enhance the airport's logistics capabilities and overall commercial development. Our approach to this proposed Scope of Service will include:

- Evaluating properties at both the Sunport and DEII that will provide key information to support decision-making and ensure alignment with long-term portfolio goals.
- Creating plans for an intermodal rail facility, which includes assessing feasibility and economic benefits, including potential partnerships with rail operators and logistics providers.
- Developing and managing the Master Developer RFP process to select qualified developers.

Scope of Services Element 3.2.4: Air Carrier Incentive Program

WJ Advisors and ASM

An air carrier incentive program is critical to airports that want to recruit new air carriers to begin service at the airport or incentivized existing air carriers to expand non-stop routes at the airport. The approach for evaluation and creation of an air carrier incentive program would include the following:

- Review existing Sunport incentive and cooperative marketing programs
- Review existing ABQ airline use and lease agreement to identify any opportunities or barriers for air carriers
- Complete studies for expansion of passenger commercial air service as outlined under Scope of Service 3.2.1
- Determine and summarize recommendations based on above assessments
- Make and adopt revisions to existing Sunport incentive and cooperative marketing programs

Scope of Services Element 3.2.5: Common Use Agreements

WJ Advisors

Understanding the Airport's key objectives, how long-term airport financial results could be improved by changes in the business relationship, and strategizing about the likely position of the airlines with new or revised agreements establishes the baseline for discussions.

- Survey best practices at other airports: In 2013, we completed a similar review and provided Department management with suggested approaches for structuring a new common use rates and charges and legal arrangements with new entrant airlines. We would update the information provided to Department management.
- Integrate common-use provisions in next signatory airline agreement: The next signatory airline agreement will have to incorporate common use business arrangements to ensure a successful implementation of that program. This would have to be done to ensure that the common use provisions are not in conflict with the "favored nations" provision of the current signatory airline agreement.
- Assist in drafting the new common-use agreement: We would assist Sunport legal counsel in drafting the new common use agreement, and assisting Department management in identifying key decisions, and understanding the advantages and disadvantages of different approaches.

Scope of Services Element 3.2.6: Plan, Develop, and Present Airport Finance and Related Issues

WJ Advisors and ASM

The planning, developing, and presenting of strategic materials to the Airport System management, including City Council and Airport Advisory Board is just as important as the strategic tasks that are completed. A successful presentation would include the following:

- Coordinate with Airport System management on purpose and goals of presentation
- Present a clear and concise analysis of the given strategic issue
- Highlight impacts on key strategic metrics
- Use simple visual charts and graphs and minimize use of text (keep simple)
- Highlight any potential interconnected dependencies or specific challenges
- Include comparisons to peer airports if applicable
- Anticipate questions or concerns related to the strategic information being presented
- Provide solutions and recommendations
- Frame suggestions in a way that is actionable and beneficial to airport operations
- Provide a timeline and next steps

Scope of Services Element 3.2.7: Concessions Plans

WJ Advisors and Vantage

We will provide feasibility studies and reports, business and marketing planning, and in-depth analyses of the Sunport's existing and future concessions programs and will also participate in their development and establishment.

As the Sunport concessions program's current redevelopment efforts are near completion, the focus of concessions planning efforts will shift from program planning to developing an array of tools, systems, and platforms to support the program's management and performance assessment. We will provide ongoing financial studies, financial negotiations, and marketing forecasts based on the evolving facility needs.

Some of the most critical activities we will perform to accomplish these tasks include:

- Continued Space Evaluation: Though the Sunport is undergoing a major redevelopment of its concessions program, as new concessions are brought online and the stable phase of the new program begins, we will continue to assess and recommend the best and highest use for underperforming and/or remaining spaces based on factors such as operator performance, changing passenger flows; enplanement increases or decreases; evolving consumer preferences and technological advancements that may further both concessions revenue potential as well as and an elevated guest experience.

- **Develop and/or Revise Concessions Manuals:** Drawing from a baseline of existing Support documents for current concessions operations, we will review and update to incorporate best-in-class operational elements worthy of the new concessions program. If there are no formal existing Concessions Manuals, we will create an all-new, fully integrated Concessions Manual tailored to provide information to tenants that is accurate, organized, and in an easy-to-use format. We will work with the Department to ensure critical operational elements such as processes, procedures, forms, contact information, and more are organized in such a way that tenants can easily integrate the Concessions Manual or Manuals into their own operational protocols.
- **Introduce Routine Operational and Guest Experience Reviews/Audits:** Drawing from our experience of managing successful operations in airport facilities across North America, we will develop a systematic approach to conducting, compiling, reviewing, and summarizing Operational and Guest Experience reviews and audits. We are prepared to conduct audits or provide training to the Department staff to complete the audits. Audits can be conducted at a frequency accommodating the Department's need for relevant data from the program. As data is only useful when it is reviewed, understood, and summarized, we will develop a process for processing this information as well as a customized summary based on ABQ preferences.
- **Conduct Annual Analysis and Benchmark of Current Concessions Performance:** we will conduct a full analysis, by performing a "deep dive" to both financial and operational aspects of the concessions program, including performance summaries and key observations. Results would be compared to other similar airports to identify areas of opportunity and strength.
- **Develop and Revise Annual Concessions Management Plans:** Based on the annual analysis task above, we will develop recommendations for improved concessions space performances, operational practices, and other areas that require improvement to drive a superior guest experience.
- **Develop and Maintain Dashboard of Key Performance Indicators:** We would develop a dashboard to track key performance indicators for the concessions program. The dashboard would provide monthly information on gross revenues, rents, and trends for concessions units based on defined categories, locations, and operators.
- **Support Development of Concessions Program Branding and Marketing Strategy:** In conjunction with the Department, we will collaborate with the Department's in-house marketing team to develop a marketing plan and brand to further raise the profile of the concessions program inside and beyond the terminal facility. Significant gains in revenue can be realized with an airport-led cohesive commercial marketing program showcasing airport offerings throughout the passenger journey. Applying consistent messaging and branding throughout all airport-led marketing activities increases the impact and optimizes the use of marketing and promotional funds.

Scope of Services Element 3.2.8: Airline Negotiations

WJ Advisors

Given our experience at the Sunport, we would be able to complete the Scope of Services to negotiate a new airline use and lease agreement quickly and efficiently.

Currently, the airline cost per enplaned passenger at the Sunport is slightly less than the average of medium-hub airports, and produces significant annual cash flow for reinvestment in facilities at the Sunport and DEII Airport. Everything in the current agreements exists for a reason, which is known by WJ Advisors and is important to understand from the perspective of what should or should not be changed.

Three distinct phases in the negotiation of an airline use and lease agreement exists, which also reflects our proposed approach:

- ***Pre-negotiation phase***, which, when started in advance of the first meeting with the airlines, would allow Department management to evaluate all possible outcomes. The following areas would be evaluated during the pre-negotiation phase:
 - Department management goals and objectives over the next 5 to 10 years, which will influence the business provisions of the next airline agreement.
 - The continued need for an airline agreement or to impose rates by ordinance. This is a key issue for Department management, given that there may not be a particular need for an airline agreement. With an ordinance structure, Department management would govern the use of airport facilities in a similar manner, but the provisions for doing such would not be in the form of a multi-year agreement, but a month-to-month, year-to-year structure. There are advantages and disadvantages to this approach, which would be discussed with Department management.
 - Incorporation of common-use rate-making methodologies. Purposely, the existing passenger airline use and lease agreement does not include common-use practices or rate-making methodologies. This is because the primary focus of the current use and lease agreement was to continue prior practices, and the need for a common-use structure did not exist at the time.
 - Evaluating different airline rate-making methodologies. The current approach for passenger and cargo airlines exists for a reason and provides significant financial benefits to the Sunport by providing cash flow for reinvestment in airport facilities. As bonds issued for airport facilities mature, we will need to re-evaluate the need for continuing or increasing the current level of cash flow to the Capital Fund of the Sunport. The evaluation will include, but not be limited to:
 - “Unbundling” the current approach for revenue-sharing in the terminal building and evaluating a continued practice of revenue-sharing or the current structure. Many of the existing revenue-sharing practices exist for very specific reasons, and understanding those reasons is key in

developing an effective approach for transitioning to a new approach, as necessary.

- The term of the new airline agreement, which has been 5 years for the last two airline agreements. This is typical of most airports in the United States, but there could be Sunport-specific reasons why the term should be shorter or longer.
- Using a different denominator for calculating terminal building rental rates. The Department currently uses “rentable” space to determine the average terminal building rental rate, but a “usable” space denominator would also be used, which includes all public areas in the terminal. This would be evaluated along with the notion of discontinuing revenue-sharing in the terminal building.
- Continuing to exclude vacant airline space from “rentable space” when calculating the average terminal rental rate. Some of this was done when the current passenger airline agreement was negotiated in 2011, and we would exclude any additional rentable space that would not be leased in the foreseeable future.
- Continuing the use of counting the “passenger circulation space” in the concourses as fully recoverable from the airlines. This practice has been carried over since the terminal building opened in 1989, and has been a favorable business arrangement for Department management. Currently, the airlines pay for what is public circulation space on the concourses. Excluding this space would result in an increase in terminal building rental rates, but the increase could be offset by declines in terminal building debt service.
- Evaluating the impact of new reductions in airline demised premises/leased space in the terminal building and the impact of this on total airline revenues and Sunport cash flow.
- Continuing the practice of providing the airlines with “majority-in-interest” control over Sunport capital projects.
- Continuing the practice of including the DEII Airport operating deficits in the Sunport landing fee rate.
- Reevaluating the rate-making methodologies used to establish the cargo building and cargo apron rates.

All of the pre-negotiating activities would result in an opening position of the negotiations that would be presented to the passenger and cargo airlines.

- ***Negotiating the use and lease agreement*** would consist of the negotiation of business terms and conditions with the airlines. As part of this phase of the negotiations, we would perform the following (not a complete list):

- Educate the passenger and cargo airlines on the existing terms and conditions of the airline agreements. Given the turnover in airline representatives, not every airline will understand why current provisions exist. Providing this education will mean that the Department and the airlines have the same understanding about why terms and conditions exist.
 - Prepare all materials, including an agenda, for use in each airline meeting.
 - Represent Department management during the negotiations.
 - Brief the Mayor or City Council members, if necessary, to ensure that the new agreement will be successfully implemented.
 - Assist Department management and/or legal counsel in drafting new language for the agreements or in revising existing language.
- **Completing the negotiating process**, which largely consists of assisting Sunport management in executing the new agreements, such as preparing lease exhibits, finalizing language in the agreement, and explaining the basis of the agreement to the Mayor or City Council members, as necessary.

Alternative rate making approaches for various elements of the existing airline rates and charges included the following analysis: consideration of new cost centers; review of and potential adjustments for terminal space recovery, elimination /addition of certain fees and credits within certain requirements; and the consideration of an adjustment to the number of classes of terminal space currently being charged.

Scope of Services Element 3.2.9: Develop Management Plan and Staffing Plan

- Coordination with Department management regarding tasks and services required
- Develop Management Plan and Staffing Plan (including subcontractors) to carry out Strategic Services described above
- Ensure that work completed is consistent with Management Plan and Staffing Plan

Scope of Services Element 3.2.10: Other Related Services

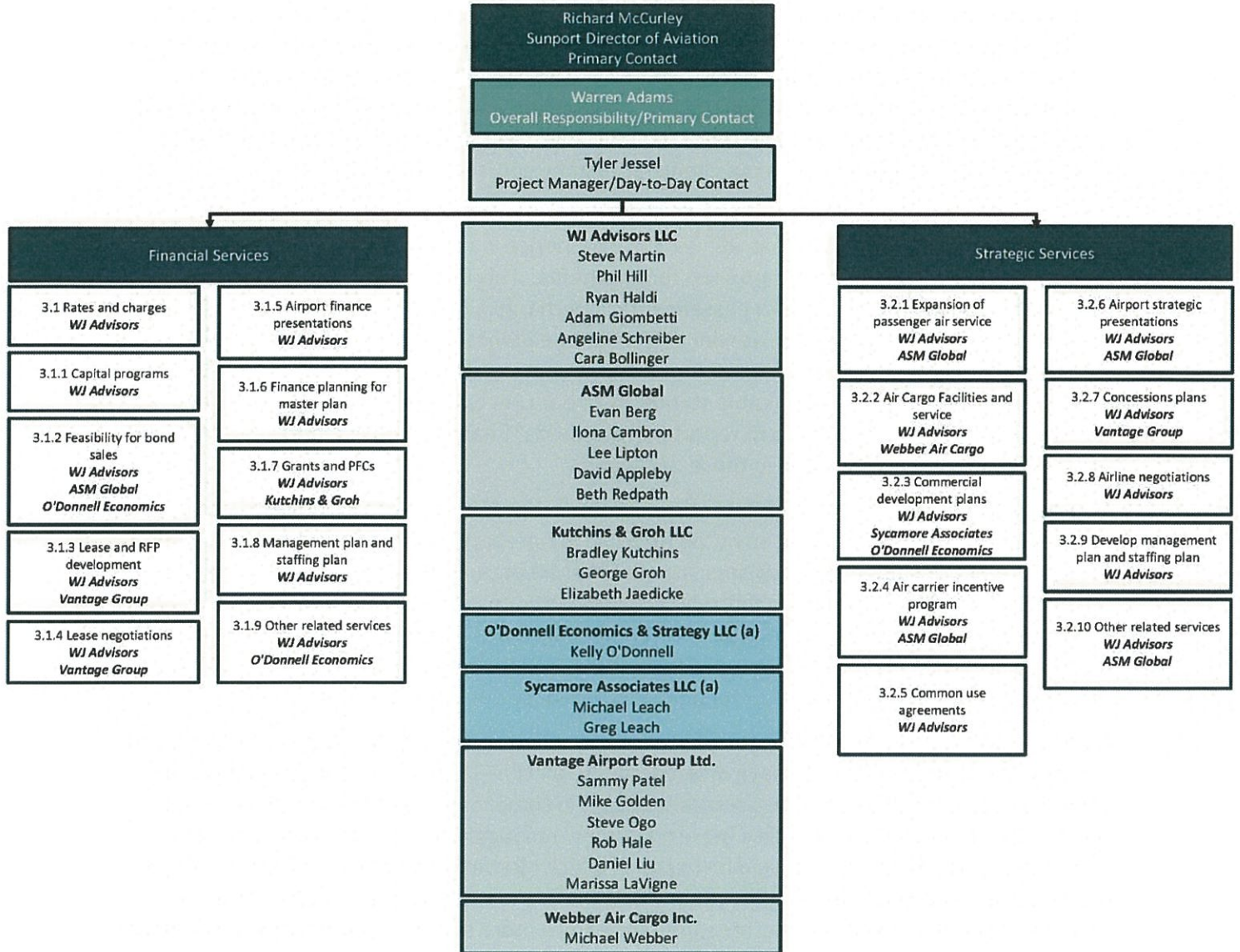
The WJA Team includes extensive experience in related services and other possible areas of interest to Department management. As requested, we would assist Department management in any other areas affecting the Airport, including performing qualitative and quantitative analyses on a variety of strategic issues.

2.1.4 PROPOSED PROJECT MANAGEMENT AND RESOURCES

The Staffing Plan provided in Figure 2 presents resources to be drawn from in order to complete the Scope of Services, including individual staff, prime, and subcontractor responsibilities in performing the Scope of Services, as well as lines of authority to Department management. WJ Advisors would assume responsibility for all work performed for the City, and would have one or two roles on each Scope of Service (1) to facilitate or coordinate the ongoing development of the work or (2) to directly participate in the Scope of Services. In addition, Warren would

continue to serve in a similar capacity for Department management, unless otherwise directed by the Department.

Figure 2
STAFFING PLAN



(a) Company is local/located in Albuquerque, NM.

The WJA Team has a high level of understanding of the level of involvement and requirements for coordination and interface between the Department, other consultants, and stakeholders. The team understands the level and type of responsiveness that is necessary to successfully perform the Scope of Services. With respect to coordination with Department management and other consultants, we would continue the successful practices that we have used in current and prior assistance to the City.

The Management Plan for all work performed by WJ Advisors and WJA Team members would be subject to our Quality Control Program, as described below:

1. **Coordination among Team Members.** Once a client has agreed to a specific Scope of Services, we would hold an internal coordination meeting to discuss the client's expectations, timeframe, project purpose, and budget. For many projects, there is a high degree of communication and coordination with our clients during the project to ensure that their expectations are met upon completion. We hold similar meetings throughout the project with team members to ensure that preliminary and draft results are consistent with the data reviewed and industry trends (if applicable), and that recommendations reflect discussions we have held with our clients during the course of the project.
2. **Technical Editing.** All of our publicly available documents are professionally edited by a Technical Editor with more than 25 years of experience in the airport industry, with a special interest in feasibility reports and their requirements. This individual is well versed in industry specific terms, such as passenger facility charges, Airport Improvement Program, and general airport revenues, as well as the tight deadlines associated with our work. Engaging a professional Technical Editor ensures that the documents produced by WJ Advisors meet the highest possible standards of our clients as well as our agreed upon deadlines. This policy applies to reports, memoranda, financial exhibits, presentations, and all graphics that are included in those documents.
3. **Production, Distribution, and Retention.** Unless otherwise specifically requested by our clients, all documents produced by WJ Advisors are prepared in accordance with our style guide, which includes a WJ Advisors specific color scheme, font, font size, and formatting standards. All documents are thoroughly reviewed to ensure that they adhere to our style guide and are ready for production. Draft and final copies are transmitted to our clients electronically in compatible formats. In addition, WJ Advisors has an electronic and hard copy document retention policy for all files created for our clients.

WJ Advisors would be responsible for all services provided to the City; however, we believe that it is important for our clients to have direct access to all WJA Team members, if required. This approach creates a more efficient process that can, in some instances, result in the expedited completion of our work. Although a more traditional management approach could be used (and, if requested by the City, would be used), in which all communications would go through one individual and would be disseminated within the WJA Team, we are confident that our proposed approach results in a better experience and a more successful outcome for our clients.

2.1.5 TRAINING

The WJ Advisors Management Plan is focused on ensuring a high level of continuity and customer service to the City. As such, we often have multiple WJ Advisors team members trained on the same financial models, and we often brief our team members on key issues facing the Department for redundancy purposes. Training is done on an ongoing basis and through constant and regular contact with our WJ Advisors team members. In addition,

succession management is largely a function of ensuring that other senior WJ Advisors team members are constantly aware and informed on key issues facing our clients.

Additionally, WJ Advisors is prepared to train Department personnel in the use of any financial models developed at any time. Our team is experienced in preparing training materials in the form of electronic user manuals, as well as hosting in-person training sessions to ensure that any Department personnel have a thorough understanding of the workings of the financial rate model.

WJ Advisors has also represented clients when training key stakeholders (e.g., airline representatives) on the airport specific matters. WJ Advisors has accomplished this through creating "Airport 101" training materials that summarize general information about the airport, rules and regulations that govern the airport, and specific agreements that are relevant to specific stakeholder groups.

2.1.6 FEDERAL FORMS

The following required federal forms have been uploaded in the City's eProcurement System

- Suspension and Debarment Certification
- Lobbying Certification
- Certification of Bidder Regarding Equal Employment Opportunity

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS – PRIMARY COVERED TRANSACTIONS

The WJ Advisors LLC, certifies to the best of its
knowledge and

(Company/Contractor)

belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this Agreement been convicted or had a civil judgment against them for commission or fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or Agreement under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
- (4) Have not within a three-year period preceding this agreement had one or more public transactions (Federal, State or Local) terminated for cause or default.

Where the Contractor is unable to certify to any of the statements in this certification, such Contractor shall attach an explanation to this certification.

THE COMPANY/CONTRACTOR, WJ Advisors LLC
CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS
OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION.

Executed on this date: June 25, 2024.

By



(Signature of authorized official)

Managing Partner

(Title of authorized official)

CERTIFICATION OF RESTRICTIONS ON LOBBYING

I, Warren J. Adams, Managing Partner, hereby
certify on behalf of
(Name and title of Official)
WJ Advisors LLC that;
(Name of Company)

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee or Member of Congress in connection with the awarding of any Federal Agreement, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Agreement, grant, loan or cooperative agreement.

(2) If any funds other the Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Agreement, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-agreements, sub-grants, and Agreements under grants, loans and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

For purposes of this Certification, the Agreement shall be considered a federal Agreement. This certification is a material representation of fact upon which reliance is placed when this transaction was made or entered into. Submission of this certification is prerequisite for making or entering into this transaction imposed by Section 1352, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Executed on this date: June 25, 2024.

By



(Signature of authorized official)

Managing Partner

(Title of authorized official)

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

This certification is required pursuant to Executive Order 11246 (30 F. R. 12319-25). The implementing rules and regulations provide that any bidder or perspective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract or subcontract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION OF BIDDER

Bidder's Name: WJ Advisors LLC

Address: 11354 East Ida Avenue, Englewood, CO 80111

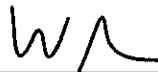
1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes No

2. Compliance reports were required to be filed in connection with such contract or subcontract. Yes No

Certification -- The information above is true and complete to the best of my knowledge and belief.

Warren J. Adams, Managing Partner

NAME AND TITLE OF SIGNER (PLEASE TYPE)



June 25, 2024

SIGNATURE

DATE

**ATTACHMENT 1
WJA TEAM RESUMES**



WARREN J. ADAMS

Managing Partner

Warren has been responsible for or led the preparation of airline rates and charges through PFC applications in the Scope of Work for Department management at Denver International Airport for over 30 years. Specifically, Warren has assisted the Department in (1) negotiating each of the airline agreement amendments with United and other airlines serving DEN, (2) the preparation of financial feasibility reports to support the issuance of over \$11.1 billion in revenue bonds, including the issuance of over \$2.6 billion in airport revenue bonds at the Airport—the largest amount of airport revenue bonds ever issued, and (3) capital program financing strategies. Warren also assisted with the preparation of rating agency/investor presentation materials for the issuance of bonds, participated in all rating agency and investor tour meetings, developed strategies for airline agreement negotiations, developed and implemented capital program financing strategies, and has developed strategies for all aspects of a potential new ConRAC at DEN, including project delivery, commercial negotiations with rental cars, business and financial strategies.

At Los Angeles International Airport (LAX) since 2008, Warren has (1) led the development and negotiation of term sheets and/or agreements for a new public-private-partnership (P3) ConRAC project at LAX (the worlds largest and biggest), the proposed \$2.5 billion Concourse Zero project, the proposed \$2.3 billion Terminal 9 project, and the renegotiation of the airline agreement. Each negotiation included multiple sessions with airline and rental car stakeholders, financial analysis to support key LAX decisions, coordination calls with LAX, and LAX briefings to the Board of Airport Commissioners. In addition, Warren has led the preparation of financial feasibility reports to support the issuance of over \$9.0 billion in revenue bonds.

From 2015 through 2024, Warren led or is leading the preparation of financial feasibility reports to support the issuance of almost \$4.0 billion in revenue bonds by the Port of Seattle. Warren is currently assisting senior management at Seattle-Tacoma International Airport (SEA) in the negotiation of a new 10-year airline use and lease agreement. Warren previously assisted SEA management with prior airline agreement negotiations.

Warren was a senior advisor to a P3 consortium for the redevelopment of new Terminal B at LaGuardia, which was fully operational in 2022 and was the largest aviation public-private-partnership (P3) project ever to be completed in the United States. New Terminal B was recently awarded the best new terminal in the world. Warren also assisted the P3 consortium from 2016 through 2018 in the negotiation of a new airline agreement for the redevelopment of new Terminal B at LaGuardia Airport. The new airline agreement was signed by all of the airlines serving Terminal B at LaGuardia in 2017. Warren continues to assist LGP with matters concerning the new Terminal B project, including annual airline rates and charges.

Warren has provided similar services as those requested in the Scope of Work to Albuquerque International Sunport, Baltimore/Washington International Thurgood Marshall Airport, Sarasota Bradenton International Airport, and a proposed new terminal in McKinney, Texas.

EDUCATION

B.S., with distinction, Finance, San Jose State University.



STEVE MARTIN
Associate Director

Steve has over 40 years of airport management and development experience both as an executive at airports and while working in the private sector both as a consultant to airport clients and as a sponsor of P3 developed projects.

Most recently, Mr. Martin served as Chief Development Officer at Vantage Airport Group, a leading international P3 firm, in which role he oversaw the negotiations and private financing of JFK's new Terminal 6 and served as a director of the P3 delivery of Terminal B at LGA airport.

Steve served as an executive at Los Angeles World Airports, the owner and operator of LAX and VNY Hanscom Field. During his time at Los Angeles World Airports, Steve was a key strategist in the development of LAX's new international terminal and its midfield concourse, was the lead negotiator of airline-sponsored redevelopments of several terminals, led the launch of P3 financing and development for the \$5 billion 2.5-mile automated people mover, and the \$2 billion ConRAC, which was also a P3 financed and developed project launched in parallel with the automated people mover.

From 1996-2004, Steve was a Principal at Leigh Fisher Associates focused on strategic developments both internationally and in the U.S. Steve served as a longstanding advisor to National Australia Bank which was a key lender to P3 entities during the central government's privatization of nine airports across Australia. He also advised airport owners and investors for privatization projects in New Zealand, including the successful IPO of Auckland International Airport Limited. Steve also served on the financial advisory team to the Incheon Airport Authority during the construction of ICN. Steve's U.S. clients included BOS, BWI, DEN, FLL, LGA, MIA, PDX, RDU, SEA, and SFO.

Earlier in his career, Steve also served at U.S. DOT when the FAA's AIPP was incubated. Mr. Martin has unique expertise in the management of grant assurances and disposition of federal interests in the development of P3 assets at airports.

Steve served for over a decade as an executive at Massport, the owner and operation of BOS and BED. While employed at Massport, he led the third-party development of a new air cargo campus at BOS, negotiated ground leases for four hotel projects, new Terminal A, and facilitated the development of aircraft maintenance facilities.

EDUCATION

University of Massachusetts, B.A., Economics and Political Science
Northeastern University, M.S. Economic Planning



PHIL G. HILL

Associate Director

Phil has 34 years of airport consulting and municipal finance experience, including forecasting airport financial results; developing airline rates and charges models; and preparing bond feasibility reports, passenger facility charge (PFC) applications, and capital program financial plans.

Since 2016, he has assisted with the preparation of bond feasibility studies and PFC applications for Denver International Airport. As described below, Phil has provided similar services as those requested in the Scope of Work to airport management at several other airports.

Phil is currently assisting Los Angeles World Airports (LAWA) with bond feasibility studies, day-to-day airline rates and charges support, and financial planning related to the Landside Access Modernization Program (LAMP) at LAX—including an automated people mover and consolidated rental car facility (ConRAC) built, financed, and to be operated and maintained by 3rd party developers. He recently developed budgeted rental car company rates and charges associated with the ConRAC at LAX. He is also currently assisting the Port of Seattle with airline lease negotiations and a bond feasibility study, and recently developed the aviation financial forecast model used by the Port for forecasting purposes.

He has assisted in the execution of 80 municipal bond financings, including the preparation of financial analyses and financial feasibility reports in support of 69 airport/port bond financings totaling \$24.9 billion in par value. Since 2014, Phil has managed financial feasibility reports prepared in support of \$11.6 billion of airport revenue bonds and special facility bonds issued by LAWA to finance terminal, airfield, ConRAC, and other improvements at Los Angeles International Airport and \$3.5 billion of revenue bonds issued by the Port of Seattle to finance airport improvements. He has also prepared or assisted with financial feasibility reports for bonds issued by the City of San Jose (CA), the Greater Orlando Aviation Authority, the Port of Portland (Oregon), the Rhode Island Airport Corporation (Providence), and the County of Sacramento.

Phil has also previously assisted City of Albuquerque, the City of San Jose, the Greater Orlando Aviation Authority, LAWA, the Port of Seattle, and the Vancouver Airport Authority with negotiations for airline agreements.

He has also developed financial plans for master plans prepared for Guam, Los Angeles, Mineta San Jose, Nashville, Orlando, and Sacramento International Airports, and for T. F. Green Airport (Providence). He also prepared financing capacity analyses, capital improvement program financing plans, PFC applications, annual budget reviews, annual management reports, and rates and charges analyses for several of the airports listed above.

EDUCATION

B.S., Mathematics/Applied Science (Economics), University of California at Los Angeles (UCLA)

Master of Public Administration with Certificate in City Management, University of Southern California (USC)



ADAM GIOMBETTI
Senior Consultant

Prior to 2020, Adam held various positions at DEN including Deputy Chief Financial Officer and Acting Chief Financial Officer where he was responsible for undergoing an organizational transition managing multiple teams with responsibilities over Accounting, Procurement, Properties, Air Service and Finance. During his tenure at DEN, Adam led a comprehensive investor outreach program leading to a successful \$2.5 billion bond transaction which resulted in low-cost financing, allowing DEN to maintain a competitive cost for its airlines. This transaction received The Bond Buyer regional and national award for innovation and excellence in municipal finance for the Southwest Region and National Deal of the Year Award. Prior to the transaction, he assisted in the development of a \$3.5 billion 5-year capital program balancing growth needs and maintenance of the airport while contributing to DEN's ratings upgrade and first ever E1 green evaluation rating. In addition, Adam managed DEN's \$400M+ operations and maintenance budget and implemented a cost savings program resulting in a 10% reduction in projected spend.

Currently, Adam is overseeing several projects with strategic financial planning and business advice, including, but not limited to:

- Assisting LaGuardia Gateway Partners (LGP) with the management of Terminal B at LaGuardia Airport (LGA) in New York, the largest public-private partnership (P3) transaction in the United States including rates and charges, financial planning, and airline strategy.
- Leading Albuquerque International Sunport's airline use and lease negotiations and provided analyses on a potential commercial development opportunity.
- Supporting Los Angeles International Airport with commercial, space and financial analysis in support of transitioning the existing lease with TBITEC to a third-party service party agreement and bond transactions.

In addition, Adam is assisting a public-private-partnership consortium with their development of a new terminal building at John F. Kennedy International Airport including financial analysis and airline negotiations.

Adam is leading McKinney National Airport airline engagement process including project development agreements and commercial terms to support McKinney National Airport's next capital program.

Adam is also supporting LGP with their annual O&M and Rates & Charges process including financial analysis in support of their airline discussions.

Prior to DEN and WJ Advisors, Adam was part of the FP&A Global Equities - Americas and Derivatives Finance teams at Merrill Lynch Bank of America responsible for trend, risk, and revenue analysis across multiple financial products.

EDUCATION

Global ACI-ICAO Airport Management Professional Accreditation Program (AMPAP)
International Airport Professional (IAP) – Specialized aviation training in the field of airport management

The Pennsylvania State University, University Park, PA
Schreyer Honors College – Thesis – Descriptive and Quantitative Analysis of the U.S. Airline Industry: A Reconstruction Plan
Smeal College of Business Bachelor of Science in Accounting



TYLER JESSEL
Senior Consultant

Since 2018, Tyler has worked with Denver International Airport (DEN) providing Passenger Facility Charge (PFC) application consulting services that included the first PFC application in over 19 years totaling \$269M. From 2020 through 2021, Tyler coordinated the submission of an additional PFC application resulting in the Federal Aviation Administration (FAA) approval of another \$137M in PFC collection authority.

Since 2017, Tyler has worked with Los Angeles International Airport (LAX), most recently on the preparation of the Series 2023AB feasibility study to fund a portion of their \$12.1B 5-year capital program. In addition to feasibility studies, Tyler has also run affordability scenarios for a new automated people mover (APM) and consolidated rental car facility (ConRAC) at LAX. The affordability scenarios included a review of rental car historical performance and the impacts TNCs have had on the rental car business.

Also since 2017, Tyler has worked with Albuquerque International Sunport (ABQ), most recently on the redesign of the terminal concessions program, identifying the need to transition much of the pre-security space of the existing program to more productive post-security units. Tyler has also helped lead the negotiation of the first new rental car agreement in the past 10-years, consolidating multiple historical agreements into a single rental car concession and lease agreement. Tyler has facilitated the negotiation of several new development projects at ABQ, establishing fair market value rental rates for airport land and future improvements. In addition to supporting commercial activities at ABQ, Tyler has produced the FY 2025 annual budgeted airline rates and charges and FY 2023 year-end reconciliation, assessed the parking program, completed a comprehensive business and financial plan to provide ABQ with a framework of forward-looking airport goals and targets, and successfully submitted and received approval of four PFC applications with the FAA.

Tyler has also worked with several other airports since 2017, including Oakland International Airport (OAK), LaGuardia Gateway Partners at LaGuardia Airport (LGP/LGA), and Montreal-Pierre Elliott Trudeau International Airport (YUL). At OAK, Tyler helped assess the affordability of a potential new terminal building. At LGA, Tyler helped set up the rates and charges for new Terminal B and demonstrate the impact of the transition to each airline from the existing terminal facility. At YUL, Tyler recommended a methodology for setting airline rates and charges and calculated the impact of changes in costs for each airline.

From 2008 through 2013, Tyler managed the PFC program for the Portland International Airport (PDX) facilitating the successful approval of two PFC applications by FAA increasing the collection authority by \$308 million. Tyler also managed the 10-year capital forecast and funding plan for PDX. The forecast identified the need for the issuance of PDX Series 19 and Series 20 revenue bonds. In 2010, Tyler also supported the capital modeling for a new airline agreement which marked a transition from the previously capped capital program to a Majority-in-Interest (MII) capital program.

EDUCATION AND INTEREST

Master of Business Administration, Webster University
B.A. in Business Administration, Minor in Aviation, Walla Walla University
Private, Instrument, and Commercial Pilots License

**RYAN HALDI**
Senior Consultant

Ryan has assisted Department management at Denver International Airport for the last 8-years in the following areas included in the Scope of Work: (1) preparation of financial feasibility reports, (2) qualitative and quantitative analyses related to the development of a new consolidated rental car facility at Denver International Airport, and (3) the preparation of PFC applications. Specifically, Ryan has assisted the Department in the preparation of a financial feasibility report to support the issuance of over \$2.6 billion in airport revenue bonds at the Airport—the largest amount of airport revenue bonds ever issued, and the on-going development and implementation of strategies for all aspects of a potential new ConRAC at the Airport, including project delivery, financial analysis, and commercial negotiations with rental cars.

For the last 13 years, Ryan has assisted Los Angeles International Airport (LAX) with the implementation of a multi-billion dollar capital improvement program. Work has included bond feasibility studies, rates and charges analyses, capital program analyses, and rental car negotiations. Ryan worked with LAX to develop a comprehensive financial and business plan for the development of a new ConRAC and then assisted in negotiating a new concession and lease agreement with the rental car industry that covered both their existing operations at LAX and their future use and occupancy of the ConRAC. Previously, Ryan has helped LAX issue over \$2 billion in airport revenue bonds. On an on-going basis, Ryan assists LAX with rates and charges and capital program analyses to help manage airline rates and charges and assess the impact to LAX's long-term financial competitiveness and flexibility.

At John F. Kennedy International Airport, Ryan has been assisting a private consortium since 2017 with the development of new Terminal 6. Terminal 6 is a +\$4B project consisting of 10 international gates that will replace the existing Terminal 7, which first opened in the 1970's. Ryan has worked to create financial models, airline rates and charges strategies, and to negotiate airline agreements that have secured multiple airline tenants for Terminal 6.

Ryan assisted a P3 consortium for the redevelopment of Terminal B at LaGuardia, which was fully operational in 2022 and was the largest aviation public-private-partnership (P3) project ever to be completed in the United States. New Terminal B was recently awarded the best new terminal in the world. Ryan also assisted the P3 consortium from 2016 through 2018 in the negotiation of a new airline agreement for the redevelopment of new Terminal B at LaGuardia Airport. The new airline agreement was signed by all of the airlines serving Terminal B at LaGuardia in 2017. Ryan continues to assist LGA with commercial matters concerning the new Terminal B project, including annual airline rates and charges.

Ryan has provided similar services as those requested in the Scope of Work to Albuquerque International Sunport, Sarasota Bradenton International Airport, and Seattle-Tacoma International Airport.

EDUCATION

MPIA – International relations, focus on international business, University of California San Diego
B.A. – Economics and History, with honors, University of California Santa Cruz



W J A D V I S O R S
AVIATION MANAGEMENT
CONSULTANTS

ANGELINE R. SCHREIBER
Consultant

Angeline has played a crucial role in supporting the WJ Advisors team on various projects at major airports. At Albuquerque International Sunport (ABQ), she assisted in managing the \$87 million concessions redevelopment program, focusing on revenue optimization and enhancing passenger experience. For Sarasota-Bradenton International Airport (SRQ), Angeline contributed to the negotiation of airline use and lease agreements and helped develop a new gate allocation framework for their ground boarding facility. At McKinney National Airport (TKI), she was involved in developing marketing strategies and digital content to support potential development opportunities. Additionally, she has supported air traffic initiatives at Paris Charles de Gaulle and Scandinavian Mountains Airport.

Before joining WJ Advisors, Angeline was a Senior Marketing and Sales Analyst at Saab, where she oversaw user groups, sales training, and content production for the Air Traffic Management portfolio.

EDUCATION

M.B.A., University of Florida, Houghton Graduate School of Business
B.S., Air Traffic Management, Embry-Riddle Aeronautical University



Cara Bollinger
Senior Consultant
Airmac LLC

Experience Overview

Ms. Bollinger has more than 23 years of experience in airport financial, economic, and organizational analysis. In 2013, she began working as a senior consultant and specializes in financial forecasting for long-term capital programs, the preparation of financial feasibility studies supporting the sale of revenue bonds, nonairline revenue analyses including the compilation rental car transaction data to support rental car facility planning, financial modeling to support airline negotiations and rates and charges analyses, and bench-marking analyses.

Ms. Bollinger worked as an independent airport consultant for five years, during which time she teamed with a major consultancy as well as directly supported the client.

Ms. Bollinger began her career as a senior consultant with LeighFisher, Inc (previously LeighFisher Associates) from 2001-2007. She utilized her financial analysis and modeling expertise to assist multiple airports with major capital planning, airline negotiations supporting new use and lease agreements, and nonairline revenue performance.

Select Airport Experience Detail and History

City and County of Denver – Denver International Airport (2017 - present)

- Assisted in the preparation of the Report of the Airport Consultant and financial analyses supporting the sale of Series 2013, Series 2018, and Series 2022 bonds

City of Albuquerque – Albuquerque International Sunport (2016 – present)

- Prepared a detailed inventory of terminal space to inform the calculation of certain airline rates and charges
- Developed a model to illustrate the financial effects of reallocating rental car space in the consolidated rental car facility

Los Angeles World Airports – Los Angeles International Airport (2015 - present)

- Compiled rental car transaction day data in support of the future consolidated rental car facility planning
- Developed and extended the airport's long term financial model through 2035
- Prepared a reconciliation of current and future capital projects, including updates to project costs and funding sources
- Assisted in the preparation of the Report of the Airport Consultant supporting the sale of Series 2019, Series 2020, and Series 2021 bonds

LaGuardia Gateway Partners – LaGuardia International Airport (2016 - present)

- Prepared financial projections of airline rates and charges on an airline-by-airline basis in support of a major capital development program
- Developed a detailed inventory of terminal space to inform analysis for the New Terminal B

Education

B.A. – Duke University

Evan Berg, Director, Air Service Development

June 2022 - Present **ASM North America**
Director Air Service Development, North America

Mr. Berg has more than 20 years of experience in aviation planning, including 16 years spent at Southwest Airlines in a variety of management positions. Mr. Berg's airline and consulting experience has given him a unique perspective on all airline and airport planning projects.

Prior to joining ASM in 2022, Mr. Berg served as a consultant to many airports across the Americas and the Caribbean where he developed air service strategies, engaged with airlines, designed air service proposals, crafted air service incentive programs, managed stakeholder relationships, evaluated transactional opportunities, performed master plan forecasts, and developed QSI route forecasts. Mr. Berg implemented air service strategies for domestic U.S. airports, such as Chicago, Charleston, and Orlando International Airports. In addition, Mr. Berg developed air service strategies for several international airports, including Daniel Oduber Quirós International Airport in Liberia (Costa Rica), Halifax Stanfield International Airport in Halifax (Canada), and Mariscal Sucre International Airport in Quito (Ecuador). Furthermore, Mr. Berg has supported the development of new terminal facilities at Newark Liberty International Airport with long-term passenger forecasts, schedules, and gate plans. He also assisted several airport operators and tourism agencies with specific air service development projects, including Ernesto Cortissoz International Airport in Barranquilla (Colombia) and the Bay Islands Tourism Bureau in Roatán (Honduras).

Prior to working as an aviation consultant, Mr. Berg held a variety of management positions at Southwest Airlines, which included finance, schedule planning, corporate real estate, network planning, strategy and initiatives, and international planning. Mr. Berg was responsible for overseeing the airline's international growth strategy and for developing new market initiatives. His work included creating 5- and 10-year growth strategies, evaluating new aircraft, QSI-based route forecasting, assessing airline mergers and acquisitions, analyzing new business models, and developing go-to-market strategies for all new international markets. His work led to the opening of several domestic airports and 15 new international destinations. Additionally, Mr. Berg developed initiatives to establish customs and immigration facilities in both Fort Lauderdale-Hollywood International Airport and William P. Hobby Airport (Houston). During his time at Southwest Airlines, Mr. Berg also led several cross-functional teams to align commercial and operational objectives, to improve financial and operational performance, and enable capacity and revenue growth to strengthen the airline's market position. In addition, Mr. Berg was responsible for overseeing the integration of the AirTran Airways network post-acquisition, including fleet, staffing, technology, and station integration plans.

Mr. Berg also spent a portion of his time in the corporate real estate area at Southwest Airlines, where he managed relationships with many U.S. airport operators. In this role, Mr. Berg initiated the airline's entry into Washington Dulles International Airport; negotiated six use-and-lease agreements; led four airline-airport affairs committees; executed lease agreements for operational space; participated in airport budgetary reviews and master planning updates; and analyzed various airport development projects and their associated budgets.

Evan's experience in leading air service development engagements has ranged from strategic program management through the full range of air service development strategic and tactical activities across multiple firms.

Air Service Development Skills:

Evan provides his clients with an extensive background across a range of air service development pursuits including business case development, route forecasting and profitability modeling, socio-economic analysis, strategic planning and analysis, long-term traffic and operations forecasting, stakeholder engagement, board presentations and public speaking, and creating innovative air service development solutions.

Key Projects:

In the past several years as an ASD consultant, Evan has managed or heavily participated in at least 20 air service development engagements for airport and marketing organization clients ranging from large international hubs (ex. Chicago O'Hare, Baltimore Washington, Orlando International, Fort Lauderdale) to medium and smaller hub facilities (ex. Charleston, SC; Liberia, CR; Norfolk, VA; Toronto City, CA; Keflavik, IS; etc.). Evan consistently utilized his quantitative and strategic background to develop and deliver persuasive business cases to airlines across a range of settings leading to numerous air service development wins for client airports; including British Airways service to Charleston, SC; American Airlines service to Liberia, CR from Austin; and El Al service to Chicago from Tel Aviv.

Relevant Employment History:

June 2022 – Present

ASM North America - Director of Air Service Development

2018-2021

Ricondo & Associates - Director Forecasting and Air Service Development

2017-2018

Campbell Hill Aviation Group - Vice President Air Service Development

2001-2017

Southwest Airlines - Business Development, Sr. Manager International Planning (2014-2017)

Network Planning, Manager International Planning (2011-2014)

Network Planning, Manager Network Initiatives (2009-2011)

Network Planning, Manager Capacity Planning (2008-2009)

Corporate Real Estate, Manager Airport Properties (2005-2008)

Schedule Planning, Planner Capacity Planning (2002-2005)

Finance, Ticketing Operations Analyst (2001-2002)

Education:

B.A. – University of North Carolina at Chapel Hill (1995)

Postgraduate Studies Pre-Medicine – Appalachian State University (1996)

Ilona Cambron, Director of Air Service Development

April 2017 - Present **ASM North America**

Director Air Service Development, North America

Ilona's main responsibilities include securing additional air service, supporting community development, and providing marketing and government air service development grant support (SCASD) for clients based in North America. Ilona specializes in catchment analysis and traffic leakage/retention studies, as well as the economic impact of airports and specific routes. Ilona leads multiple ASM air service development engagements, as well as forecasting and marketing training courses throughout the year.

Ilona is a member of the ACI-NA Air Service Steering Group.

Key Projects:

- **Fairbanks International Airport** – primary ASD consultant since 2016
- **Puerto Rico Tourism Company** – overall project lead (2021-present)
- **PANYNJ** – Stewart International Airport (SWF) catchment analysis, ongoing air service development support (2018-Present)
- **PromPeru** – ASD consulting services (2023-present)
- **Cleveland (CLE) Airport** Catchment Analysis and ASD support (2022-2024)
- **Avports / Tweed New Haven Airport (HVN)** – primary ASD consultant (2018-2022)

October 2013 – April 2017 Sixel Consulting Group, Inc.

Air Service Development & Marketing Consultant

Specialized in domestic and international air service development. Efforts focused primarily on securing additional air services for airports in the USA and Europe. Expert in use, analysis, and presentation of airline/airport data such as traffic, airline revenue, and airline capacity/schedules. Routinely produced route forecasts, leakage/point-of-sale studies, airfare analysis, and applications to secure government grants to support air service (such as DOT SCASD). Met with and maintained relationships with airline decision makers at industry conferences and their head offices. Created and maintained airport marketing programs utilizing social media, blogs and digital advertising platforms. Maintained relationships with clients, attended client stakeholder meetings, and developed community support for air service development initiatives. Member of ACI-NA Jumpstart Planning Working Group.

January 2012 – September 2013 - Airports of Regions Management Company, Moscow, Russia

Sr. Manager Air Service Development and Marketing

Responsible for air service development and marketing for all managed airports (four) - including Russia's third largest airport – in Ekaterinburg (SVX) as part of the largest airport management corporation in Russia.

Business to business marketing of group airports to airlines using data analysis, forecasting, presentation creation, one-on-one meetings, and relationship management. Created marketing programs to promote passenger use and incentive plans to attract air carriers. Developed relationships with stakeholders in government and private sector. Prepared economic justification for new air service and secured service on Alitalia, Ukraine International Airlines, Air One, and Hainan Airlines. Led a team of eight marketing and ASD analysts working on air service development projects.

June 2006-December 2011 - Ekaterinburg Koltsovo International Airport (SVX)

Head of Aviation Marketing Department

In addition to duties performed in role at successor entity, managed Ground Handling Contracts between contractors and airline headquarters staff.

Organized and hosted UBM Routes CIS airline-airport event in 2012. Created/submitted bid for hosting Routes CIS event, the first Routes event in Russia. Managed event staff, chose venues, recruited volunteers, arranged advertising, secured sponsors, and bore ultimate responsibility for all aspects of the event.

Developed unique incentive program: leased Embraer aircraft to a regional carrier in return for service to regional communities.

Prepared economic justification for new air service and secured service on Finnair, Air China, Belavia, flydubai, Air Astana, airarabia, Czech Airlines.

Education

MBAA, Embry Riddle Aeronautical University (2022-present).

MA in Linguistics and Philology (2005). Master's Program in Strategic Marketing and Economics (2012), Ural State University, Russia

Lee Lipton, Senior Vice President, Aviation Strategy

Profile:

Lee joined ASM in 2018 bringing with him two decades of airline and airport strategy, planning, and business development experience in Canada, the US, and Europe. He led network planning teams and functions at Southwest Airlines, Aer Lingus, and WestJet. In those roles, Lee was responsible for the strategy and implementation of long-term and short-term network plans, route development, flight scheduling, and regional airline partnerships at low cost and network airlines. He focused on integrating planning process across the commercial and operational sides of the business and navigating complex, competitive, and constrained environments. Lee also led air service development and cargo strategy across the Vantage Airport Group's ten airports in five countries as well as traffic forecasting and analysis for Vantage's airport transactions. In addition to his strategic planning and analytical experience, Lee brings a strong history of building stakeholder partnerships to his projects. At ASM, Lee has led air service development, forecasting, and airport transaction advisory projects throughout the Americas and Europe.

Key Skills

- Network Strategy and Development
- Airport Business & Air Service Development
- Market and Competitive Analysis
- Traffic and Operations Forecasting
- Airport Transaction Advisory

Experience:

2018 – Present Senior Vice President – Aviation Strategy, ASM – Informa Plc

- **Kalaallit Airports (Greenland)** – Created and implemented air service development strategy for two new international airports in Greenland as well as significant investment in the country's tourism infrastructure. Initiated and developed relationships with key prospective airlines while supporting network development for existing domestic and international services. Created and implemented air service task force to foster collaboration in air service development across Greenland's travel and tourism ecosystem.
- **JFK International Airport T6 Traffic Advisory** – Served as traffic advisor to the Vantage Airport Group-led JFK Millennium Partners, including short-term and long-term traffic and operations forecasts for the New York region, JFK airport, and new Terminal 6. Prepared traffic and economic report for rating agencies, investors, and lenders, and supported financing due diligence.
- **Barbados Tourism Marketing Inc.** – Developed air service development strategy and implementation plans for growing the country's tourism and recovery from the COVID-19 pandemic. Supported creation of new airline incentive and marketing support schemes, including airline negotiations.
- **Edmonton International Airport (YEG)** – Supported growth of new ultra-low-cost airline service through market analysis, airline relationship support, development of new airline incentive schemes, and supporting airline agreement negotiation. Developed business cases for community stakeholder support of airline incentives for domestic and international services by new and incumbent airlines. Created and delivered bespoke air service development training program to airport team.

- **Hermes Airports Cargo Strategy** – Led evaluation of cargo business opportunities for Cyprus, including economic development analysis, regional traffic flows, cargo industry trends, and potential facility requirements to recommend a national strategy.
- **Canadian Airport (client confidential)** – Short-term and long-term traffic forecast for a secondary Canadian airport, including forecasts and analysis of multi-airport system for passengers and cargo.
- **Rice Group** – Evaluated aviation and aerospace business opportunities for real estate investor at multiple Canadian airports. Sectors included cargo, business aviation, maintenance, and air mobility.
- **Québec City Jean Lesage International Airport** – Development and delivery of airline business cases for new and additional services on domestic and international routes.
- **Pointe-à-Pitre International Airport** – Guided negotiation of airline incentive program with a new carrier, including drafting the agreement, creating, and supporting negotiating strategy, and local stakeholders.
- **Kraków Airport** – Supported creation of new air service development strategy following extensive market and competitor analysis, alongside extensive engagement with local government, business, travel, and tourism stakeholders.
- **Ontario International Airport (California)** – Part of team providing air service development strategy and implementation to secondary Los Angeles-area airport. Responsible for relationship with largest airline, as well as developing new services from European and Asian airlines.

Other Relevant Employment History:

2016 – 2017 Director of Network & Schedule Planning - WestJet – Calgary, Canada

Oversaw network planning, flight scheduling, schedule publications, slot management, and charters for Canada's second largest airline with 150+ aircraft carrying 20 million annual guests to more than 100 destinations in 20 countries. Led team of fifteen people at varying experience levels with four manager direct reports.

2012 – 2016 Director of Air Service & Cargo Development, Vantage Airport Group

Led the marketing of network airports/regions to passenger and cargo airlines to bring additional flights for the privately held investor and operator of ten airports in Canada, the Caribbean, Cyprus, and US.

Supported business development initiatives to add airports to the network. Guided a team of two at the Vancouver corporate office and five marketing professionals at the network airport sites.

2010 – 2012 Director of Network Planning, Aer Lingus

Delivered effective network strategy, profitable route structure, and efficient flight schedules for the national airline of Ireland operating throughout Europe, the UK, and the US. Led team of seven experienced analysts and planners. Contributed to 31.6% operating profit increase over two years. Represented Aer Lingus with international business trade organizations in Ireland and the US.

1995 – 2010 Network Planning Manager/Schedule Planning Analyst/Planner/Supervisor, Southwest Airlines, Dallas, Texas

Managed the network planning process including long-term strategy, short-term capacity plans, new market entry, network and business model development, and fleet initiatives. During entire Southwest tenure, operating revenue increased from \$3.8 billion to \$12.1 billion. Promoted from Analyst to Team Leader of ten schedulers and planners for the largest low-cost airline in the US.

Education

Master of Journalism, Northwestern University, Bachelor of Aeronautics (Minor in German), Miami University, AFS Student Exchange: Akureyri, Iceland (full year) Sønderborg, Denmark (summer)

David Appleby – Director – Latin America & the Caribbean

Profile:

An experienced aviation professional with 19 years working in the industry.

After holding commercial and analytical roles during his 7 years at US Airways, he transferred to the Routes & ASM business in 2007 to lead development in the Latin America & Caribbean regions, based firstly in Mexico and more recently in South Florida. Dave holds key relationships right up to C-Suite and Ministerial level all around the LAC region with Airlines, Airports, Destinations, Governments and Associations. He has been actively involved in many of the ASM consulting projects he has delivered over the years. Dave has most recently been key in landing new air services for Cali, Colombia by bringing Spirit, Aeroméxico and Jetsmart to the market as well as playing important roles concerning consulting projects and air service results with some of the largest airport clients of the region such as Bogotá, Panamá, Sao Paulo-Viracopos, Buenos Aires and Brasília.

Key Projects Secured and Direct Project Involvement:

- Airline Implementation Projects
 - . Bogotá El Dorado International Airport, Colombia
 - . Aerocali S.A., Colombia
 - . JAPI Airport, Suriname
 - . Cheddi Jagan International Airport, Guyana
 - . Guayaquil, Ecuador
 - . Sao Paulo – Viracopos, Brazil
 - . Inframerica, Brazil (Brasilia International Airport)
 - . Cartagena, Colombia

- Air Service Development Strategy Studies –
 - . Barbados Marketing Tourism Inc.
 - . Aerocali S.A., Colombia
 - . Querétaro International Airport
 - . Cayman Islands Department of Tourism
 - . Sao Paulo – Viracopos, Brazil
 - . OECS, Caribbean

- Route Opportunity and Long-Term Passenger Forecasts –
 - . Airports Authority of Trinidad & Tobago
 - . Pointe-a-Pitre International Airport, Guadeloupe
 - . Grupo Aeroportuario del Pacifico (GAP), Mexico
 - . ODINSA, Colombia
 - . Antigua & Barbuda Tourism Authority
 - . Toluca International Airport, Mexico

- Advance Business Cases –
 - . Pointe-a-Pitre International Airport, Guadeloupe
 - . St. Lucia Tourist Board

- Routes Event Preparation/Support Packages –
 - . Bogotá El Dorado International Airport, Colombia
 - . Aerocali S.A., Colombia
 - . MINCETUR, Peru
 - . INGUAT, Guatemala
 - . Airports Authority of Jamaica (AAJ, Jamaica)
 - . Queretaro Intercontinental Airport, Mexico
 - . Tocumen International Airport, Panama
 - . L.F. Wade International Wade, Bermuda
 - . AA2000, Argentina
 - . Guayaquil International Airport, Ecuador
 - . Inframerica, Brazil (Brasilia International Airport)

Skills:

- Data Manipulation and Analysis
- Airline/Route Strategy/Target Setting
- Airline Incentive Support
- Airline Presentation and Negotiation
- Latin America/Caribbean Aviation Market Specialization
- Business Development Fluent in English and Spanish

Roles & Responsibilities

To secure new business assignments for ASM in Latin America & the Caribbean as well as performing client project fulfilment/consulting work in the specialized knowledge area of air service development utilizing native level Spanish speaking ability, existing top level contact base and a local working knowledge of every Latin America and Caribbean market to develop business for the company and to secure new air services for clients. To support clients globally across all geographies and all aviation sectors, providing assistance where necessary and principally within Latin America & the Caribbean regions, utilizing broad contact base for the benefit of ASM's global network of clients to develop to/from the region. To secure and increase the attendance and revenues at Routes events from airports, airlines, suppliers and other customers in Latin America and the Caribbean

- Responsible for ASM's business development in Latin America & the Caribbean and manages a portfolio of clients ensuring all commitments to them are undertaken on time and of the highest quality.
- Utilizes native-level Spanish speaking ability, business French speaking ability and profound aviation/air service development knowledge/experience to drive the business forward in the region, taking advantage of existing wide range, top level, business relationships from every sector of the industry including Ministers/CEOs and Managing Directors of Airlines, Airports, Governments, Tourism Bodies and Economic Development Agencies.
- Uses strong business relationships and possesses a local working knowledge of every country within the Latin America and Caribbean region to the benefit of the company and on a daily basis
- Leads the sales effort in Latin America and the Caribbean region to win new business, following up on leads, preparing/presenting detailed and technical air service development project proposals and negotiating fees with clients, in both English and Spanish.

- Utilizes relevant software/databases (Sabre Market Intelligence, Flightbase etc.) to manipulate relevant market/airport data to identify trends and vital information to support client business cases and overall route development strategizing
- Participates in fulfillment of ASM client project work where required
- Leads/participates in Airline event/HQ meetings, organize and leads Client Sales Missions where required
- Maintains dialogue with the airlines on clients' behalf until conclusion of the route development process
- Responds to client requirements as well as directing the client, initiating new solutions and route development initiatives
- Organize, secure host agreement and delegate sales for ASM's client training programs within Latin America & the Caribbean, including sometimes delivery of content. Develops and grows revenues across a portfolio of all regional clients and company products
- Delivers delegates and revenues from airlines, airports, tourism authorities and suppliers to attend Routes events and investment in Routes products through sales meetings and through meetings held at global trade events

Beth Redpath – Senior Research Analyst

Profile:

Beth joined ASM at graduate level entry in 2016. She provides market insight through the delivery of ASM's data and forecasting products and conducts qualitative geo-political-economic studies, alongside quantitative data analysis, to produce commercial analysis and traffic benchmarking reports, assisting in network development strategies. Beth has recently been promoted to Senior Research Analyst which has allowed her to further develop her analytical skills and become an invaluable member of the team and helping clients fulfil their key objectives.

Key Skills:

- Data Analysis
- Route Development Strategy
- Traffic Forecasting
- Report and Presentation Production

Key Projects:

Examples of forecasting experience including but not limited to:

- Aerocali – Analysis of Cali & Colombian Markets: provided descriptive statistics
- Antigua – Traffic Forecast Report: conducted 5-year traffic forecast
- Brazil Concession – Bid Preparation for Fortaleza, Salvador, Florianopolis and Porto Alegre Airports in Brazil: provided qualitative market data to assist in development of probability model for long-term forecast
- Birmingham Airport – Traffic Reports and Forecasts – conducted 5-year traffic forecast
- Lithuania Airports – Provided data analysis and multiple traffic route forecasts to feed into government incentive policy
- Venice – Long-Term Forecast Project: provided qualitative market data to aid the formation of assumptions for long-term forecast model and reviewed aviation pricing strategy.

Examples of route development strategy and retainer experience including but not limited to:

- Cayman Islands Department of Tourism - Empty Seat Strategy Project & Airline Meeting Representation: provided descriptive statistics for airline presentations, presented to airlines at Routes, and produced monthly traffic reports, produced analysis for key strategic targets
- Edeis – Nimes Market Study & Implementation including Airline Meeting Representation: developed presentations for Routes event and presented to airlines
- IAA – Air Service Development Marketing Services: developed presentations to present to airlines
- London Southend Airport – In-depth data and analysis, producing airline presentations, supporting client with post covid recovery strategy
- Lithuania Airports: Provided data analysis for countrywide airport system Route Development strategy
- New Libreville International Airport (NLIA) – Route Development Study: Analyzed traffic flows for Cargo report. Also, 23 5-year traffic forecasts for CEMAC region.
- Permian LP – Produces regular analytical reports for Fund Management Company
- Prague Airport - Long-term Route Development Strategy Study and Prague Airport Operational Results
- Queretaro Intercontinental Airport - Route Development Strategy: performed socioeconomic demographic analysis
- SITA – Produces regular data update reports for Aviation Information Technology Company

Experience

March 2022 – Present: Senior Analyst, ASM

August 2016 – March 2022: Research Analyst, ASM

Education:

BSc Hons Air Transport with Commercial Pilot Studies (1st Class)



Bradley C. Kutchins, PE

Managing Principal

Bachelor of Science in Civil Engineering, Texas A&M University - May 1986

Professional Engineer – State of Texas

Member of the American Association of Airport Executives,

Louisiana Airport Managers and Associates,

Tau Beta Pi National Engineering/Chi Epsilon Civil Engineering Honor Societies

Mr. Kutchins has thirty-eight years of experience in aviation programming, planning, and design and program/construction management. He leads the firm's Federal Liaison, Environmental and Master Planning Service Practice efforts, as well as a significant number of K&G's Financial and Capital Development Practice, including many Rates and Charges Analyses and Passenger Facility Charge Actions for the firm's clients in Texas and Louisiana. The Environmental and Master Planning efforts include general coordination of environmental clearance processes, Environmental Assessments, Part 150 planning studies, and complete Master Plan development. His client base includes Dallas Love Field, Houma-Terrebonne, Baton Rouge Metropolitan, Abilene Regional, Monroe Regional, North Little Rock Municipal, and Lake Charles Regional Airports, as well as several other small primary and general aviation facilities across the Southern sector of the country.

Before forming Kutchins & Groh, LLC, Mr. Kutchins worked with the Mumphrey Group from 1998 – 2003, leading the firm's planning practice in Texas and Louisiana. During this period, he worked with multiple entities resulting in the implementation of several major capital development programs at New Orleans International and Baltimore/Washington International Airport.

From 1991 – 1998, Mr. Kutchins served as a Program Manager for the FAA where he administered all federally-funded airport improvements, through the Airport Improvement Program, in Southeast Louisiana and Northwest Arkansas. This entailed the management of all facets of planning, engineering, and construction for a \$300,000,000 capital development program, as well as an \$110,000,000 Land Acquisition program for the New Orleans International Airport General Aviation and Air Cargo Development Program.

Brad also served as the FAA's manager for the New Northwest Arkansas Regional Airport handling all aspects of the program including planning, design, and construction, as well as dealing with the public and media throughout the development of the airport. Under his direction, this 2,185-acre facility was constructed on time and brought in significantly under the original budget of \$145,000,000. During his career with the FAA, he was honored several times for Superior Accomplishment and Technical excellence.

Brad began his career and spent six years with AECOM (previously Day & Zimmermann, Inc.) in its transportation services group where he was in charge of daily resident management for the design and construction phases of both publicly and privately-owned transportation and infrastructure projects. This included airfield construction and rehabilitation projects, aircraft maintenance facility construction, and landside development.

In 2023, Brad was a co-recipient of the *Louisiana Aviation Professional of the Year* award.



George L. Groh, AIA

Managing Principal

Bachelor of Architecture, University of Louisiana-Lafayette, 1981

Registered Architect - State of Louisiana

Member of the American Association of Airport Executives, Southeast Chapter American Association of Airports Executives, American Institute of Architects, Florida Airports Council, and the Louisiana Airport Managers Association

George Groh brings 40 years of experience in planning, design, project management, and construction management, with over ten years in airport management. Mr. Groh has extensive experience in developing Airport Capital Improvements Programs. This includes implementing the airport's vision from the planning phases through project construction completion. Understanding the various governmental challenges of planning, funding, environmental and FAA processes is critical to implementing and successfully developing the airport program. George's Capital Planning and Program Management efforts include management and coordination of all facets of our clients' capital development programs. Since forming Kutchins & Groh, Mr. Groh has been the lead principal on multiple airport master plans for both air carrier and general aviation airports and lead the program management efforts on a multitude of airport development programs overseeing design through construction projects. He has also performed hundreds of Independent Fee Estimates for airport projects throughout the country and assisted in the development and funding strategies of airport capital improvement programs. **In 2023 the Louisiana Department of Aviation and Development presented Mr. Groh with the David Slayter Memorial Louisiana Aviation Professional of the Year Award.**

Prior to forming Kutchins & Groh, George worked with the Mumphrey Group from 1998 – 2003 and led the firm's efforts on the Richmond International Airport's planning contract, including planning and management for the Airport's Terminal Improvement Program, as well as management of and preparation of the Airport's Passenger Facility Charge Application. At Louis Armstrong New Orleans International Airport, he managed the implementation of the Transportation Security Administration's security screening mandates. This involved the installation of all the new security equipment at the checkpoints, baggage-screening equipment, managing the TSA construction and the relocation of six major airlines.

Before working with the Mumphrey Group, Mr. Groh served as Deputy Director of Planning and Development for the Louis Armstrong New Orleans International Airport (MSY). He was directly responsible for the implementation of its \$850 million Capital Facilities Program. This program included the expansion and renovations of the main terminal building and concourses, renovation and expansion of the baggage systems, as well as all air- and land-side upgrades and expansions. Mr. Groh also managed the Airport's Planning, Noise Compatibility, and Land Acquisition Programs. In these capacities, he oversaw all aspects of the Airport's Programs from initial concept development through implementation. Mr. Groh began his career and spent six years as an architect at Harold Burns & Associates, working on the design and implementation of numerous municipal, commercial, and industrial projects in the State of Louisiana. These projects included schools, office buildings, hotels, apartments, and various warehouse facilities.



ELIZABETH K. JAEDICKE

Director, Jaedicke Consulting LLC

PROFESSIONAL EXPERIENCE

Ms. Jaedicke is an aviation advisor with 20 years of experience helping clients understand future air traffic demand and its potential effects on revenue streams, infrastructure requirements and economic growth. She specializes in advising on traditional forms of airport financing (bonds, grants, PFCs, etc.) as well as alternative forms such as public-private partnerships (P3s). In addition to airport strategy consulting, Ms. Jaedicke advises on airport activity forecasting, state aviation system plans and air service development. She constructs forecast models to estimate long-term growth in passengers, cargo, and aircraft operations. Her expertise covers aviation traffic forecasting for multiple-airport systems, greenfield airports, national and regional airport system plans, and airports serving tourism-based economies. Models consist of consensus forecasts based on airport share models, econometrics, and trip propensity, among other forecast techniques. Her forecasts are often used to determine future infrastructure needs and as inputs to financial models or benefit cost analyses.

SELECTED PROJECTS

AIRPORT FORECASTING

Aviation Activity Forecasting for Buffalo Niagara International Airport (BUF) Master Plan, McFarland Johnson, Buffalo, NY (2024)

Lead forecaster responsible for preparing the annual forecasts of enplanements, cargo volumes, and aircraft operations at BUF. Modeled passenger demand from both Western New York and Ontario, Canada. Estimated changes to integrator cargo flows as a result of changing ownership of postal contracts and the effect on aircraft parking positions.

Aviation Activity Forecasting for Terminal Planning at New Bedford Regional Airport (EWB), New Bedford, MA (2024)

Lead forecaster responsible for preparing annual forecasts of enplanements, operations, and based aircraft at EWB. These forecasts were converted into peak period metrics for use in demand/capacity analysis of a future terminal.

Aviation Activity Forecasts for Business Plan, Manchester Airports Group (MAG), Grand Bahama International Airport (FPO), Freeport, Bahamas (2024)

Prepared bottom-up, short-term forecasts of aviation activity at FPO to be used in MAG's business plan for operating the airport. Created long-term forecasts of tourist arrivals to the Bahamas and expected airport passengers.

Master Plan Traffic Forecasts for Negril Aerodrome, Jacobsen Daniels Brakkam of Jamaica, Negril, Jamaica (2024)

Created long-term aviation activity forecasts for passengers and aircraft operations, assuming new carrier service and leakage recovery from the Montego Bay International Airport. Estimated peak hour forecasts to be used as inputs into capacity sizing analysis for a new terminal.



Master Plan Traffic Forecasts for Lake Charles Regional Airport, Kutchins & Groh, Lake Charles, LA (2024)

Jaedicke Consulting is currently preparing long-term forecasts of enplanements, based aircraft, scheduled flights, air taxi, and general aviation operations. Forecast scenarios cover the introduction of electric aircraft, variation in economic growth, and new commercial service assumptions.

Master Plan Traffic Forecasts Grove City Regional Airport, McFarland Johnson, Grove City, PA (2023)

Created a long-term forecast of aircraft operations, based aircraft, and peak period activity for a general aviation-focused airport in Western Pennsylvania.

Master Plan Traffic Forecasts for Nantucket Memorial Airport, McFarland Johnson, Nantucket, MA (2022)

Created a long-term traffic forecast covering enplanements, aircraft operations, fleet mix and based aircraft. Forecasts included five scenarios covering market interruption and new carrier service.

Master Plan Forecast Update for Pittsburgh International Airport, Ricondo/Allegheny County Airport Authority, Pittsburgh, PA (2020)

Analyzed the effect of COVID 19 on global, national and regional air cargo flows as well as business aviation operations. Created long-term forecasts of volume (belly and all-cargo) and freighter flights for multiple pandemic recovery scenarios. Estimated future General Aviation operations and fleet mix at PIT and GA-focused Allegheny County Airport.

Msalato Airport Economic Impact Analysis, EBP, Dodoma, Tanzania (2020)

Prepared long-term passenger, aircraft operation, and cargo forecasts expected at a Greenfield airport to be built in the new Tanzanian capital city.

Updated Master Plan Forecasts for the Westchester County Airport, Merchant Aviation, White Plains, NY (2020, 2022, 2023)

Created a long-term traffic forecast covering passengers, air cargo volumes, aircraft operations, fleet mix and based aircraft.

Long-Term Forecasts of Perishable Air Cargo Flows, Airglades International Airport, Hendry County, FL (2019)

Identified key macroeconomic drivers of perishable imports from Latin America to the US. Constructed econometric models to project US-Latin America air cargo flows (inbound and outbound). Forecast South Florida's market share of perishable imports by air. Estimated route costs per flight for importing perishables to the US by air from multiple Latin American airports.

Forecasts for JFK Airport Terminal One Redevelopment, Steer Group (2018)

Advised on the traffic forecasting efforts covering the development of a new 23-gate facility at JFK. Created long-term constrained traffic forecasts for all three NYC airports.

Mobile Airport Authority Metropolitan Airport Systems Study, Mobile, AL (2018)

Conducted a Metropolitan Airport Systems Study to examine the feasibility of shifting commercial passenger service from Mobile Regional Airport to the Mobile Downtown Airport. The study involved creating short-term traffic forecasts including estimations of leakage recapture due to the change in airport location. The cost-benefit of the relocation was also estimated in terms of tourism, state and local taxes, and business receipts.



Data Analysis for JFK Landside Planning, PANYNJ (2017)

Analyzed flight-level data for JFK to be used in landside planning and passenger arrival simulations. Combined data from airline schedules, FAA Opsnet, and US DOT T-100.

Baton Rouge Metropolitan Airport Master Plan Forecasts, Kutchins & Groh, Baton Rouge, LA (2016)

Supervised the creation of demand forecasts in support of the Airport's Master Plan; forecasts covered commercial traffic and ATMs, freight and mail, General Aviation and busy periods/peak hour.

Prefeasibility Study for a Third Airport in São Paulo, Multiple Clients, Brazil (2009, 2016)

Led forecasting efforts for a technical and financial feasibility study of the development of a third international airport for São Paulo, Brazil.

Long-Term Traffic Forecasts for Mohammed V International Airport, Zurich Airport Ltd., Morocco (2015)

Oversaw creation of long-term traffic forecasts for Royal Air Maroc and other carriers at the Airport. Supervised creation of design day schedules for use in estimating future stand demand and baggage handling scenario analysis.

Cargo Demand Forecasts, John C. Munro Hamilton International Airport (YHM), Ontario, Canada (2013)

Supervised the creation of a detailed 20-year cargo demand forecast for YHM Airport. The project also provided planning and design support for a proposed cross-dock facility. Short-term forecasts were based on a series of potential user interviews including freight forwarders and integrators. Long-term forecasts were based on an econometric model.

Review of Long-term Traffic Forecasts, ICF and Grupo Aeroportuario del Pacífico (GAP), Sangster International Airport, Montego Bay, Jamaica (2013)

Reviewed long-term forecasts being used for planning purposes. Conducted regression analysis to understand the relationship between economic growth in origin countries and tourist arrivals to Jamaica.

Airport Development & Management Project, Aeropuertos y Auxiliares (ASA), Mexico (2012)

Managed study funded by the United States Trade Development Agency (USTDA) to forecast traffic, assess infrastructure requirements, evaluate safety and environmental processes, and create an air service development strategy at four airports in the greater Mexico City area.

São Paulo Regional Airports Forecasting and Sell-side Advisory, Aviation Department of the State of São Paulo (DAESP), Brazil (2012)

Led team in creation of route level forecasts for 27 DAESP airports.

Traffic Forecasts for AENA Airports, Advent International, Spain (2011)

Prepared forecasts of long-term traffic growth at 47 Spanish airports owned by AENA including Madrid Barajas and Barcelona El Prat.

Traffic Forecasts for OMA and Mexico City Airports, Advent International, Mexico (2010)

Created route-level short-term forecasts for 13 airports in Mexico operated by OMA and for Mexico City International Airport (AICM).



Traffic Forecasts for Quito International Airport, Quiport, Ecuador (2008)

Created long-term traffic forecasts and design day forecasts for use in planning the capacity of the new airport.

Traffic Forecasts for Grupo Aeroportuario del Pacífico (GAP), Abertis Airports, Mexico (2007)

Prepared traffic forecasts for 12 Mexican airports operated by Grupo Aeroportuario del Pacífico (GAP).

New England Regional System Plan, FAA, Boston, MA (2005)

Served as lead forecaster. The New England Regional System Plan developed comprehensive forecasts of aviation demand across the primary airports of the six-state New England region. Ms. Jaedicke analyzed air service and economic trends in the region. Based on these trends and regional projections of air travel demand, she developed short and long-term forecasts of scheduled passenger demand for the region at the city/town and county level.

Study on Changes in Demand for Air Transport, Office of the Secretary, U.S. Department of Transportation (2004)

Served as the lead forecaster for a study measuring changes in U.S. air travel demand and purchasing patterns pre- and post-September 11, 2001. Changes were estimated within segments of demand (business vs. leisure, short- vs. long-haul) and at different price points.

AIRPORT TRANSACTION DUE DILIGENCE

Gulf Shores Bid Due Diligence, Skylark Consulting Group, Gulf Shores, AL (2022)

Provided market analysis and long-term traffic forecasts in support to a bidder for the development of a business plan to construct and operate a greenfield passenger terminal at Gulf Shores International Airport.

St. Louis Lambert International Airport Bid Due Diligence, Skylark Consulting Group, St. Louis, MO (2019)

Lead traffic forecaster supporting the development of a business plan for a bidder for Lambert Saint Louis International Airport. Included forecasts of passenger, cargo, and general aviation activity. Forecasts were used as inputs into financial models of aeronautical and non-aeronautical revenues, and operating expenditures.

Austin South Terminal Sell-Side Advisory, Skylark Consulting Group, Austin, TX (2019)

Developed a business plan for the operator of the low-cost carrier South Terminal at Austin Bergstrom International Airport. Services included identifying airlines with business models consistent with the terminal's operating environment, forecasting airline network developments and related passengers and operations.

Hobart International Airport Bid Due Diligence, Skylark Consulting Group, Hobart, Australia (2019)

Reviewed and advised on short-term and long-term passenger forecasts used in business plan development.



Allied Aviation Services Due Diligence, Skylark Consulting Group, Canada/Ecuador/Colombia (2019)

Provided a due diligence of Allied Aviation, a fuel provider at 26 airports throughout Canada and the United States as well as Bogotá, Colombia, and Quito, Ecuador. Developed long-term demand forecasts of operations and fuel that drove projections of revenues and costs at each location.

Paine Field Due Diligence, Skylark Consulting Group, Everett, WA (2019)

Provided due diligence services to a bidder evaluating an opportunity to invest in a newly built passenger terminal at Paine Field in the Seattle area. Analyzed capacity constraints at Seattle-Tacoma International Airport and projected aviation activity for the region.

Chhatrapati Shivaji International Airport (MIAL) and the Navi Mumbai International Airport (NMIA), Skylark Consulting Group, Mumbai, India (2018)

Led the traffic forecasting efforts involved in a bid for the sale of a 49% stake in GVK's airports businesses in India. A long-term forecast of Mumbai regional O&D passengers was created based on regression analysis of the relationship between historical traffic growth and underlying socioeconomic characteristics of the market. Bottom-up (route level) forecasts were created for the next five years of operation of MIAL and the first five years after the opening of NMIA. Long-term, unconstrained forecasts of passengers and aircraft operations were estimated by applying elasticities to projected economic growth rates as well as making assumptions about the allocation of traffic between the two airports and future connecting flows.

Sofia Airport Due Diligence, Skylark Consulting Group, Sofia, Bulgaria (2018)

As part of technical due diligence, developed long-term annual passenger, cargo and aircraft movement forecasts. The methodology used a mixture of bottom-up, route-by-route forecasting and top-down long-term forecasting from 2024 to 2065 based on econometric analysis. The traffic forecasts were used as inputs into aeronautical, non-aeronautical and operating expenditure models.

Denver Concession Bid Due Diligence, Great Hall Partners, Denver, CO (2017)

Created the long-term passenger traffic forecasts used in the winning bid by Great Hall Partners (Ferrovial Airports/Saunders Construction/JLC Infrastructure) for the Denver Great Hall (Jeppesen Terminal) privatization. Ms. Jaedicke supervised operating model creation including aeronautical and non-aeronautical revenue streams, operating expenses and capex. She prepared reports and presentations given by the Client as part of its bid to the Denver Department of Aviation.

LaGuardia Airport Privatization, Goldman Sachs/AdP, New York, NY (2014)

For the privatization of the Central Terminal at LaGuardia, Ms. Jaedicke led the traffic forecasting effort as part of a bid consortium's due diligence. She designed an annual traffic forecast model and supervised creation of forecast design day schedules and coordinated integration of traffic and revenue forecast models.

Billy Bishop Toronto City Airport Privatization Due Diligence, Macquarie Infrastructure and Real Assets, Toronto, Canada (2014)

Served as project manager and lead traffic forecaster as part of bid due diligence. Ms. Jaedicke managed five contiguous work streams: traffic forecasting, environmental assessment, safety and security evaluation, and airport planning.

Sendai International Airport Privatization, Confidential Consortium, Japan (2014)

Created long-term traffic forecasts for use in evaluating the value of the Airport.



Midway Airport Privatization Due Diligence, IFM, Chicago, IL (2013)

Served as lead traffic forecaster. Ms. Jaedicke created route-level and econometric forecast models of passengers and ATMs involving the assessment of airport constraints.

Sanford International Airport Due Diligence, Macquarie European Infrastructure Funds, Sanford, FL (2013)

Served as lead traffic forecaster, providing advice related to traffic forecasts and business plan forecasts (including all cost and revenue streams) and identification of risks and opportunities regarding the sale of Orlando Sanford International Airport by Abertis Airports.

Rio de Janeiro Galeão Airport Privatization, Fraport, Brazil (2013)

Developed route level forecasts for both airports serving the Rio di Janeiro market as well as a passenger share model for the international traffic into Brazil via Rio and São Paulo.

São Paulo Airport Privatization, Fraport, Brazil (2011)

Created an airport share model for the São Paulo passenger market, distributing traffic across three airports based on airport preference factors and infrastructure constraints.

Bogotá El Dorado Airport Due Diligence, InterAmerican Development Bank, Colombia (2007-2009)

Created passenger and aircraft operations forecasts aiding in airport revenue projections for investors involved in the privatization process as well as due diligence for the InterAmerican Development Bank. Down-side scenarios were identified, ranked in terms of likelihood, and potential impacts estimated.

Juan Santamaria International Airport Due Diligence, San José, Costa Rica (2008)

Assisted the preferred bidder of the airport concession, ADC & HAS, in its acquisition due diligence. Created long-term aviation forecasts for passengers, cargo, and aircraft operations as well as conducted peak hour analysis for infrastructure sizing.

St. Petersburg Pulkovo International Airport Privatization Due Diligence, Hochtief, Russia (2007)

Prepared long term-traffic forecasts, including design day schedules for prospective buyer.

AIRPORT STRATEGY/ECONOMICS

Aviation Forecast Advisory for Greater Toronto Airports Authority (GTAA), Alton Aviation, (2022)

As a subcontractor to Alton Aviation, Ms. Jaedicke reviewed GTAA's aviation activity forecasts and scenario assumptions, advising on how to model the length and size of market shocks.

Creative Marketing Techniques to Improve Revenue Generation Partnerships, Airports Cooperative Research Program (ACRP), (2021-22)

As part of the Meehan Aviation Group (TMAG) team, Ms. Jaedicke completed a study for ACRP to document how and to what extent U.S. airports leverage Big Data and targeted digital marketing to enhance the customer experience and generate incremental non-aeronautical revenue.

Virginia Air Transport System Plan, The Meehan Aviation Group, Virginia (2021-2023)

Analyzed historical funding of airport capital projects at 66 airports across the Commonwealth of Virginia. Developed funding plan of future projects for these airports including Federal AIP entitlement



and discretionary funds, state sources, and local matches. Identified potential gaps in funding and strategies for bridging the gaps.

Air Service Development, Allegheny County Airport Authority, Pittsburgh, PA (2021-current)

Translated the story of Pittsburgh's economic transformation and health of its O&D passenger market into slide presentations for airport staff to give at industry air service development conferences and airline headquarter visits. Analyzed potential of the economy in the PIT catchment area; focused on local industrial drivers of economic growth.

Rates & Charges Renegotiation, ICF and Grupo Aeroportuario del Pacifico (GAP), Norman Manley International Airport, Kingston, Jamaica (2019)

Advised on the preparation of rate proposal documents and traffic forecasts in connection with quinquennial rate negotiation process.

Massport Bond Feasibility Reports, Boston, MA (2015-2016)

Supervised the preparation of feasibility reports in support of bond issuances in 2015 and 2016. Ms. Jaedicke also presented these reports to rating agencies. The reports include a socioeconomic review of the Greater Boston metro area and a review of Massport's financial and planning traffic forecasts.

Air Service Marketing and Strategy, Tampa International Airport, Tampa, FL (2012-2017)

Managed a team on a multi-year contract to conduct air service marketing, stakeholder engagement, strategic planning, airline presentations, and route forecasts. Tasks included leakage studies, understanding the economic impact of new air service, community surveys, business surveys, as well as analysis of how Tampa fits into existing airline route networks.

Air Service Marketing and Stakeholder Engagement, San Angelo Regional Airport, San Angelo, TX (2011-2013)

Served as project manager, supervising surveys of the community (including via social media), business surveys, and making city council presentations regarding air service at the Airport. Ms. Jaedicke prepared route forecasts and airline presentations. She also accompanied the Airport on trips to airline headquarters and air service conferences.

Air Cargo & Aircraft Maintenance Hub Technical Assistance Project, Piarco International Airport, Trinidad & Tobago (2008-2011)

Under a U.S. Trade and Development Agency (USTDA) grant, evaluated the financial and conceptual feasibility of a proposed multi-modal industrial complex, cargo logistics center, and tax free zone.

Duty Free Arbitration, International Centre for Settlement of Investment Disputes, Government of Romania (2008)

Prepared reports and testimony for an expert witness for the Government of Romania in a dispute with EDF Services which operated the Duty Free Concession at Bucharest's Otopeni International Airport and two other regional airports in Romania.

Airport System Plan, U.S. Trade & Development Agency, Morocco (2006)

Performed macroeconomic analysis of factors affecting the development of aviation in Morocco; constructed aviation and financial forecasts for infrastructure sizing and development.

Van Nuys Airport Part 161 Study, HMMH, Van Nuys, CA (2006)



Analyzed the General Aviation (GA) aircraft operations data and assisted in creating the forecasts used in support of a 161 application for Van Nuys Airport. Multiple types of restrictions were addressed including incentives, daytime noise limits, curfews, helicopter caps, among others. Ms. Jaedicke organized aircraft operations data from the air traffic control tower (daily logs and curfew counts), aggregating operations by aircraft type (and noise stage), day of week, and time of day. Her data was used as inputs into the FAA's Integrated Noise Model (INM model), which analyzed the noise impacts of the Airport's operations on the surrounding area (noise contours).

ECONOMIC IMPACT

Regional Benefit Provided by JFK International Airport, PANYNJ (2016-2017)

As part of a larger economic impact study primed by Arup, Ms. Jaedicke managed a task to estimate catalytic economic impacts at JFK International Airport resulting from the Airport's connectivity.

Strike Economic Impact Analysis, Hawaiian Airlines, Honolulu, HI (2016)

In late 2016, negotiations between the Hawaiian Airlines' management and its pilots reached an impasse. As a result, the Airline began preparing for a strike. Ms. Jaedicke led a team of consultants that estimated the potential economic impact to the State of Hawaii of a strike. Multiple scenarios were evaluated based on the timing of the strike and varying strike lengths. Impacts were estimated for the following areas: airline operations, inter-state trade, healthcare, cultural effects, inter-island business and education. Impacts were estimated using the IMPLAN input-output model.

Airport Economic Impact Analysis, Hillsborough County Aviation Authority, Tampa, FL (2011)

Led a study to estimate impacts (direct, indirect and induced) of Tampa International Airport on the surrounding region and the State of Florida. The study included assessing the impacts from visitor spending, current and new international air service, the capital investment plan, airport management and tenants, and taxes. In addition to overall airport impacts, the impacts of individual routes were also calculated. Impacts were estimated using the IMPLAN input-output model.

AIRPORT SUSTAINABILITY

Environmental Impact Statement, Federal Aviation Administration/VHB, Inc., Charlotte, NC (2017)

Evaluated traffic forecasts used to estimate the impact of a new runway and terminal expansion on the surrounding environment at Charlotte Douglas International Airport. Estimated the amount of historical delay (as measured by taxi in and taxi out times) using FAA Opsnet at the airport. Used delay analysis to demonstrate the purpose and need of the project. Benchmarked CLT's delay statistics compared to other large hub airports.

Environmental Data Reporting, Massport, Boston, MA (2017)

Analyzed traffic for annual report on environmental conditions at Boston-Logan International Airport including emissions reductions and sustainability initiatives. Conducted historical analysis of Boston area economic and aviation markets.

Sustainability Reporting, Los Angeles World Airports, Los Angeles, CA, (2016)

Coordinated collection of data and preparation of annual sustainability report covering economic, social, water, energy, and noise metrics.

TOURISM STRATEGY



Tourism and Aviation Market Review, International Finance Corporation (IFC), Samoa (2016)
Analyzed the cost-benefit of investing in air service development strategies to increase tourist arrivals.

Joint Venture Review, Government of Samoa (2016)

Supervised diagnostic analysis of existing joint venture between the Government of Samoa and Virgin Australia.

Study on Developing Air Linkages to Sustain Tourism, Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC) (2014)

Identified the status of air transportation services in 56 OIC member states, determined the barriers to enhancing air transportation and proposed recommendations for improving air linkages to foster tourism activities.

AIRLINE STRATEGY

Air Canada Restructuring Review, Cerberus Capital Management, Montreal, Canada (2003)

Assisted with a comprehensive evaluation of Air Canada's restructuring plan as the basis for a bankruptcy exit-financing investment.

TRAINING COURSES TAUGHT

- Overview of Aviation Databases
- Airport Traffic Forecasting
- Intermediate Airport Forecasting
- Introduction to Route Forecasting

EDUCATION

Master's in Public Administration/International Development, Kennedy School of Government, Harvard University, 2003

B.A., History, Texas A&M University, 2001

TRANSPORTATION RESEARCH BOARD EXPERIENCE

ACRP Report 251 (Project# 01-39): Creative Marketing Techniques to Improve Revenue Generation Partnerships, Research Team Member

ACRP Report 194 (Project# 03-36): Using Disaggregated Socioeconomic Data in Air Passenger Demand Studies, Panel Member

Friend of Aviation Economics and Forecasting Committee AV040, 2015-present

EMPLOYMENT HISTORY

Jaedicke Consulting LLC

Director, August 2018-present

Vanasse Hangen Brustlin, Inc. (VHB)



Chief of Aviation Economics and Forecasting, June 2017-June 2018

ICF International

Principal, Airports, December 2007-April 2017

SH&E, Inc. (acquired by ICF International)

Senior Consultant, Airports, April 2004 – December 2007

Target Analysis Group, Inc. (now Blackbaud, Inc.)

Database Analyst: Client Data Services, August 2003-April 2004

COMPUTER AND DATA SKILLS

- US DOT DB1B (“O&D Survey”) and T-100 onboard data
- Airline schedule data (OAG and other suppliers)
- FAA Opsnet
- Airline booking data (ARC, MIDT)
- IATA AirportIS
- Databases: Oracle, Microsoft SQL Server, MySQL
- Advanced Excel modeling

PUBLICATIONS

The Meehan Aviation Group and Jaedicke Consulting. *Airports Cooperative Research Program (ACRP) Report 251: Creative Marketing Techniques to Improve Revenue Generation Partnerships*, Transportation Research Board of the National Academies, Washington, DC, 2023.

Jaedicke, Elizabeth. (August 2015). Trip Propensity Can Be a Powerful Addition to Airport Forecasts. *Airports Council International-Latin America (ACI-LAC) News Bulletin*, (2), 10-12.

Kelly O'Donnell, PhD
Corrales, New Mexico
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Professional Experience

2022-Present

Chief Research and Policy Officer, Homewise Inc.

Lead all state, local and federal policy initiatives as well as research and program evaluation at Homewise. Member of senior leadership team overseeing strategic planning and all internal and external activities of Homewise. Manage program evaluation staff. Contribute expertise in economic research and public policy to policy and funding initiatives.

2021-2022

Homewisdom Director, Homewise Inc.

Oversaw the creation and curation of content for Homewisdom publications. Authored numerous housing policy reports, opinion pieces, and blog posts. Recruited, led, and managed Homewise staff, consultants, and relationships with other research entities. Oversee the communications strategy that disseminates Homewisdom content. Supported the resource and business development efforts of Homewise.

2017-2021

Research Asst. Professor, School of Public Administration, University of New Mexico

Economic research, policy analysis, and program evaluation. Conducted economic impact analysis, social return-on-investment analyses, and cost modeling.

2014-2021

Senior Research Fellow, RWJF Center for Health Policy, University of New Mexico

Economic research, policy analysis, and program evaluation in the areas of healthcare finance, economic development, workforce development and education.

2011-Present

Founder and President, O'Donnell Economics and Strategy LLC

Economic research, analysis, policy development and planning for public and private sector clients in healthcare, education, workforce development, fiscal policy, and economic development. Helped clients plan, finance, and implement high impact policies and programs and structure effective public-private partnerships. A partial list of clients and links to projects are available at www.odonnelleconomics.com, a full list is available upon request.

2007-2011

Superintendent, New Mexico Regulation and Licensing Department

Served in the Governor's cabinet. Represented the agency before the state Legislature. Led the state agency that regulated most New Mexico licensed industries and professions, working with the New Mexico legislature, business leaders, social advocates to promote public safety, environmental health and consumer protection while also fostering economic competitiveness and functioning markets. Managed a \$25 million annual budget. Designed, implemented and promoted the Governor's policy initiatives in health care, finance, environmental health and consumer protection. Articulated the Governor's policy objectives to government entities, industry groups and the general public. Mentored 33 individual boards, commissions and divisions to support and sustain the Governor's vision.

2005-2007

Deputy Cabinet Secretary, New Mexico Economic Development Department

Principal legislative liaison and advocate for Governor's economic development agenda. Oversaw internal operations, budget, policy development and government affairs. Developed and implemented new incentive programs including tax incentives, training programs and capital outlay grants. Led initiatives to enhance New Mexico's green economy. Worked with site selectors and company representatives to promote New Mexico and structure incentive packages. Chaired the New Mexico Spaceport Authority board.

2004-2005

Tax Policy Director, New Mexico Taxation and Revenue Department

Principal legislative liaison for Department. Oversaw the development and implementation of state tax policy. Crafted legislation, developed and implemented regulation, and coordinated between disparate government entities, businesses and the general public. Oversaw tax research division, state revenue estimates and fiscal impact reporting.

2000-2004

Research Director, New Mexico Voices for Children

Represented New Mexico's largest child advocacy organization at the state legislature and in the press. Developed and advocated for state policies to improve the well-being of low-income and otherwise disadvantaged children throughout New Mexico. Produced the annual New Mexico KIDS COUNT Data book. Authored numerous research reports and spoke extensively on topics including early care and education, healthcare, minimum wage, predatory lending and state tax policy.

1997-2000

Senior Fiscal Economist, New Mexico Department of Taxation and Revenue

Conducted research on numerous state tax topics, authored fiscal impact reports and participated in revenue estimating.

Board Service

New Mexico Spaceport Authority, 2006-2008
New Mexico State Investment Council, 2023 – present
New Mexico Climate Investment Center, 2024 – present

Education

PhD Economics, University of New Mexico, 2001
MA Economics, University of New Mexico, 1997
BA Economics, Summa Cum Laude, University of New Mexico, 1995

Testimony

Lemar Rogers v. City of Albuquerque D/B/A Solid Waste Management Division, et al.; No. D-202-CV-2016-04488, Second Judicial District Court State Of New Mexico County Of Bernalillo, 2017, expert report.

Deloria Chapo v. Gallup-McKinley County Public Schools, et. al.; D-1113-CV-2016-00287, Eleventh Judicial District Court State of New Mexico County of McKinley, 2018, expert report.

Nicole Sena, et. al., v. New Mexico Department of Health, et. al.; D-101-CV-20160197, First Judicial District Court State of New Mexico County of Santa Fe 2018, expert report and trial testimony.

In the Matter of Public Service Company of Mexico's Abandonment of San Juan Generating Station Units 1 And 4; Case No. 19-00018-UT, New Mexico Public Regulation Commission, November 2019, expert report and hearing testimony

Pamela Montoya vs. Board of Education of the Dulce Independent School District and Darlene Gomez; No. 1:19-cv-00475-JAP-SCY. United States District Court for the District of New Mexico, 2019, expert report.

In the Matter of the Application of Public Service Company of New Mexico for Approval of Renewable Power Agreements and Energy Storage Agreements and Proposal for Demand Response Plan Pursuant to Final Order in Case No. 20-00182-UT Case No. 19-00195-UT New Mexico Public Regulation Commission, October 2020, expert report.

Jamie Vance v. Las Cruces Public Schools And Greg Ewing; D-307-CV-2019-02408; Third Judicial District State of New Mexico County of Dona Ana, November 2020, expert report.

Juan Gonzales v. R. J. Reynolds Tobacco Company, et al; D-101-CV-201902017; First Judicial District Court State of New Mexico County of Santa Fe 2019, expert report.

Edward Waters v. RJ Reynolds Tobacco Company, et. al; D-101-CV-201902366, First Judicial District Court State of New Mexico County of Santa Fe 2023, expert report.

In The Matter Of The Petition To Amend Title 20, Chapter 11 Of The New Mexico Administrative Code To Require Review And Consideration Of Health, Environment And Equity Impacts. AQCB Petition No. 2022-3. Petitioners: Mountain View Neighborhood Association, Mountain View Community Action. Friends of Valle de Oro. Albuquerque-Bernalillo County Air Quality Control Board, Albuquerque, 2023, expert testimony.

Larry Cottle, et al v. R. J. Reynolds Tobacco Company, et al; Cause No. D-101-2020-02471; First Judicial District Court, Santa Fe, NM, expert report.

Michael D. Leach

Professional Summary

Michael D. Leach co-founded Sycamore Associates, LLC with his father in 1980, following two years in sales with a prominent area land developer specializing in industrial land sales in the North I-25 corridor. Sycamore Associates, LLC has specialized in the industrial and office property disciplines since its inception. The firm provides brokerage, management, consulting, development, and administration services with a primary emphasis on sales and leasing in the Albuquerque, New Mexico metro area.

Professional Experience

Sycamore Associates, LLC

Co-Founder

1980 – Present

- Specialize in industrial and office property disciplines, providing brokerage, management, consulting, development, and administration services.
- Emphasize sales and leasing in the Albuquerque, New Mexico metro area.
- Serve a broad range of clients from Fortune 500 companies to Real Estate Investors, Tenants, and Business owners.
- Maintain personal service, attention to detail, and a high regard for ethical dealings.
- Achieved personal transaction volume exceeding \$80 Million in over 240 sale and lease transactions since 2019.
- Currently marketing 32 active property listings for sale or lease.
- Admissions chair for NM SIOR Chapter.

Awards & Honors

- 2018 CCIM Deal of the Year over \$1,000,000.00
- 2019 Realtor of the Year, Commercial Association of Realtors New Mexico

Education

University of New Mexico, Bachelor's Degree

Valley High School

Greg Leach, Broker, MBOE

Professional Summary

Greg Leach is a native New Mexican, proud husband, and father. After receiving a bachelor's degree in communications from the University of New Mexico in 2005, Greg spent the next 5 years in Ohio and completed a Masters in Business and Operational Excellence from The Ohio State University in December of 2009. Upon returning to New Mexico in the Fall of 2011, Greg completed his Real Estate license requirements to pursue work and experience in Commercial and Industrial Real Estate with the family business and began working with Sycamore Associates in 2012.

Professional Experience

Sycamore Associates

Broker

2012 – Present

- Specialize in Commercial and Industrial Real Estate.
- Over 10 years of experience in Business Operations, Sales, and Customer Service prior to Commercial Real Estate.
- Served as a committee member & Director on the Commercial Association of Realtors New Mexico (CARNM) for 7 years (2016 – Current).
- Received the President's Award in 2021 in recognition and appreciation of creativity, vision, and volunteer service.
- Served as President Elect for CARNM in 2023.
- Nominated as the incoming President of CARNM in 2024.

Other Roles

Encino Development and Management

Board of Directors

2018 – Present

- Involved in preparing the organization to improve affordable housing for seniors in New Mexico.
- Expect to complete the first rehab of the Encino Gardens Building via the LIHTC program in 2024/2025.

Awards & Honors

- 2021 President's Award, Commercial Association of Realtors New Mexico (CARNM)

Education

- The Ohio State University, Masters in Business and Operational Excellence
December 2009
- University of New Mexico, Bachelor's Degree in Communications
2005

Licenses

Qualifying Broker NM Real Estate License #20093

Sammy Patel BSc (Hons) MSc
spatel@vantageairportgroup.com

PROFESSIONAL EXPERIENCE

VANTAGE AIRPORT GROUP

2020 - Present

Vice President, Commercial, Chicago, United States

Appointed Vice President, Commercial to provide leadership and oversight for the commercial management functions of Vantage Airport Group and serving as a member of the group's Executive Team.

- Responsible for maximizing the group's financial goals and strategic initiatives by developing and delivering the commercial (non-aeronautical) strategy
- Areas of accountability include Concession Management and Planning, Parking, Car Rentals, E-Commence, Property Development and development of the M&A strategy
- In addition, the successful delivery of the commercial program of the \$5.1B USD redevelopment of Terminal B at New York's LaGuardia

VANTAGE AIRPORT GROUP

2017 - Present

Chief Executive Officer – Midway Partnership, Chicago, United States

Appointed CEO of Midway Partnership (a new venture between Vantage Airport Group, SSP America & Hudson Group)

- *Responsible for the extensive concession redevelopment for Chicago Midway International Airport's 22 million annual passengers. This project is a part of the \$400 million modernization program and is made up of a team of almost 1,400 employees*

VANTAGE AIRPORT GROUP

2015 - Present

Commercial Director, Vancouver, Canada

- Main responsibilities include maximizing financial performance and enhancing the guest experience at each of the groups' airports, by developing and delivering the commercial (nonaeronautical) strategy. Areas of accountability include Concession Planning, Retail, Food & Beverage, Parking, E-Commence, Advertising, and Car Rental

LIVERPOOL JOHN LENNON AIRPORT

2012 - 2015

Commercial Manager, United Kingdom

- Main responsibilities included development and delivery of the airports commercial strategy including retail, food & beverage, car parking, ground transport, commercial space planning, and operational management of the retail program
- In addition to maximizing passenger spend and dwell time; financial forecasting; developing KPI reporting programs
- Undertook a department turnaround project in April 2012, resulting double digit growth in key Non-Aeronautical revenue categories each year, over delivery on revenue budgets

VANTAGE AIRPORTS UK

2010 – 2012

Head of Business, Car Parks & Ground Transport, United Kingdom

- Main responsibilities included management and delivery of one third of the groups' income; accountability for the company's single largest revenue budget; maximizing net car park income across all sites (yield management, new product development/enhancement, CRM, marketing and promotion)
- Delivered strategic cost reductions of 12% and developed and introduced the first online airport parking pre-book system delivering 15% additional revenue within the first six months of trading: increasing product upselling by 40%

Sammy Patel BSc (Hons) MSc
spatel@vantageairportgroup.com

PROFESSIONAL EXPERIENCE – *continued*

LIVERPOOL, DONCASTER, AND DURHAM AIRPORTS, UK <i>Aviation Sales Executive – United Kingdom</i>	2008 - 2010
LIVERPOOL JOHN LENNON AIRPORT, UK <i>Aviation Analyst – United Kingdom</i>	2007 – 2008
SCANDINAVIAN AIRLINES SYSTEM (SAS), LONDON HEATHROW <i>Turnaround Coordinator – United Kingdom</i>	2005 - 2007

EDUCATION

EXECUTIVE DEVELOPMENT PROGRAM –
Wharton Business School, University of Pennsylvania, United States

MSC RISK, DISASTER & ENVIRONMENTAL MANAGEMENT –
Business School, University of Huddersfield, United Kingdom

BSC AVIATION MANAGEMENT –
Centre for Civil Aviation, London Metropolitan University, United Kingdom

3 A LEVELS; ICT, ECONOMICS, GENERAL STUDIES. 1 AS LEVEL; MATH -
Greenhead College, Huddersfield, United Kingdom

Michael Golden
mgolden@vantageairportgroup.com

PROFESSIONAL EXPERIENCE

VANTAGE AIRPORT GROUP

2018 - Present

Senior Director, Commercial Development

- Oversee the strategy and leasing of commercial programs throughout the Vantage Airport Group portfolio, including LaGuardia Terminal B, Midway Airport and Lynden Pindling International Airport
- Respond to requests for proposals for new business with the successful pursuit of the Philadelphia 30th Street Station concession program
- Provide space planning and development support for Vantage's network airports and third-party Airports

MCCAFFERY INTERESTS

2017 - 2018

Portfolio Manager, University of Chicago

Commercial Real Estate Portfolio

- *Responsible for the management of the University of Chicago's 600,000 sf commercial real estate portfolio located in Chicago's Hyde Park neighborhood*
- *Lead a team of property managers, engineers, lease administrators and accountants to ensure client's expectations for properties were exceeded*

M&J WILKOW PROPERTIES

2016 - 2017

Senior Portfolio Manager

- Responsible for the management and leasing of a national portfolio of nearly 2 million sf of retail and office properties
- Collaborated with local brokers to develop and refine long term leasing goals for each property and oversaw the leasing process from the LOI stage through lease documentation and construction
- Contributed to the due diligence evaluation of acquisitions, including development of proforma, review of all leases and contracts, and tenant interviews
- Oversaw a \$2 million annual capital expenditure program including roof replacements, ADA upgrades, and landscaping projects

JOSEPH FREED & ASSOCIATES

General Manager (Sullivan Center)

2014 - 2015

General Manager (Block 37)

2008 - 2010

- Responsible for the comprehensive asset management of JFA's retail and office properties totaling nearly 1.5 million square feet, including a 1 million square foot historic mixed-use property located in the heart of downtown Chicago
- Lead contributor to the acquisitions team responsible for due diligence of investment properties
- Developed initial budget and CAM/TAX recovery models for development properties

Michael Golden
mgolden@vantageairportgroup.com

PROFESSIONAL EXPERIENCE – continued

WESTFIELD, LLC

<i>General Manager (O'Hare Terminal 5) – Chicago, IL</i>	2015 – 2016
<i>General Manager (Hawthorn Mall) - Vernon Hills, IL</i>	2011 – 2014
<i>Assistant General Manager (Franklin Park Mall) - Toledo, OH</i>	2010 – 2011
<i>Retail Manager (Old Orchard Mall) - Skokie, IL</i>	2007 – 2008
<i>Retail Manager (San Francisco Center) - San Francisco, CA</i>	2006 – 2007
<i>Assistant General Manager (Fox Valley Mall) - Aurora, IL</i>	2005 – 2006

- Chosen by Westfield to manage some of the company's highest profile properties and projects. Oversaw the successful Food Emporium development grand opening at San Francisco Center which grossed over \$25 million in its first year
- Managed Old Orchard through a 100,000sf development of a vacated Saks Fifth Avenue building
- Led Hawthorn through planning and construction of a \$55 million theater and entertainment wing

SKYDOME / SPORTSCO INTERNATIONAL, L.P.

1999 – 2005

Vice President

- Contributed to all aspects of due diligence evaluation and acquisition of the SkyDome Entertainment Centre
- Responsible for the comprehensive property management of the facility, including leasing, engineering, security, event management, food and beverage operations and leasing
- Leased over 300,000 sf of office and retail spaces

EDUCATION

MASTER OF PUBLIC ADMINISTRATION –
University of Arizona

BACHELOR OF SCIENCE IN PUBLIC AFFAIRS –
Indiana University

Steve Ogo
sogo@vantageairportgroup.com

PROFESSIONAL EXPERIENCE

VANTAGE AIRPORT GROUP

2019 - Present

Sr. Director Commercial Performance

2023 - Present

- Responsible for maximizing commercial performance across the Vantage Network, establishing best in class management processes and business intelligence through a team focused on daily management, marketing, and analytics.

General Manager, Midway Partnership & Sr. Director Commercial Performance

2022 – 2023

- Oversee the Midway Partnership joint venture made up of Vantage Airport Group, SSP America, and Hudson Group reporting to the management committee
- Responsible for maximizing commercial performance across the Vantage Network

Director, Commercial Operations Midway Partnership

2019 - 2022

- Oversee the daily operation of Midway International Airport's concession program; the first of its kind partnership hired to redevelop and operate concessions
- Lead a cross functional team consisting of business analysis, finance, and marketing
- Develop, implement, and execute operational systems for the operation of concessions across Vantage's network of airports

HANNA ANDERSSON

2017 – 2019

District Manager – KS, IL IN, MI, MO, MN, OR, TN, WA, WI

- Responsible for a portfolio of 10 Retail stores and 5 Outlet stores located across 10 states (Midwest, South, and PNW)
- Oversee Outlet division across the organization – Communication and Ops strategy

GUESS? INC.

2014 – 2017

District Manager – Midwest

- Responsible for a portfolio of 9 Factory and G by Guess stores in Illinois, Minneapolis, and Wisconsin
- Recruited into the company for the purpose of bringing the company culture to life and to stabilize talent in the market

BATH & BODY WORKS

2013 – 2014

District Manager – Chicago, IL

- Responsible for a portfolio of 10 stores that span from 10 miles north of Chicago to Merrillville Indiana
- One of 3 District Managers in the company that oversee “focus stores” (intended to double the sales across the company)

ADVANCE AUTO PARTS

2011 – 2013

District Manager – Chicago, IL

- Responsible for a portfolio of 11-13 stores in urban and suburban markets in the Chicagoland area
- Full P&L responsibility for both DIY and Commercial business
- Responsible for maintaining relationships with external vendors, commercial accounts, and representing the brand through excellent service and presentation in the retail store

Steve Ogo
sogo@vantageairportgroup.com

PROFESSIONAL EXPERIENCE – *continued*

STARBUCKS COFFEE COMPANY

2002 - 2011

District Manager - Eugene, OR / Chicago IL

- Managed several portfolios ranging from 9 to 16 stores in suburban and urban/flagship markets
- Developed a remote market from 9 to 21 stores over a 3-year period
- Platform lead for several strategic initiatives including Diversity and Inclusion, Customer Care, Remote Market Development, and LEAN Transformation

Rob A. Hale
rhale@vantageairportgroup.com

PROFESSIONAL EXPERIENCE

VANTAGE AIRPORT GROUP

2022 - Present

Senior Director, Commercial

- Lead new business development for U.S. airport concessions and other non-aero opportunities
- Develop strong pursuit teams, identify and secure local business partners, brands and operators
- Provide a metrics-driven approach to commercial space planning and programming
- Create commercial terminal master plans that drive sales as well as create memorable customer journeys
- Led all aspects of the on-site coordination and delivery of the concessions program at Kansas City International Airport for an on-time opening in 2023
- Support wider commercial development efforts at Vantage network airports

RALEIGH-DURHAM AIRPORT AUTHORITY

2019 - 2022

Vice President, Commercial Management

- Directly managed 3 directors overseeing the concessions, parking, car rental and property development revenue streams for the Authority
- Instituted a data-driven approach to space programming of the terminal concessions and phasing of the concessions redevelopment program to support a 60,000sf updated masterplan across 2 terminals
- Represented the Division on all capital expansion program discussions and design initiatives
- Successfully developed, in concert with the Chief Revenue Officer and other Commercial staff, an RFP for concessions based an Authority-financed redevelopment of concessions space

MAG USA, INC.

2015 - 2019

Program Delivery Director

- Lead commercial development of the UK-based Manchester Airports Group (MAG) foray into the US marketplace by simultaneously leading project delivery teams for common-use lounges, yield-management parking programs, pursuing commercial terminal redevelopment opportunities and assisting in the pursuit of airport public-private partnership ("P3") opportunities in the industry
- Assisted in the development commercial master plans options for concessions and P3 program RFPs
- Led design and delivery of all active development for company, including the Escape Lounges product. After rollout of the first US lounge in late 2015, oversaw the growth of the brand to 10 units and CAPEX over \$15 million nationwide through 2019
- Continuously evolved the brand standard to reflect site-specific opportunities and cost-saving initiatives. Directly-procured all FF&E, food service equipment and millwork packages to drive further cost savings. Redesigned kitchen spaces to be smaller and more efficient than its UK counterparts allowing the concept to better scale to meet client needs

AIRMAIL USA (NOW FRAPORT USA)

2004 – 2015

Development Director

- Supervised all aspects of corporate development efforts for an award-winning national airport retail developer with 4 international airports and over 350,000 square feet of retail space in its portfolio at the time
- Managed delivery teams for CAPEX projects ranging from \$10 - \$20 million in live airport environments, including BWI Airport, transforming historically underperforming retail units into industry-leading concessions programs
- Master planned concessions programs to create specific tenant mix for optimal commercial performance; worked with base building design teams as well as tenants to ensure that tenant food/beverage and retail designs would seamlessly integrate into redevelopment strategy

Rob A. Hale
rhale@vantageairportgroup.com

PROFESSIONAL EXPERIENCE – *continued*

AMEC CONSTRUCTION MANAGEMENT, INC.

2001 – 2004

Development Director

- Managed multiple packages on two of the largest active projects in Boston office during tenure
- Provided consulting services to clients, specializing in peer review of design documents, providing value-engineering alternatives and troubleshooting phasing and constructability of designs
- Managed concrete, structural steel, excavation and general contractor contracts for in-line baggage screening project at Logan International Airport in Boston, MA. \$146 million project was managed over 10 individual job sites operating on 24 hour-a-day, 7 day-a-week accelerated schedule to ensure on-time completion.
- Facilitated 100% baggage screening by federally mandated deadline of January 2003, only 6 months after start of the project. Logan was the only US airport to meet the mandated deadline

EYP ARCHITECTURE AND ENGINEERING

1998 – 2001

Architectural, Electrical and Mechanical Designer

- Designer for architectural, electrical and mechanical disciplines, often working on interdisciplinary challenges within a single project.
- Specialized in higher educational classroom, dormitory, library and laboratory facilities as well as mission critical projects for national telecommunication clients.
- Coordinated all aspects of deliverables for project submissions. Reported to both architectural and engineering principals

EDUCATION

B.S. ARCHITECTURAL ENGINEERING – University of Colorado Boulder (1998)

Daniel Liu BA (Hons) MSc
dliu@vantageairportgroup.com

PROFESSIONAL EXPERIENCE

VANTAGE AIRPORT GROUP

2022 - 2023

Commercial Performance Analyst, Commercial

- Innovating and developing the Active Concession Management System (ACMS) across the network airports (MDW, LGA, MCI, and JFK) and train station (PHL) for the Commercial Team.
- Benchmarking and positioning concession performance between specific airports and the industry, delivering data-driven results and business implications to general managers and senior directors.
- Managing the analyst team to conduct all non-aeronautical data analytics and fulfilling analytics-related requests.
- Forecasting air travel demand and trends and researching major North American airlines movement.
- Leading in sales budgeting and financial results evaluation for the network sites.
- Supporting commercial managers with real-time insight through data automation and data visualization.
- Working cross-functionally with the Marketing director to improve passenger experience at each commercial network site through quantitative and qualitative analytics.

VANTAGE AIRPORT GROUP

2019 - 2022

Commercial Analyst, Commercial

- Responsible for providing strategic analysis, forecast, data visualization, and information system design for the commercial concession business (Food & Beverage and Retailing)
- Delivering business performance, benchmark comparison, industrial insights, trend analysis, and financial positioning to the executive and senior management teams
- Designing and developing brand-new industry-leading data management & reporting system
- Leverage big data analytical skills to support new business development

BRANDLOYALTY

2016 - 2017

Business Analyst, Taipei, Taiwan

- Responsible for delivering all-level data analytical support to improve the operational efficiency of each customer loyalty program
- Set up analytical objectives and strategies for the projects and conducted analyses to measure the performance
- Performed market gaps analysis to locate potential business opportunities
- Conducted customer surveys with A-class market research companies

BRANDLOYALTY

2014 - 2015

Commercial Business Analyst, Shanghai, China

- Performed weekly and monthly analyses to constantly conceptualize new strategies and initiatives focused on optimizing efficiency and improving the trade-off between associated cost and fulfillment
- Created and maintained data files to ensure the accuracy of data
- Performed KPI analysis and scenario analysis
- Conducted inventory management

BRANDLOYALTY

2012 - 2014

Program Coordinator, Shanghai, China

- Conducted comprehensive analytical research on target consumers to produce actionable insights for critical decision-making
- Provided client staff with extensive training and detailed guidance through the entire project life cycle
- Engaged with clients to discuss project status and collect new data on a regular basis

Daniel Liu BA (Hons) MSc
dliu@vantageairportgroup.com

EDUCATION

MSC BUSINESS DATA ANALYTICS
Quinlan Business School, Loyola University Chicago, United States

MSC ADVANCED MARKETING MANAGEMENT
Management School, Lancaster University, United Kingdom

BA BUSINESS WITH MARKETING
Newcastle Business School, Northumbria University, United Kingdom

Marissa LaVigne
mlavigne@vantageairportgroup.com

PROFESSIONAL EXPERIENCE

VANTAGE AIRPORT GROUP

2023 - Present

Director, Commercial Marketing

- Partner with network location teams and corporate stakeholders to support development of marketing campaigns and special projects that add value to the overall airport customer experience.
- Drive revenue for concession partners, create unique customer experiences, and increase customer engagement and satisfaction.
- Develop, manage and execute on marketing programs utilizing a variety of consumer touch points including advertising, events, sales driving promotions, digital, PR, in-terminal collateral/support materials, and services.
- Spearhead industry awards submissions and roadmap across Vantage's commercial locations.

WALGREENS

2021 – 2023

Director, Customer Loyalty Marketing

- Led team in development and optimization of personalized member offers and rewards across channels for nearly 100M myWalgreens members, driving a 2% increase in engagement and redemption sales of \$60M+.
- Drove design of new Pharmacy Rewards program with a cross-functional group focusing on driving better health outcomes and customer value. Determined reward activities, cash value amount and redemption opportunities. Collaborated with research and design teams on usability and customer experience.
- Presented and communicated project status and next steps to all stakeholders including at the Executive level.
- Identified new vendor for upcoming Healthy Goals program through extensive RFP process and collaboration with procurement, Legal, Product and IT teams.
- Led team of managers and analysts including hiring, training and mentoring.

UNITED AIRLINES

2007 – 2021

Senior Manager, Loyalty Co-Brands

2016 - 2021

- Led Chase Existing Cardmember team in retention and engagement strategy for over 4M credit cardmembers, including design, analysis and implementation of personalized promotional offers.
- Drove innovation in promotional testing including increased targeting and varied offers resulting in a 20% decrease in Cardmember attrition and over \$200M in annual incremental card spend.
- Oversight of all marketing and communications targeted at existing domestic cardmembers, including lifecycle and trigger-generated emails, direct mail, social media, digital banner placements, and customer surveys.
- Directed a cross-functional team with stakeholders from Finance, IT, Merchandising, Legal and other teams in the development and successful launch of 4 new Chase Credit card products.
- Spearheaded PR efforts in support of new credit card launches including airport, inflight and virtual activations.

Manager, Loyalty Chase Program Marketing

2014 - 2016

- Managed Visa Signature cardmember event programs, including venue selection, customer pricing, marketing and hosting for over 60 annual dining, concert, movie and virtual events.
- Developed semi-annual cardmember survey to track customer engagement and awareness, key metrics for determining success of program marketing.
- Led approval process for scheduled trigger emails and Chase MileagePlus social media posts

Marissa LaVigne
mlavigne@vantageairportgroup.com

PROFESSIONAL EXPERIENCE – *continued*

UNITED AIRLINES – *continued*

Loyalty Non-Air Redemption Manager

2010 – 2014

- Managed United's Merchandise Redemption program, increasing the program to \$50M in annual redemptions, while maintaining budget and keeping costs to a minimum. Ensured that nearly 85% of program spend was on the highest tiers of MileagePlus members.
- Developed MileagePlus Headliners Auctions program, including sourcing of auctions experiences, functionality and website design, and creating a comprehensive multi-channel marketing strategy. Grew redemptions by over 10% and reduced costs by 40%.

Merchandising Product Manager

2007 – 2010

- Managed 1st and 2nd bag fee revenues, a Merchandising initiative that tracked at over \$400M in 2010.
- Implemented Differentiated Airport Pricing and International 2nd Bag Fee projects under tight deadlines.
- Developed, launched, and managed Door-to-Door Baggage (D2D), a Merchandising ancillary revenue product launched in October 2008, including product and website design, co-branding with FedEx, and customer communications.

RESOURCE SYSTEMS GROUP, INC

2006 – 2007

Market Research Consultant

- Key associate on Motorola's Device Portfolio Optimization (DPO) research, a Consumer Insights project determining the overall competitiveness of the client's cellular phone and PDA portfolio and serving as the basis for product pricing and positioning strategies.
- Managed field research and local vendors on-site in the UK, Germany, Argentina, Brazil, Mexico and the US.
- Charted, analyzed, and reported research results for each of 15 global markets tested using both quantitative and qualitative methods.

EDUCATION

CARROLL GRADUATE SCHOOL OF MANAGEMENT MBA – Boston College

BACHELOR OF ARTS IN POLITICAL SCIENCE, MINOR IN ECONOMICS –
College of The Holy Cross

Michael Webber
Airport & Cargo Planning Specialist



SUMMARY OF EXPERIENCE

In a 33-year career, Michael Webber has led marketing departments of two airports, as well as consulted for numerous airport operators and civil aviation authorities. Consulting assignments include market analyses, forecasts, facilities and strategic plans. Clients have included the four largest international air cargo gateways in the U.S., as well as multiple airports in Africa, Asia, Latin America and the Middle East.

On a consulting basis, he managed cargo affairs for Airports Council International – North America (ACI-NA) and was an on-call consultant for IATA (International Air Transport Association). He has completed cargo assignments for the World Bank and U.S. Transportation Security Administration (TSA) and co-authored an air cargo facilities planning guide for the Transportation Research Board (TRB).

EDUCATION

Tulane University, M.B.A., 1990

Specialization in International Commerce with studies in Management in Developing Countries.

University of Kansas, B.S., Business Administration, 1987

Included a Concentration in Spanish Literature & Culture with study abroad in Guadalajara, Mexico.

PROFESSIONAL EMPLOYMENT

Webber Air Cargo: President, January 2002 to September 2017; and May 2020 to the present.

Landrum & Brown (L&B): Associate Vice President – Air Cargo Practice, September 2017 to May 2020.

Leigh Fisher Associates (LFA): Senior Associate – Air Cargo Practice, January 2000 to January 2002.

TranSystems Corporation: Air Cargo Planner, September 1998 to January 2000.

City of Kansas City, MO Department of Aviation: Director of Marketing, September 1997 to September 1998, Air Cargo Manager, August 1996 to September 1997.

Jackson (MS) Municipal Airport Authority: Director of Marketing & Economic Development, January 1993 to August 1996.

First National Bank of Commerce: New Orleans, LA
Commercial Representative – International Division, July 1991 to January 1993.

Louisiana Trade Initiatives: New Orleans, LA
Managing Director, June 1990 to July 1991.

FUNCTIONS BY PROJECT TYPE

Master Planning (Cargo Component): Typically, inventory of air cargo facilities and services, cargo forecasts (all-cargo operations and tonnage), and capacity demand analysis. Inclusion of special-purpose facilities on a market-specific basis.

Air Cargo Market Study: Typically, cargo tasks of airport master plan, plus workshops and interviews with representatives of cargo carriers, cargo handlers, freight forwarders, regulatory/agencies and allied services. May include analyses of international trade commodities and markets.

Air Cargo Strategic Plan: Typically, all air cargo market study tasks, with deeper analysis of cargo facilities capacity, land use and development strategies.

Michael Webber
Airport & Cargo Planning Specialist



SAMPLE PROJECTS BY TYPE
(last 10 years only)

Cargo Strategic Planning

Los Angeles International Airport (LAX),
(Ongoing)
Denver International Airport, Denver, CO (2022)
Grand Junction Regional Airport, CO (GJT)
(2022)
Port Authority of New York & New Jersey,
multiple airports (EWR & JFK) (Ongoing)
Los Angeles World Airports, Los Angeles, CA
(Multiple, latest in 2019)
Charlotte-Douglas International Airport,
Charlotte, NC (2018)
Xi'an Xianyang International Airport, Shaanxi
Province, China (2018)
Vancouver International Airport, Richmond, BC,
Canada (2016)
Tocumen International Airport, Panama (2014).
JFK International Airport, New York, NY
(Multiple, latest 2012)

Cargo Market Studies

Milwaukee Mitchell International Airport (MKE),
WI, (2022)
Halifax Stanfield International Airport, Canada
(2022)
Cairo International Airport, Cairo, Egypt (2021)
San Antonio International Airport, San Antonio,
TX (Multiple, latest in 2018)
Wilkes-Barre Scranton International Airport,
Avoca, PA (2018, 2022)
Oakland International Airport, Oakland, CA
(Multiple, latest in 2018)
Albuquerque International Sunport,
Albuquerque, NM (2017)
Pittsburgh International Airport, Pittsburgh, PA
(Multiple, latest in 2016)
Orlando International Airport, Orlando, FL (2015)
T.F. Green Airport, Providence, RI (2021)
Denver International Airport, Denver, CO (2014)
Seattle-Tacoma International Airport, Seattle,
WA (2014)
Detroit Metropolitan Wayne County Airport,
Detroit, MI (2013)
Washington Dulles International Airport,
Washington, DC (2013)
Boise Air Terminal, Boise, ID (2013)

Master Planning & Strategy

San Francisco International Airport, San
Francisco, CA (2019-2020)
Dallas/Ft. Worth International Airport, Dallas, TX
(Multiple, latest in 2020)
Juan Santamaria International Airport, San Jose,
Costa Rica (2019)
Punta Huete Logistics Center, Managua,
Nicaragua (2019)
Chicago Airport System, Chicago, IL (Multiple,
latest in 2018)
Kempegowda International Airport (BLR),
Bangalore, India (2018)
Reno-Tahoe International Airport, Reno, NV
(2017)
Calgary International Airport, Calgary, AB (2013)

Not Airport-Specific

Aviation Facilities Company (AFCO), multiple
(LRD, ATL) air cargo facilities development
proposals (2020-2021)
World Bank, Central Asia (Azerbaijan,
Kazakhstan, Kyrgyz Republic, Tajikistan and
Uzbekistan), Trade & Investment Profiles,
(2021)
Vermont Airport System Plan, Vermont Agency
of Transportation (2017)
Guidelines for Air Cargo Facility Planning and
Development, Transportation Research
Board, National Academy of Sciences,
Washington, DC (2015)

CONTACT INFORMATION:

Michael Webber, President
Webber Air Cargo, Inc.
7808 Cheno Cortina Trail
Austin, TX 78749
512-788-6565 (Mobile)
mike@webberaircargo.com
www.webberaircargo.com

ATTACHMENT 2
BUSINESS AND MARKETING DELIVERABLES WORK SAMPLE

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Travel made
EASY!

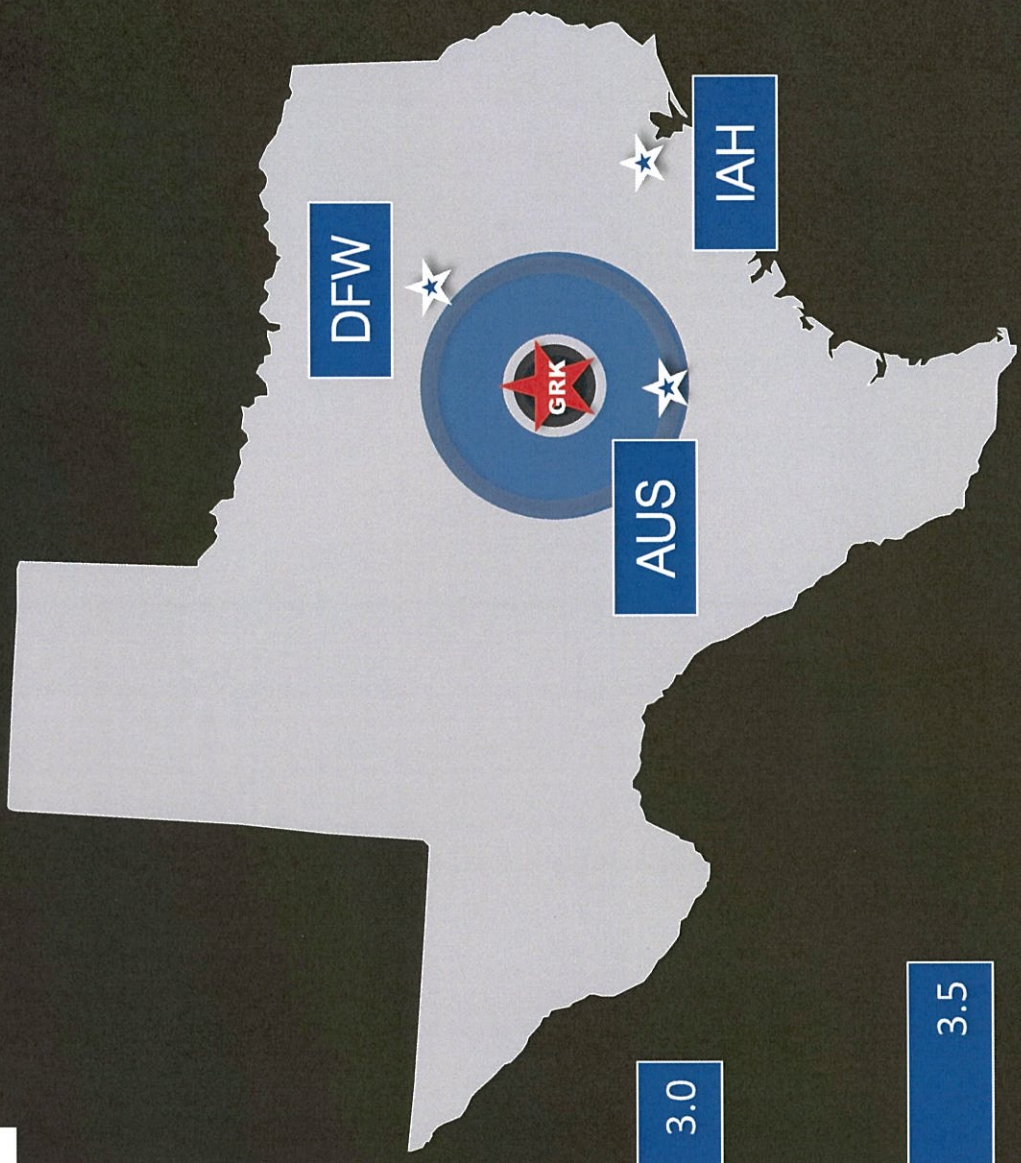
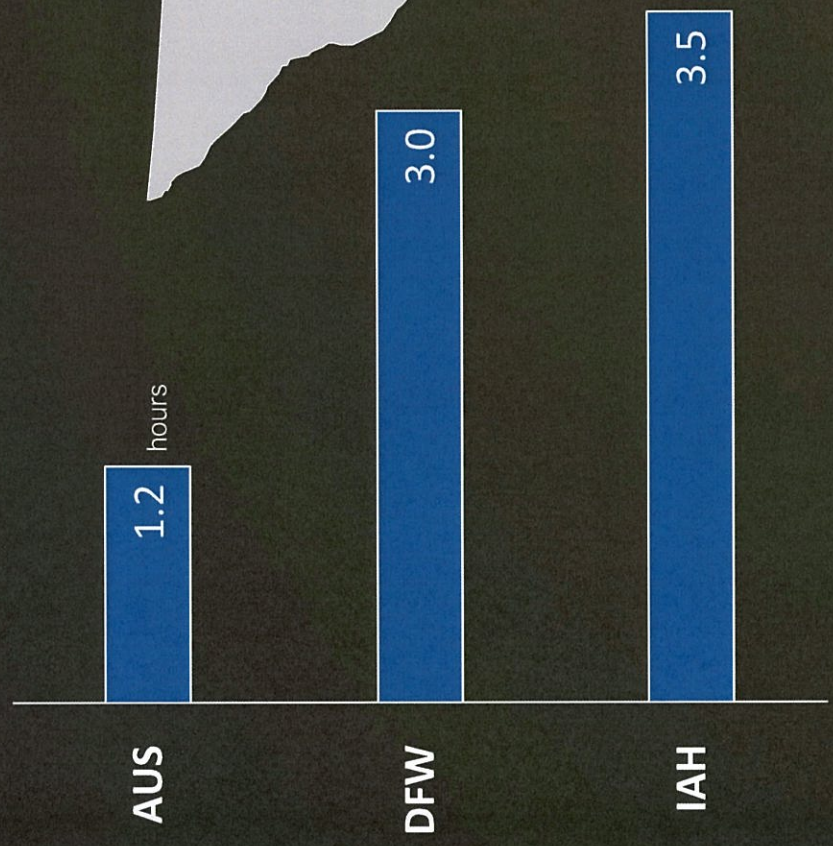
Air Service Proposal



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AIRPORT position

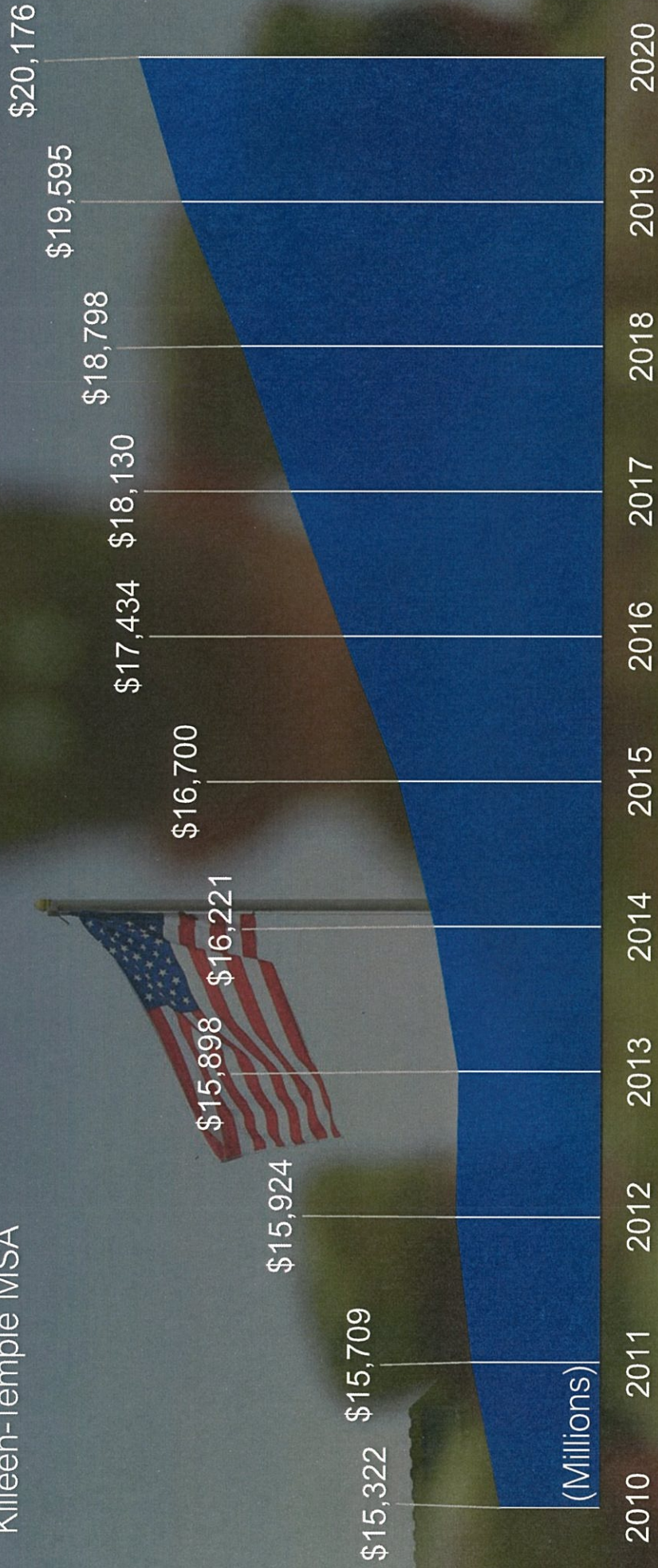
DRIVE TIME



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GDP TAKES FLIGHT

Killeen-Temple MSA

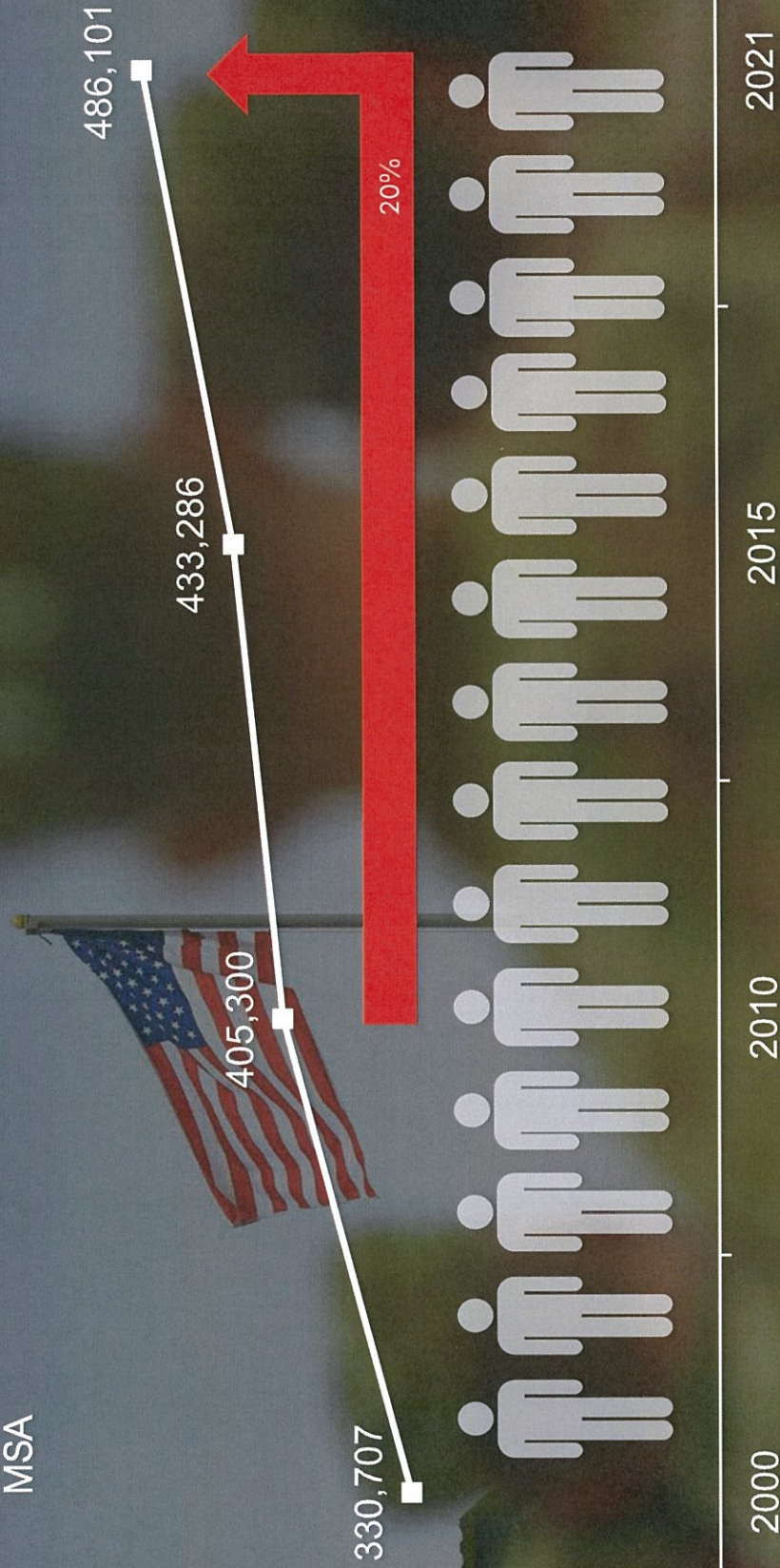


Source: Bureau of Economic Analysis

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POPULATION ON THE RISE

Killeen-Temple- Fort Hood
MSA



Source: US Census Bureau

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FORT HOOD - ECONOMIC DRIVER

The largest...

- Active Duty Armored Post (U.S.), Power Projection Platform
- Single site employer in the state of Texas

47,096 personnel on-site
 48,113 off post family
 6,021 deployed

\$35.4 B Statewide Economic Impact



	Population	% Total
Killeen, TX	158,129	
Fort Hood	95,209	60%

“Mission Critical”
 “Enduring Installation”



Source: US Census, Fort Hood "Fast Facts"

FORT HOOD - ECONOMIC DRIVER

MILITARY RETIREMENT / RESOURCES



Fort Hood % Total

Annual Retirements	6,000
Remain in Killeen	1,800 30%

3. Military retirees residing in the MSA. While the Veterans Inventory Initiative only surveys the intent of Soldiers departing the service, we are able to more accurately track the disposition of the retiring population using data from the Retired Army Personnel System (RAPS), which is based on the actual retired Soldiers' zip code. According to RAPS, the cities of Killeen, Harker Heights, Belton, Nolanville, Salado, and Temple experienced retiree growth rates larger than the MSA overall growth of 78.48% for the period June 2009 to June 2022.

	JUNE 2009	JUNE 2022	% GROWTH 2009 - 2022
KILLEEN	8120	14,289	+75.27%
COPPERAS COVE	3,028	4,451	+46.82%



	1,843	3,586	+95.06%
HARKER HEIGHTS	1,843	3,586	+95.06%
TEMPLE	1,150	2,437	+111.83%
KEMPNER	884	1,479	+66.52%
BELTON	826	1,911	+129.53%
LAMPASAS	356	552	+51.99%
GATESVILLE	350	656	+84.0%
NOLANVILLE	266	659	+143.98%
SALADO	206	513	+146.1%
MSA	17,029	30,533	+78.48%

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INDUSTRY "CLUSTER" – HIGHER EDUCATION

Major Colleges / Universities

1,800+
42,000+

Employees
Students



University of Mary Hardin-Baylor

3,900

Temple College

5,200

Texas A&M Central Texas

3,470

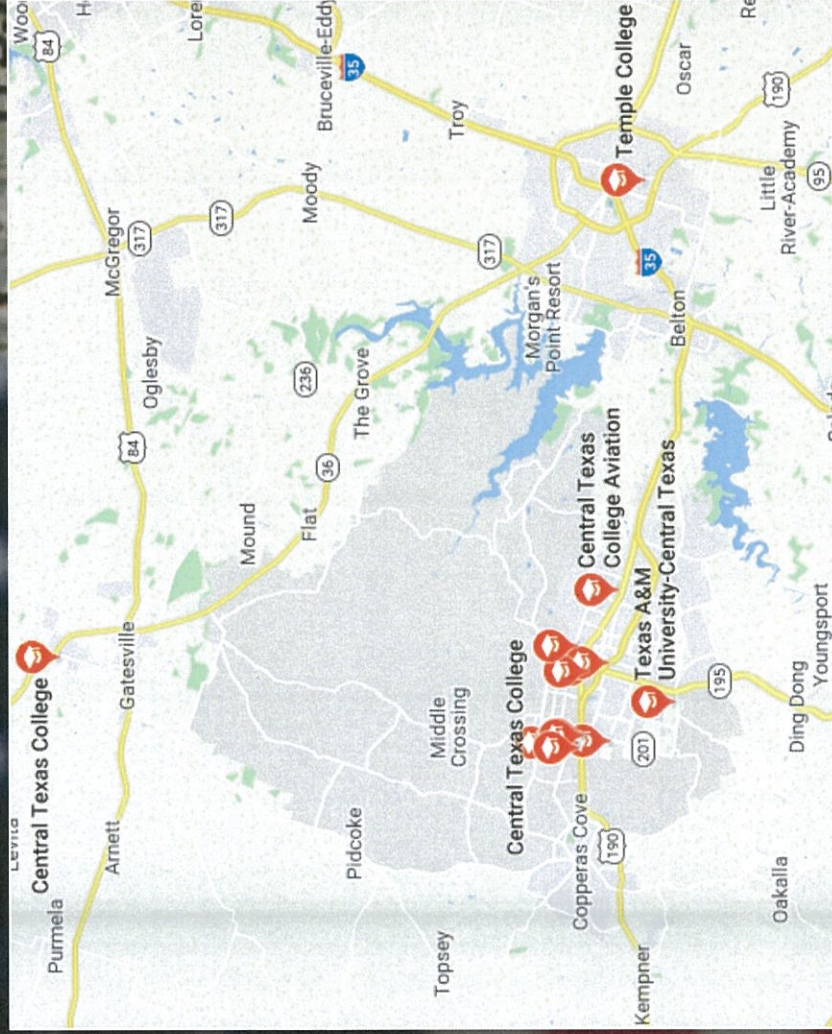
Central Texas College

20,000+



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INDUSTRY "CLUSTER" – HIGHER EDUCATION



INDUSTRY "CLUSTER" - MEDICAL

Seton Medical Center

Carl R. Darnell Army Med. Center

Scott & White Medical

Advent Health

McLane Children's Scott & White

VA Hospital

Carl R. Darnell Medical Center

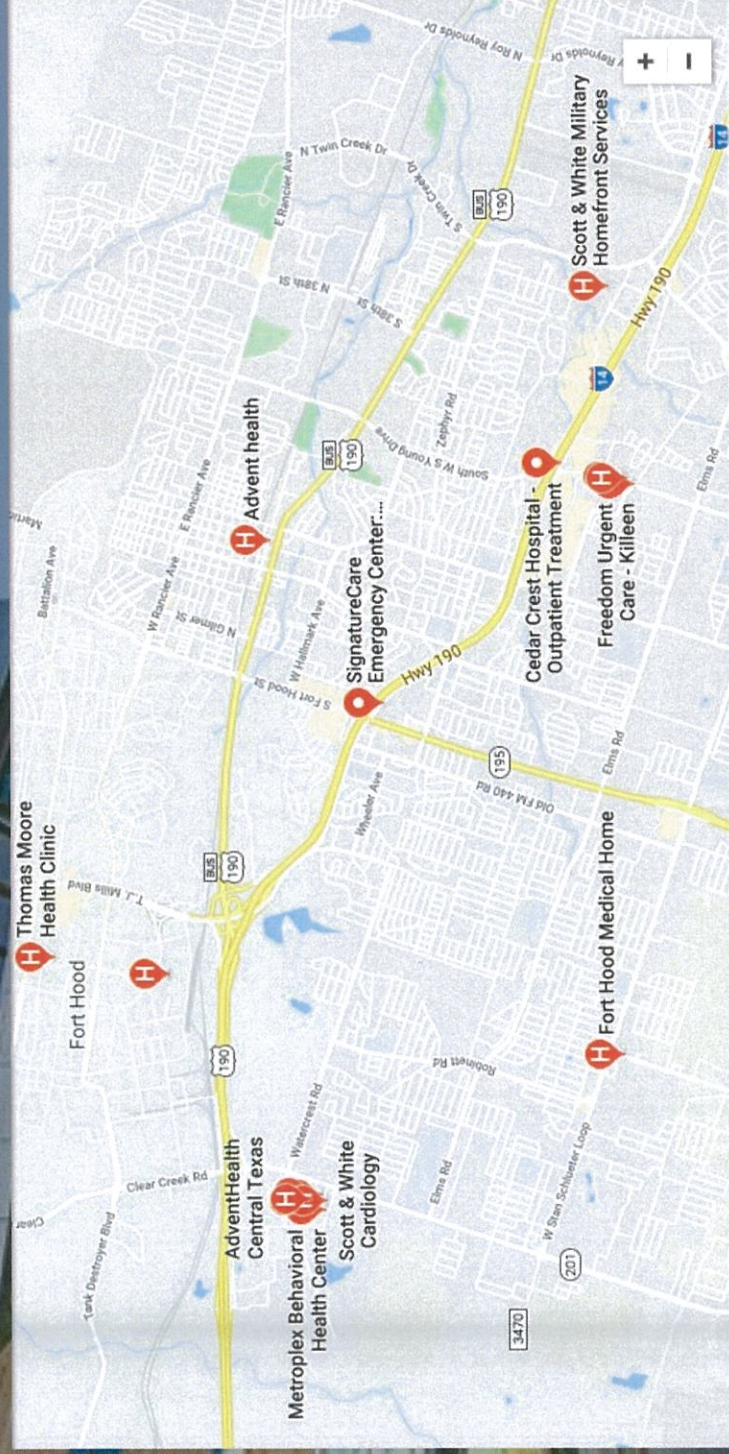
- One of the largest in the U.S.
- \$900M expansion completed
- Primary medical facility for:

Active Duty
Retirees
Military Families

Serves 260,000+ annually

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INDUSTRY "CLUSTER" - MEDICAL



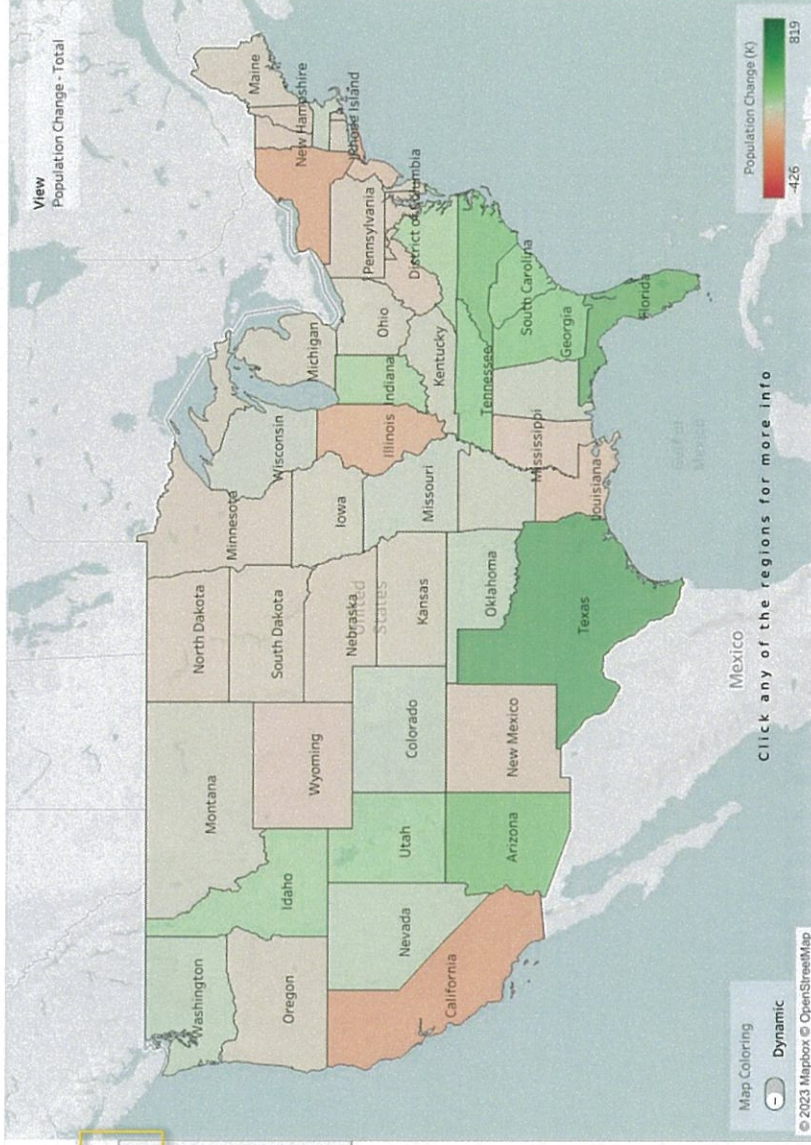
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Migration Data – Past 36 months

Migration Analysis Nationwide Overview

Report Period: 36 Months Unit Date: 12/22 Time Period: Dec-2019 - Dec-2022 Show By: State Filter: All Median Household Income: All values Population Density (Pop/SqMi): All values Population % Change: All values



State	Pop. Change	% of Pop.	HHI Ratio
Texas	819.1K	2.82%	0% (\$64K)
Florida	632.7K	2.95%	15% (\$66K)
North Carolina	307.0K	2.92%	15% (\$65K)
Arizona	295.5K	4.02%	12% (\$69K)
Georgia	205.3K	1.93%	2% (\$62K)
South Carolina	181.2K	3.52%	17% (\$64K)
Tennessee	164.6K	2.40%	12% (\$62K)
Utah	141.2K	4.40%	-9% (\$67K)
Idaho	138.5K	7.65%	20% (\$71K)
Indiana	135.9K	2.01%	8% (\$63K)
Virginia	126.5K	1.47%	-13% (\$66K)
Washington	88.5K	1.16%	-11% (\$68K)
Nevada	88.3K	2.86%	14% (\$71K)
Oklahoma	83.5K	2.10%	17% (\$63K)
Massachusetts	72.5K	1.04%	-17% (\$70K)
Colorado	70.9K	1.24%	-13% (\$66K)
Missouri	69.6K	1.13%	10% (\$63K)

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Migration Data – Past 36 months

Migration Analysis Nationwide Overview

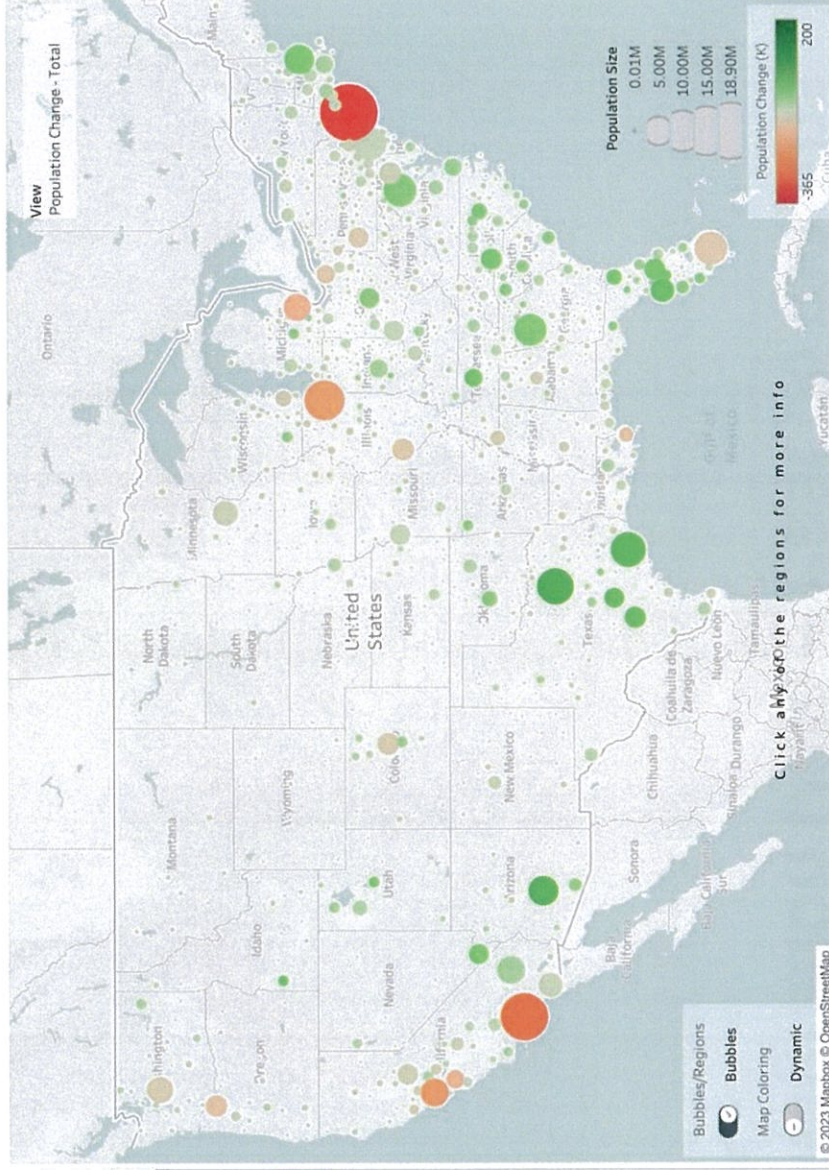
Report Period: 36 Months Until Date: 12/22 Time Period: Dec 2019 - Dec 2022 Show By: State CESA County Median Household Income: All values Population Density (Pop/SqM): All values Population % Change: All values

Population Change

Filter by State: All

Urbanicity: On

CBSA	Pop. Change	% of Pop.	HHI Ratio
Dallas-Fort Worth-Arlington...	199.8K	2.64%	-12% (\$64K)
Phoenix-Mesa-Chandler, AZ	191.8K	3.85%	1% (\$68K)
Houston-The Woodlands-Sugar...	157.3K	2.22%	-9% (\$63K)
Austin-Round Rock-Georgetown...	124.3K	5.57%	-18% (\$66K)
San Antonio-New Braunfels, TX	112.9K	4.42%	5% (\$65K)
Tampa-St. Petersburg-Clear...	98.6K	3.09%	14% (\$65K)
Boise City, ID	70.9K	9.33%	8% (\$70K)
Lakeland-Winter Haven, FL	68.2K	9.35%	21% (\$62K)
Nashville-Davidson--Murf...	64.3K	3.32%	-9% (\$62K)
Jacksonville, FL	59.5K	3.82%	0% (\$63K)
Las Vegas-Henderson-Parad...	58.7K	2.58%	17% (\$72K)
Provo-Orem, UT	58.0K	8.80%	-7% (\$72K)
Orlando-Kissimmee-Sanfo...	56.8K	2.21%	4% (\$64K)
Charlotte-Concord-Gastoni...	53.6K	2.04%	-5% (\$62K)
Raleigh-Cary, NC	52.9K	3.80%	-21% (\$62K)



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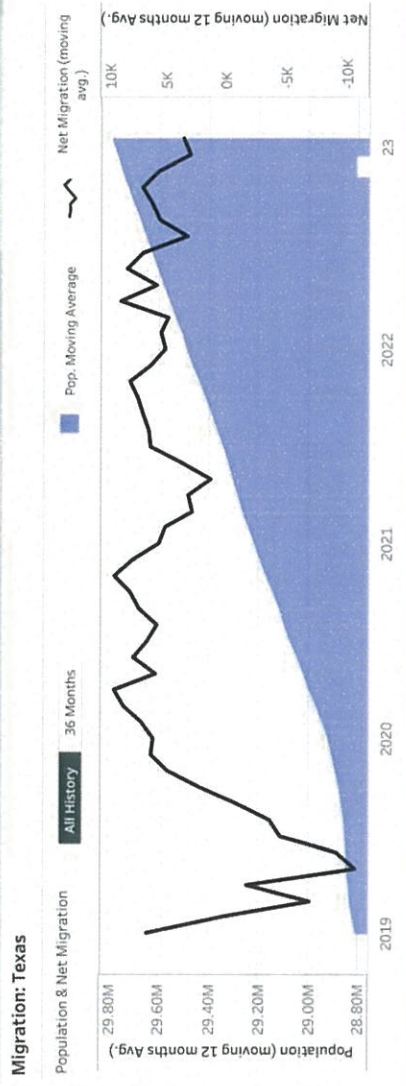
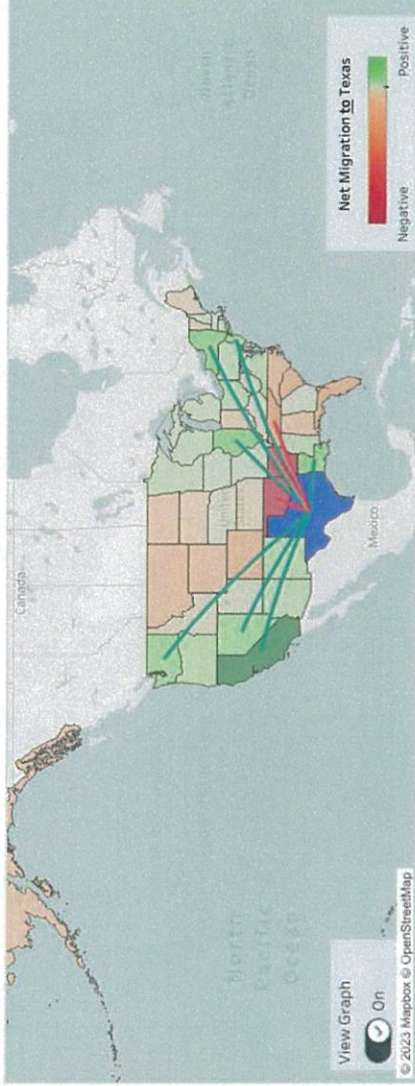
Migration Data – Past 36 months

< Nationwide Overview
Texas Top Destinations/Origins

Report Period: 36 Months
 Until Date: 12/22
 Time Period: Dec-2019 - Dec-2022
 Show By: Origins/Destinations
 Zipcodes Map
 Direction: Top Net Migrations
 Show Top: 10

Top Net Migrations To: Texas			
Origin Regi..	Net Migration	% of Population	Median HHI
California	132.2K	0.44%	\$79K
Illinois	18.1K	0.06%	\$68K
New York	17.7K	0.06%	\$71K
Louisiana	15.9K	0.05%	\$51K
Washington	10.4K	0.03%	\$77K
New Jersey	10.2K	0.03%	\$85K
Nevada	9.3K	0.03%	\$62K
Oregon	5.3K	0.02%	\$66K
New Mexico	4.7K	0.02%	\$51K
Arizona	3.8K	0.01%	\$62K

Top Net Migrations From: Texas			
Destination Region	Net Migration	% of Population	Median HHI
Oklahoma	-20.2K	-0.07%	\$54K
Arkansas	-18.3K	-0.06%	\$49K
Tennessee	-7.0K	-0.02%	\$55K
Florida	-6.3K	-0.02%	\$58K
South Carolina	-5.1K	-0.02%	\$55K
Colorado	-4.0K	-0.01%	\$75K
North Carolina	-3.1K	-0.01%	\$57K
Alaska	-2.5K	-0.01%	\$78K
Montana	-2.4K	-0.01%	\$57K
Wyoming	-2.1K	-0.01%	\$65K



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Migration Data – Past 36 months

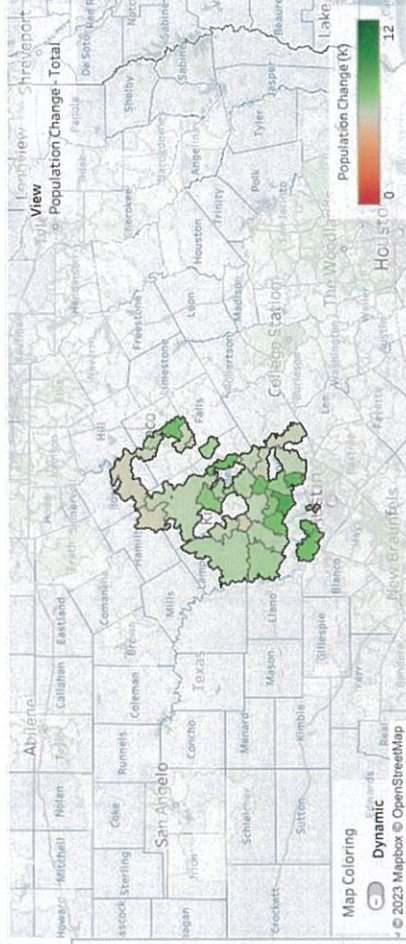
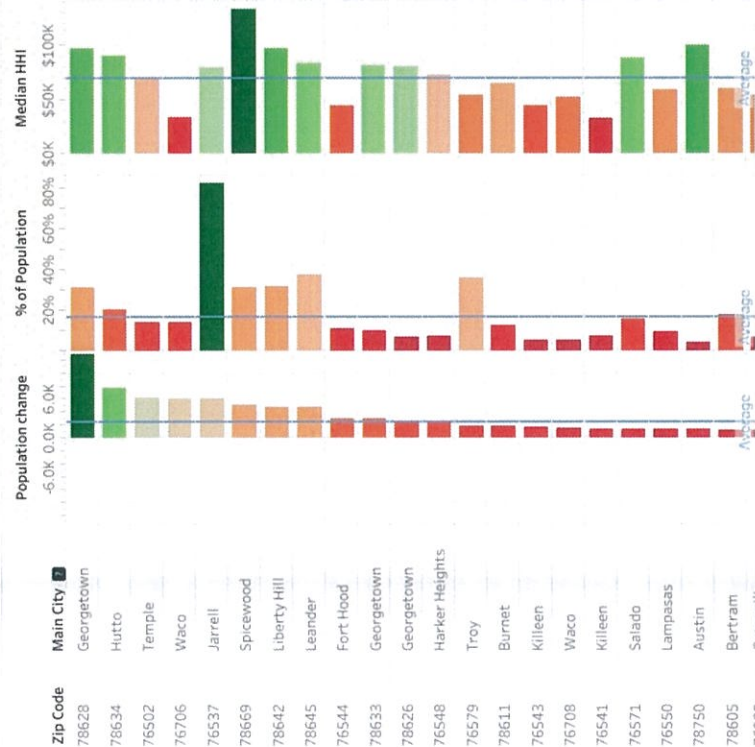
← Nationwide Overview
Texas Migration Analysis

Report Period: 36 Months
Until Date: 12/22

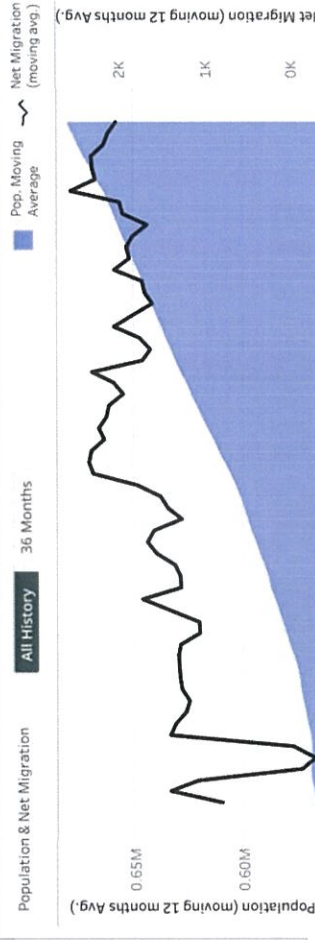
Show By: Origins/Destinations
Zipcodes Map

Time Period: Dec-2019 - Dec-2022

Median Household Income: All values
Population Density (Pop/SqMi): All values
Population % Change: 0.01 to 1.85 and Null values



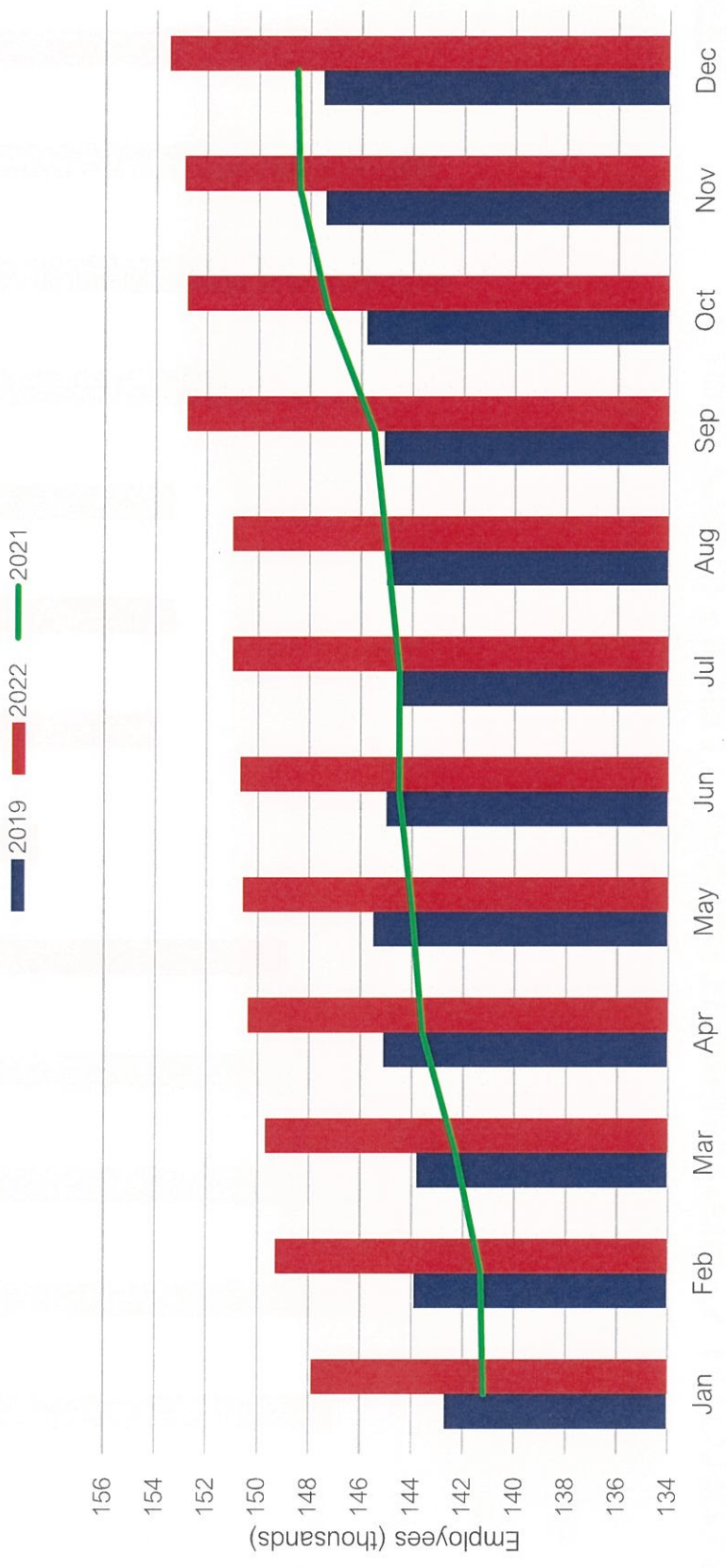
Population & Net Migration: Selected Zips





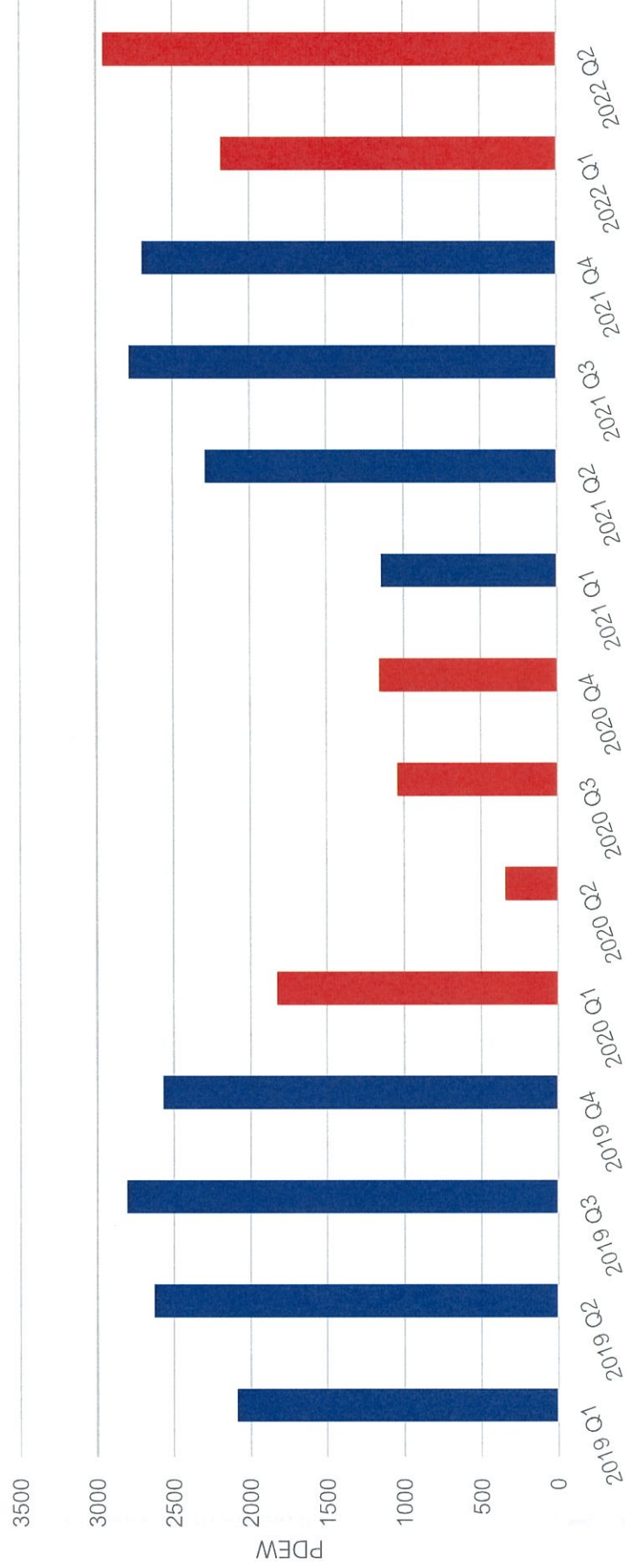
Killeen-Temple, TX Employment Trend

NonFarm





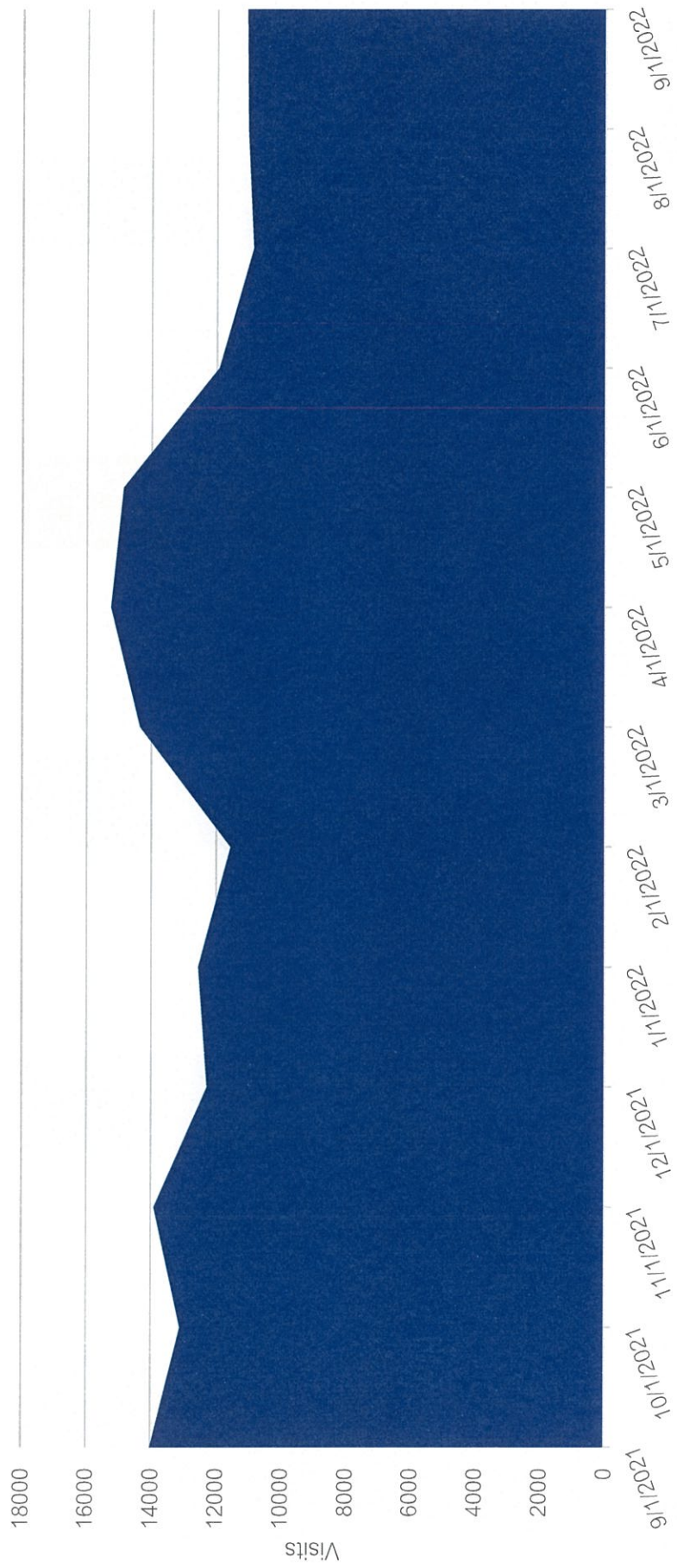
Custom Catchment Area Traffic Recovery



Source: Airline Data Inc.

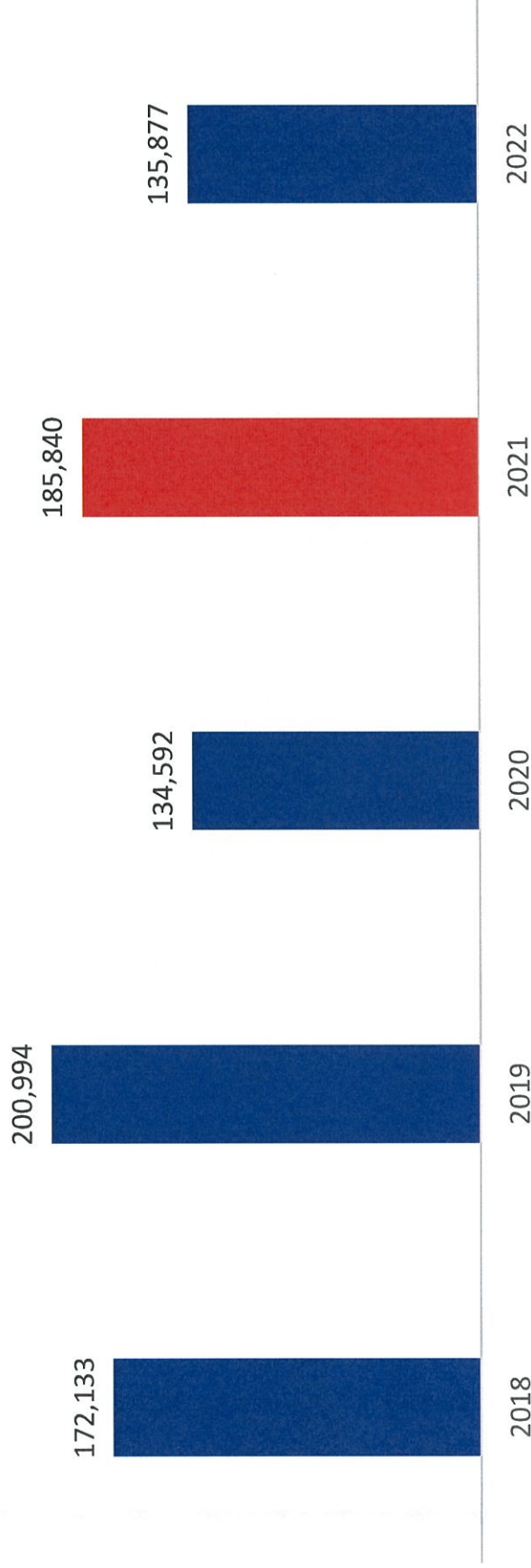


Location Based Mobile Traffic Recovery



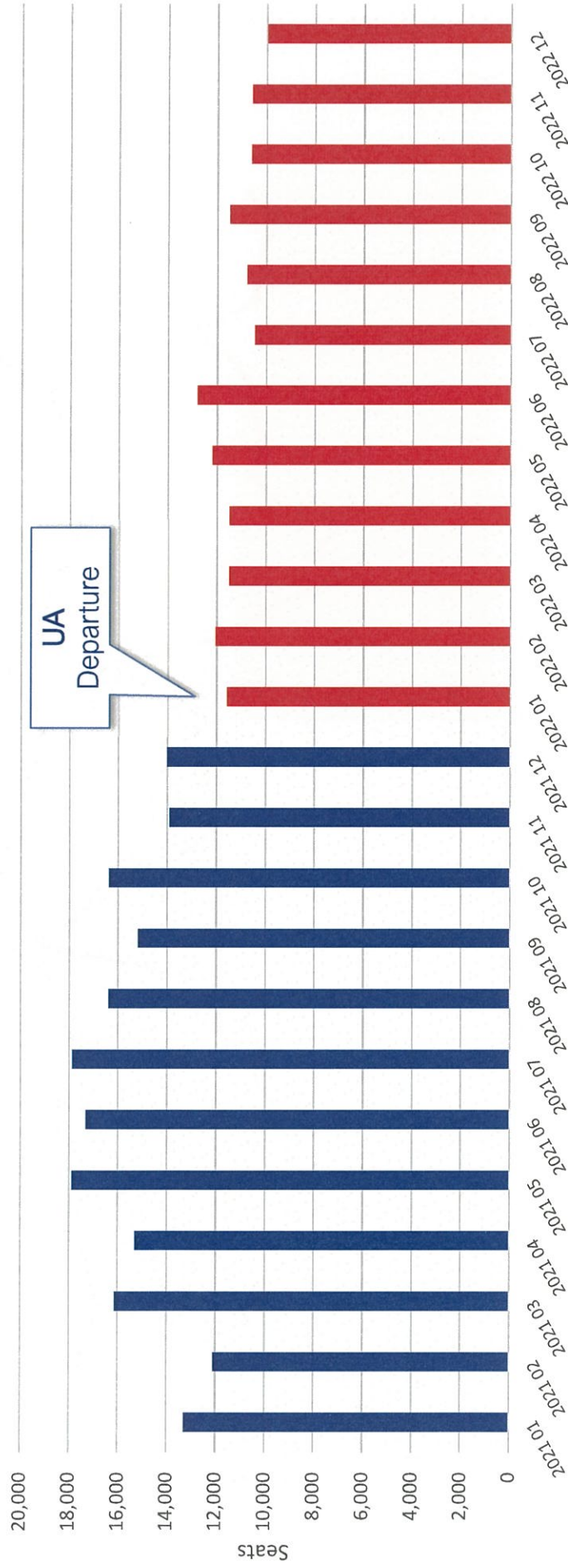


GRK – Capacity Trend



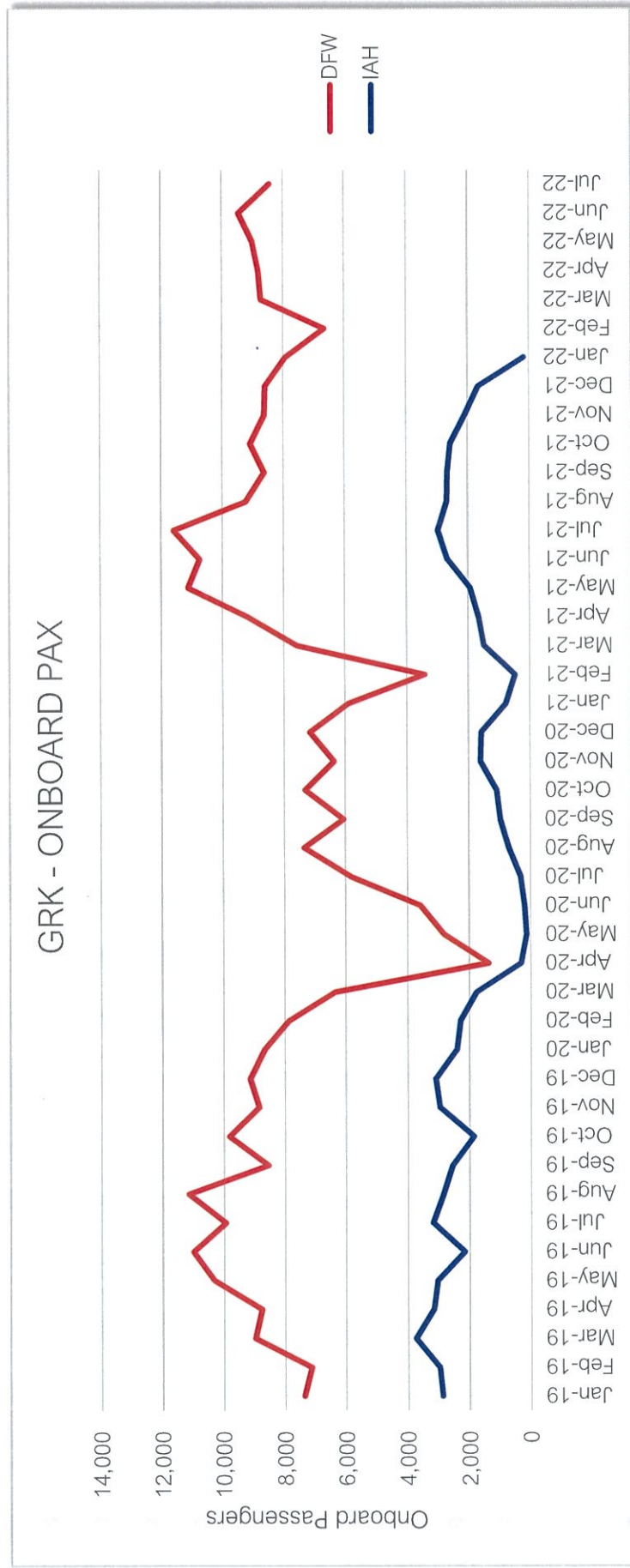


GRK – Capacity Trend





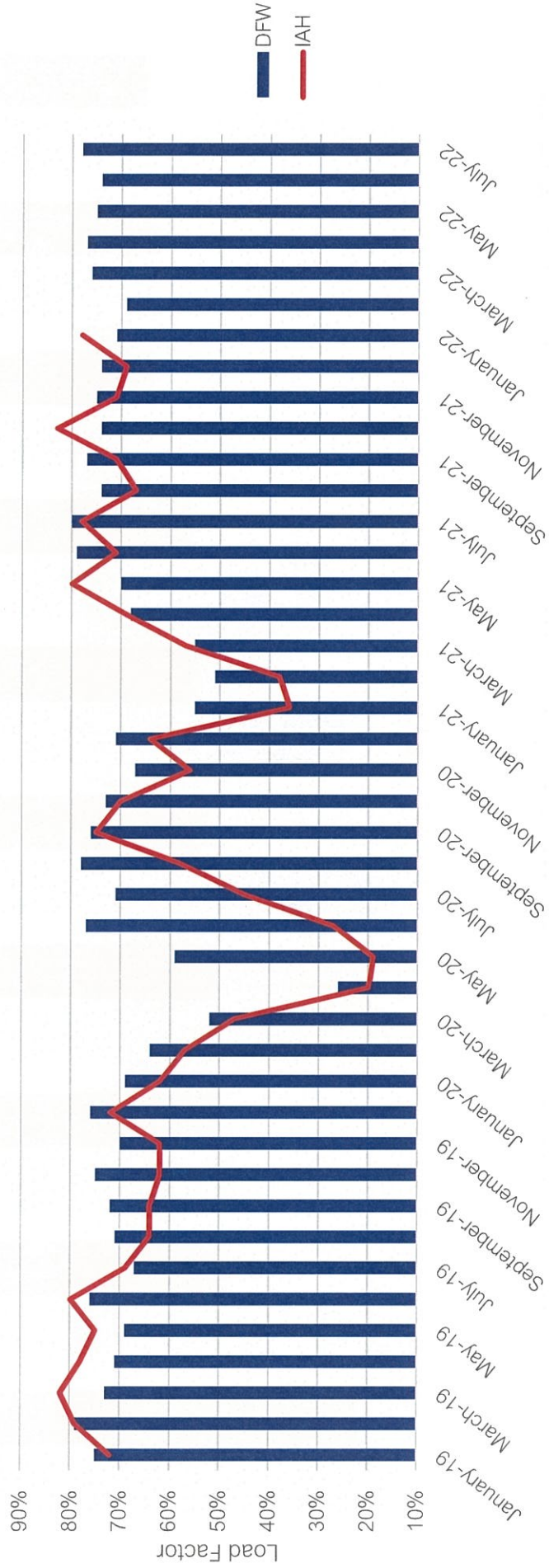
GRK – Onboard PAX Trend





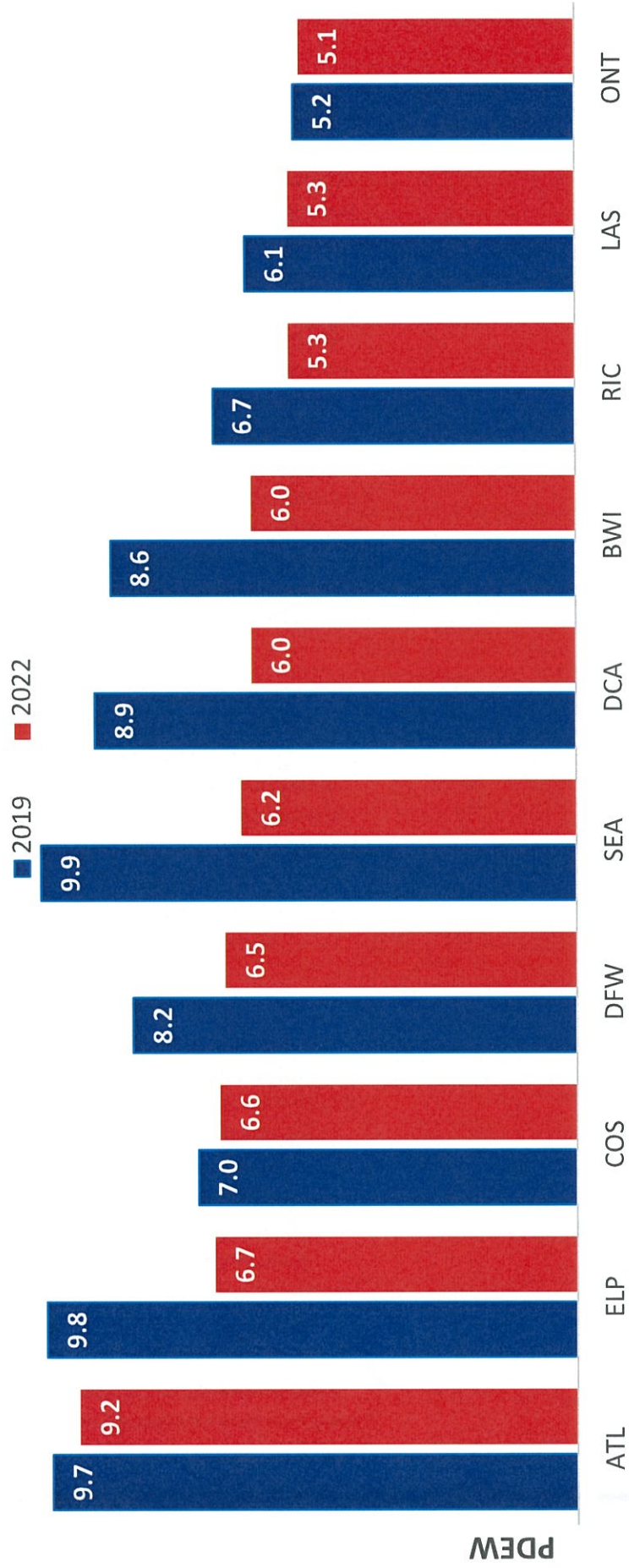
GRK – Load Factor Trend

GRK - LF





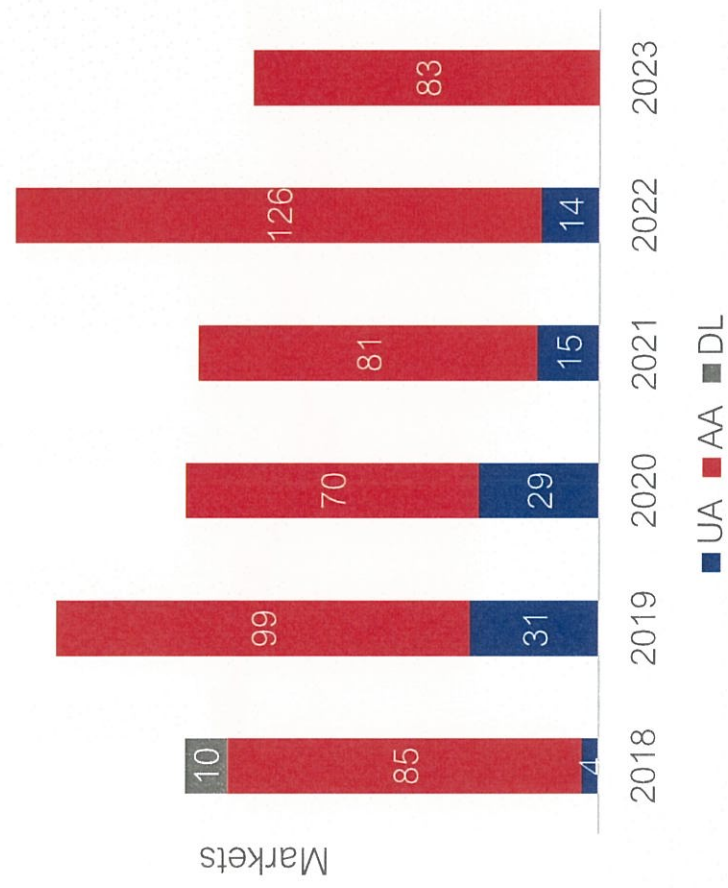
GRK – TOP MARKETS (CY 2019 vs YE 1Q2022)



Note: GRK Originating
Source: Airline Data Inc., DB15

GSA – CITY PAIR PROGRAM

OCT 1 – SEP 30





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UA – IAH Departures vs. Load Factor (CY2017)

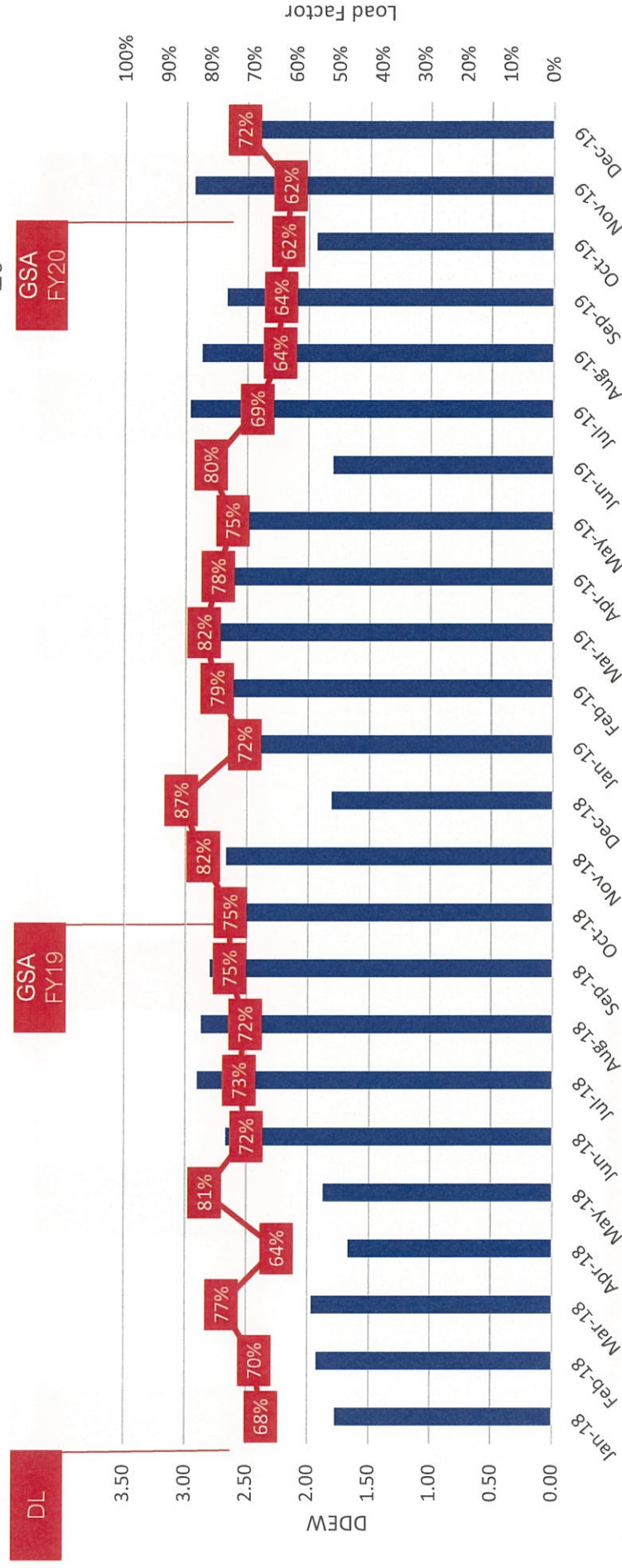




UA – IAH Departures vs. Load Factor

31

29

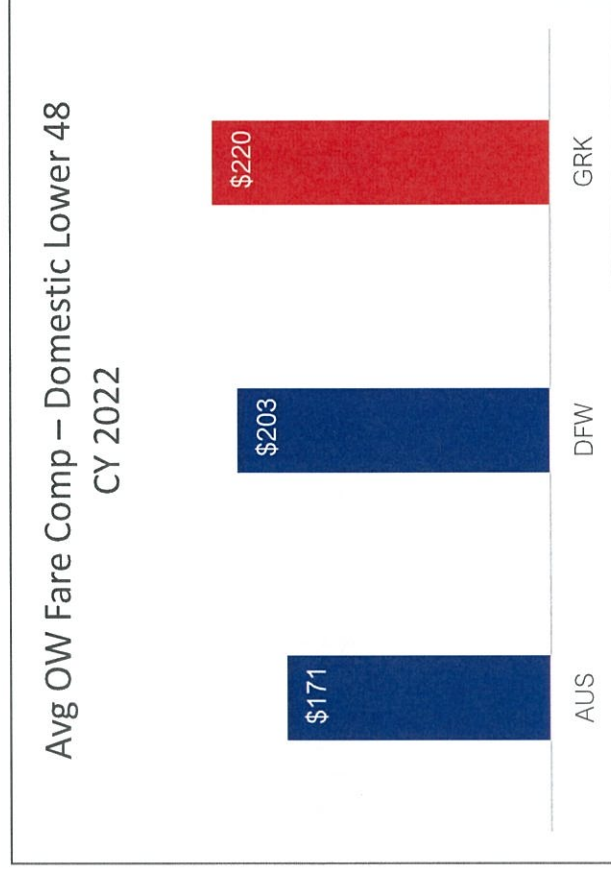
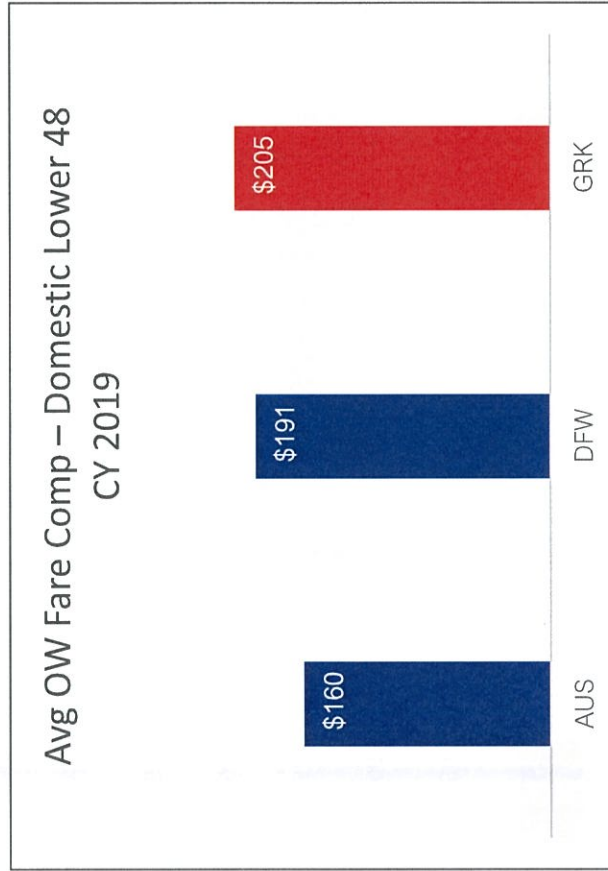


DL

GSA FY19

GSA FY20

GRK – AVG FARE COMP



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CUSTOM CATCHMENT ANALYTICS DATA

Point of Sale methodology :

Web search behavioral data, US
Census, DOT DB1B, MIDT

Origin – outbound passenger traffic starting travel
from catchment area.

Visitor – inbound catchment area traffic depicted by
zip code of final destination.

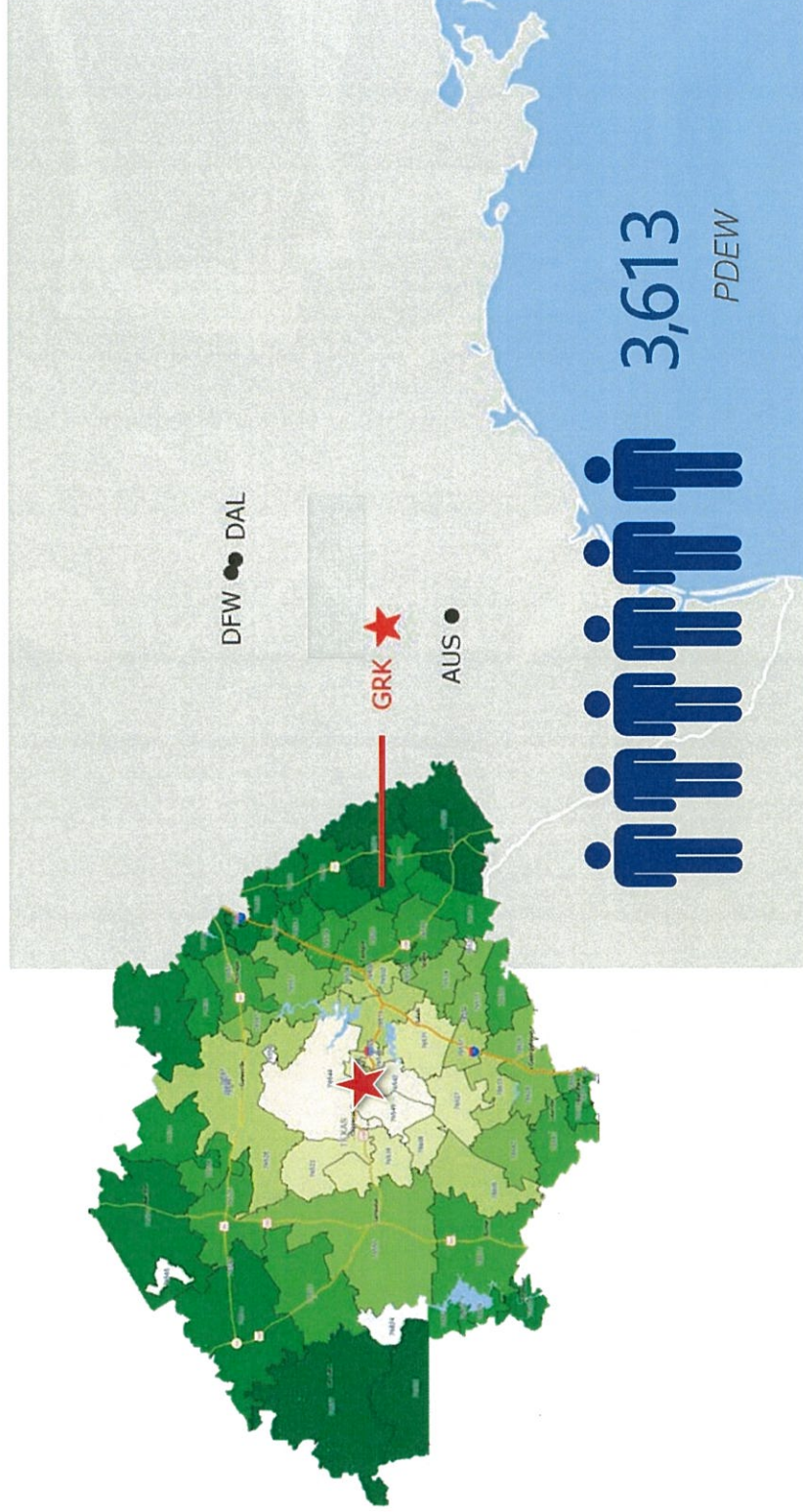




TRUE Market Size (custom catchment) YE 2Q22

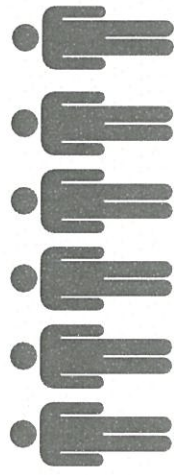
ORIGIN + VISITOR

Airport	PDEW	% Capture
AUS	2,615	72%
DFW	548	15%
GRK	294	8%
DAL	116	3%
ACT	40	1%
TOTAL	3,613	



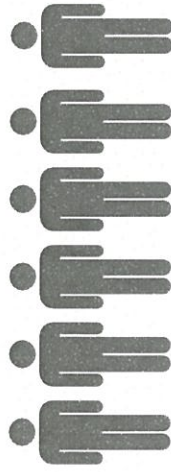


PASSENGER Origin vs Visitor YE 2Q22



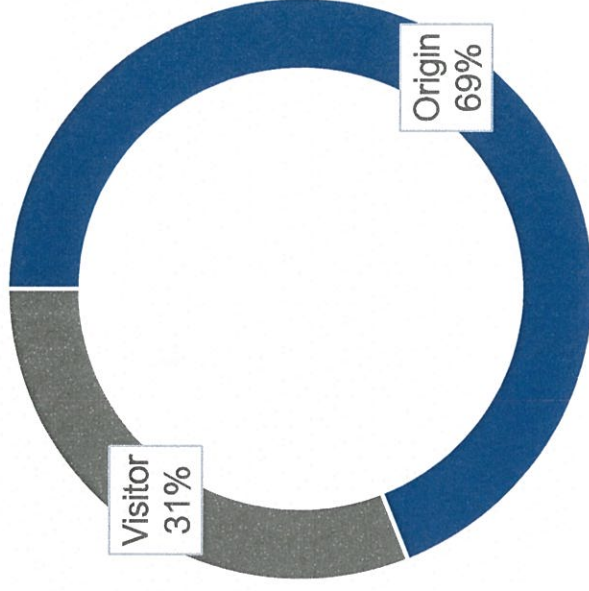
1,108
PDEW

VISITOR



2,505
PDEW

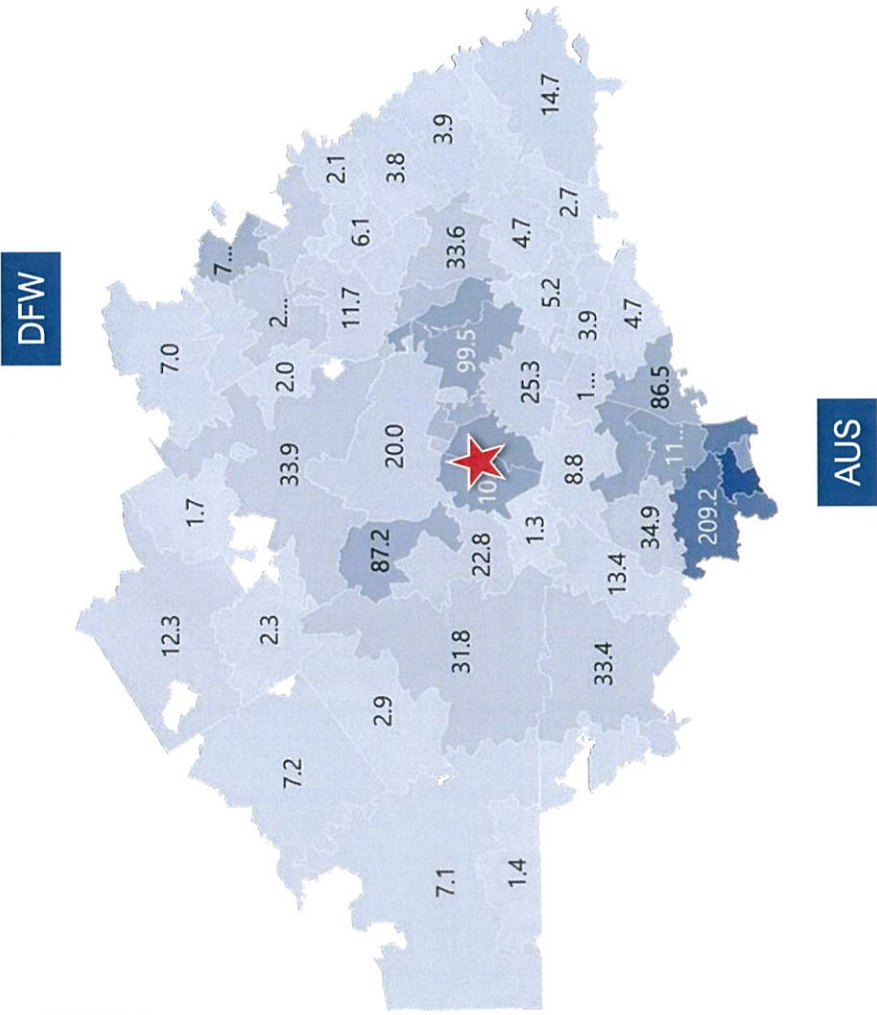
ORIGIN





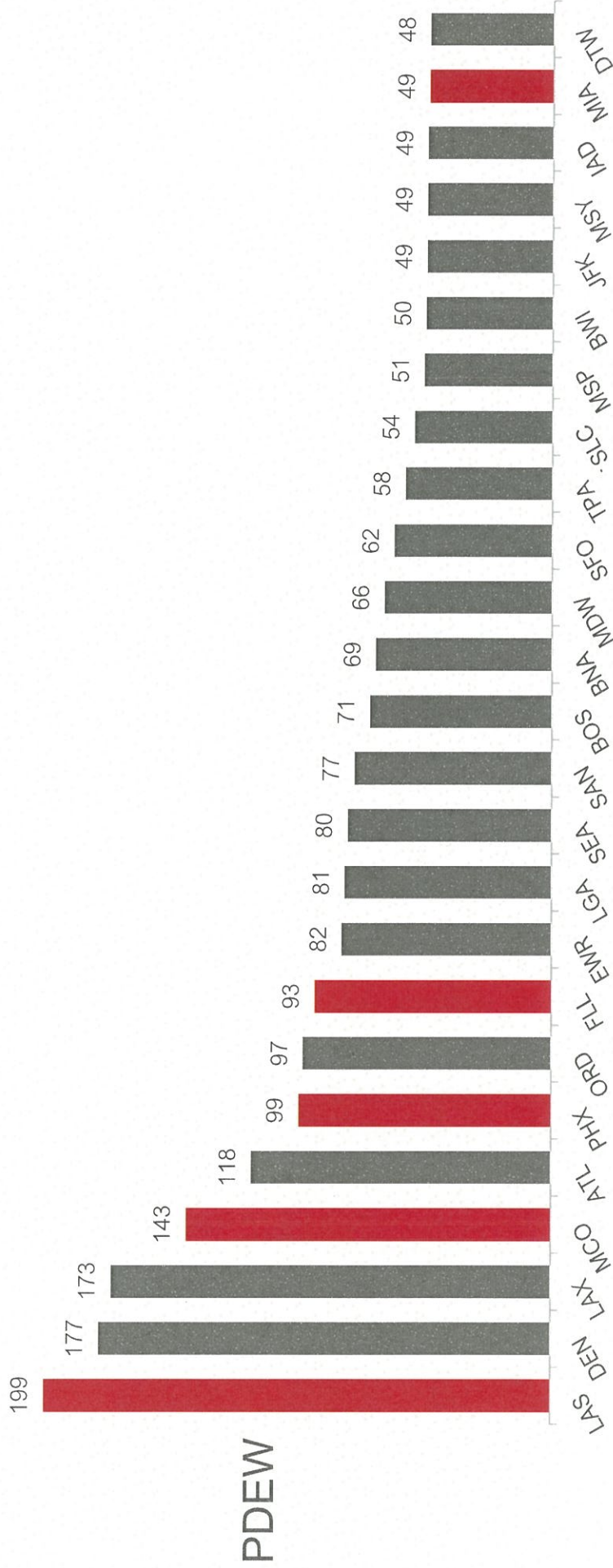
TOP Zip Codes -- ORIGIN YE 2022

Zip Code	AUS		DAL		DFW		GRK		Grand Total		% Capture
	Distance to Base	PDEW	PDEW	PDEW	PDEW	PDEW	PDEW	PDEW	PDEW Total	PDEW Total	
76549	3	62.7	2.8	15.3	28.2	109.0	26%				
76544	7	10.6	0.7	3.8	4.9	20.0	25%				
76541	7	19.7	1.3	6.9	8.3	36.2	23%				
76522	14	46.3	3.7	19.8	17.3	87.2	20%				
76539	12	13.4	0.8	4.2	4.5	22.8	20%				
76542	6	72.1	3.8	20.0	23.1	119.1	19%				
76543	13	34.8	2.4	12.5	11.9	61.7	19%				
76548	11	48.1	2.6	13.6	11.9	76.3	16%				
76559	13	7.1	0.4	2.4	1.8	11.7	15%				
78608	11	1.0	0.0	0.1	0.2	1.3	15%				
76550	26	20.4	1.1	6.3	4.0	31.8	13%				
76571	17	17.7	0.8	4.1	2.8	25.3	11%				
76513	19	62.9	4.2	21.5	10.7	99.5	11%				
76528	25	15.2	2.5	12.5	3.6	33.9	11%				
76527	15	6.8	0.2	0.9	0.9	8.8	10%				
76525	35	1.1	0.2	0.9	0.2	2.3	9%				
76502	25	69.3	4.9	24.9	9.2	108.5	8%				
76504	27	28.4	2.2	11.1	3.6	45.3	8%				
76537	22	9.9	0.2	1.4	1.0	12.6	8%				
78605	24	10.9	0.2	1.3	1.0	13.4	7%				
76501	34	21.1	1.6	8.3	2.5	33.6	7%				
76853	35	1.8	0.1	0.8	0.2	2.9	7%				
78633	22	84.9	1.6	9.1	6.6	102.2	6%				
78611	33	26.4	0.7	4.2	2.1	33.4	6%				
76538	39	0.7	0.2	0.8	0.1	1.7	6%				





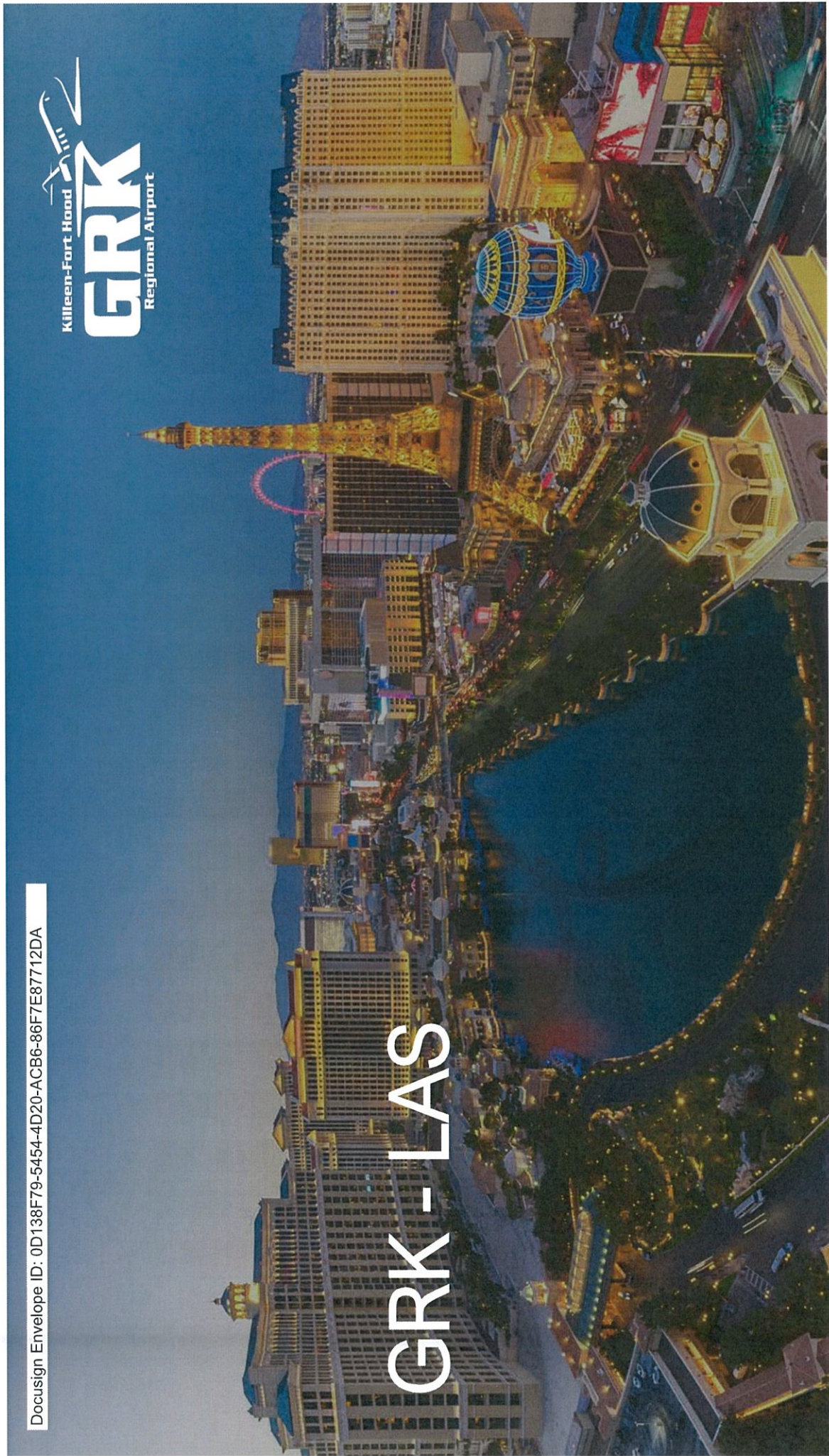
TOP 20 Markets (ORIGIN + VISITOR) YE 2Q22



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GRK - LAS





LAS Radius Traffic YE 2Q22

CATCHMENT **184 / 15 – PDEW**
Origin and Visitor

TOTAL **199**
Origin and Visitor

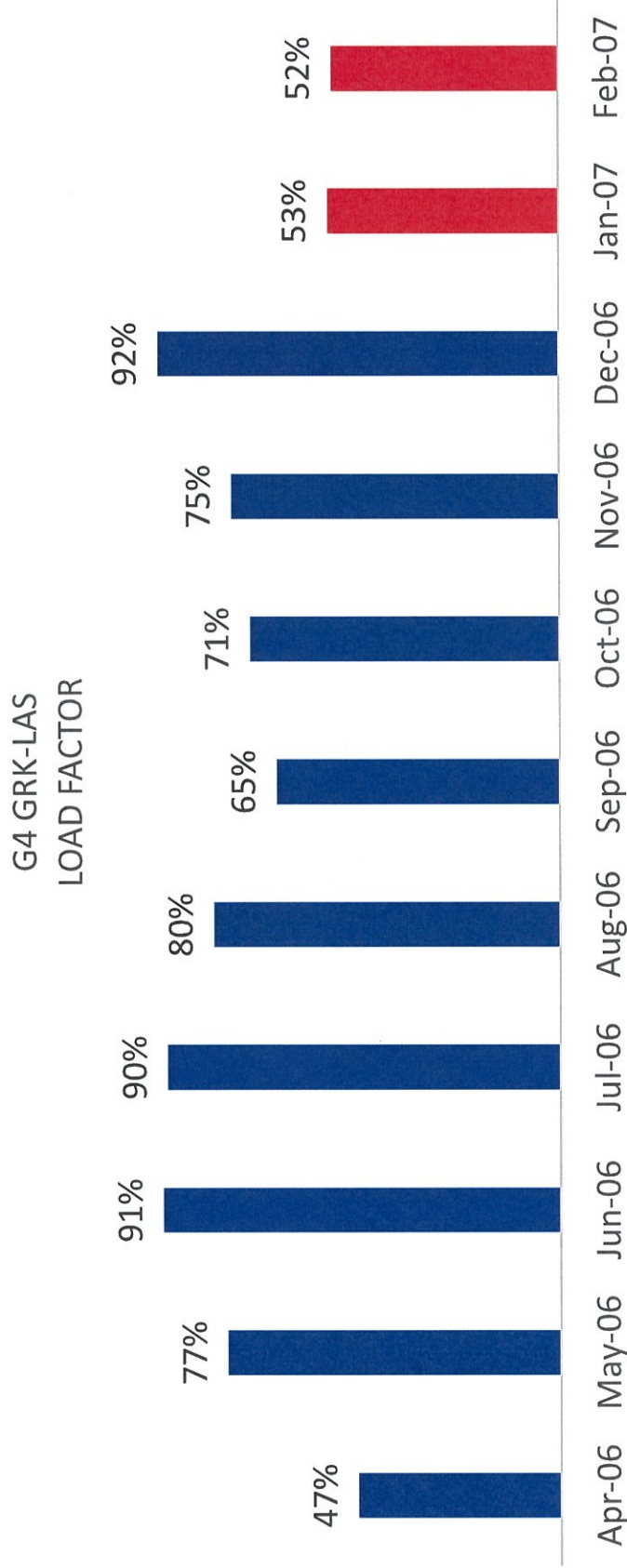
PER WK – 1,393

GRK AVG FARE
CY 2019
\$187 OW

GRK CAPTURE
PDEW - 6



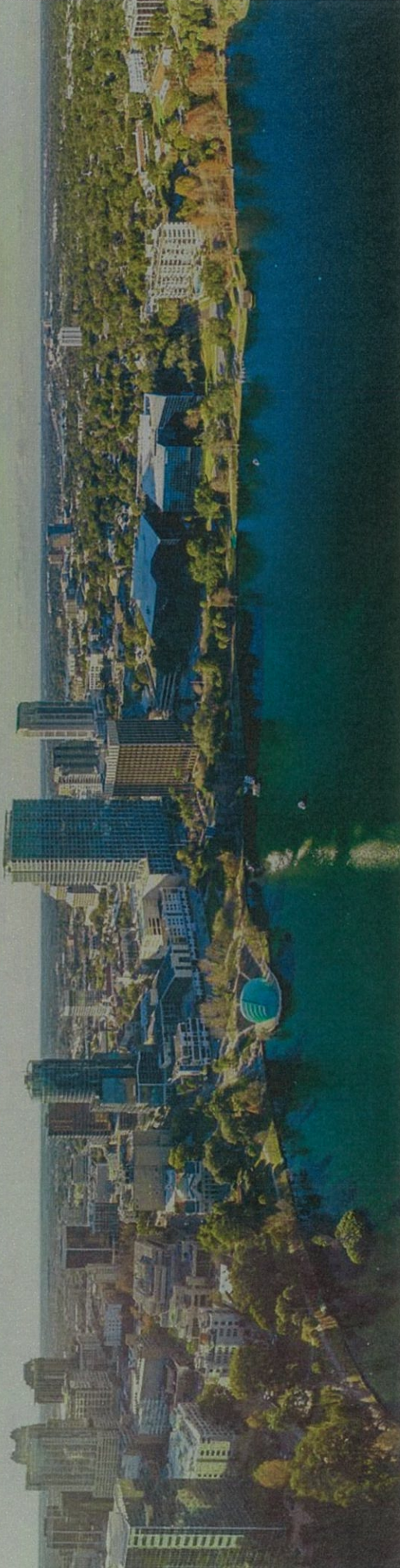
GRK- LAS historical traffic trend



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GRK – SFB/MCO



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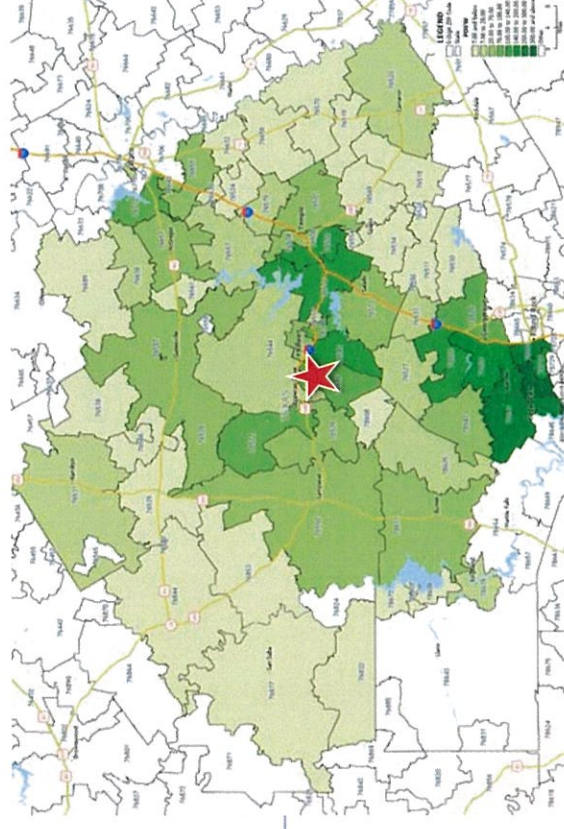
SFB/MCO Radius Traffic YE 2Q22

CATCHMENT **129 / 20 – PDEW**
Origin and Visitor

TOTAL **149**
Origin and Visitor

GRK CAPTURE
PDEW - 8

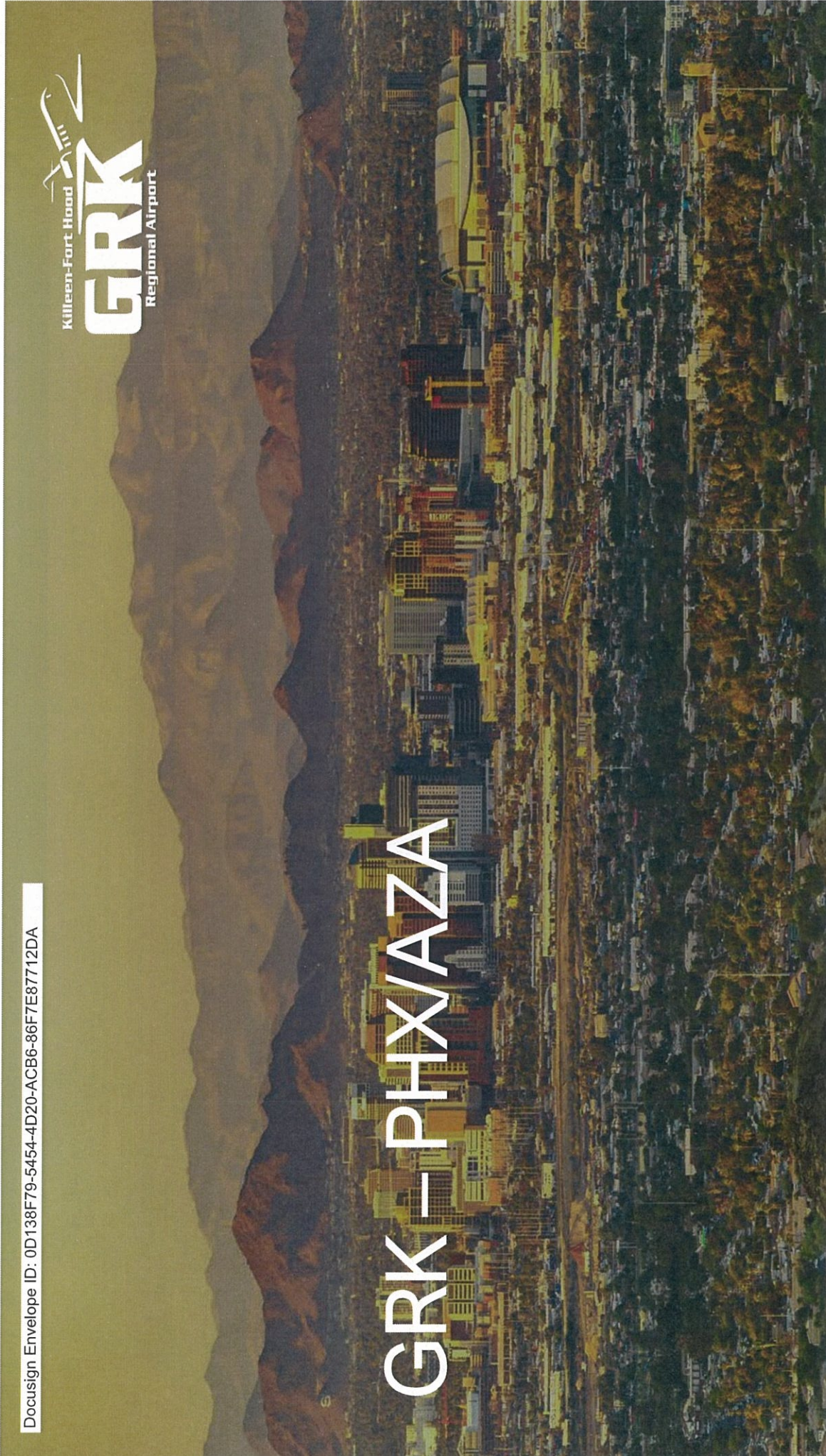
PER WK – 1,043



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GRK — PHX/AZA



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PHX Radius Traffic YE 2022



CATCHMENT

71 / 28 – PDEW

Origin and Visitor

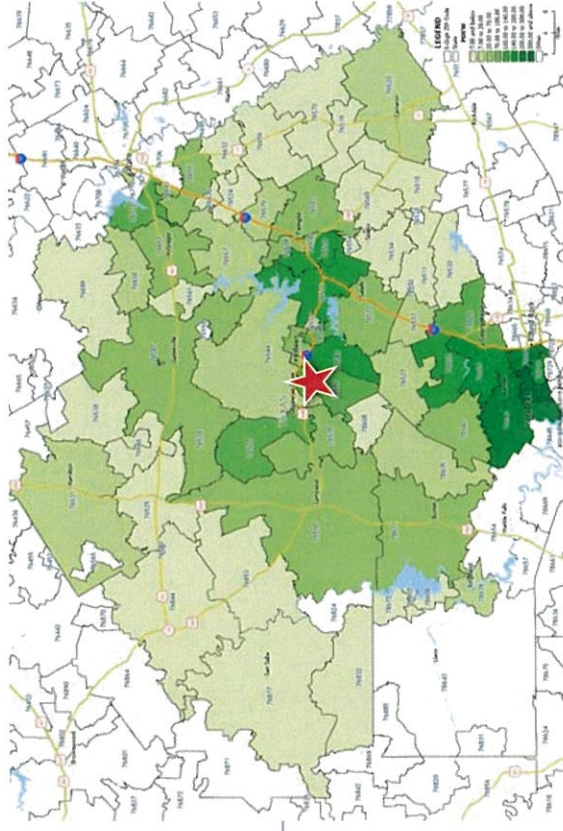
TOTAL

99

Origin and Visitor

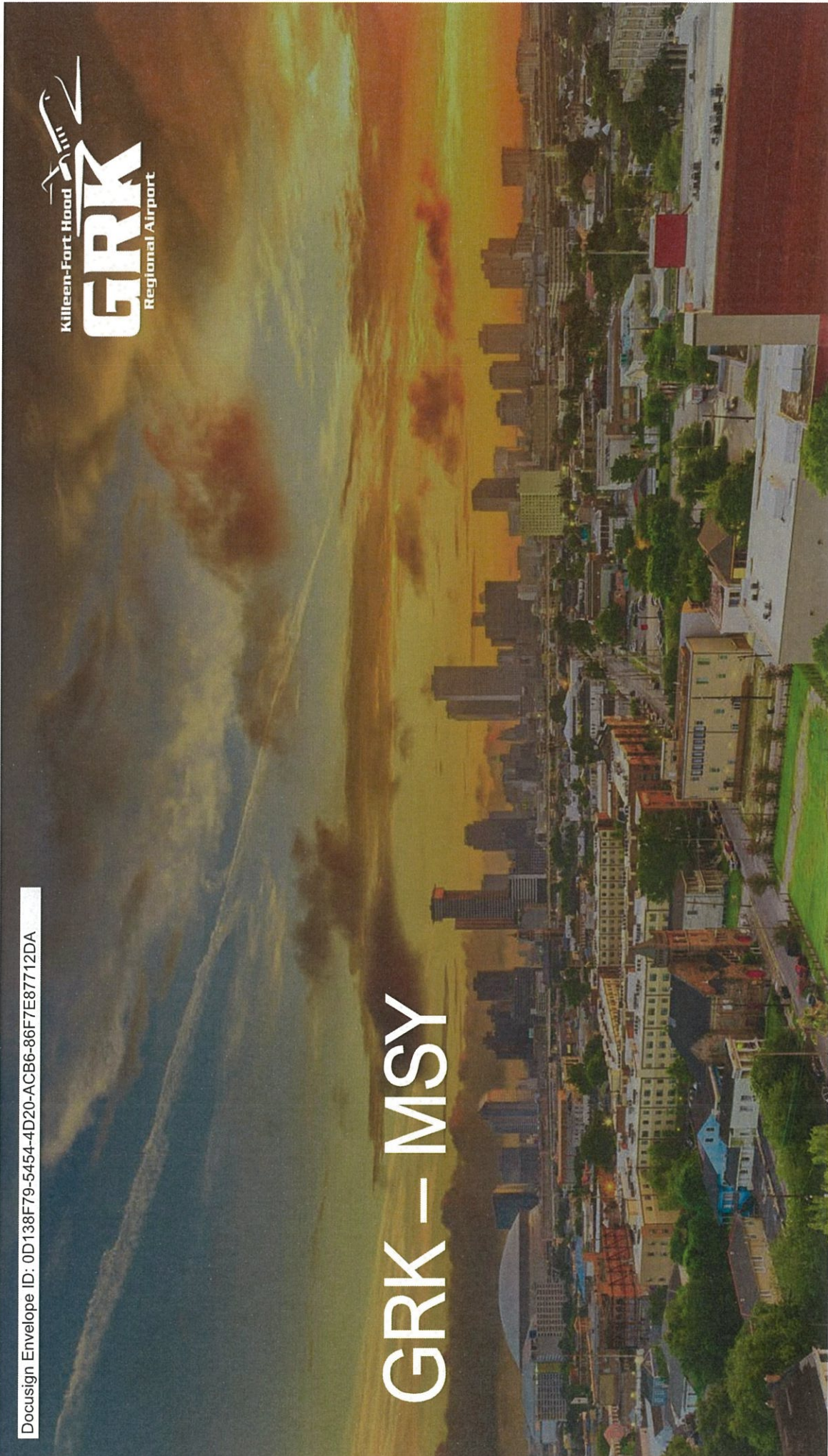
GRK CAPTURE
PDEW - 5

PER WK – 693



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GRK – MSY



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MSY Radius Traffic YE 2022

CATCHMENT

39 / 11 – PDEW

Origin and Visitor

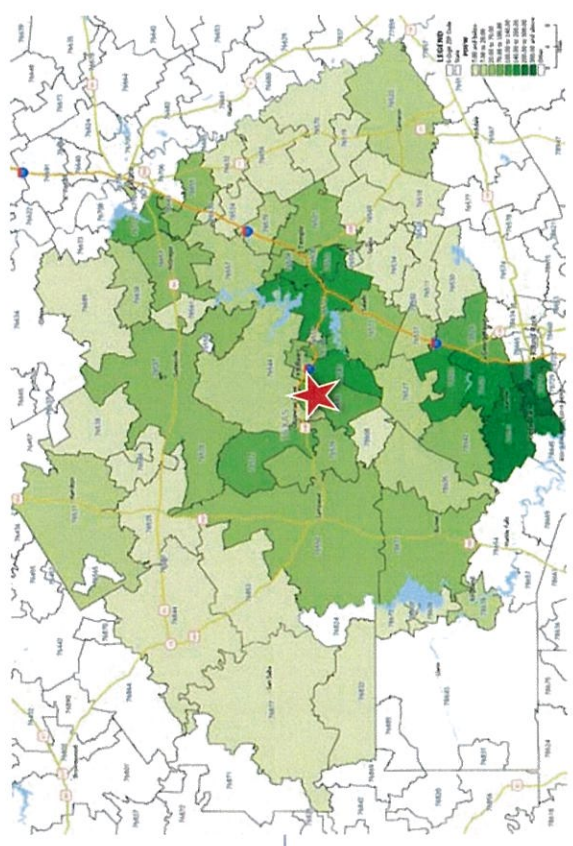
TOTAL

50

Origin and Visitor

GRK CAPTURE
PDEW - 2

PER WK – 350

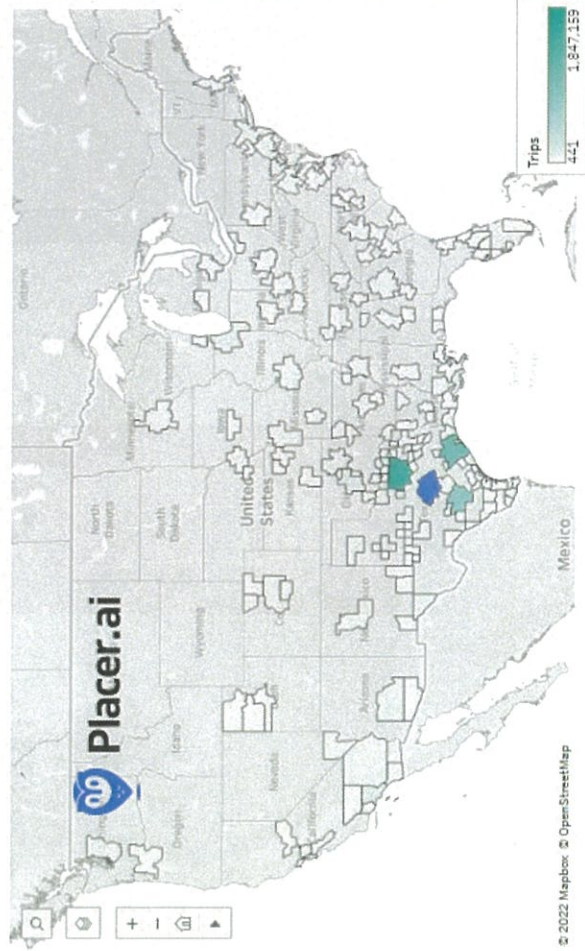


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MSY LOCATION BASED MOBILE



Number of Trips From Each MSA to Killeen-Fort Hood Regional Airport (GRK) Between Sep 2021 - Aug 2022



Origin Name	F	Trips
St. Louis, MO-IL		30,467
Wichita Falls, TX		30,354
Sherman-Denison, TX		26,953
Athens, TX		26,793
Nashville-Davidson--Murfreesboro--Franklin, TN		25,906
Shreveport-Bossier City, LA		25,553
New Orleans-Metairie, LA		25,551
Albuquerque, NM		25,335
Boston-Cambridge-Newton, MA-NH		25,269
Colorado Springs, CO		25,052
Las Vegas-Henderson-Paradise, NV		24,977
Fayetteville-Springdale-Rogers, AR		24,957
Sacramento-Roseville-Folsom, CA		24,958
San Jose-Sunnyvale-Santa Clara, CA		23,932
Tampa-St. Petersburg-Clearwater, FL		23,586
Palestine, TX		22,207

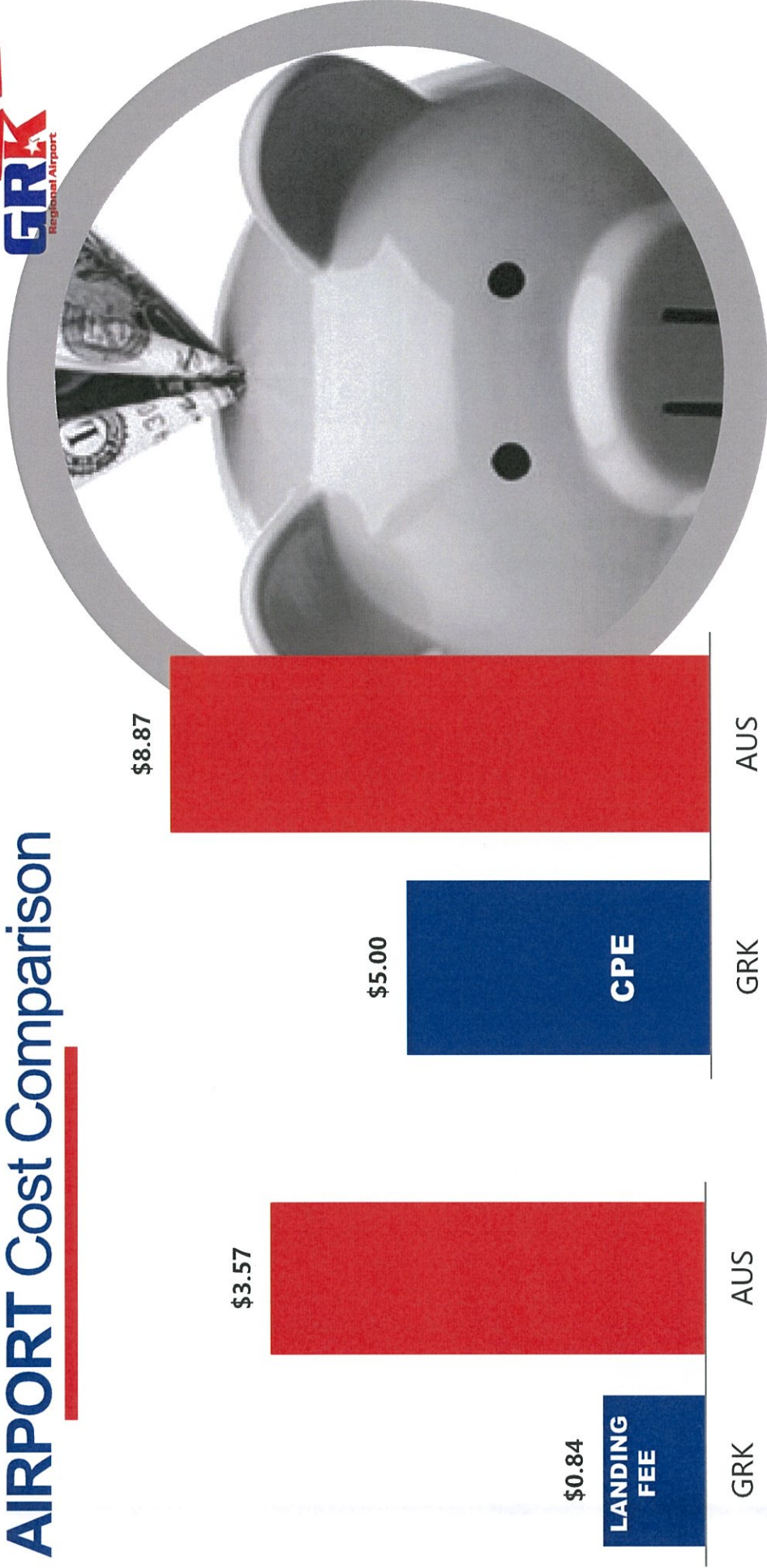
PDEW - 70

ACA - 11

TOTAL - 59



AIRPORT Cost Comparison



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AIRPORT INCENTIVES

Airport Fees

Waived landing fees / Ground handling support

Marketing Support Funds



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- **SCOPE**

DOT Small Community Air Service Development Grant (FY2019-20)

Minimum revenue guarantee (MRG), associated marketing program and start-up costs to recruit, initiate and support new air service to **Denver (DEN)**. Alternatively, **Charlotte, Washington-Dulles** or **Chicago-O'Hare**.

AIRPORT INCENTIVES

Airport Fees

Waived landing fees / Ground handling support

Marketing Support Funds

\$MRG

2019/20 SCASDP grant proposal

DEN or similar hub

Category	Federal	Local	Total
Minimum Revenue Guarantee	\$1,000,000	\$200,000	\$1,200,000
Marketing/Advertising (Private)		\$10,000 (1% match)	\$10,000
Marketing/Advertising (Airport)		\$100,000	\$100,000
Airport In-Kind Contribution		\$20,000	\$20,000
Community In-Kind Support		\$50,000	\$50,000

TOTAL

\$1,380,000

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AIRPORT MARKETING

Marketing program

- \$100K/year
- Develop Marketing Task Force

In House Ad Program

CONTACT DETAILS

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Killeen-Fort Hood Regional Airport (GRK)

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 254.501.8704

**ATTACHMENT 3
COST-BENEFIT ANALYSIS WORK SAMPLE**



BTR

BATON ROUGE
METROPOLITAN AIRPORT

Baton Rouge Metropolitan Airport

Benefit Cost Analysis

Runway 13/31 Runway Safety Area and
Runway Protection Zone Improvements

April 2018



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1. Baton Rouge Metropolitan Airport: Benefit-Cost Analysis

1.1 Executive Summary

This benefit-cost analysis (BCA) has been prepared by the Kutchins & Groh (K&G) Team to assess the cost-effectiveness of various construction alternatives at Baton Rouge Metropolitan Airport (IATA Code: BTR) for the replacement of an Engineered Materials Arrestor System (EMAS), development of a fully compliant Runway Safety Area (RSA) and creation of a standard compliant Runway Protection Zone (RPZ) through the relocation of Plank Road (the Project). This team is comprised of Kutchins & Groh, LLC (prime consultant), ICF International (BCA subject matter expert), and Gotech, Inc. (engineering consultant). The Federal Aviation Administration (FAA) requires that all airport improvements requiring more than \$10 million in Airport Improvement Program (AIP) funding, such as this one, are accompanied by a BCA.

This BCA considers the total costs of each of the development alternatives for the project as proposed by the K&G Team, including physical costs for the construction labor and materials, environmental mitigation costs, design and project management costs, and the full lifecycle costs. These three design alternatives include the relocation of Plank Road and its replacement with (1) conventional intersections, (2) crossover intersections, or (3) a fly-over intersection. The construction costs of the three proposed project alternatives range from \$27.0 million to \$35.0 million.

The benefits of these three alternatives, which include the EMAS replacement savings (avoided costs of replacing the EMAS every 10 years, and avoided EMAS upkeep costs) and the net traffic improvements (time savings associated with more efficient intersections), range from \$12.7 to \$30.5 million. The values of various economic metrics used to evaluate the Project are presented in Table 1-1 and show that Alternative 1 is cost-effective, with a net present value of \$3.8 million and a benefit-cost ratio of 1.16.

Table 1-1: Summary Results (with 7 percent discounting)

METRICS	ALT 1	ALT 2	ALT 3
Net Present Value	\$3,800,000	-\$19,600,000	-\$1,500,000
Benefit-Cost Ratio	1.16	0.39	0.95

When considering the BCA results, however, it is important to understand that the qualitative benefits are the impetus for this Project, but that the quantitative metrics used in this analysis do not fully account for the true benefits. The principal qualitative benefits of this Project are the establishment of a full-sized standard RSA, removal of Plank Road from the RPZ, and compliance with the new FAA design standards. These changes result in safety and compliance benefits that are not easily quantified. Therefore, the quantitative metrics presented in this report should be viewed as a lower bound, and the true societal benefits are significantly higher.

1.2 Introduction

The purpose of this report is to present a rigorous BCA that compares the costs and benefits of the Selected Master Plan Update Improvements for the Baton Rouge Metropolitan Airport. This report describes the process by which the K&G Team conducted the BCA and estimated the costs, benefits, net benefits, and benefit-cost ratios of the various design alternatives for replacement of the existing EMAS with a full-sized standard RSA and a standard compliant RPZ.

The FAA is responsible for regulation and oversight of civil aviation in the United States and establishes specific design standards to be used at commercial service airports. These standards apply to this Project and have been employed in this analysis. FAA Advisory Circular 150/5300-13A, Airport Design (2014),¹ contains the FAA standards and recommendations for the layout and engineering designs of runways, taxiways, aprons, and other facilities at commercial service airports. This document consolidates and revises previous design

¹ Federal Aviation Administration (FAA). (2012). Advisory Circular. U.S. Department of Transportation. Retrieved from https://www.faa.gov/documentLibrary/media/Advisory_Circular/draft_150_5300_13a.pdf.

standards from 1989, and other guidance, and outlines the RSA standards. FAA Order 5200.8 contains additional information on the FAA Runway Safety Area Program and outlines EMASs as one viable alternative.²

As part of the funding process for the Project, the Baton Rouge Metropolitan Airport is applying for an FAA grant under the FAA Airport Improvement Program. FAA Order 5100.38D provides guidance on the program through the Airport Improvement Program Handbook (2014).³ The FAA requires that a BCA accompany all capacity projects entailing more than \$10 million in Airport Improvement Program discretionary funding.

The FAA has established a series of guidance documents for the completion of BCAs. These guidance documents include:

- Airport Benefit-Cost Analysis Guidance (FAA, 1999)⁴
- FAA Order 5200.9 Financial Feasibility and Equivalency of Runway Safety Area Improvements and Engineered Material Arresting Systems (FAA, 2004)⁵
- Economic Analysis of Investment and Regulatory Decisions – Revised Guide (FAA, 2007)⁶
- Planning Information Needed for FAA Headquarters Review of Benefit-Cost Analysis (FAA, 2006)⁷
- Executive Order 12893 Principles for Federal Infrastructure Investments (Federal Register, 1994)⁸

ICF followed the guidance in these documents to ensure compliance and rigor in this analysis.

² FAA. (1999). Order 5200.8, Subj: Runway Safety Area Program. U.S. Department of Transportation. Retrieved from https://www.faa.gov/documentLibrary/media/Order/Construction_5200_8.pdf.

³ FAA. (2014). Order 5100.38D, Subj: Airport Improvement Program Handbook. U.S. Department of Transportation. Retrieved from https://www.faa.gov/airports/aip/aip_handbook/media/AIP-Handbook-Order-5100-38D.pdf.

⁴ FAA. (1999). FAA Airport Benefit-Cost Analysis Guidance. Office of Aviation Policy and Plans. Retrieved from https://www.faa.gov/regulations_policies/policy_guidance/benefit_cost/media/1999_FAA_Airport_Benefit_Cost_Analysis_Guidance.pdf.

⁵ FAA. (2004). Order 5200.9, Financial Feasibility and Equivalency of Runway Safety Area Improvements and Engineered Material Arresting Systems. U.S. Department of Transportation. Retrieved from https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/13908.

⁶ GRA, Incorporated. (2007). Economic Values for FAA Investment and Regulatory Decisions, A Guide. FAA. Retrieved from https://www.faa.gov/regulations_policies/policy_guidance/benefit_cost/media/ECONOMICVALUESFORFAAINVESTMENTANDREGULATORYDECISIONS10032007.pdf.

⁷ FAA. (2006). Memorandum: Planning Information Needed for FAA Headquarters Review of Benefit Cost Analysis (BCA). https://www.faa.gov/airports/aip/bc_analysis/media/planning-information-bca.pdf.

⁸ Executive Order No. 12893. 3 C. F. R. Vol. 59, No. 20 (1994). Principles for Federal Infrastructure Investments. Retrieved from <https://www.archives.gov/files/federal-register/executive-orders/pdf/12893.pdf>.

This proposed project takes on added significance given recent events in the EMAS market. In February, Zodiac Aerospace (supplier of EMAS blocks for BTR) announced an immediate halt to production of EMAS products. Due to standing agreements, the only other EMAS producer, Runway Safe, is prohibited from entering the U.S. Market until September, 2020. This shock to the supply of EMAS products will likely drive up EMAS repair and replacements costs in the short-term for the 100+ EMAS customers. In situations where an EMAS could not be repaired, airport operators would likely need to reduce the accelerate stop distance and landing distance available on the affected runways, which could drastically impact airport functionality. These recent developments provide an even greater impetus for the replacement of the aging EMAS system with a full-sized standard RSA and a standard compliant RPZ at BTR.

1.3 Background

The Baton Rouge Metropolitan Airport is an important element of the local economy. The City of Baton Rouge, the capital of Louisiana, is home to over 228,000 residents. Moreover, more than 824,000 people reside in the broader Metropolitan Statistical Area which this airport serves. The median household income for the metro area in 2016 was estimated at \$53,000, slightly below the median household income for the United States, \$55,000 (ACS, 2016).⁹ BTR and the neighboring Aviation Business Park directly employed 2,393 workers in 2015 and were indirectly responsible for an additional 2,355 jobs. Ultimately, the Airport and business park supported over \$1 billion of economic activity in 2015.¹⁰ Additionally, an economic and community impact study of the Baton Rouge Airport found that a 10 percent increase in enplanements yields a 1 percent increase in employment in service-related industries. Further, a 1 percent increase in service-related industry employment represents 3,000 additional jobs in the Baton Rouge metro area (Baton Rouge Metropolitan Airport, 2015).¹¹

The Airport is located 5 miles north of downtown Baton Rouge and adjacent to US Interstate 110. The Airport is surrounded on three sides by highways: LA Highway 67, LA Highway 408, and Veterans Boulevard. Situated on 1,800 acres, BTR has two perpendicular air carrier runways: Runway 13/31 is 7,005 feet by 150 feet, and Runway 4L/22R is 7,500 feet by 150 feet, as shown in Exhibit 1-1. BTR experienced an approximately 4 percent increase in enplanements in 2017 over 2016. Based on the previously cited economic impact report, this roughly translates to an additional 1,200 service-related jobs in the Baton Rouge metro area in 2017 (Baton Rouge Metropolitan Airport, 2018).¹²

⁹ American Community Survey (ACS). (2016). U.S. Census Bureau.

¹⁰ The 2015 data is the most current data available at the time of the development and publication of this report.

¹¹ Baton Rouge Metropolitan Airport. (2015). BTR Economic and Community Impact Study. Retrieved from https://flybtr.com/Images/Interior/commission%20agendas/em_btr_economic%20and%20community%20impact%20study_final.pdf.

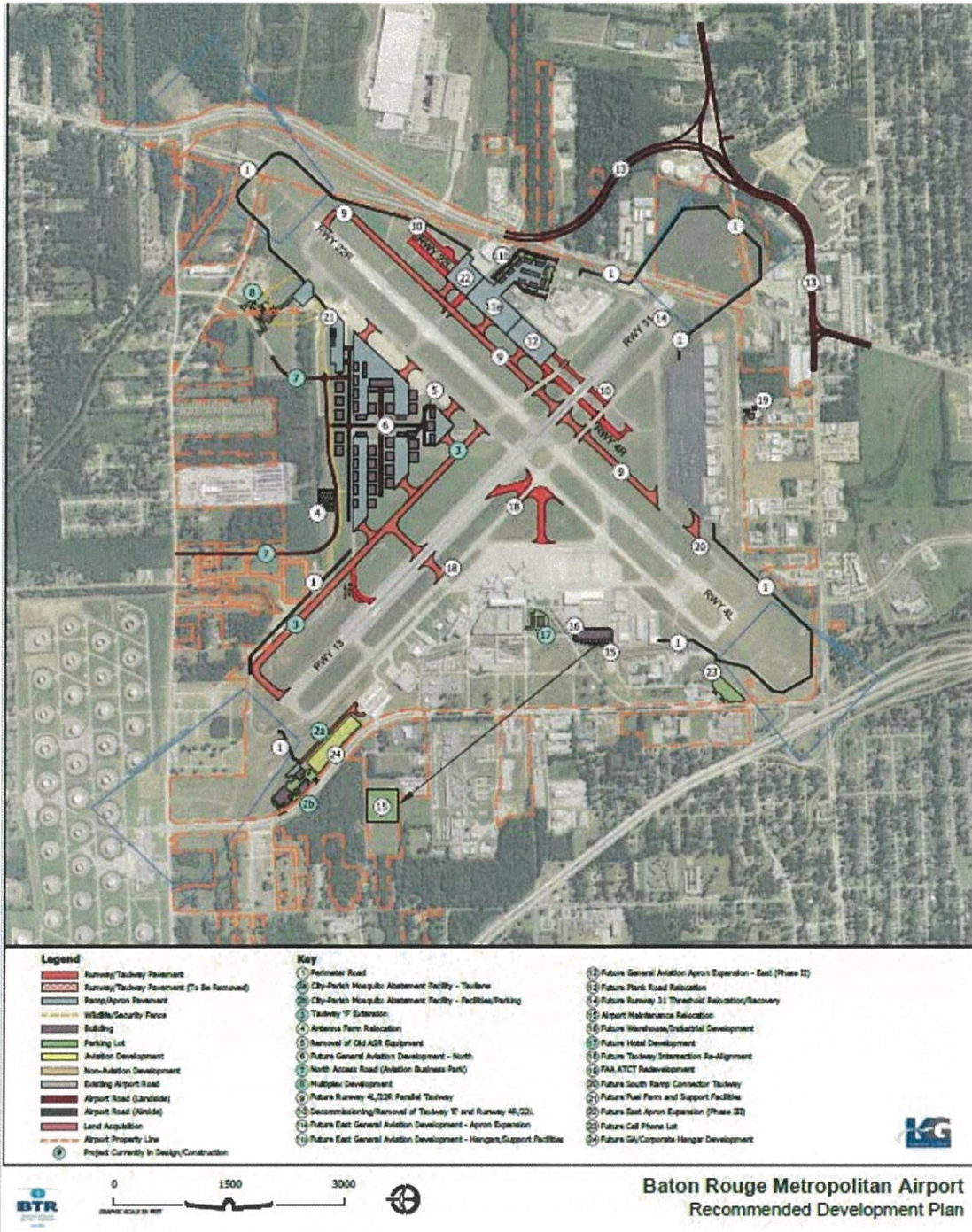
¹² Baton Rouge Metropolitan Airport. (2018). Enplanement Data / Deplanement Data. Retrieved from <https://flybtr.com/CatSubCat/CatSubCatDisplay.asp?p1=2946&p2=Y&p7=408&p8=7448&p9=CSC1>.

BATON ROUGE METROPOLITAN AIRPORT
BENEFIT-COST ANALYSIS

The objective of this analysis is to assess the costs and benefits of the Project to replace the existing EMAS on Runway 31, establish a full-sized standard RSA, relocate Plank Road outside of this new RSA, and create a standard compliant RPZ. The conceptual design for the Project is presented in the context of the surrounding area in Exhibit 1-1.

BATON ROUGE METROPOLITAN AIRPORT
BENEFIT-COST ANALYSIS

Exhibit 1-1: Draft Development Plan for the Baton Rouge Metropolitan Airport



Note: Due North on this map is the left-side of the page.

1.4 Design Alternatives

FAA airport BCA guidance directs the consideration of all reasonable ways to achieve the desired objectives. This analysis estimates the cost-effectiveness of the creation of the RSA and the relocation of Plank Road. The RSA development is the same for each of the three roadway relocation alternatives: (1) conventional intersections, (2) restricted crossover U-turn (RCUT) intersections, and (3) fly-over. A no-action, no build alternative is not considered in this analysis because it does not remove the roadway from the RPZ.

Alternative 1: Conventional Intersections

Exhibit 1-2: Alternative 1 Conventional Intersections

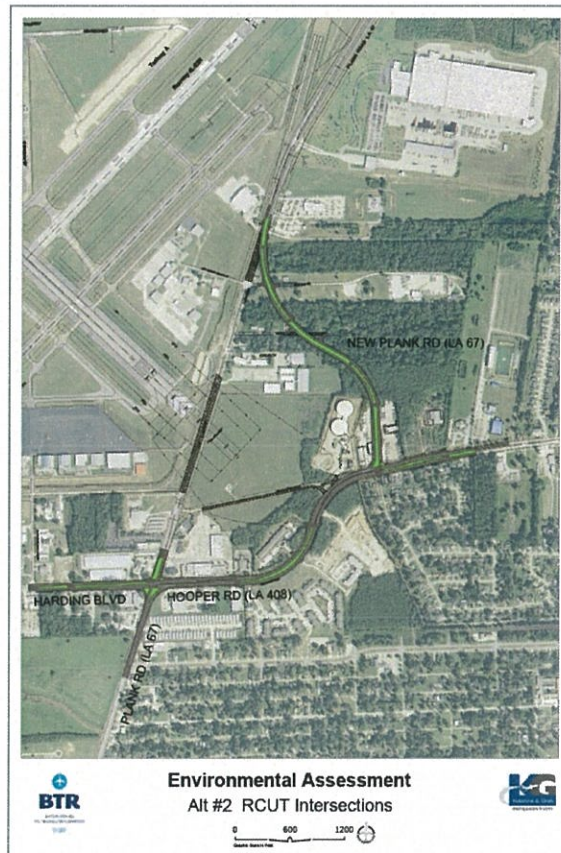


Alternative 1 includes the addition of a through lane in each direction along Harding Boulevard/Hooper Road from 1,300 feet west of Plank Road to 800 feet west of Betty Smothers Drive, a distance of approximately 5,300 feet. This design includes the addition of turn lanes at the existing Plank Road (LA 67) signalized intersection

and a new signalized intersection positioned on the relocated Plank Road, at the intersection of Plank Road and McClelland Drive. There will also be changes to the Hooper Road median strip including restricted access and two new signalized U-turn intersections located between the two major intersections. The relocated Plank Road section will consist of a 4-lane divided roadway approximately 3,300 feet in length beginning at the Hooper Road/McClelland Drive Intersection, proceeding in a northwest direction, and connecting into the existing Plank Road at the All Star North Chevrolet Dealership.

Alternative 2: RCUT Intersections

Exhibit 1-3: Alternative 2: RCUT Intersections



Alternative 2 includes the same addition of through lanes along Harding Boulevard/Hooper Road as in Alternative 1. However, it also includes the installation of RCUT intersections at the existing intersection of Plank Road and Hooper Road and the proposed intersection of Plank Road and McClelland Drive. Median strip changes include restricted access with three signalized U-turn intersections and one un-signalized U-turn intersection located just east of McClelland Drive. One signalized U-turn intersection is located west of the existing Plank Road/Hooper Road intersection, and two are located in the section of Hooper Road between the

existing Plank Road and the proposed relocated Plank Road. The relocated Plank Road section is the same as in Alternative 1 except for the lane configuration at the intersection of Hooper Road.

Alternative 3: Fly-Over

Exhibit 1-4: Alternative 3: Fly-Over



Alternative 3 also includes the same addition of through lanes along Harding Boulevard/Hooper Road and installation of an RCUT intersection at Plank Road and Hooper Road as in Alternative 2, but also a grade separation at the proposed intersection of Plank Road and Hooper Road. The proposed grade separation is created through construction of an 800-foot bridge structure allowing westbound vehicular traffic on Hooper Road to overpass the proposed new Plank Road. Vehicular traffic flow on both southbound Plank Road and westbound Hooper Road would also be unimpeded by signalized intersections. The proposed westbound two lanes on Hooper Road that would overpass the new Plank Road would merge into the additional Hooper Road through lane. The three eastbound Hooper Road travel lanes would split into two northbound Plank Road lanes

and two eastbound Hooper Road lanes. This overpass alternative would include a signalized intersection for the Plank Road southbound left turn and Plank Road northbound movements. The relocated Plank Road section has the same layout as Alternative 2 except for the lane configuration at the intersection of Hooper Road.

Each of the three design alternatives has separate construction cost estimates that are summarized below in Table 1-2. See Appendix A for details.

Table 1-2: Construction Subtotals

COST	ALT 1	ALT 2	ALT 3
Construction Cost	\$27,032,424	\$27,127,797	\$34,951,060

Each cost alternative requires funding from a combination of several sources: AIP entitlement funding, AIP discretionary grant funding, local AIP match funding, and local funding (see Table 1-3). Airports are entitled to a certain amount of AIP funding each year based on passenger volume. This funding can be used for a variety of projects and upgrades, and in this case, the AIP entitlement will be used to fund the relocation of Plank Road partially. The FAA will also provide the AIP discretionary funding. The AIP Match will be provided by the State of Louisiana Department of Transport and Development Aviation Division (DOTD). It is anticipated that the DOTD will also support the project from its Aviation Trust Fund. Additionally, there will be a local funding grant of \$60,000, contributed by the airport, towards the project as a match for the 100% state grant funding. The larger cost of Alternative 3 necessitates other funding due to its augmented price, and the source of this funding has yet to be determined.

BATON ROUGE METROPOLITAN AIRPORT
BENEFIT-COST ANALYSIS

Table 1-3: Funding Sources

FUNDING SOURCE	ALT 1	ALT 2	ALT 3
AIP Entitlement (FAA) ¹	\$7,922,269	\$7,922,269	\$7,922,269
AIP Discretionary (FAA) ²	\$9,777,731	\$9,777,731	\$9,777,731
AIP Match (DOTD)	\$1,966,667	\$1,966,667	\$1,966,667
100% State (DOTD)	\$9,000,000	\$9,000,000	\$9,000,000
Local Funding (Airport)	\$60,000	\$60,000	\$60,000
Other Funding ³	\$0	\$0	\$6,284,392
Total	\$28,726,667	\$28,726,667	\$35,011,059

Notes: ¹Airports are entitled to a certain amount of AIP funding each year based on passenger volume. ² The AIP Discretionary funding is being provided by the FAA. ³ Alternative 3 requires \$6.2 million in funding from other sources and these sources are yet to be determined.

1.5 Approach

This report estimates the incremental costs and benefits associated with the various Project alternatives relative to a baseline case of no action. The incremental development costs and associated benefits are then used to evaluate the cost-effectiveness of the Project, using several economic payoff metrics:

- Net present value (NPV),
- Benefit-cost ratio (BCR, also known as a savings/investment ratio), and
- Discounted payback period (DPP) (also known as a break-even period).

NPV is the difference between the discounted total benefits and the discounted total costs. A positive NPV indicates that a project is cost-effective and will pay for itself over the selected period. BCR is a numeric ratio that expresses the discounted total benefits relative to the discounted total costs. A BCR greater than or equal to 1 indicates that the benefits of the project are greater than or equal to its costs. The DPP represents the number of years it takes to break even after the initial investment, assuming a specified discount rate (in this case, 7 percent).

BATON ROUGE METROPOLITAN AIRPORT
BENEFIT-COST ANALYSIS

The economic analysis is anchored in guidance for BCAs provided by OMB in Circulars A-94¹³ (Guidelines and Discount Rates for Benefit-Cost Analyses of Federal Programs) and A-4¹⁴ (Regulatory Impact Analysis: A Primer).¹⁵ The analysis also relies on FAA guidance to estimate appropriate direct benefits and costs in a defensible manner and without double-counting or overestimating the benefits.

Circular A-94 establishes guidelines for benefit-cost analyses conducted by Federal agencies. According to Circular A-94, analyses should “include comprehensive estimates of the expected benefits and costs to society” (underline provided in Circular A-94). The Circular states that social benefits, and not simply benefits and costs to the Federal Government, should be the basis for conducting benefit-cost analysis. Circular A-94 further states that “both intangible and tangible benefits and costs should be recognized” and that they should reflect the “opportunity cost of any resources used.”

The following criteria ensure that the evaluation of cost-effectiveness based on the various economic payoff metrics is sufficiently rigorous:

- Inclusion of the lifecycle costs, such as construction and maintenance;
- Avoiding the double-counting of benefits; and
- Discounting future monetary values to reflect the time value of money.

This report quantifies and monetizes the impacts of the Project, where feasible, and uses monetary estimates for the expected impacts. In some cases, defensible and geography-specific data were not available to estimate monetary impacts. In these cases, the K&G Team presents the results qualitatively. Exhibit 1-5 presents a summary of the categories of impacts included in this analysis, including whether these impacts are quantified or discussed qualitatively in this report.

¹³ Office of Management and Budget (OMB) (1992). Subject: Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs. Retrieved from https://obamawhitehouse.archives.gov/omb/circulars_a094/.

¹⁴ OMB. (2003). Subject: Regulatory Analysis. Retrieved from https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/.

¹⁵ OMB Circular A-4 provides further information on discounting, noting that a real discount rate of 7 percent should be used. OMB also recommends using 3 percent for sensitivity analysis, but FAA guidance stipulates that for the AIP a 7 percent discount rate should be used.

Exhibit 1-5: Summary of Impact Categories

Quantifiable Costs	Quantifiable Benefits	Hard-to-Quantify Benefits
<ul style="list-style-type: none"> • Design • Land Acquisition and Relocation • Construction • Environmental Mitigation • Oversight • Maintenance 	<ul style="list-style-type: none"> • EMAS Replacement Savings • Roadway Improvements • Increased Safety 	<ul style="list-style-type: none"> • Compliance with FAA RSA Standard Requirements • Compliance with FAA RPZ Standard Requirements

The goal of this monetization effort is to assist BTR in estimating the costs and benefits of the project. In general, the higher the NPV and BCR over the useful life of the project, the higher the economic payoff.

The analysis covers a period of 24 years (2018 through 2041) to ensure the K&G Team captures all major costs and benefits which could be reasonably expected to accrue over the useful life of the Project. This period includes a 4-year construction phase in which the majority of the costs accrue, followed by a 20-year useful life phase in which the benefits of the Project are realized. This study presents impacts in constant dollars and discounts the monetized costs and benefits to capture the time value of money, reflecting the fact that benefits and costs experienced in future years are worth less than those experienced in the present. The analysis also uses a primary discount rate of 7 percent, in accordance with FAA Order 5100.38D Airport Improvement Program Handbook (2014) guidance.

The estimates and outcome metrics presented in this report are in 2017 dollars. Many of the inputs for the analysis are sourced from reports from the FAA or the Department of Transportation. To ensure that all metrics are comparable, inputs are converted to 2017 dollars using the consumer price index from the Bureau of Labor Statistics. The majority of the inputs used in this analysis that required conversion represent wages or value of time, not construction costs. Therefore, the K&G Team used the consumer price index rather than a construction cost index.

1.6 BCA Components

This section discusses the components of each impact category listed in Exhibit 1-5 above: quantifiable costs, quantifiable benefits, and hard-to-quantify benefits. The sub-sections for each category of impacts list the components in the category, provide a description of the component, and provide information on the estimated cost or value of the component, where possible.

1.6.1 Quantifiable Costs

As displayed in Exhibit 1-5, quantifiable costs include those costs to be incurred over the lifecycle of the Project: (a) Design, (b) Land Acquisition and Relocation, (c) Construction, (d) Environmental Mitigation, (e) Oversight, and (f) Maintenance.¹⁶ The K&G Team has provided some detail on each of these cost components below. Values for each alternative can be found in the Appendix.

a. Design

The design costs represent the costs associated with the planning for the Project. Projects at this stage of the process are conceptual and not required to have finalized designs. Due to uncertainty in the level of effort required to draw up detailed design costs, an estimate is determined using a percentage of the total construction cost. Design costs for each of the project alternatives are estimated at 12 percent of the construction costs. These costs could range from \$1.3 million to \$2.1 million depending on the alternative.

b. Land Acquisition and Relocation

The relocation of Plank Road and the improvements to Hooper Road and Harding Boulevard extend into the land that is not currently owned by the Airport but owned by commercial or private interests. This land will need to be acquired before construction can begin. Costs associated with purchasing land, relocating residences or businesses, and attaining right-of-ways are included in the estimated land acquisition and relocation costs. Land acquisition and relocation costs are estimated at \$9.1 million for each alternative.

c. Construction Costs

The construction costs of the Project are estimated to include the following activities:

- *Lighting, landscaping, and seeding* – adding lighting, landscaping, and seeding with vegetation (grass) to prevent excess runoff and erosion.
- *Utility relocations* – relocating the above- and below-ground utilities, including electric, water, and wastewater utilities.
- *Clearing* – materials and labor for clearing the land of trees, wetlands, and structures within the required right of way as well as any fences or structures.
- *Grading* – materials and labor for leveling the land.
- *Paving* – materials and labor for the construction of the roadway.
- *Testing* – testing of the constructed works.

These construction costs range from \$12.2 million to \$18.8 million depending on the alternative.

d. Environmental Mitigation

The environmental mitigation costs represent those associated with the expansion of the RSA and establishment of the RPZ, and include the following types of mitigation categories:

¹⁶ GOTECH estimated the costs presented in this section.

- Water resources (wetland mitigation) – The expansion of the RSA and establishment of the RPZ may result in the clearing of wooded and wetland areas as well as potential impacts to streams and other drainage features as part of the construction process. Louisiana state law requires the mitigation of such impacts through the restoration or construction of wetlands elsewhere.
- Historical and cultural resources – The construction of the RSA and establishment of the RPZ may result in the U.S. Army Corps of Engineers requesting cultural resources evaluation beyond that required by the State Historic Preservation Office. The costs associated with such evaluation are accounted for here.
- Noise and compatible land use – This Project includes the potential construction of approximately 4,000 linear feet of sound wall to mitigate traffic noise resulting from the relocated roadway.
- Hazardous materials and solid waste – The Project requires the acquisition of a parcel of land that is used as a trucking facility. It is possible that this land may require environmental mitigation, including additional soil testing and potential remediation.
- Cumulative impacts – The cumulative impacts of the Project represent the total combined impacts on the environment of the proposed alternatives and other known or foreseeable actions.

Environmental mitigation costs are estimated to be \$2.0 million, regardless of the alternative.

e. Oversight

Oversight includes project management and administrative costs (e.g., for permits, advertising, contract recordation). Project management costs are estimated to be 8.5 percent of the construction cost, ranging from \$2.1 million to \$2.7 million across the alternatives. Administrative costs are estimated to be 1 percent of construction costs, ranging from \$0.25 million to \$0.32 million across the alternatives.

f. Maintenance

The K&G Team considered maintenance costs associated with the expansion of the RSA and the relocation of Plank Road. These maintenance costs fall into two categories: roadway and airport costs. The costs associated with these two components, however, are assumed to be negligible.

- Roadway – The relocation of Plank Road could result in additional maintenance costs, such as for signage and resurfacing. The State of Louisiana will take over maintenance responsibilities (e.g., signage, resurfacing). Incremental maintenance is assumed to be negligible.
- Airport – The expansion of the RSA could result in additional maintenance costs, such as for mowing, pest control, and fence repairs. The new RSA not already owned by the Airport is approximately 3 acres in total, which results in negligible incremental maintenance.

1.6.2 Quantifiable Benefits

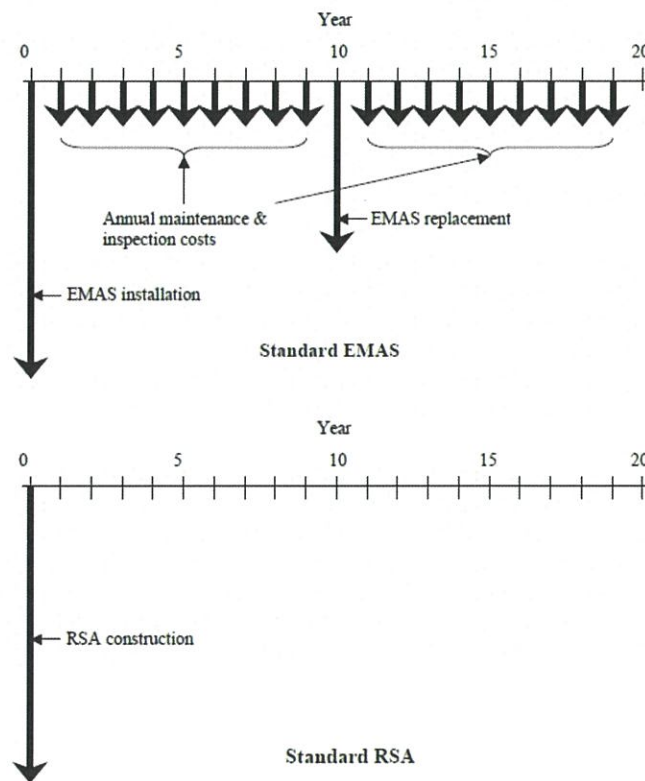
As displayed in Exhibit 1-5, the quantifiable benefits include (a) EMAS replacement savings and (b) net road traffic improvements. More information on each of these benefits is presented below.

a. EMAS Replacement Savings

EMAS replacement savings result from replacing the EMAS with a full-sized standard RSA and a standard compliant RPZ. These savings include those derived from avoided future costs associated with the installation and maintenance of the EMAS, as described further below:

- Installation – The removal of the EMAS will result in avoided installation costs. FAA Order 5200.9 provides details on a methodology for estimating the feasibility of replacing an EMAS with a full-sized standard RSA and a standard compliant RPZ. This FAA guidance determines the maximum feasible cost of a standard RSA by estimating the replacement cost of an EMAS. This replacement cost is determined using the dimensions of the EMAS and various unit costs for site preparation and EMAS bed installation. Further, the baseline analysis outlines a lifecycle methodology whereby a full replacement of the EMAS occurs every 10 years, and a maintenance fee applies in every year where the EMAS is not replaced (see Exhibit 1-6).

Exhibit 1-6: EMAS Lifecycle Costs Compared to RSA



Source: FAA Order 5200.9, Figure B1. Life Cycle Cash Flow. Retrieved from https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/13908.

This cyclical methodology (a replacement year followed by nine years of maintenance) is adopted for the analysis of the Airport; however, the associated EMAS estimates are outdated. More recent EMAS cost information was gathered from Zodiac AeroSpace (the company that currently supplies the materials to BTR) and from the Airport Cooperative Research Program (ACRP). The ACRP Report 29, Developing Improved Civil Aircraft Arresting Systems, provided additional installation estimates using both FAA Order 5200.9 and a survey of manufacturers. These unit estimates result in an EMAS replacement cost of \$8.6

million every 10 years (converted to 2017 dollars). More information on the EMAS installation costs can be found in the Appendix.

The cessation of EMAS product production by Zodiac Aerospace is going to send ripple effects through the EMAS market in the United States. The limited supply of EMAS blocks will sharply drive up the costs of replacing blocks in aging systems or in the case of an overrun. The EMAS replacement costs presented in this analysis represent costs under normal market conditions, but Zodiac Aerospace's decision could drive prices up to an unprecedented level. Airports will need to make arrangements to obtain replacement blocks, and this may require importing blocks from elsewhere, at higher prices. Therefore, the replacement costs presented in this report are likely an underestimate of the actual prices. Given these recent events, the benefits of this project are all the more clear, and greatly outweigh the costs.

- Maintenance – The removal of the EMAS will also result in annual maintenance cost avoidance. FAA Order 5200.9 suggests an annual maintenance cost of \$20,000. Scaled to 2017 dollars, this equals \$26,000. Following the methodology outlined in FAA Order 5200.9, this annual maintenance value occurs in every year which the EMAS is not replaced (9 out of 10 years).

b. Road Traffic Improvement Benefits

The relocation of Plank Road is expected to result in traffic improvements as a result of optimized traffic movement and generate associated benefits. However, there are both benefits and costs associated with the road improvement elements of the Project. A traffic analysis conducted by the K&G Team¹⁷ assessed the projected changes in traffic to estimate the traffic volume and travel times for each of the three design alternatives.¹⁸ This report used these metrics to estimate the monetary impacts resulting from changes in travel time, vehicle operating costs, fuel usage, and vehicular emissions.

Time savings represents the societal benefit, expressed in monetary terms, of time saved by individuals due to increased efficiency of traffic patterns. The K&G Team calculated the travel time savings using peak traffic counts and the estimated per-vehicle delay when navigating the various intersection designs. These peak counts and delays were converted into total daily delays by multiplying the morning peak delays and traffic counts by 2.0 and the evening peak by 3.0, which is standard practice for transportation analyses.¹⁹ The K&G Team converted the daily time savings into monetary estimates using guidance from the Department of Transportation (DOT). In the DOT guidance, the savings is split into the proportion of travel that is for personal

¹⁷ Neel-Shaffer Inc. in coordination with GOTECH and Kutchins & Groh.

¹⁸ Neel-Shaffer (2017). Runway 13-31 RSA & RPZ Improvement Project: Traffic Study East Baton Rouge Parish. GOTECH.

¹⁹ Personal communication with Nick Ferlito of Neel-Shaffer: 12/19/2017.

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reasons (95 percent) and business reasons (5 percent) and then multiplied by the median income for the state of Louisiana (\$27.20 and \$29.62 for personal and business travel, respectively).²⁰

Each design alternative results in a slightly longer travel distance (0.42 miles) than the baseline conditions. This additional travel distance imposes both additional operational and emissions costs. The operational costs represent the additional maintenance required for the extra travel as a result of wear-and-tear on vehicles. These costs were estimated by multiplying the daily traffic count by the incremental travel distance, and then by an operation cost per mile (\$0.60 per mile) from the American Auto Association.²¹ The emissions costs represent the environmental costs of an additional unit of pollutants that result from vehicle emissions per mile of vehicle travel. These costs were estimated by multiplying the incremental travel distance by the daily traffic count and by a per-mile emissions cost (\$0.15 per mile).²²

The annual net benefit resulting from traffic improvement ranges from \$1.8 million (Alternative 1) to \$2.1 million (Alternative 3). Due to the smaller traffic time savings in Alternative 2, the traffic changes result in an annual cost of \$0.86 million.

Alternative-specific traffic improvement benefits are displayed in Table 1-4.

Table 1-4: Road Traffic Improvement Benefits

CATEGORY	ALT 1	ALT 2	ALT 3
Traffic Improvement Benefit	\$16,000,000	\$0	\$17,800,000

Note: Due to the design components of Alternative 2, there are no traffic improvement benefits; rather, there is an additional cost. See Appendix A for more information.

²⁰ The Department of Transportation has issued "revised departmental guidance on travel time in economic analysis" (2015) to assist in the valuation of travel time. The methodology suggests splitting the time into personal and business travel and monetizing by using regional specific income information. Median household income for Baton Rouge from the DepartmentofNumbers.com was used to estimate personal travel value, while median occupational income from the Bureau of Labor Statistics was used to estimate business travel.

Department of Transportation guidance retrieved from <https://www.transportation.gov/sites/dot.gov/files/docs/Revised%20Departmental%20Guidance%20on%20Valuation%20of%20Travel%20Time%20in%20Economic%20Analysis.pdf>.

Department of Numbers income information retrieved from <http://www.deptofnumbers.com/income/louisiana/baton-rouge/>

Bureau of Labor Statistics income information retrieved from https://www.bls.gov/oes/current/oes_la.htm#00-0000.

²¹ American Auto Association (2015). News Room. Retrieved from <http://newsroom.aaa.com/2015/04/annual-cost-operate-vehicle-falls-8698-finds-aaa-archive/>.

²² Victoria Transport Policy Institute. Transportation Cost and Benefit Analysis II – Air Pollution Costs. Retrieved from <http://www.vtpi.org/tca/tca0510.pdf>.

1.7 Findings

This section presents the results of the BCA and the various metrics used in this report to evaluate the cost-effectiveness of the Project. First, Table 1-3 presents the total discounted costs and benefits of the Project for each of the three alternatives. As shown in the table below, the estimated costs are \$24.8 million for Alternative 1, \$32.3 million for Alternative 2, and \$32.0 million for Alternative 3. Similarly, Table 1-5 presents the total quantified benefits of the Project, which are estimated at \$28.6 million for Alternative 1, \$12.7 million for Alternative 2, and \$30.5 million for Alternative 3. These total costs and benefits are present value estimates over the 24-year analysis period discounted at a rate of 7 percent.

Table 1-5: Benefit-Cost Analysis Results (total with 7 percent discounting)

COMPONENT	ALT 1	ALT 2	ALT 3
COSTS			
Construction	\$24,800,000	\$24,900,000	\$32,900,000
Maintenance ¹	\$0	\$0	\$0
Traffic Costs ²	\$0	\$7,400,000	\$0
<i>Total Costs</i>	\$24,800,000	\$32,300,000	\$32,000,000
BENEFITS			
Averted EMAS Costs	\$12,700,000	\$12,700,000	\$12,700,000
Traffic Improvements	\$16,000,000	\$0	\$17,800,000
<i>Total Benefits³</i>	\$28,600,000	\$12,700,000	\$30,500,000

Notes: ¹ Maintenance for each of the alternatives is assumed to be negligible. The new RSA area already owned by the Airport is approximately 3 acres in total, which results in negligible incremental maintenance. ² The construction of Alternative 2 (R-Cuts) are estimated to impact traffic patterns negatively. Therefore, Alternative 2 does not result in traffic improvements, but rather a traffic cost. ³ Totals may not add due to rounding.

Next, Table 1-6 presents the two economic payoff metrics used in evaluating the BCA of the Project. First, the NPV (total discounted benefits – total discounted costs) of the Project is estimated at \$3.8 million for Alternative 1, -\$19.6 million for Alternative 2, and -\$1.5 million for Alternative 3. Next, the BCR (total discounted benefits / total discounted costs) of the Project is estimated at 1.16 for Alternative 1, 0.39 for Alternative 2, and 0.95 for Alternative 3.

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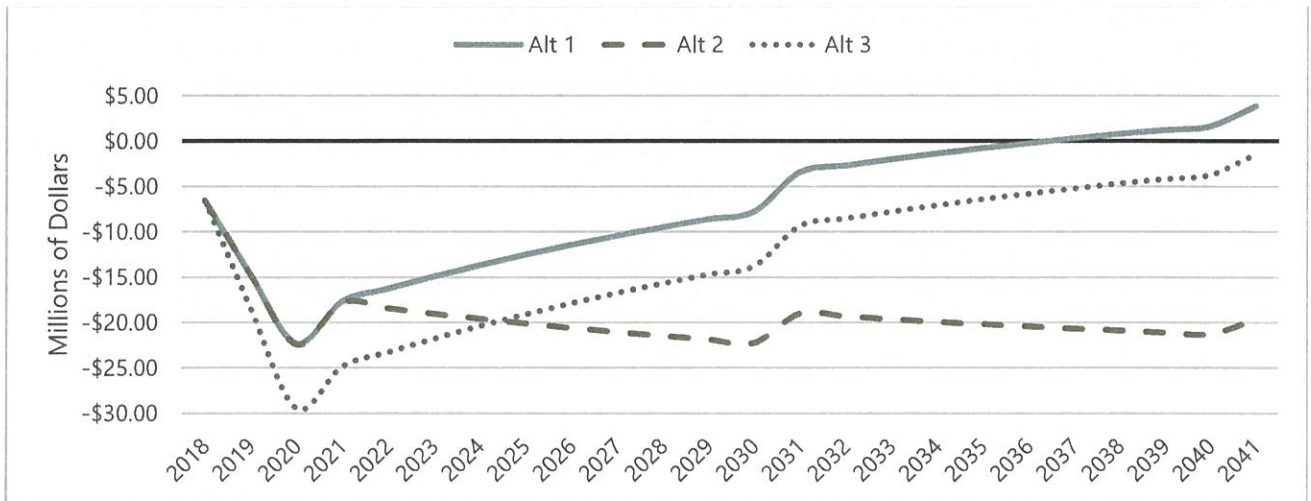
Table 1-6: Outcome Metrics (with 7 percent discounting)

METRIC	ALT 1	ALT 2	ALT 3
Total Benefit	\$24,800,000	\$32,300,000	\$32,000,000
Total Cost	\$28,600,000	\$12,700,000	\$30,500,000
NPV (Total Benefits – Total Costs)	\$3,800,000	-\$19,600,000	-\$1,500,000
BCR (Total Benefits / Total Costs) ¹	1.16	0.39	0.95

Notes: ¹ The BCR has been rounded to the hundredth place.

The discounted payback period represents the number of years it takes to break even after the initial investment. Exhibit 1-7 presents the payback period for the various alternatives. Only Alternative 1 has a positive net present value, and therefore a positive payback period. According to the results, Alternative 1 breaks even in 2037, or 19 years after initial investment.

Exhibit 1-7: Payback Period (using a 7 percent discount rate)



Qualitative Benefits

There are important benefits of this Project that are not reflected in the components presented above due to the difficulty to quantify these impacts. The primary benefits of this Project are –

- Establishment of a full standard RSA in lieu of the utilization of EMAS to achieve this standard, and
- Removal of Plank Road from the RPZ, which will bring the Airport into compliance with the new FAA design standards (AC 150/5300-13A) regarding RPZs.

This project will increase compliance with FAA standards by replacing existing physical infrastructure (EMAS) at or near the end of its useful life with a full standard RSA. This project will improve airfield facilities and safety so that the Baton Rouge Metropolitan Airport may continue to serve as a regionally competitive, origin-destination airport for passenger aircraft operations.

The proposed improvements at BTR are needed to provide additional capabilities to safely and efficiently accommodate projected future levels of activity. The Runway 13-31 RSA and RPZ improvements are needed to fully meet current FAA design standards, to provide the maximum reasonable margin of safety for the runway environment, and to preserve the Airport's eligibility to receive federal funding assistance by complying with FAA design standards and federal obligations. These obligations are described by the Federal Grant Assurances which require airport operators to maintain their facilities in a safe and efficient manner for public use. The current Emergency Materials Arresting System (EMAS) has reached the end of its useful life and will require a near term replacement should these improvements not be made and will require replacement approximately every ten years thereafter.

An RSA is defined as "the surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway." The standard dimensions have increased over time to accommodate larger and faster aircraft, and to improve safety. An RPZ's primary function is to ensure the protection of people and property on the ground. In its current location, Plank Road prevents BTR from having a full standard RSA and bisects Runway 31's RPZ. In 2012, the FAA released Interim Guidance on Land Uses within a Runway Protection Zone as well as revised Design Standards (AC 150/5300-13A), which stipulate that any new public roadways or highways to be developed through an RPZ require consultation with the National Airport Planning and Environmental Division, and that staff should work to remove existing incompatible land uses (i.e., roads) in the RPZ. Similarly, the guidance stipulates that Airport control of RPZ is desired. The proposed AIP project discussed in this report would provide for a full standard RSA and remove the roadway from the RPZ per FAA current guidance.

These components represent significant improvements to the Airport, and arguably provide the largest benefit of the Project. Because it is difficult to quantify or monetize these benefits, the BCRs presented should be considered as the lower-bounds of the benefits of the Project. The true benefits are likely higher than the values have estimated.

1.8 Conclusions

The quantitative results of this report consider the total costs of each of the three design alternatives aimed at the relocation of Plank Road from the RPZ and the establishment of a full-sized standard RSA. Only Alternative 1, conventional intersections, represents a cost-effective design alternative for the Project—with a net present value of \$3.8 million (using a 7 percent discount rate). The BCR of Alternative 1, 1.16, suggests that the development of conventional intersections represents the only viable alternative for the relocation of Plank Road and conversion of the EMAS to a standard RSA.

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These metrics are the result of analyzing the lifecycle costs of each alternative, assuming a four-year construction period, followed by a 20-year benefit period. EMAS replacement savings constitute a large portion of the overall benefit, in the avoided replacement of the EMAS every ten years, and avoided annual EMAS maintenance. The net traffic improvements represent a second benefit, derived from the benefit of time savings and the cost of additional air emissions and operating costs from the additional mileage traveled. On net, these benefits outweigh the costs only in Alternative 1.

As discussed throughout the report, the impetus for this Project is the development of a full-sized standard RSA and RPZ which is fully compliant with new FAA design standards. The importance of these safety benefits, while difficult to quantify, cannot be understated, and therefore the K&G Team believes that the BCA estimates developed in this report are likely to represent the lower-bounds of the true societal benefit of the Project.



BTR

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Baton Rouge Metropolitan Airport

Benefit Cost Analysis

Appendix

Runway 13/31 Runway Safety Area and
Runway Protection Zone Improvements

April 2018



Appendix A

Table 1-7. Acronym List

ACRONYM / ABBREVIATION	STANDS FOR
AIP	Airport Improvement Program
Alt	alternative
BCA	benefit-cost analysis
BCR	benefit-cost ratio
EMAS	engineered materials arrestor system
DOT	Department of Transportation
DPP	discounted payback period
FAA	Federal Aviation Administration
LDA	localizer type directional aid
NAVAIDs	navigational aids
NPV	net present value
OMB	Office of Management and Budget
RPZ	runway protection zone
RSA	runway safety area
SIR	savings/investment ratio
RCUT	restricted crossover U-turn

A.1 Alternative-Specific Inputs

This section briefly presents the alternative specific construction cost inputs to facilitate comparison across the various alternatives. Table 1-8 shows the various cost components that when aggregated form the construction subtotal.

BATON ROUGE METROPOLITAN AIRPORT
BENEFIT-COST ANALYSIS

Table 1-8. Construction Cost Breakdown

COMPONENT	ALT 1	ALT 2	ALT 3
Design	\$1,325,686	\$1,334,506	\$2,058,003
Land Acquisition	\$9,100,000	\$9,100,000	\$9,100,000
Construction	\$12,261,460	\$12,339,738	\$18,760,773
Environmental Mitigation	\$2,000,000	\$2,000,000	\$2,000,000
Program Management	\$2,098,407	\$2,105,811	\$2,713,096
Administrative Costs	\$246,871	\$247,742	\$319,188
Maintenance ¹	\$0	\$0	\$0
<i>Construction Subtotal</i>	<i>\$27,032,424</i>	<i>\$27,127,797</i>	<i>\$34,951,060</i>

Notes: ¹ Maintenance costs are assumed to be negligible.



BTR

BATON ROUGE
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ATTACHMENT 4
BOND FEASIBILITY STUDY WORK SAMPLE



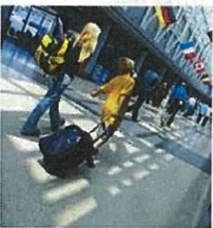
Appendix A

Report of the Airport Consultant

on the proposed issuance of

Los Angeles International Airport Subordinate Revenue Bonds, 2021
Series D, Private Activity/Alternative Minimum Tax and Subordinate
Refunding Revenue Bonds, 2021 Series E, Federally Taxable

September 14, 2021



Prepared for

Department of Airports of the City of Los Angeles | Los Angeles, California

Prepared by

WJ Advisors LLC | Denver, Colorado



September 14, 2021

Ms. Beatrice Hsu, President
Board of Airport Commissioners
Los Angeles World Airports
1 World Way
Los Angeles, California 90045

Re: Report of the Airport Consultant on the Proposed Issuance of Los Angeles International Airport Subordinate Revenue Bonds, 2021 Series D, Private Activity/Alternative Minimum Tax and Subordinate Refunding Revenue Bonds, 2021 Series E, Federally Taxable

Dear Ms. Hsu:

WJ Advisors LLC is pleased to submit this Report of the Airport Consultant (the 2021DE Report) related to the proposed issuance of Los Angeles International Airport Subordinate Revenue Bonds, 2021 Series D, Private Activity/Alternative Minimum Tax (AMT) (the Series 2021D Bonds) and Subordinate Refunding Revenue Bonds, 2021 Series E, Federally Taxable (the Series 2021E Bonds) by the Department of Airports (the Department) of the City of Los Angeles (the City). Together, the Series 2021D Bonds and the Series 2021E Bonds are referred to in this 2021DE Report as the proposed Series 2021DE Bonds. The proposed Series 2021DE Bonds are to be issued pursuant to the Department's Master Subordinate Trust Indenture, as amended, and the Twenty First Supplemental Subordinate Trust Indenture (collectively referred to herein as the Subordinate Revenue Bond Indenture). In this 2021DE Report, the Senior Revenue Bond Indenture and the Subordinate Revenue Bond Indenture are collectively referred to as the Revenue Bond Indentures.

The City owns and, through the Department, operates Los Angeles International Airport (the Airport or LAX).

This 2021DE Report was prepared to determine if forecast financial results are sufficient to meet the requirements of the rate covenant of the Subordinate Revenue Bond Indenture (the Subordinate Obligation Rate Covenant) for Fiscal Year¹ (FY) 2022 through FY 2027 (referred to in this 2021DE Report as the Forecast Period) when taking into account the issuance of (1) the proposed Series 2021DE Bonds and (2) future Senior Bonds and other Subordinate Obligations (the Future Bonds) currently expected to be issued by the Department during the Forecast Period to fund a portion of the Airport Capital Program (as defined below).

In preparing this 2021DE Report, we assisted Department management in identifying key factors affecting the future financial results of the Airport and in formulating assumptions about those factors. The results and key findings of our analyses are summarized in this letter

¹ The Fiscal Year of the City and the Department ends June 30. In this 2021DE Report, calendar year data are shown unless otherwise indicated as a Fiscal Year/FY.

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and described more fully in the following three sections of the Background portion of this 2021DE Report: “Airline Traffic and Economic Analyses,” “Airport Facilities and Capital Program,” and “Financial Performance.” This 2021DE Report should be read in its entirety for an understanding of the forecasts and the underlying assumptions.

Capitalized terms in this 2021DE Report are used as defined in the Senior Revenue Bond Indenture, the Subordinate Revenue Bond Indenture, the Air Carrier Operating Permit for the Use of Landing and Apron Facilities at the Airport (Operating Permit), or the Department’s Rate Agreement with the airlines using terminal facilities at the Airport pursuant to the Los Angeles International Airport Passenger Terminal Tariff (Tariff) or a lease.

COVID-19 PANDEMIC

The worldwide outbreak of novel coronavirus SARS-CoV-2 (COVID-19) began in late 2019 and caused significant disruptions to domestic and international passenger travel as well as the conduct of day-to-day business in the City of Los Angeles, the rest of the United States (U.S. or nation) and the world. The numbers of flights and passengers on the passenger airlines serving the Airport have been and continue to be lower than aviation activity levels in 2019 because of the COVID-19 pandemic, as follows:

- **Enplaned passengers in the United States.** The numbers of enplaned passengers in the United States decreased 60.3% in 2020 compared with 2019 data. During the first 6 months of 2021 (the latest available data for the nation), the numbers of passengers screened by the Transportation Security Administration (the TSA) at all U.S. airports (an indicator of passenger travel) decreased 42.9% relative to the same period of 2019.
- **Enplaned passengers at the Airport.** The numbers of enplaned passengers at the Airport decreased 67.4% in 2020 compared with 2019 data, which is a slightly larger decrease than in the nation (-60.3%)². During the first 6 months of 2021, the numbers of enplaned passengers at the Airport decreased 58.6% relative to the same period of 2019.

The recovery in the number of enplaned passengers at the Airport is related to increases in domestic passenger travel, which has been consistent with national recovery trends as shown on Figure 1, but the recovery in the total number of enplaned passengers (domestic and international) at the Airport has been slower than in the nation as a result of the large share of international passenger traffic typically accommodated at the Airport. Restrictions imposed by governments around the world, including, but not limited to, mandatory 14-day quarantine periods, proof of a negative COVID-19 test, or bans on non-essential travel have more severely curtailed international travel than domestic travel.

² Calendar data are used rather than Fiscal Year data for purposes of comparison with the number of enplaned passengers in the nation.

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In 2020, the Airport was the third busiest international gateway in the nation (it was the second busiest U.S. international gateway in 2019), with international enplaned passengers representing 22.4% of total enplaned passengers at the Airport compared with an average share of 11.7% of international enplaned passengers to total enplaned passengers at other large-hub U.S. airports. The lower ranking in 2020 was largely attributable to the different international markets served from the Airport compared with those served at other international gateway airports and the travel restrictions or border closures at those destinations.

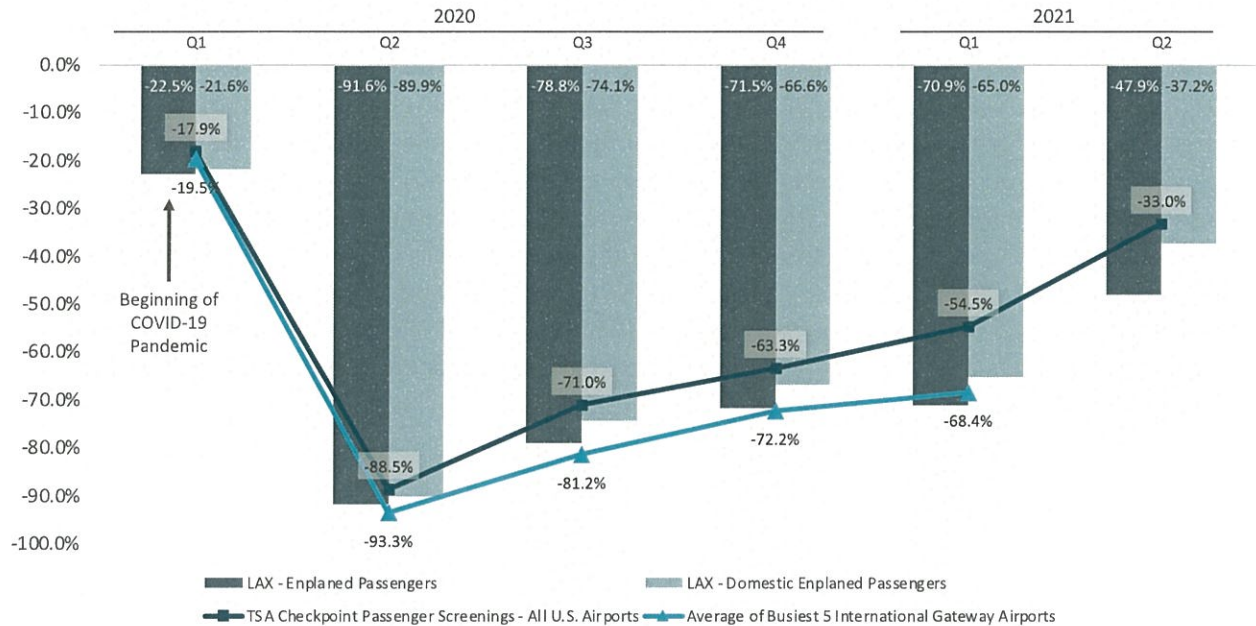
Figure 1 shows the average quarterly decrease in the number of enplaned passengers at the five busiest international U.S. gateway airports³, which decreased 68.3% in 2020 compared with the number enplaned in 2019. At the Airport, the number of enplaned passengers decreased 67.4% in 2020 compared with the number enplaned in 2019. As shown on Figure 1, the recent growth in the number of enplaned passengers at the Airport, which is largely the result of the growth in domestic traffic, has been consistent with that at other international gateway airports in the nation.

Prior to the COVID-19 pandemic, the largest quarterly decrease in the number of enplaned passengers at the Airport was 24.7% in the fourth quarter of 2001, related to the terrorist attacks in the nation on September 11, 2001. Similarly, the largest quarterly decrease in the national number of enplaned passengers was 18.2% in the same quarter, also related to the September 11, 2001, attacks. These comparisons are presented solely to provide an understanding of the magnitude of the quarterly decreases in passenger traffic at the Airport resulting from the COVID-19 pandemic relative to prior major events.

³ Ranking based on 2019 international enplaned passengers, includes John F. Kennedy International Airport, Los Angeles International Airport, San Francisco International Airport, Miami International Airport, and Newark Liberty International Airport.

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Figure 1
PERCENT DECREASES IN LAX ENPLANED PASSENGERS, NATIONAL TSA CHECKPOINT PASSENGER SCREENINGS, AND ENPLANED PASSENGERS AT THE FIVE BUSIEST U.S. INTERNATIONAL GATEWAY AIRPORTS IN THE U.S. IN 2020 AND 2021
(compared with the same quarter in 2019)



Note: Data for the second quarter of 2021 are the latest available data for the Airport and TSA passenger screenings. Data for the first quarter of 2021 are the latest available data for the five busiest international gateway airports.
Sources: Department records, airport websites, TSA: <https://www.tsa.gov/coronavirus/passenger-throughput>.

The largest source of Pledged Revenues at the Airport is airline rentals, rates, fees, and charges for use of the Terminal Buildings, Airfield, and Apron areas, which represented approximately 52.0% and 63.9% of Pledged Revenues based on FY 2020 and FY 2021 results. A provision in the contractual arrangements between the Department and the airlines serving the Airport allows the Department to reconcile all airline revenues from budget to actual results, so decreases in airline and passenger activity do not materially affect the level of revenues earned from the airlines on a year-to-year basis.

Certain sources of Pledged Revenues at the Airport are based on the number of passengers using the Airport, including, but not limited to, public parking revenues (originating passengers), rental car revenues (arriving passengers), and in-terminal concession revenues (enplaned passengers). Concession revenues represented approximately 26.8% and 14.8% of total Pledged Revenues at the Airport based on FY 2020 and FY 2021 results (the latest available

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data, see Figure 39 in the “Financial Performance” section of this 2021DE Report for additional information).

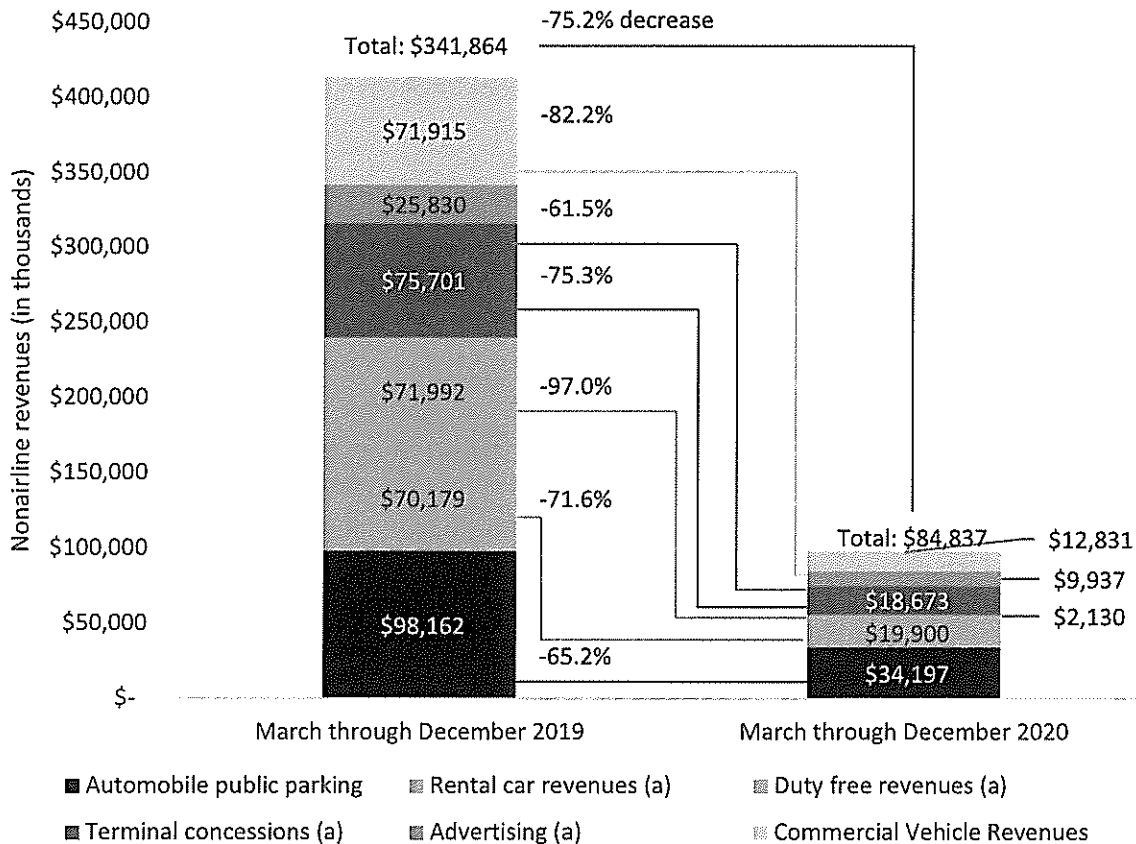
Figure 2 presents the cumulative decrease and percent change in the largest sources of Pledged Revenues at the Airport based on unaudited financial results for March through December⁴ 2020 compared with the same period of 2019.

Pursuant to the Revenue Bond Indentures, Pledged Revenues do not include revenues earned by the Department from passenger facility charges (PFCs) and customer facility charges (CFCs), but the Department uses annual PFC revenues to pay certain PFC-eligible Debt Service that otherwise be paid from Pledged Revenues and annual CFC revenues to pay certain costs associated with a new consolidated rental car facility (the ConRAC) at the Airport and the automated people mover system (the APM System). Both sources of revenues are a function of the number of passengers at the Airport, so decreases in numbers of passengers will result in lower PFC and CFC revenues. Despite recent reductions in PFC and CFC revenues resulting from the COVID-19 pandemic, the Department has sufficient PFC and CFC fund balances to continue to use PFC revenues and CFC revenues as described above and as discussed more fully in the “Financial Performance” section of this 2021DE Report.

⁴ The COVID-19 pandemic first began to materially affect the Airport in March 2020, as measured by the decrease in the number of enplaned passengers relative to the number enplaned in the same month of 2019.

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Figure 2
DECREASES IN THE LARGEST SOURCES OF NONAIRLINE REVENUES
(March-December 2020 compared with the same period of 2019)
Los Angeles International Airport



(a) The year-over-year decreases include the effect of the minimum annual guarantee (MAG) waiver as described later in this 2021DE Report.

Source: Unaudited Department records.

FEDERAL COVID-19 RELIEF GRANTS

The federal government passed the following legislation which, among other things, includes the award of certain grants to the operators of all U.S. airports to assist with managing the financial effects of the COVID-19 pandemic: the Coronavirus Aid, Relief, and Economic Security Act (the CARES Act), the Coronavirus Response and Relief Supplemental Appropriation Act (the CRRSA Act), and the American Rescue Plan Act (the ARP Act) (collectively, the Coronavirus Relief Grants).

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Table 1 summarizes the Coronavirus Relief Grants awarded to the Department, expenditures, and the remaining grant amounts expended by the Department. As of the date of this 2021DE Report, the Department has been reimbursed by the Federal Aviation Administration (the FAA) for \$323.6 million of the amounts expended by the Department through FY 2021.

Table 1
CORONAVIRUS RELIEF GRANTS AWARDED TO LOS ANGELES WORLD AIRPORTS
Los Angeles International Airport
(in millions)

Source of Funds	Award	Amount Expended through FY 2021	Remaining Award Amounts to Be Expended
CARES Act	\$323.6	\$323.6	\$0.0
CRRSA Act	72.3	0.0	72.3
ARP Act	303.8	0.0	303.8
Total	\$699.7	\$323.6	\$376.1

Source: Department records.

In general, airport operators can use their awarded Coronavirus Relief Grants to pay for any purpose for which airport revenues can lawfully be used⁵. At the Airport, this includes, but is not limited to, the payment of LAX Maintenance and Operation (M&O) Expenses and the payment of Debt Service. The Coronavirus Relief Grants must be used within 4 years from the date that the grant agreements between an airport operator and the FAA were executed. When agreeing to receive these grants, airport operators must comply with certain other obligations, such as, but not limited to, the requirement to employ at least 90.0% of airport staff as of March 27, 2020, through September 30, 2021, under the ARP Act.

Under the Revenue Bond Indentures, the Coronavirus Relief Grants are not included in the definition of Pledged Revenues. However, any LAX M&O Expenses and Debt Service paid using grants, including Coronavirus Relief Grants, can be excluded from the calculation of Debt Service coverage pursuant to the Revenue Bond Indentures.

In connection with its Airline Cost Stabilization and Recovery Plan described later in this 2021DE Report, the Department used a total of \$323.6 million of the Coronavirus Relief Grants to pay LAX M&O Expenses and Debt Service in FY 2020 and FY 2021, costs that would have otherwise been paid by the airlines or by using other operating revenues of the Airport. This helped to (1) substantially reduce airline costs at the Airport and (2) replace nonairline revenues lost as a result of reductions in passenger numbers.

⁵ Portions of the CRRSA Act and the ARP Act specifically set aside amounts to provide rent relief to airport concessionaires.

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The Department currently expects to use CRRSA Act and ARP Act grants in FY 2022 and FY 2023 to (1) substantially reduce airline costs at the Airport, (2) replace lost nonairline revenues resulting from reductions in the number of passengers using the Airport, (3) reduce near-term costs of certain airline Common Use Equipment (as defined later), and (4) pay certain LAX M&O Expenses and/or Debt Service.

DEPARTMENT ACTIONS RELATED TO THE COVID-19 PANDEMIC

As the negative effects of COVID-19 on airline travel at the Airport, in the nation and internationally became more apparent, the Department quickly implemented a series of operational, commercial, and financial actions that included, but were not limited to (1) reducing LAX M&O Expenses and (2) implementing a deferral and repayment program for airline payments of rentals, rates, fees, and charges, as well as a concessionaire MAG waiver program, as described later in the Financial Performance Section of this 2021DE Report.

Department management has also implemented a series of new multiyear strategic objectives to strengthen the competitive position of the Airport in the route network of domestic and international airlines during and after the COVID-19 pandemic. The multiyear plan, referred to as the "Airline Cost Stabilization and Recovery Plan" (the Plan), implemented by the Department in 2020, is focused on the continued stability of Airport financial operations during and after the negative effects of the COVID-19 pandemic and on strengthening the competitive position of the Airport by:

- Beginning in 2020, lowering the annual fixed costs of the Airport through a restructuring of certain annual Debt Service payments, deferral of certain annual amortization charges and the use of Coronavirus Relief Grants in the near term, resulting in lower annual airline rentals, rates, fees, and charges associated with the Terminals, Airfield/Apron, and certain other airline-used facilities at the Airport to better match current and near-term airline passenger levels with the use of those facilities during the effects of the COVID-19 pandemic.
- In 2021, transitioning the operation and management of certain common-use baggage and passenger boarding bridge equipment (collectively, the Common Use Equipment) from an airline consortium to the Department, enabling the Department to lower the airline cost of using the Common Use Equipment.

In connection with implementation of the Plan, certain changes were required to the Tariff and the Rate Agreement, requiring airline approval (Tariff changes) and amendments (Rate Agreement changes) to become effective. All approvals of the Department changes to the Tariff and Rate Agreement were received by the Department.

In general, the changes to the Tariff and Rate Agreement were mostly related to transitioning the calculation of certain airline rentals, rates, fees, and charges from a (1) calendar year to a fiscal year basis and (2) from the previous year's actual LAX M&O Expenses, certain Pledged

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Revenues, and aviation activity in the calculation of airline rentals, rates, fees, and charges to using budgeted Fiscal Year data. With these changes, all airline rentals, rates, fees, and charges at the Airport, including the financial forecasts presented in this 2021DE Report, are to be recalculated by the Department each year, becoming effective on July 1 and will be based on the Department's annual operating budget, not the prior year's actual results.

Restructuring of Debt Service, Deferral of Amortization Charges, and Use of Grants

The restructuring of Debt Service, deferral of amortization charges, and use of certain Coronavirus Relief Grants to pay costs that would otherwise be paid by airline revenues began in 2020 and is currently expected to continue through the end of FY 2023, but the period could be (1) shortened (with the amount of restructured Debt Service reduced) if the number of passengers enplaned at the Airport returns to FY 2019 levels faster than presented in this 2021DE Report or (2) lengthened (with the amount of restructured Debt Service increased) if the number of passengers enplaned at the Airport takes much longer to recover. In this 2021DE Report, it was assumed that the Plan would be in effect through the end of FY 2023. According to the Department, any shortening or lengthening of the Plan period would not result in any material and negative effect on the forecast financial results presented in this 2021DE Report.

The reduction in near-term Airport costs in airline cost centers and the corresponding reductions in airline rentals, rates, fees, and charges have been and would continue to be achieved by: (1) using certain Coronavirus Relief Grants to pay LAX M&O Expenses or Debt Service, (2) refunding and restructuring approximately \$379.7 million in outstanding Airport bond principal and interest through the original maturity of the bonds that are to be refunded (the Refunded Bonds), the refunding of approximately \$176.6 million of which was completed with the issuance of the Series 2021ABC Subordinate Bonds, and (3) deferring and restructuring certain annual amortization charges of Department cash that has been expended on projects in certain airline cost centers. Following completion of the Debt Service and amortization charge restructuring program, the annual costs in each of the airline cost centers benefiting from the Plan would be higher in the future as compared to what they would have otherwise been.

The proposed Series 2021E Bonds include approximately \$74.0 million of the remaining \$203.1 million in outstanding Airport bond principal and interest payments (\$379.7 million less \$176.6 million from the net proceeds from the sale of the Series 2021ABC Subordinate Bonds) that would be refunded and restructured as part of the Plan. Any future refunding and restructuring of Airport bonds under the Plan would be subject to LAWA Board approval and, among other things, future bond interest rates and the recovery in the number of passengers at the Airport to that in 2019.

In this 2021DE Report, it was assumed that the remaining \$129.1 million (\$203.1 million remaining after issuance of the Series 2021ABC Bonds less \$74.0 million as part of the proposed issuance of the Series 2021E Bonds) in Airport bond principal and interest would be refunded

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and restructured by the Department through FY 2023. The estimated changes in annual Debt Service costs and projected airline revenues from completion of the Plan by the Department are included in the forecasts of financial results presented in the exhibits at the end of this 2021DE Report.

Transition of Common Use Equipment from Airline Consortium to Department

The Department recently completed another element of the Plan with the transition of certain responsibilities under a lease between the Department and an airline consortium to a third-party service provider.

The transition has enabled the Department to:

- Create a single baggage system cost rate for the domestic and international airlines using the common use baggage system, which eliminated the cost differences by terminal in the use of that system when managed by the airline consortium and, if required, would better enable Department management to relocate airlines from terminal to terminal to facilitate the growth in aviation activity.
- Reduce the near-term cost of certain Common Use Equipment pursuant to the Plan.

Prior to the transition, the airline consortium (1) leased space from the Department and operated and managed certain baggage system equipment and (2) leased passenger boarding bridges from the Department and operated and managed the bridges, all of which were used by international and domestic airlines that did not have leases with the Department but operated in common use facilities at the Airport. The airline consortium would set certain rates, fees, and charges for use of the Common Use Equipment and used the revenues collected from the airlines to pay (1) leased space and equipment costs to the Department and (2) the operating and maintenance costs of the Common Use Equipment.

With the transition from an airline consortium to a third-party service provider completed, the following changes are now in effect:

- The Department is now responsible for the operation and maintenance of the Common Use Equipment. As such, the forecast of annual LAX M&O Expenses now includes the cost of operating, maintaining, and managing the Common Use Equipment.
- All costs of operating, maintaining, and managing the Common Use Equipment are to be recovered by the Department through the following rates, fees and charges pursuant to the Tariff: common-use outbound baggage system rates, common-use domestic baggage claim rates, and passenger boarding bridge fees. The forecast of Pledged Revenues included in this 2021DE Report includes revenues from these rates, fees, and charges.

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In general, the higher airline revenues from the rates, fees, and charges associated with the Common Use Equipment would offset the increase in LAX M&O Expenses from this transition.

PROPOSED SERIES 2021DE BONDS

The Department intends to issue the proposed Series 2021DE Bonds to:

- Finance a portion of the Airport Capital Program (as defined below).
- Reimburse the Department for certain prior Airport Capital Program expenditures paid with Department Funds.
- Refund \$2.3 million in outstanding Subordinate Commercial Paper used to pay the interest portion of debt service on certain Airport Capital Program projects.
- Make a deposit to the Subordinate Debt Service Reserve Fund.
- Pay approximately \$74.0 million in interest payments on outstanding Airport bonds in connection with the Plan.
- Pay issuance and financing costs associated with the proposed Series 2021DE Bonds.

The proposed Series 2021DE Bonds are assumed to be issued as fixed-rate bonds with a final maturity date of May 2051, and an all-in true interest cost of approximately 3.07% based on input from Public Resources Advisory Group (the Department's Co-Financial Advisor).

Projects expected to be funded with the net proceeds from the sale of the proposed Series 2021D Bonds include:

- **Midfield Satellite Concourse (MSC)/Bradley West Baggage Project.** This project includes construction of outbound baggage systems supporting the combined operations of both the Tom Bradley International Terminal (TBIT) and the Midfield Satellite Concourse – North Project. An airline consortium is providing construction funding and undertaking these improvements, which are to be acquired by the Department when the project is completed and have been included in the projected Terminal Buildings Rate. This project is currently estimated to cost \$264.0 million; approximately \$116.0 million of this cost would be funded with the net proceeds from the sale of the proposed Series 2021D Bonds.
- **Terminal 4 Improvement Project – American Airlines.** This project includes the construction of a connector between Terminal 4 and Terminal 5 to the new APM System. American Airlines is providing construction funding and undertaking these improvements, which are to be acquired by the Department when the project is completed and have been included in the projected Terminal Buildings Rate. This

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project is estimated to cost approximately \$1.1 billion⁶; approximately \$105.2 million of this cost would be funded with the net proceeds from the sale of the proposed Series 2021D Bonds.

- **North Terminal Improvement Program – Delta Air Lines.** This project includes the complete renovation of Terminal 3, renovations to Terminal 2, a secure connector to the north side of TBIT, infrastructure improvements supporting the planned APM System, and various enabling projects. Delta Air Lines is providing construction funding and undertaking these improvements, which are to be purchased by the Department in phases when the portions of the project are complete and have been included in the annual calculation of the Terminal Buildings Rate. This project is estimated to cost \$1.8 billion; approximately \$92.3 million of this cost would be funded with the net proceeds from the sale of the proposed Series 2021D Bonds.
- **TBIT Core and APM System Interface.** This project is to provide vertical circulation elements in the TBIT⁵ to accommodate passenger circulation and connections to the APM System. While associated with the APM System, the cost of this project is to be allocated to the Airport's Terminal cost center. This project is estimated to cost \$277.7 million; approximately \$88.9 million of this cost would be funded with the net proceeds from the sale of the proposed Series 2021D Bonds.
- **Terminal 6 Project – Alaska Airlines.** This project includes the modernization of Terminal 6 by increasing the amount of holdroom space, enhancing the security screening checkpoint, installing new passenger boarding bridges, and certain other operational improvements. Alaska Airlines is providing construction funding and undertaking these improvements, which are to be acquired by the Department when the project is completed and have been included in the projected Terminal Buildings Rate. This project is estimated to cost approximately \$232.6 million; approximately \$81.0 million of this cost would be funded with the net proceeds from the sale of the proposed Series 2021D Bonds.
- **Terminal 5 Core and APM System Interface.** This project is to provide vertical circulation elements in Terminal 5 to accommodate passenger circulation and connections to the APM System. While associated with the APM System, this project is to be allocated to the Airport's Terminal cost center. This project is estimated to cost \$214.5 million; approximately \$65.7 million of this cost would be funded with the net proceeds from the sale of the proposed Series 2021D Bonds.
- **Terminal 1.5 Project.** This project was completed and operational in FY 2021 and consists of the development of a new terminal building between Terminal 1 and

⁶ The Department currently expects that an additional \$612.0 million in improvements to Terminal 4 may be required to complete the renovation of that terminal, but that the \$612.0 million of additional improvements would be completed after the Forecast Period considered in this 2021DE Report. See the "Airport Facilities and Capital Program" section of this 2021DE Report.

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Terminal 2 that links the two terminals directly, resulting in a single unified facility. Southwest Airlines provided construction funding and undertook these improvements, which were acquired by the Department and are included in the annual calculation of the Terminal Buildings Rate. This project is estimated to cost \$497.2 million; approximately \$56.3 million of this cost would be funded with the net proceeds from the sale of the proposed 2021D Bonds.

- **Power Distribution Facility.** This project replaces existing facilities and provides more reliable power transmission and greater capacity to support planned Airport growth. The project is estimated to cost approximately \$158.7 million; approximately \$47.6 million of this cost would be funded with the net proceeds from the sale of the proposed Series 2021D Bonds.

The Department may refund for economic savings certain outstanding Senior Bonds, Subordinate Obligations or a combination of both during the Forecast Period with the net proceeds of the proposed Series 2021DE Bonds or other series of bonds issued by the Department. Debt service savings, if any, from the refunding of outstanding bond principal are not included in the financial forecasts presented in this 2021DE Report.

AIRLINE TRAFFIC

The Airport has an important role in the international, national, State of California, regional, and local air transportation systems.

In FY 2019 (the year prior to the COVID-19 pandemic), the Airport was the second busiest passenger origin and destination (O&D) airport in the world and the second busiest airport in the United States in terms of total passengers (enplaned plus deplaned). O&D passengers begin and end their journeys at the Airport, while connecting passengers transfer on flights at the Airport to other destinations. In FY 2019, approximately 44.2 million passengers enplaned at the Airport, including an estimated 36.4 million originating passengers (82.3%) and 7.8 million connecting passengers (17.7%).

From FY 2014 through FY 2019, the number of enplaned passengers at the Airport increased an average of approximately 5.2% per year, reflecting above average rates of growth in numbers of domestic enplaned passengers (4.5% per year) and international enplaned passengers (7.0% per year). In comparison, the total number of enplaned passengers in the United States during the same period increased an average of 4.3% (reflecting 4.0% growth in the number of domestic enplaned passengers and 5.2% growth in the number of international enplaned passengers) per year⁷.

Over the 20-year period from FY 1999 through FY 2019, the average annual rate of growth in the number of enplaned passengers was 1.7% for the Airport and 1.9% for the nation. During

⁷ Source: U.S. Department of Transportation, Bureau of Transportation Statistics.

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this 20-year period, significant events occurred that resulted in large decreases and then rebounds in airline travel at the Airport, in the nation, and internationally, including, but not limited to, the events of September 11, 2001; the recession of 2008-2009; and rising and falling jet fuel costs. As discussed earlier, the largest single quarterly decrease in the number of enplaned passengers at the Airport prior to the COVID-19 pandemic was due to the events of September 11, 2001 (-24.7%), with the number of passengers almost recovering to the numbers of enplaned passengers pre-September 11, 2001, numbers approximately 7 years later, in FY 2008/FY 2009, but the recovery was delayed to FY 2014 (11 to 12 years later) as a result of the 2008-2009 recession.

The events of September 11 and the COVID-19 pandemic are very different, but the recovery in traffic following September 11 and the near-term recovery in domestic traffic at the Airport and the nation following (1) the widespread availability of COVID-19 vaccines, (2) reduction in economic closures, and (3) other factors reflect the importance of air travel for leisure and business purposes.

As discussed earlier, the recovery in international passenger travel at the Airport and in the nation has not been as fast as the recovery in domestic passenger travel, likely as a result of, but not limited to, differing rates of COVID-19 infections, slower availability of COVID-19 vaccines outside of the United States, country-imposed border closures and travel restrictions, and other factors. As described more fully in the section of this 2021DE Report titled "Airline Traffic Forecasts", which should be read in its entirety, it was assumed in the forecasts of enplaned passengers at the Airport that the Los Angeles Combined Statistical Area (the CSA) would remain a major destination market for U.S. leisure and business travelers and a top global destination for tourism, meetings, and conventions. The forecasts were also based on the following specific assumptions for domestic and international passengers at the Airport:

- **Domestic enplaned passengers.** The number of domestic enplaned passengers at the Airport will reach FY 2019 levels in FY 2024, based, in part, on the recent growth in domestic travel at the Airport and the nation through the first 6 months of 2021, the continued availability of vaccines to protect against the COVID-19 virus and its variants, and reduced domestic travel restrictions.
- **International enplaned passengers.** The number of international enplaned passengers at the Airport will be slower to recover than the number of domestic enplaned passengers and will reach FY 2019 levels in FY 2025, as a result of, but not limited to, continued border closures and travel restrictions in the near-term, continued production and rollout of vaccines to protect against the COVID-19 virus and its variants, and the availability of vaccines internationally.

It was assumed in this 2021DE Report that the total number of enplaned passengers at the Airport would reach FY 2019 levels by FY 2025 and from FY 2026 through FY 2027 (the last year of the Forecast Period), the total number of enplaned passengers would increase at the 20-year

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(FY 1999-FY 2019) average annual rate of growth in the number of enplaned passengers at the Airport of 1.7% per year.

AIRPORT CAPITAL PROGRAM AND FUNDING SOURCES

Department management periodically develops and updates a Capital Program for the redevelopment, improvement, and expansion of Airport facilities (Airport Capital Program). The Airport Capital Program is developed based on anticipated facility needs, current and forecast airline traffic, available funding sources, project priorities, and other relevant information that is available to the Department when the Airport Capital Program is developed.

The current Airport Capital Program, which is estimated to cost approximately \$11.5 billion, was initiated in or around FY 2016 and is currently expected to be completed by the end of FY 2026⁸. According to the Department, approximately \$6.1 billion of the Airport Capital Program was completed through the end of FY 2021 and projects costing approximately \$5.4 billion are ongoing or expected to be initiated and completed by the end of FY 2026⁹.

While the Department continues to review the Airport Capital Program and may delay the timing or reduce the scope and cost of individual projects included in the program given the substantial reduction in the number of enplaned passengers at the Airport due to the COVID-19 pandemic, it was assumed in this 2021DE Report that the Department will implement and complete the remaining \$5.4 billion of projects in the Airport Capital Program by the end of FY 2026.

Exhibit A, provided at the end of this 2021DE Report along with other financial exhibits, presents the anticipated funding sources for the approximate \$11.5 billion Airport Capital Program, which includes the following major projects:

- The continued rehabilitation, improvement, and expansion of the Terminals at the Airport, including the Midfield Satellite Concourse—North Project, the North Terminal Improvement Program, Terminal 1.5, Terminal 4, and Terminal 6, as well as vertical circulation and APM interface improvements to Terminal 5 and the TBIT.
- Certain runway improvements and other Airfield and Apron improvements.
- The Department's portion of certain costs related to construction of the new ConRAC.

⁸ As of the date of this 2021DE Report, the Department's published Airport Capital Program totaled \$14.9 billion, which includes certain projects that are to be initiated and completed outside the Forecast Period, have already been completed, and APM System and ConRAC Developer milestone payments. See the "Airport Facilities and Capital Program" section of this 2021DE Report for more information.

⁹ The Airport Capital Program includes projects to be completed by the end of FY 2026 and the Forecast Period extends one additional year, through FY 2027, to reflect a full year of financial resultings of the Airport Capital Program.

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- The Department's portion of certain costs related to implementation of a new APM System that is to transport passengers between the Central Terminal Area (CTA), the ConRAC, and other Airport facilities the Department expects to construct during the Forecast Period.

In 2018, the Department executed a 28-year contract with LA Gateway Partners (the ConRAC Developer) to design, build, finance, operate, and maintain the ConRAC at the Airport. As part of the contract, the Department is to make ConRAC Availability Payments (APs) to the ConRAC Developer for expenses associated with operating the ConRAC (the ConRAC M&O APs) and capital costs to design, build, finance, and maintain the ConRAC (the ConRAC Capital APs).

Also, in 2018, the Department executed a 30-year contract with LAX Integrated Express Solutions (the APM Developer) to design, build, finance, operate, and maintain the APM System at the Airport. As part of the contract, the Department is to make APM APs to the APM Developer for expenses associated with operating the APM System (APM M&O APs) and capital costs to design, build, finance, and maintain the APM System (APM Capital APs).

The financial forecasts included in this 2021DE Report reflect changes in Pledged Revenues, LAX M&O Expenses, Debt Service, and certain APs discussed below associated with the financing, construction, and completion of the Airport Capital Program.

The Department currently expects that the \$11.5 billion Airport Capital Program would be funded from (1) \$3.7 billion of Department Funds, (2) \$4.2 billion of proceeds from the sale of prior bonds, (3) the net proceeds from the sale of approximately \$1.8 billion of Future Bonds, (4) net proceeds of approximately \$652.9 million from the sale of the proposed Series 2021D Bonds, and (5) \$1.2 billion of other funds, including, but not limited to, PFC revenues on a pay-as-you-go basis and federal grants-in-aid.

FINANCIAL PERFORMANCE

The Department accounts for the Airport's financial performance according to generally accepted accounting principles for governmental entities and the requirements of its Revenue Bond Indentures. Department management makes business and financial decisions in the context of its obligations under the Revenue Bond Indentures, among other factors.

Pledged Revenues

Under the Senior Revenue Bond Indenture, Pledged Revenues include rentals, rates, fees, and charges associated with the Airport, except for PFC revenues, CFC revenues, and certain other

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revenues. Sources of Pledged Revenues in FY 2019 (prior to the negative effects of COVID-19), FY 2020, and FY 2021¹⁰ are shown on Figure 3¹¹.

Figure 3
SOURCES OF PLEDGED REVENUES IN FY 2019, FY 2020, AND FY 2021
Los Angeles International Airport



Revenues from airline Terminal rentals, landing fees, and apron fees accounted for the largest portion of Pledged Revenues at 49.8% in FY 2019, 52.0% in FY 2020, and in 63.9% FY 2021; the second largest source of Pledged Revenues was concession revenues, followed by aviation revenues (other than airline revenues), investment earnings, and miscellaneous revenues.

Airline Terminal rentals, landing fees, and apron fees were calculated on the basis of: (1) the number of gates and square footage used or leased by the airlines serving the Airport, as well as their number of enplaned passengers and amount of landed weight and (2) the rentals, rates, fees, and charges in effect each year, as calculated by the Department pursuant to the Operating Permits, the Tariff, and the Rate Agreements.

Concession revenues include, but are not limited to, public parking fees, rental car concession fees, and revenues from Terminal concessions. Concession revenues are a function of the business strategies and practices developed and implemented by Department management,

¹⁰ The FY 2021 financial data presented in this 2021DE Report are preliminary and unaudited and subject to change.

¹¹ FY 2019, FY 2020, and FY 2021 are shown because FY 2019 was prior to the impacts of the COVID-19 pandemic, FY 2020 included 4 months of COVID-19 impact (March through June 2020), and FY 2021 included 12 months of COVID-19 impact.

Source: Department records.

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the terms and conditions of agreements with the entities providing those services, and the number of passengers at the Airport each year.

Aviation revenues include land rentals, aircraft parking fees, fuel flowage fees, and other related revenues from sources other than the passenger airlines.

Other sources of Pledged Revenues shown on Figure 3 include investment earnings and miscellaneous revenues generated by the Department. A further description of these revenue categories is provided later in this 2021DE Report.

Pledged Revenues totaled approximately \$1.6 billion in FY 2019, \$1.4 billion in FY 2020, and \$1.1 billion in FY 2021, and are forecast to increase to approximately \$2.7 billion in FY 2027, average increases of 6.6% per year between FY 2019 (pre-COVID-19) and FY 2027 and 16.0% per year between FY 2021 and FY 2027.

LAX Maintenance and Operation Expenses

Under the Revenue Bond Indentures, LAX M&O Expenses are defined as substantially all of the day-to-day expenses of operating the Airport under generally accepted accounting principles, excluding depreciation and expenses paid from sources other than Pledged Revenues.

Categories of LAX M&O Expenses in FY 2019, FY 2020, and FY 2021 are shown on Figure 4. Approximately 91.3% (FY 2019), 91.9% (FY 2020), and 92.4% (FY 2021) of LAX M&O Expenses were for salaries and benefits, contractual services, and materials and supplies. The remaining 8.7% (FY 2019), 8.1% (FY 2020), and 7.6% (FY 2021) of LAX M&O Expenses were for utilities, advertising and public relations, administrative services, and other operating expenses.

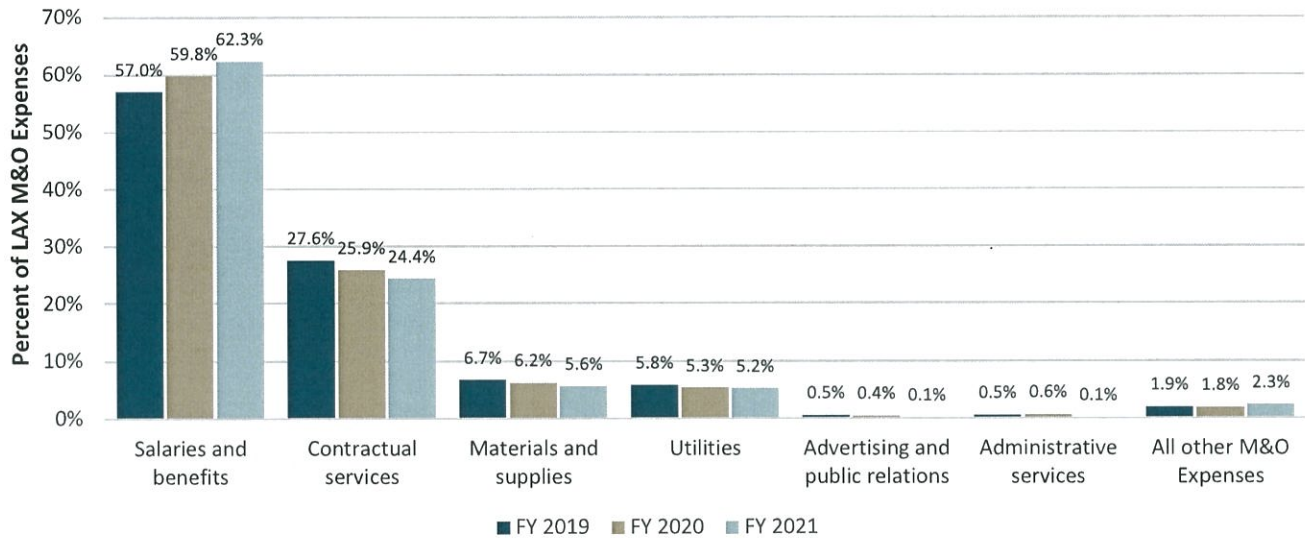
LAX M&O Expenses totaled approximately \$786.9 million in FY 2019, after deducting the administrative costs allocated to other airports operated by the Department and certain M&O Expenses paid with grants, which are not included in the definition of LAX M&O Expenses. LAX M&O Expenses were approximately \$844.6 million and \$465.7 million in FY 2020 and FY 2021, respectively, after the same deductions as well as the use of approximately \$9.7 million and \$249.2 million in certain Coronavirus Relief Grants to pay M&O Expenses in FY 2020 and FY 2021 respectively. The Department currently expects to use approximately \$20.0 million of Coronavirus Relief Grants to pay LAX M&O Expenses in FY 2022.

LAX M&O Expenses are forecast to increase to approximately \$1.2 billion in FY 2027, average increases of 5.1% per year between FY 2019 (pre-COVID-19) and FY 2027 and 8.6% per year between FY 2021 and FY 2027.

The forecasts of LAX M&O Expenses include the APM M&O APs to the APM Developer and the ConRAC M&O APs to the ConRAC Developer.

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Figure 4
CATEGORIES OF LAX M&O EXPENSES IN FY 2019, FY 2020, AND FY 2021
Los Angeles International Airport



Note: Prior to adjustments to exclude LAX M&O Expenses associated with the administrative expenses allocated to other airports operated by the Department, LAX M&O Expenses associated with the City pension plan, and LAX M&O Expenses paid from any grant funds.

Source: Department records.

Debt Service

In FY 2021, total Debt Service on the Department’s outstanding Senior Bonds (net of capitalized interest) was approximately \$131.6 million. The Department used approximately \$69.0 million of PFC revenues and approximately \$10.5 million of Coronavirus Relief Grants to pay Senior Bond debt service in FY 2021, resulting in Senior Bond Aggregate Annual Debt Service of approximately \$52.1 million.

In FY 2021, Subordinate Obligations Debt Service (including Debt Service on outstanding Subordinate Bonds and Subordinate Commercial Paper Notes, and net of capitalized interest) was approximately \$139.7 million. The Department used approximately \$4.5 million of PFC revenues and \$11.4 million of Coronavirus Relief Grants to pay Subordinate Bond debt service in FY 2021, resulting in Subordinate Aggregate Annual Debt Service of approximately \$123.8 million.

Under the Revenue Bond Indentures, principal of and interest on Senior Bonds and Subordinate Obligations paid with CFC revenues, PFC revenues, and grants are excluded from the amount of

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annual Debt Service for purposes of calculating compliance with the rate covenant under the Senior Revenue Bond Indenture and the Subordinate Revenue Bond Indenture.

Senior Bond Aggregate Annual Debt Service (net of capitalized interest and certain PFC revenues and Coronavirus Relief Grants) is estimated to increase from \$52.1 million in FY 2021 to \$299.6 million in FY 2027. Subordinate Aggregate Annual Debt Service (net of capitalized interest and certain CFC revenues, PFC revenues, and Coronavirus Relief Grants) is estimated to increase from \$123.8 million in FY 2021 to \$340.6 million in FY 2027.

Forecast increases in Senior Bond Aggregate Annual Debt Service and Subordinate Aggregate Annual Debt Service are attributable to (1) the overall structure of outstanding Senior Bonds and Subordinate Obligations, (2) the additional debt service associated with the proposed Series 2021DE Bonds and Future Bonds, and (3) the amount of CFC revenues, PFC revenues, and Coronavirus Relief Grants currently expected to be used by the Department in each Fiscal Year to pay annual debt service, which actual amounts may be different than the assumed annual amounts used in this 2021DE Report.

Estimated debt service on the proposed Series 2021DE Bonds and Future Bonds was provided by Public Resources Advisory Group (the Department's Co-Financial Advisor). Annual APs made from the Department to the developers of the APM and ConRAC projects are unsecured obligations of the Department and are not included in the estimated amount of future annual Debt Service in this 2021DE Report.

DEBT SERVICE COVERAGE PURSUANT TO THE REVENUE BOND INDENTURES

Under the Master Trust Indenture, as amended and supplemented, Senior Bonds are secured by a pledge of Net Pledged Revenues and certain funds and accounts held by the Senior Trustee. As defined in the Senior Revenue Bond Indenture, Net Pledged Revenues equal Pledged Revenues less LAX M&O Expenses.

Under the Master Trust Indenture, the Department has covenanted to establish, fix, prescribe, and collect rates, tolls, fees, rentals, and charges for the use of the Airport so that in each Fiscal Year:

- Pledged Revenues are at least equal to the amount of required deposits to various funds and accounts during such Fiscal Year, and
- Net Pledged Revenues, together with any Transfer (as defined in the Master Trust Indenture), are equal to at least 125% of the Senior Bond Aggregate Annual Debt Service on outstanding Senior Bonds.

In this 2021DE Report, these covenants are referred to as the Senior Bond Rate Covenant.

Subordinate Obligations are secured by a pledge of Subordinate Pledged Revenues and certain other funds and accounts held by the Subordinate Trustee. Under the Subordinate Revenue

W J A D V I S O R S

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Bond Indenture, Subordinate Pledged Revenues are defined as Pledged Revenues less LAX M&O Expenses less Senior Bond Aggregate Annual Debt Service less any deposits to the senior debt service reserve fund(s).

Under the Subordinate Revenue Bond Indenture, the Department has covenanted to establish, fix, prescribe, and collect rates, tolls, fees, rentals, and charges for use of the Airport so that in each Fiscal Year:

- Subordinate Pledged Revenues are at least equal to the amount of required deposits to various funds and accounts during such Fiscal Year, and
- Subordinate Pledged Revenues, together with any Transfer, are equal to at least 115% of the Subordinate Aggregate Annual Debt Service on outstanding Subordinate Obligations.

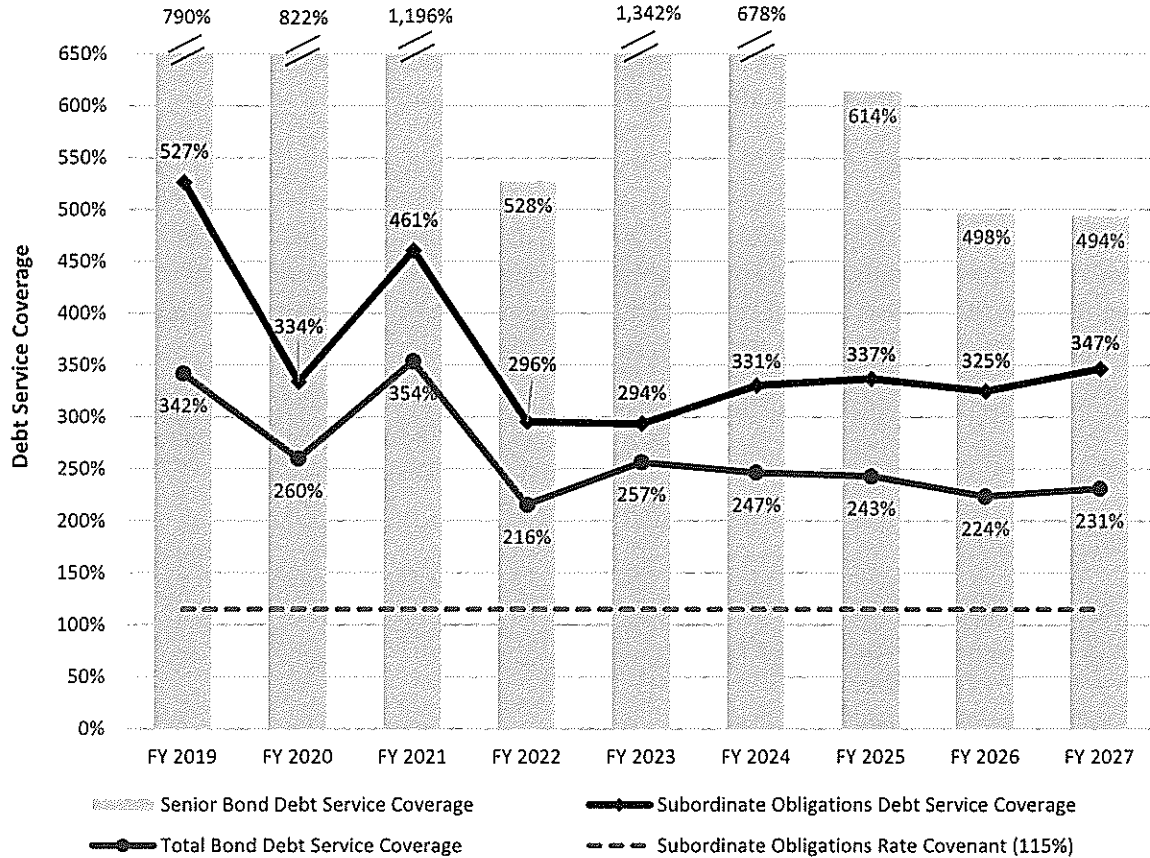
These covenants are referred to as the Subordinate Obligations Rate Covenant.

Although the Revenue Bond Indentures provide for a Transfer of certain amounts when calculating debt service coverage, no such Transfer was assumed in the financial forecasts presented in this 2021DE Report.

As shown on Figure 5, debt service coverage on Senior Bonds and Subordinate Obligations, including annual Debt Service on the proposed 2021DE Bonds and Future Bonds, in each Fiscal Year of the Forecast Period demonstrates compliance with (1) the Senior Bond Rate Covenant of 125% of Senior Aggregate Annual Debt Service and (2) the Subordinate Obligations Rate Covenant of 115% of Subordinate Aggregate Annual Debt Service.

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Figure 5
FORECAST DEBT SERVICE COVERAGE UNDER REVENUE BOND INDENTURES
Los Angeles International Airport



Note: Includes debt service on existing Senior Bonds, existing Subordinate Obligations, including existing Subordinate Commercial Paper Notes, and estimated debt service on the proposed Series 2021DE Bonds, Future Bonds and future Subordinate Commercial Paper Notes. Debt service is net of capitalized interest, if any. Source of Debt Service: Co-Financial Advisor.

PROJECTION OF DEBT SERVICE AND AVAILABILITY PAYMENT COVERAGE

A projection of coverage was prepared for informational purposes only to demonstrate the ability of the Department to meet all of its secured and unsecured obligations, which include (1) all Debt Service on existing Senior Bonds and Subordinate Obligations, the proposed Series 2021DE Bonds, and Future Bonds, and (2) annual ConRAC Capital APs and APM Capital APs,

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both of which are unsecured obligations of the Department that are not required to be included in the calculation of debt service coverage under the Revenue Bond Indentures.

The total annual revenues used to calculate coverage for informational purposes only are equal to (1) forecast annual Net Pledged Revenues plus (2) forecast annual CFC revenues that are currently expected by the Department to be used to pay the ConRAC Capital APs.

The projection of coverage for informational purposes only is presented on Exhibit F and ranges from 196% to 252% between FY 2023 and FY 2027.

SENSITIVITY ANALYSIS

The forecast financial results presented in this 2021DE Report were tested to determine their sensitivity in the last year of the Forecast Period assuming that the numbers of enplaned passengers at the Airport do not return to FY 2019 levels in FY 2025 but are delayed in returning to FY 2019 levels by 1 (FY 2026) to 2 (FY 2027) years.

	Forecast 2027 Debt Service Coverage		
	Senior Bond Rate Covenant	Subordinate Obligations Rate Covenant	Overall Indenture Debt Service Coverage
Financial forecasts	494%	347%	231%
Sensitivity Analysis			
Recovery in enplaned passengers is 1 year later (FY 2026, not FY 2025)	489%	340%	228%
Recovery in enplaned passengers is 2 years later (FY 2027, not FY 2025)	486%	336%	226%

Under the sensitivity analyses conducted, forecast debt service coverage would exceed the Senior Bond Rate Covenant and the Subordinate Obligations Rate Covenant.

ASSUMPTIONS UNDERLYING THE FINANCIAL FORECASTS

The financial forecasts presented in this 2021DE Report are based on information and assumptions provided by, or reviewed with and agreed to by, Department management. The forecasts reflect management’s expected course of action during the Forecast Period and, in management’s judgment, present fairly the expected financial results of the Airport. Those key factors and assumptions that are significant to the forecasts are set forth in the attachment, titled “Background.” The attachment should be read in its entirety for an understanding of the forecasts and the underlying assumptions.

In our opinion, the underlying assumptions provide a reasonable basis for the forecasts.

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However, any forecast is subject to uncertainties. Inevitably, some assumptions will not be realized, and unanticipated events and circumstances may occur. Therefore, there will be differences between the forecast and actual results, and those differences could be material. Neither WJ Advisors LLC nor any person acting on our behalf makes any warranty, express or implied, with respect to the information, assumptions, forecasts, opinions, or conclusions disclosed in this 2021DE Report. We have no responsibility to update this 2021DE Report for events and circumstances occurring after the date of this 2021DE Report.

We appreciate the opportunity to serve as the Department's Airport Consultant in connection with this proposed financing.

Respectfully submitted,

WJ Advisors LLC

WJ Advisors LLC

BACKGROUND

City of Los Angeles, Department of Airports

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AIRLINE TRAFFIC AND ECONOMIC ANALYSES

OVERVIEW OF AIRPORT ROLE

The Airport has an important role in the international, national, State of California, and regional and local air transportation systems and was the fifth busiest airport in the United States in terms of total (enplaned and deplaned) passengers in 2020, according to statistics compiled by Airports Council International, North American (ACI-NA). In 2020, the Airport experienced a 67.4% decrease in total enplaned passengers compared to 2019 levels due to the economic and travel restrictions resulting from the COVID-19 pandemic. In 2020, the number of domestic and international enplaned passengers at the Airport decreased 64.3% and -75.0%, respectively. The Airport is one of six commercial service airports in the greater Los Angeles area and has the most international airline service and the greatest number of connecting passengers in the area.

Large Origin-Destination Passenger Base

The Airport's large O&D passenger base is related to the population of the area served by the Airport, the strength of the local economy, and the attractiveness of the Los Angeles Combined Statistical Area (CSA), the primary geographic area served by the Airport, as a tourist destination. In 2020, approximately 12.1 million originating passengers enplaned at the Airport, making the Airport the busiest O&D passenger airport in the U.S.

The Los Angeles CSA includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. As shown in Table 2, the population of the Los Angeles CSA was 18.8 million in 2020, accounting for approximately 78.4% of Southern California's total population in that year. Los Angeles County includes the City of Los Angeles and accounted for approximately 53.5% of the population of the Los Angeles CSA in 2020.

Because economic activity and growth in the Los Angeles CSA stimulate a significant portion of passenger demand at the Airport, statistics for the Los Angeles CSA were used to evaluate airline traffic trends at the Airport.

Primary Commercial Service Airport in the Los Angeles CSA

As shown on Figure 6, the Los Angeles CSA is served by six airports with scheduled passenger airline service, including the Airport, which is defined as a large-hub airport.¹² The Airport accounts for the majority of short-haul domestic airline service in the CSA, dominates medium- and long-haul domestic service, and is the primary international air transportation gateway in Southern California. In FY 2021, the number of enplaned passengers at the Airport accounted for approximately 72.3% of all enplaned passengers at the six airports in the Los Angeles CSA.

¹² The FAA definition of large-, medium-, and small hub airports are available at the following link: https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/media/preliminary-cy20-all-enplanements.pdf.

According to 2020 preliminary FAA data, the airports in Orange County, Ontario, and Burbank are medium-hub airports and the airports in Long Beach and Palm Springs are small-hub airports.

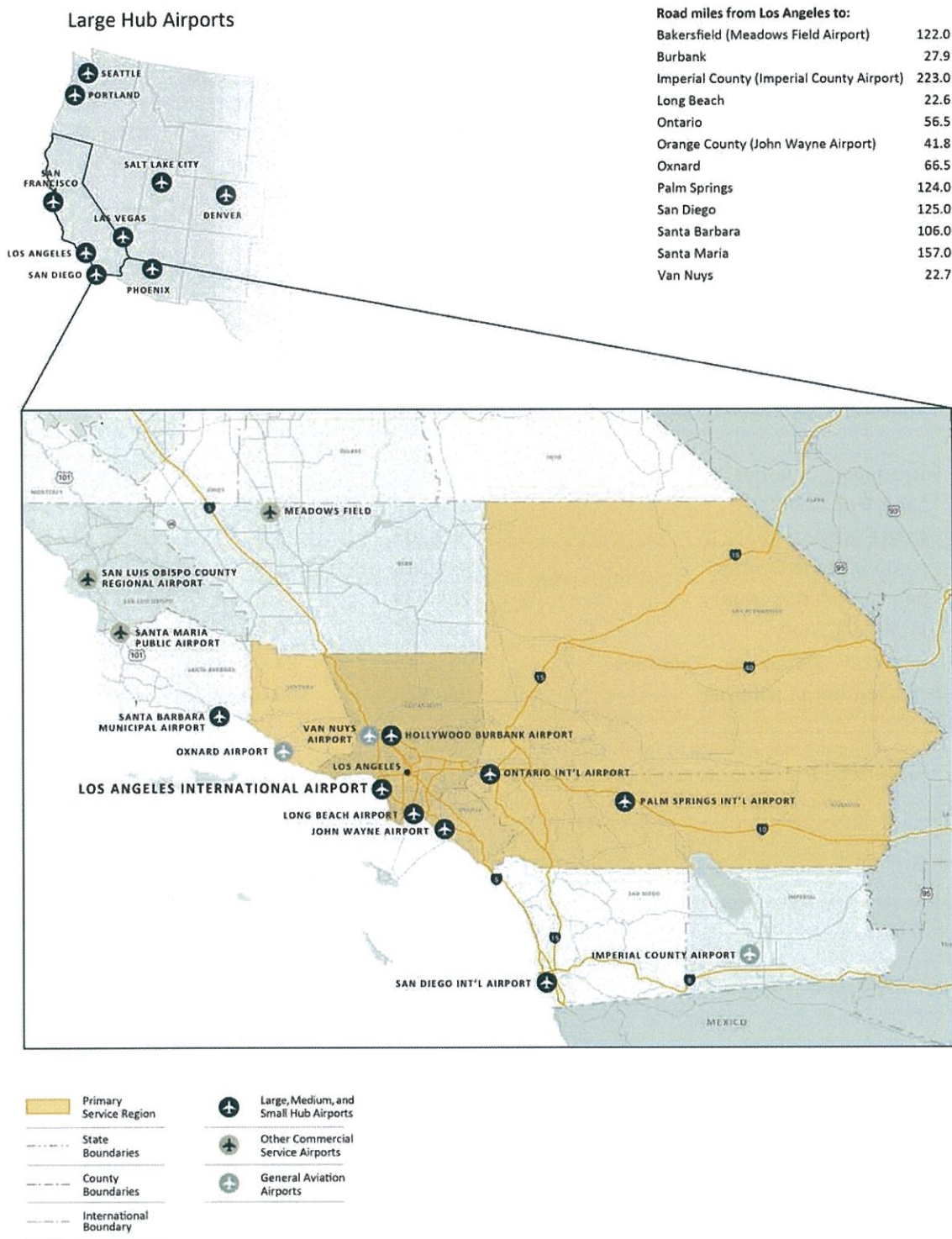
Table 2
POPULATION OF SOUTHERN CALIFORNIA IN 2020

Area	Population	Percent of Southern California population	Percent of Los Angeles CSA or Surrounding Counties
Los Angeles CSA			
Los Angeles County	10,057,518	41.9%	53.5%
Orange County	3,190,321	13.3	17.0
Riverside County	2,507,669	10.5	13.3
San Bernardino County	2,197,670	9.2	11.7
Ventura County	849,982	3.5	4.5
Subtotal—Los Angeles CSA	18,803,160	78.4%	100.0%
Surrounding Counties			
San Diego County	3,360,632	14.0%	64.8%
Kern County	909,302	3.8	17.5
Santa Barbara County	448,318	1.9	8.6
San Luis Obispo County	284,739	1.2	5.5
Imperial County	182,777	0.8	3.5
Subtotal—Surrounding Counties	5,185,768	21.6%	100.0%
Total Southern California	23,988,928	100.0%	

Note: Columns may not add to totals shown due to rounding.

Source: Woods & Poole Economics, Inc., June 2021.

Figure 6
AIRPORT SERVICE REGION

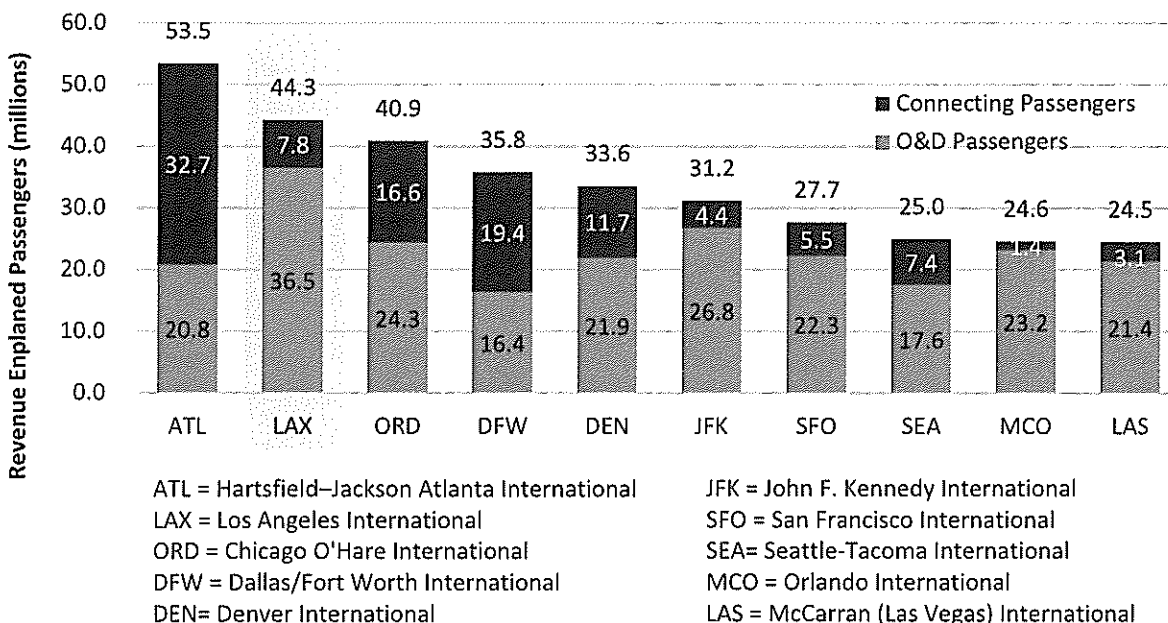


Passenger Volumes at LAX

In 2019, the Airport was the second busiest airport in the United States (see Figure 7) and the busiest airport in terms of O&D passengers with approximately 44.3 million revenue enplaned passengers and 36.5 million O&D enplaned passengers

As a result of the negative effects on air travel from the COVID-19 pandemic, the rankings of the top 10 U.S. airports (as measured by revenue enplaned passengers) in 2020 changed, including the ranking of the Airport which went from second busiest to fifth busiest (see Figure 8) in the United States. Global travel restrictions and the Airport’s large share of international passengers were major drivers behind its change in ranking in 2020.

Figure 7
10 BUSIEST U.S. AIRPORTS IN 2019 AS MEASURED BY REVENUE ENPLANED PASSENGERS



Note: Totals may not add to 100% due to rounding.

Source: U.S. Department of Transportation, T100 database, 12-months ending December, accessed July 2021 through AirlineData Inc., for all airports shown.

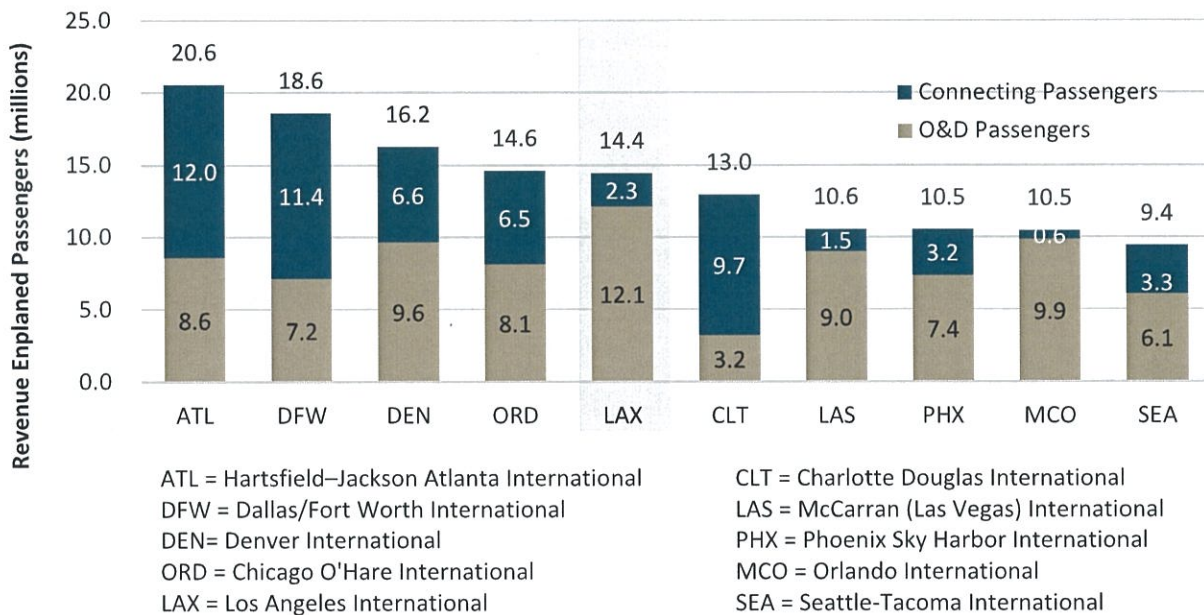
Hartsfield-Jackson Atlanta International Airport had 53.5 million revenue enplaned passengers in 2019 and was the busiest airport in the United States in 2020 with 20.6 million revenue enplaned passengers.

Dallas/Fort Worth International Airport, which is the busiest airport in the route system of American Airlines, saw its ranking increase from fourth in 2019 to second in 2020, largely as a result of American’s decision to increase the number of flights to and from DFW relative to its other hub airports in reaction to the negative effects on air travel resulting from the COVID-19 pandemic.

The ranking of Denver International Airport increased from fifth in 2019 to third in 2020 as a result of the increasing domestic travel in the United and the high proportion of domestic versus international passenger travel at the airport. The ranking of Chicago O’Hare International Airport, which is used as a hub for American Airlines and United Airlines, changed from third busiest in 2019 to fourth busiest in 2020, given its higher proportion of domestic versus international passenger travel.

Despite the change in ranking of Los Angeles International Airport from 2019 to 2020, the Airport was approximately 53.2% busier than the next largest international gateway airport (Seattle-Tacoma International Airport on the West Coast) in 2020.

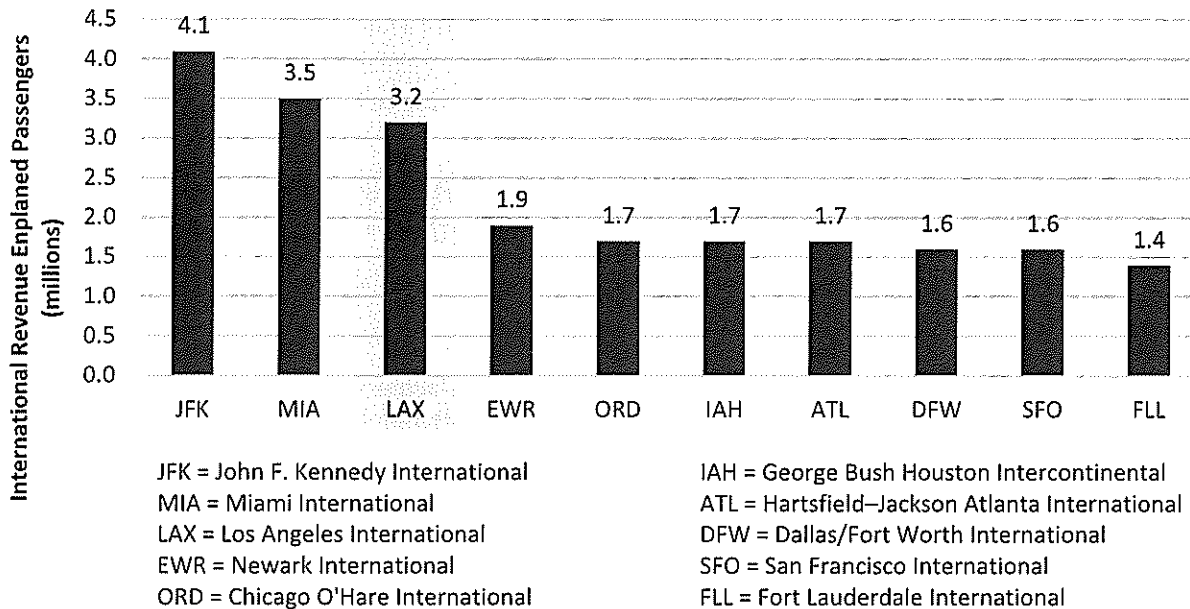
Figure 8
10 BUSIEST U.S. AIRPORTS IN 2020 AS MEASURED BY REVENUE ENPLANED PASSENGERS



Note: Totals may not add to 100% due to rounding.
 Source: U.S. Department of Transportation, T100 database, 12-months ending December 2020, accessed July 2021 through AirlineData Inc., for all airports shown.

For the 12-month period ended December 2020, the Airport was the third busiest international gateway in terms of international revenue enplaned passengers in the United States and the busiest international gateway on the West Coast, with approximately 3.2 million international revenue enplaned passengers (see Figure 9).

Figure 9
**10 BUSIEST INTERNATIONAL GATEWAY U.S. AIRPORTS IN 2020
 AS MEASURED BY INTERNATIONAL REVENUE ENPLANED PASSENGERS**



Source: U.S. Department of Transportation, T100 database, 12-months ending December 2020, accessed July 2021 through AirlineData Inc., for all airports shown.

John F. Kennedy International Airport, which had 4.1 million international revenue enplaned passengers during the same period, was the busiest international gateway in the United States. San Francisco International Airport is the only other international gateway airport on the West Coast that is ranked among the 10 busiest international gateways, with approximately 1.6 million international revenue enplaned passengers during the same 12-month period.

The international markets for the Airport in 2020, as measured by the number of international revenue enplaned passengers, were as follows: Mexico (27.1%), Asia (25.8%), Europe (17.3%), Oceania (10.5%), Canada (7.8%), Latin America and the Caribbean (8.6%), and Africa/Middle East (2.8%). Of the 10 busiest international gateway U.S. airports in 2020, the Airport served the largest number of international revenue enplaned passengers to Asia-Pacific and the second largest to Mexico and Canada after Dallas/Fort Worth International Airport and Fort Lauderdale International Airport, respectively. The Airport served more international revenue enplaned passengers to each of the markets listed above than did San Francisco International Airport.

Many of the airlines serving the Airport have alliances with foreign-flag airlines that provide, among other benefits, seamless service for passengers to markets that may not otherwise have been served by the same domestic airline. Alliances also provide airlines with strategic, marketing, and operational benefits in terms of coordinated flight schedules, the transfer of

baggage between airlines, and use of single Terminals and passenger ticketing check-in facilities.

The importance of the Airport as an international gateway can be measured by the number of domestic and foreign-flag airlines serving the Airport (which totaled 53 at the Airport in September 2021, as shown on Table 9), as well as the number and market shares of enplaned passengers of the airline alliances. A comparison of FY 2021 enplaned passenger market shares by individual airlines (including regional affiliates) and by airline alliance is shown in Table 3.

Table 3
COMPARISON OF ENPLANED PASSENGER MARKET SHARE IN FY 2021
Los Angeles International Airport

	Airline (including regional affiliates)		Airline, regional affiliate, and alliance partners		
	Number of enplaned passengers	Percent of total	Alliance Name	Number of enplaned passengers	Percent of total
Delta Air Lines	3,220,176	22.1%	oneworld	4,313,068	29.6%
American Airlines	2,947,247	20.2%	SkyTeam	3,510,957	24.1%
United Airlines	2,170,164	14.9%	Star Alliance	2,569,236	17.6%
Subtotal	8,337,587	57.1%		10,393,261	71.2%
All other airlines	6,256,204	42.9%		4,200,530	28.8%
Total	14,593,791	100.0%		14,593,791	100.0%

Totals may not add to the amounts shown due to rounding.
Source: Department records.

American Airlines operates from Terminal 4, and a passenger connector to TBIT provides a seamless experience for passengers connecting to or arriving on oneworld alliance partner flights. Delta Air Lines operates from Terminal 2. The approximately \$1.8 billion modernization of Terminals 2 and 3, referred to as the North Terminal Improvement Program, will also provide a secure connector to the north side of the TBIT, allowing Delta Air Lines and its alliance partners to operate seamlessly when the modernization program is completed.

ECONOMIC BASIS FOR AIRLINE TRAFFIC

The economy of an airport service region is a major factor affecting long-term airline traffic at the airport(s) serving the region. In general, regions with large populations, an extensive employment base, and increasing levels of per capita personal income will generate strong demand for airline travel. The demographics and economy of the region—as measured by changes in population, nonagricultural employment, and per capita personal income—as well as airline service and airfares, are typically the most important factors affecting O&D passenger demand at airport(s) serving the region.

COVID-19 in California and Los Angeles County

In response to the evolving situation of the COVID-19 pandemic, both the State of California Department of Public Health and the Los Angeles County Department of Public Health have adopted measures to allow the reopening of the economy while still requiring masking and other restrictions.

California. On June 15, 2021, California fully reopened its economy. As of the date of this 2021 DE Report, bars, restaurants, retail stores, shopping malls, movie theaters, salons, fitness centers, hotels, amusement parks, churches, and other venues are operating with no requirements for capacity limits or physical distancing, although local health jurisdictions may impose stricter criteria. In some settings, however, patrons must follow California Department of Public Health (CDPH) masking requirements including, more recently, a statewide recommendation to use masks while indoors. For example, regardless of vaccination status, masks are required on public transportation (e.g., buses, trains), hospitals, cooling centers, and homeless shelters according to Centers for Disease Control (the CDC) guidelines.

Public health measures are in place for large events such as concerts, sporting events, festivals, and conventions that include 1,000-plus people indoors or 10,000-plus outdoors. Vaccine verification or proof of negative COVID-19 results are required for large indoor events of 1,000 or more attendees and are recommended for large outdoor events of 10,000 or more attendees. Businesses, venue operators, or hosts are permitted to require all patrons to wear masks, and they may also implement vaccine verification (which can include self-attestation of vaccination status). Children younger than two years old and people with certain medical conditions are not required to wear a mask.¹³

On June 14, 2021, CDPH reported 827 new daily COVID-19 cases statewide with a seven-day test positivity rate of 0.8%. On September 8, 2021, CDPH reported an average of 7,274 new COVID-19 cases per day in California, with a seven-day test positivity reaching 4.3%. While the CDPH and local public health agencies are working toward the full vaccination of California's population, the reinstatement of lockdown measures remains an option at both the state and local level if trends in COVID-19 case and test positivity rates worsen.¹⁴

¹³ Beyond the Blueprint Framework for Industry and Business Sectors, with Limited Exceptions, 21 May 2021, State of California Department of Public Health, <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Beyond-Blueprint-Framework.aspx>; Beyond the Blueprint Questions & Answers, August 18, 2021, State of California Department of Public Health, <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Beyond-Blueprint-QA.aspx>; Guidance for the Use of Face Coverings - Effective June 15, 2021, 24 June 2021, State of California Department of Public Health, <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/guidance-for-face-coverings.aspx>, accessed August 2021.

¹⁴ State Officials Announce Latest COVID-19 Facts, 26 July 2021, California Department of Public Health, <https://www.cdph.ca.gov/Programs/OPA/Pages/NR21-232.aspx>; "California's rising COVID-19 rate sparks pleas to vaccinate", 22 July 2021, Associated Press, <https://apnews.com/article/business-health-california-coronavirus-pandemic-aa2b951ff0db9e1abc5578cded74e571>, accessed July 2021. Tracking COVID-19 in California, 10 August 2021, <https://covid19.ca.gov/state-dashboard>, accessed August 2021.

Los Angeles County. In Los Angeles County, the seven-day average number of daily COVID-19 cases increased significantly from 3,404 on August 9, 2021, to 4,816 on August 20, 2021, and then declined to 2,42 on September 7, 2021.¹⁵ As of September 8, 2021, approximately 77.0% of Los Angeles County residents aged 12 and above have received at least one dose of the COVID-19 vaccine¹⁶. Exposure to COVID-19, and especially to the more infectious Delta variant, by unmasked, unvaccinated individuals has contributed to the ongoing transmission of the disease. Although daily cases in Los Angeles County are at a lower point than during previous surges, the rate of increase in August 2021 was similar to that of the winter surge in December 2020.¹⁷ According to the CDC, the level of community transmission in Los Angeles County is rated as "High."¹⁸

The circulation of COVID-19 variants such as the highly transmissible Delta variant creates an increased risk of infection for people who are not fully vaccinated. The Los Angeles County Department of Public Health (DPH) is working with employers and community organizations to provide COVID-19 vaccinations to staff and residents. The DPH's "Find a Vaccination Provider" website allows employers and event organizers to request a mobile unit or other partner to provide vaccines. Vaccination sites at retail stores, job locations, parks, recreation centers, and other gathering places around the county allow convenient access to residents and workers to get vaccinated.¹⁹

Historical Population, Nonagricultural Employment, and Per Capita Personal Income

This section provides an overview of the Los Angeles regional economy, including current conditions and trends, and presents data that indicate that the Airport's service region has an economic base capable of supporting increased demand for airline travel at the Airport during the Forecast Period (through FY 2027).

As shown in Table 4, the Los Angeles CSA, with 18.8 million residents in 2020, is the second largest of the 172 CSAs in the United States. Only the New York-Newark CSA, with approximately 22.6 million residents, represents a larger market for airline travel. The third largest CSA is Washington-Baltimore-Arlington with approximately 53% of the population of the Los Angeles CSA.

¹⁵ COVID-19 Integrated County View, 10 August 2021, Centers for Disease Control and Prevention, <https://covid.cdc.gov/covid-data-tracker/#county-view>, accessed August 2021.

¹⁶ County Level Vaccination Data for California, 8 September 2021, Centers for Disease Control and Prevention, <https://covid.cdc.gov/covid-data-tracker/#county-view>, accessed September 2021.

¹⁷ Cases & Deaths in Los Angeles County, California, 8 September 2021, Centers for Disease Control and Prevention, <https://covid.cdc.gov/covid-data-tracker/#county-view>, accessed September 2021.

¹⁸ COVID-19 Integrated County View, September 8, 2021, Centers for Disease Control and Prevention, <https://covid.cdc.gov/covid-data-tracker/#county-view>, accessed September 2021.

¹⁹ COVID-19 Vaccine, Los Angeles County Department of Public Health, <http://www.publichealth.lacounty.gov/media/Coronavirus/vaccine/index.htm>; How to Get Vaccinated, Los Angeles County Department of Public Health, <http://publichealth.lacounty.gov/acd/ncorona2019/vaccine/hcwsignup/>, accessed September 2021.

Table 4
10 LARGEST COMBINED STATISTICAL AREAS IN THE UNITED STATES
 2020

Rank	Combined Statistical Area	Estimated population
1	New York-Newark CSA	22,618,678
2	Los Angeles CSA	18,803,160
3	Washington-Baltimore-Arlington CSA	9,882,947
4	Chicago-Naperville CSA	9,836,042
5	San Jose-San Francisco-Oakland CSA	9,717,889
6	Boston-Worcester-Providence CSA	8,303,973
7	Dallas-Fort Worth CSA	8,150,176
8	Houston-The Woodlands CSA	7,342,005
9	Philadelphia-Reading-Camden CSA	7,225,009
10	Miami-Fort Lauderdale-Port St. Lucie CSA	6,948,384

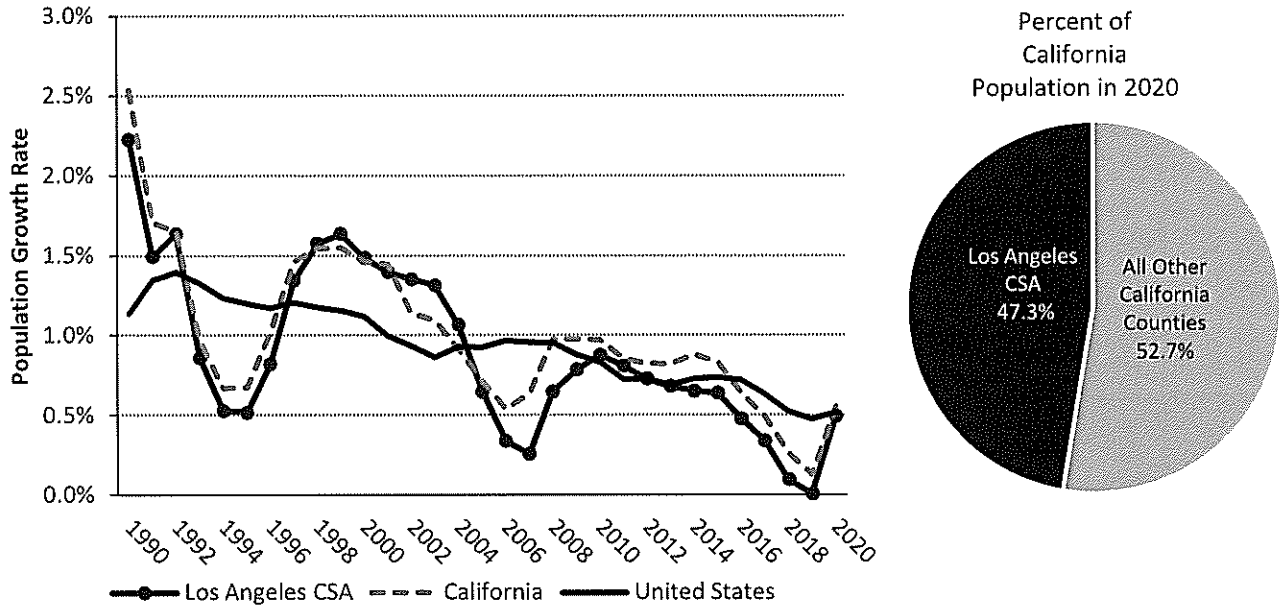
Source: Woods & Poole Economics, Inc., June 2021.

Population. As shown in the following table and on Figure 10, the growth rate for the population in the Los Angeles CSA has historically been comparable to the population growth rates in California and the United States. Population in the Los Angeles CSA increased an average of 1.2% per year from 14.6 million in 1990 to 16.4 million in 2000. From 2000 to 2010, population in the Los Angeles CSA increased from 16.4 million to 17.9 million, resulting in an average annual increase of 0.9% per year. From 2010 to 2020, population in the Los Angeles CSA increased from 17.9 million to 18.8 million, resulting in an average annual increase of 0.5% per year.

	Population (in millions)		
	Los Angeles CSA	California	United States
1990	14.6	30.0	249.6
2000	16.4	34.0	282.2
2010	17.9	37.3	309.3
2020	18.8	39.7	329.9
	Average annual percent increase (decrease)		
1990-2000	1.2%	1.3%	1.2%
2000-2010	0.9%	0.9%	0.9%
2010-2020	0.5%	0.6%	0.6%

An average annual increase of 0.7% is projected for population growth in the Los Angeles CSA from 2020 through 2027, equal to the projected increase in both California and the U.S.

Figure 10
POPULATION RATE OF GROWTH
 Los Angeles CSA, State of California, and United States



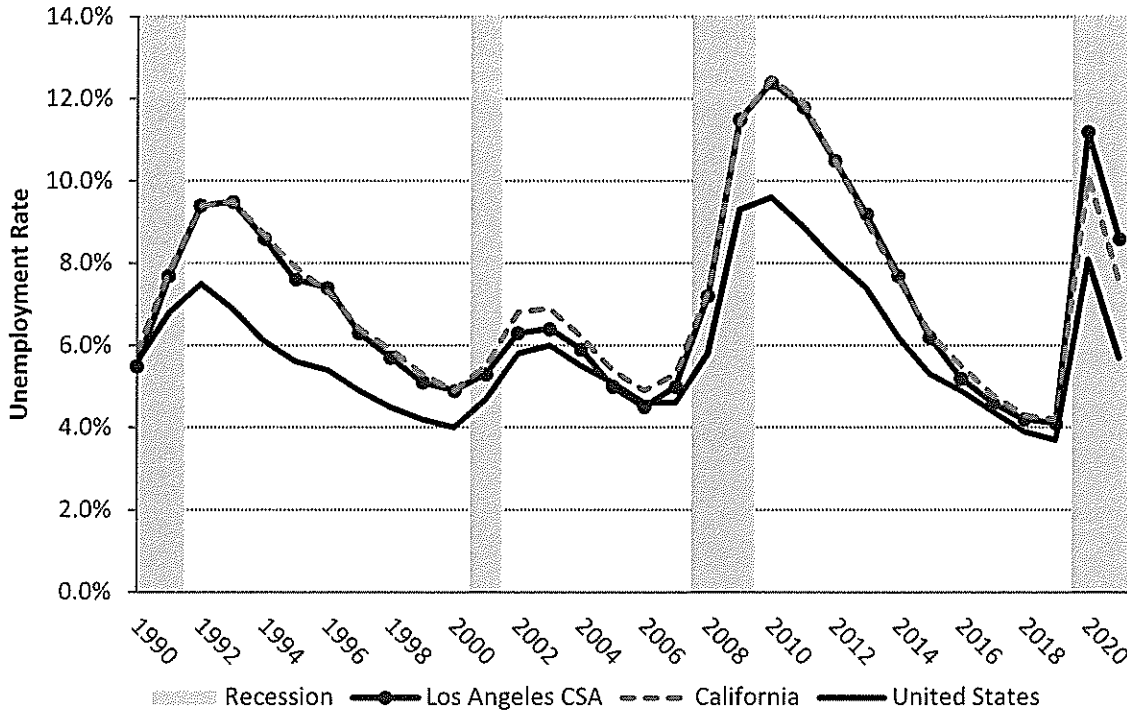
Note: The Los Angeles CSA consists of Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.
 Source: Woods & Poole Economics, Inc., June 2021.

Between 2020 and 2027, a population increase of approximately 897,000 is projected in the Los Angeles CSA, or approximately 89,000 new residents per year.²⁰ These new residents are expected to generate additional demand for airline service at the Airport.

Unemployment Rate. The annual unemployment rate in the Los Angeles CSA exceeded that in the U.S. in each of the past 31 years, except 1990, 2005, and 2006, when the two unemployment rates were generally equal, as shown on Figure 11. Although the Los Angeles CSA unemployment rate has been higher than that in the United States since 2007, it fell by 8.3%, from 12.4% at its peak in 2010 to 4.1% in 2019. In contrast, the U.S. unemployment rate fell only 5.9% from its peak of 9.6% in 2010 to 3.7% in 2019.

²⁰ Woods & Poole Economics, Inc., June 2021.

Figure 11
UNEMPLOYMENT RATES
 Los Angeles CSA, State of California, and United States



Note: Unemployment data for May 2021 are not seasonally adjusted.
 Sources: U.S. Department of Labor, Bureau of Labor Statistics, July 2021.

In May 2021, the unemployment rate in the Los Angeles CSA was 8.6% (not seasonally adjusted), higher than both the not seasonally adjusted rate in California (7.5%) and the United States (5.7%).²¹

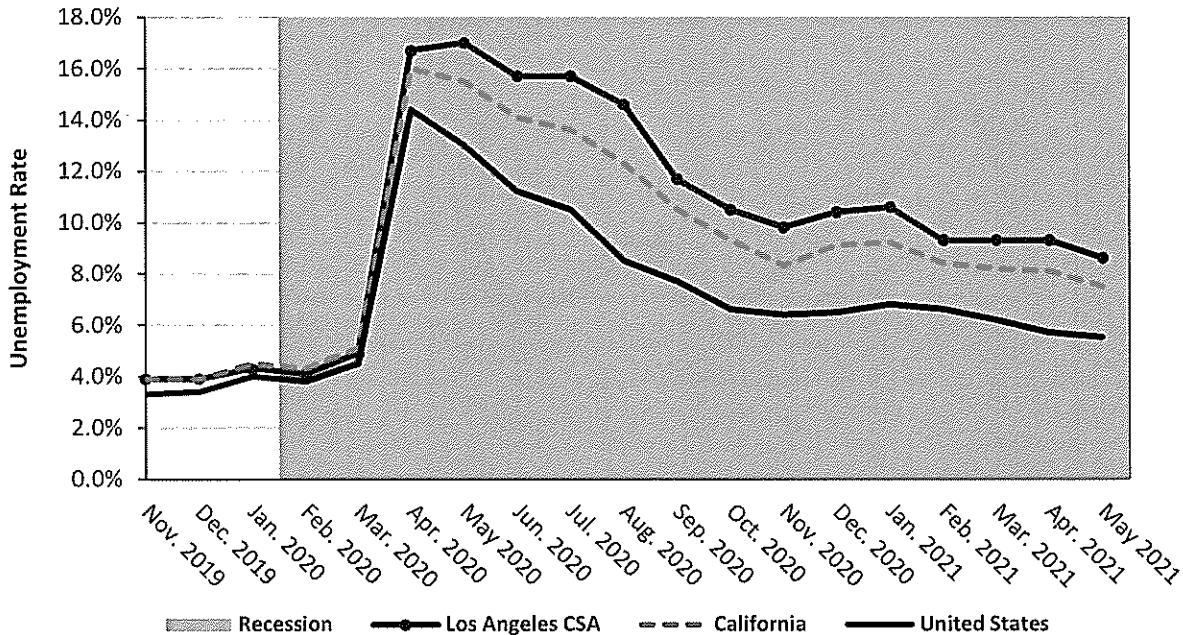
November 2019-May 2021 Unemployment Rates. The substantial increase in the unemployment rate from March 2020 to June 2020, as shown on Figure 12 was a result of the COVID-19 pandemic and the economic shutdown that occurred across the United States.

Figure 12 shows that as the economy adjusted to public health and social measures needed to reduce the risk of COVID-19 exposure, the unemployment rate in the Los Angeles CSA fell 8.4% from a peak of 17.0% in May 2020 to 8.6% in May 2021 (not seasonally adjusted). California’s not seasonally adjusted unemployment rate of 7.5% in May 2021 was 8.5% below its peak not seasonally adjusted unemployment rate of 16.0% in April 2020. Overall U.S. unemployment

²¹ Because seasonally adjusted monthly unemployment data are not available for the Los Angeles CSA, nonseasonally adjusted November 2020 unemployment data are shown for California and the United States to provide an equivalent comparison.

decreased by 8.9% from its peak of 14.4% in April 2020 to 5.5% in May 2021 (not seasonally adjusted).

Figure 12
NOVEMBER 2019-MAY 2021 UNEMPLOYMENT RATES
 Los Angeles CSA, State of California, and United States



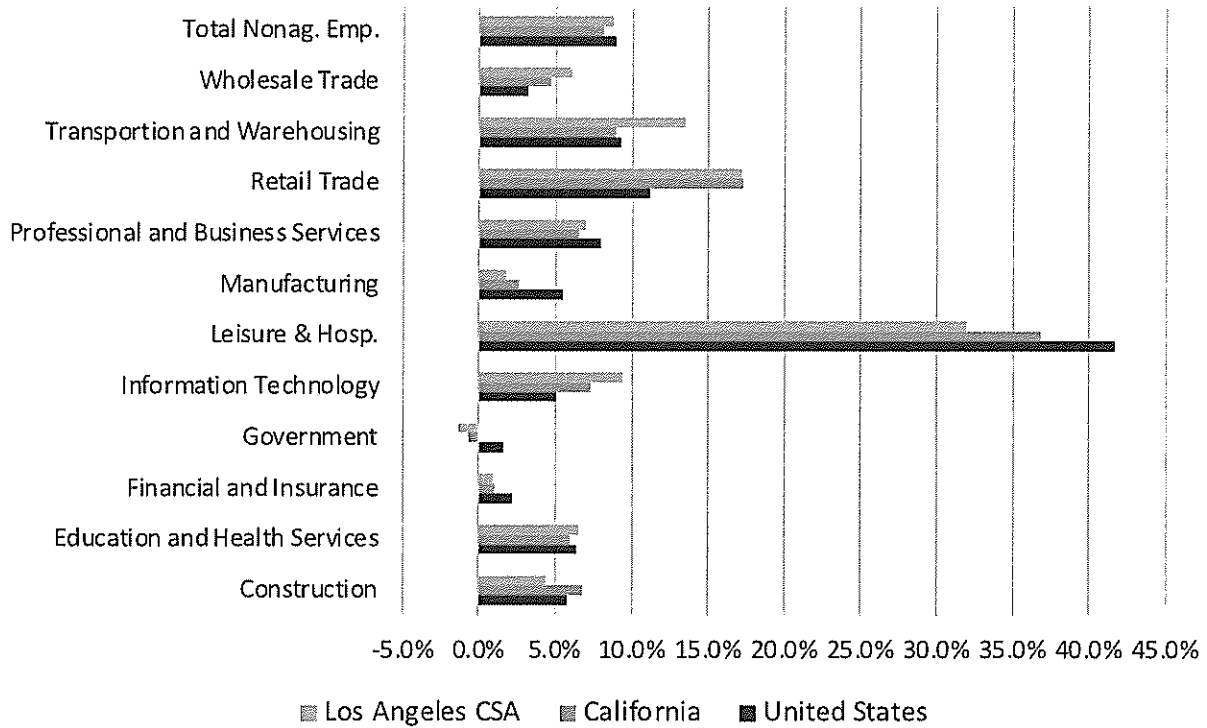
Note: Data are not seasonally adjusted.

Source: U.S. Department of Labor, Bureau of Labor Statistics, July 2021.

May 2020-May 2021 Percent Change in Industry Employment. Figure 13 shows percent changes in employment in the Los Angeles CSA, California, and the United States in total nonagricultural employment and selected industry sectors from May 2020 to May 2021. While total nonagricultural employment in the Los Angeles CSA increased by 8.8% over the 12-month period, several industries exceeded this rate including retail trade (17.2%), transportation/ warehousing (13.5%), information (9.4%), and leisure/hospitality (31.9%). However, employment in government in the Los Angeles CSA fell 1.3% between May 2020 and May 2021.

Regardless of these gains, total nonagricultural employment in the Los Angeles CSA in May 2021 was 7.7% below the level of its 10-year peak in February 2020, reflecting a loss of 632,000 jobs. Although jobs in leisure/hospitality recovered significantly (31.9%) between May 2020 and May 2021, the number of jobs remain 36% lower than their peak in February 2020. Similarly, information jobs increased 9.4% between May 2020 and May 2021 but are still 23% below their level in February 2020.

Figure 13
PERCENT CHANGE IN MAY 2020-MAY 2021 INDUSTRY EMPLOYMENT
 Los Angeles CSA, State of California, and United States

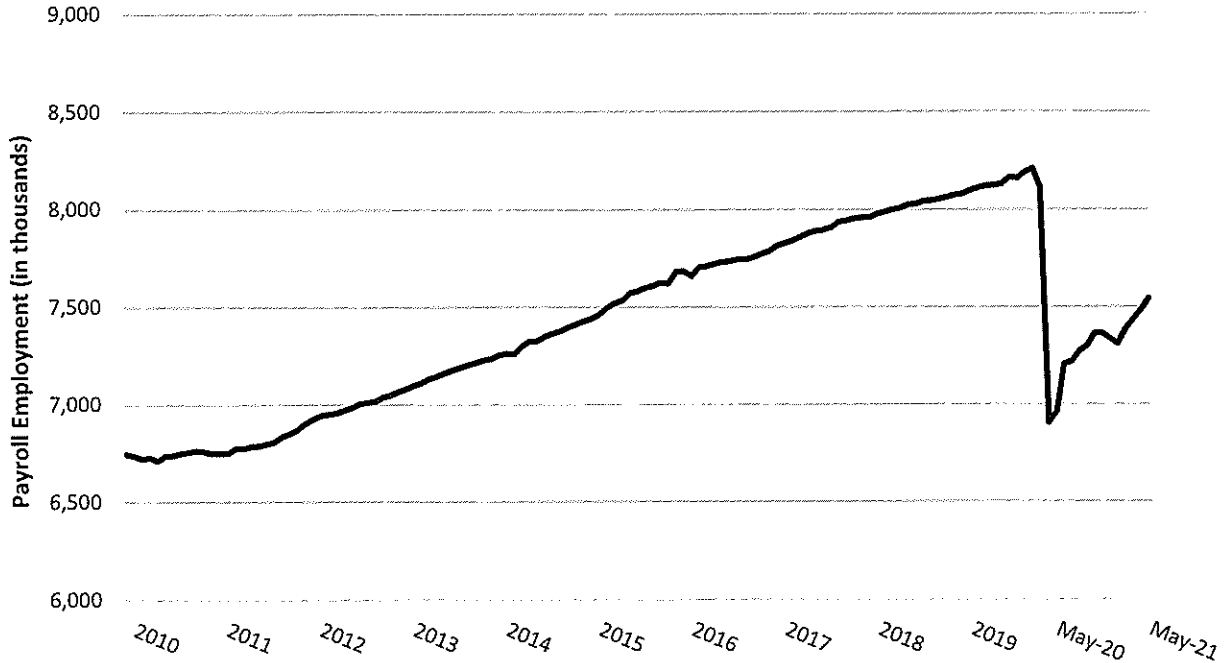


Note: Data not seasonally adjusted.

Source: U.S. Department of Labor, Bureau of Labor Statistics, California Employment Development Department, Labor Market Information Division, July 2021.

2021 Job Recovery. While Los Angeles CSA industries such as leisure/hospitality and information experienced significant job loss, nonagricultural employment overall recovered considerably between May 2020 and May 2021. Figure 14 shows that total nonagricultural payroll employment in the Los Angeles CSA fell from a 10-year high in February 2020 to a record loss of approximately 1.3 million jobs by April 2020. However, between May 2020 and May 2021 the Los Angeles CSA recovered approximately 47% of this loss, regaining approximately 612,000 jobs.

Figure 14
TOTAL 2010-MAY 2021 NONAGRICULTURAL PAYROLL EMPLOYMENT
 Los Angeles CSA



Note: Total nonagricultural employment of workers on payrolls, seasonally adjusted.

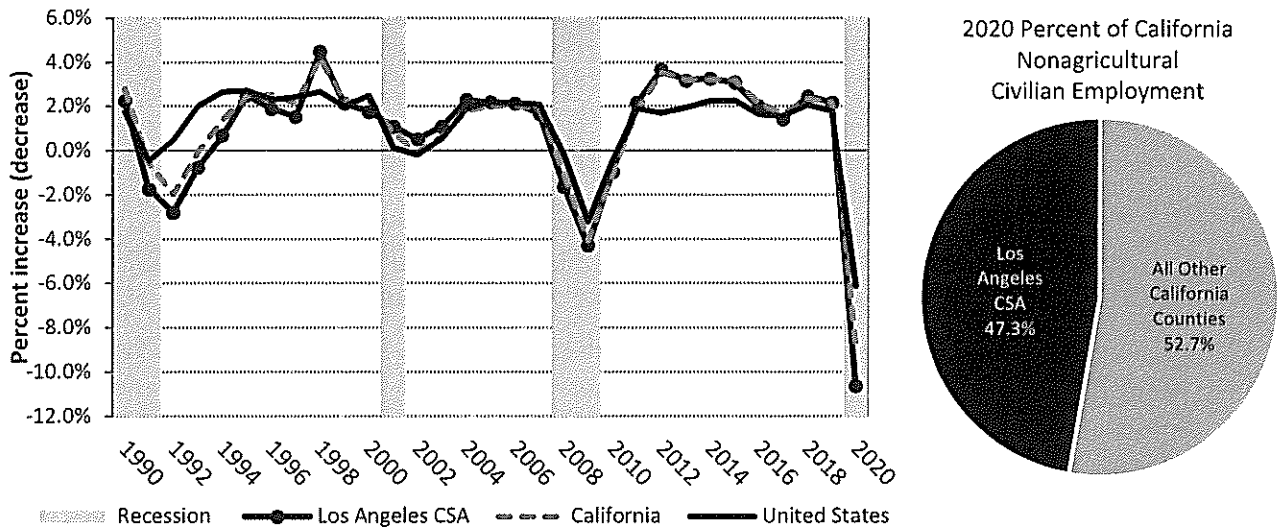
Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics, State and Area Employment, July 2021.

Nonagricultural Civilian Employment. As shown in the following table and on Figure 15, the Los Angeles CSA accounts for 47.3% of nonagricultural civilian employment in California. The annual rate of change for nonagricultural civilian employment in the Los Angeles CSA has historically been comparable to rates of change in California and the United States. Nonagricultural civilian employment in the Los Angeles CSA increased an average of 0.9% per year from 8.1 million in 1990 to 8.9 million in 2000. From 2000 to 2010, nonagricultural civilian employment in the Los Angeles CSA increased from 8.9 million to 9.2 million, resulting in an average annual increase of 0.3% per year. From 2010 to 2020, nonagricultural civilian employment in the Los Angeles CSA increased from 9.2 million to 10.4 million, resulting in an average annual increase of 1.2% per year.

	Nonagricultural civilian employment (in millions)		
	Los Angeles CSA	California	United States
1990	8.1	16.2	132.5
2000	8.9	18.7	160.2
2010	9.2	19.2	168.2
2020	10.4	22.0	187.1
	Average annual percent increase (decrease)		
1990-2000	0.9%	1.4%	1.9%
2000-2010	0.4%	0.3%	0.5%
2010-2020	1.2%	1.4%	1.1%

An average annual increase of 3.3% is projected for nonagricultural civilian employment growth in the Los Angeles CSA from 2020 through 2027, higher than the projected increase in both California (3.0%) and the United States (2.4%).

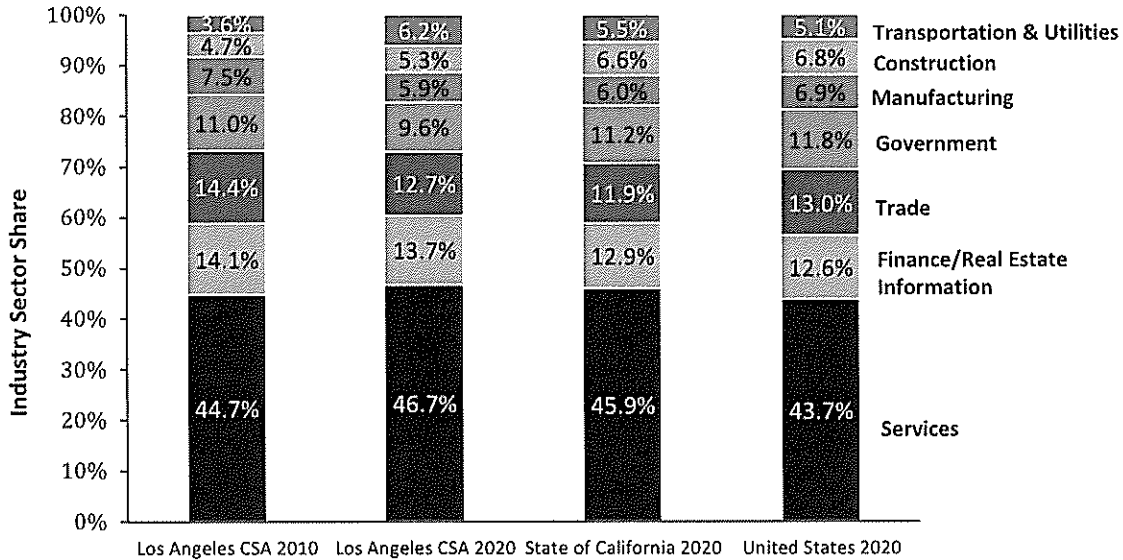
Figure 15
NONAGRICULTURAL CIVILIAN EMPLOYMENT ANNUAL RATES OF CHANGE
 Los Angeles CSA, State of California, and United States



Note: The Los Angeles CSA consists of Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.
 Source: Woods & Poole Economics, Inc., June 2021.

Figure 16 shows the comparative distribution of nonagricultural civilian employment by industry sector in the Los Angeles CSA in 2010 and 2020, and in California and the United States in 2020. Employment in services (46.7%) which includes health, education, professional, business, leisure, hospitality, and other services, combined with employment in finance, real estate, and information (13.7%), accounted for a combined 60.4% of total nonagricultural civilian employment in the Los Angeles CSA in 2020.

Figure 16
**COMPARATIVE DISTRIBUTION OF NONAGRICULTURAL CIVILIAN EMPLOYMENT
 BY INDUSTRY SECTOR**
 Los Angeles CSA, State of California, and United States



Notes: Construction employment includes mining and forestry. Totals may not add to 100% due to rounding.
 Source: Woods & Poole Economics, Inc., June 2021.

Major Employers. Table 5 lists the 25 largest private employers in the Los Angeles CSA in 2020. The table reflects the diversity of the companies and industries in the area.

The Los Angeles CSA is the headquarters location of 41 Fortune 1000 firms.²² Employing a worldwide total of approximately 867,000 workers, and with combined annual revenue of approximately \$304 billion, these companies operate globally and their activities extend to a network of approximately 2,000 overseas offices, manufacturing plants and other facilities.²³

Although business travel has been severely curtailed by the COVID-19 pandemic, business travel sentiment has improved in 2021. Fifty-five percent U.S. companies that currently are not traveling have plans to resume domestic business travel within the next three months.²⁴ International business travel is projected to grow 21% in 2021.²⁵

²² Source: Fortune 500, www.fortune.com, accessed July 2021.

²³ Source: Uniworld Online, www.uniworldonline.com, accessed July 2021.

²⁴ Monthly Travel Recovery Data Report, 1 July 2021, U.S. Travel Association, <https://www.ustravel.org/research/monthly-travel-recovery-data-report>, accessed July 2021.

²⁵ "Global business travel to grow 21% in 2021, trade group forecasts," 2 February 2021, Reuters.com, <https://www.reuters.com/article/health-coronavirus-corporate-travel-int/global-business-travel-to-grow-21-in-2021-trade-group-forecasts-idUSKBN2A211V>, accessed July 2021.

Table 5
25 LARGEST PRIVATE EMPLOYERS
 Los Angeles CSA

Rank	Company	Industry	Location	Local Employees
1	Walt Disney (53) (a)	Entertainment	Anaheim/Burbank	40,800
2	Amazon	Online Retailer	Santa Monica/Riverside	35,500
3	Allied Universal	Security Services	Santa Ana	18,600
4	Northrop Grumman	Aerospace	Redondo Beach	18,000
5	Boeing	Aerospace	El Segundo/Seal Beach	13,000
6	Bank of America	Finance	Irvine/Los Angeles	12,500
7	United Parcel Service	Transportation	Anaheim/Los Angeles/Ontario	11,600
8	NBCUniversal	Entertainment	Burbank	11,500
9	AT&T	Telecommunications	El Segundo	11,000
10	Wells Fargo Bank	Finance	Los Angeles	10,200
11	Raytheon	Aerospace	El Segundo	8,300
12	ABM Industries	Facility Services	Commerce	7,500
13	FedEx	Transportation	Irvine/Los Angeles/Ontario	7,000
14	Space Exploration Technologies	Aerospace	Hawthorne	6,000
15	Edwards Lifesciences (589)	Medical Equipment	Irvine	5,300
16	Pechanga Resort & Casino	Casino/Resort	Temecula	5,100
17	Amgen (112)	Pharmaceuticals	Thousand Oaks	4,500
18	JP Morgan Chase	Finance	Irvine/Los Angeles	4,500
19	Warner Bros. Entertainment	Entertainment	Burbank	4,400
20	Paramount Pictures	Entertainment	Hollywood	4,300
21	loanDepot	Finance	Foothill Ranch	4,000
22	Medtronic Diabetes	Medical Equipment	Northridge	4,000
23	Charter Communications Inc.	Telecommunications	El Segundo	3,700
24	Lockheed Martin	Aerospace	Palmdale	3,700
25	City National Bank	Finance	Los Angeles	3,700

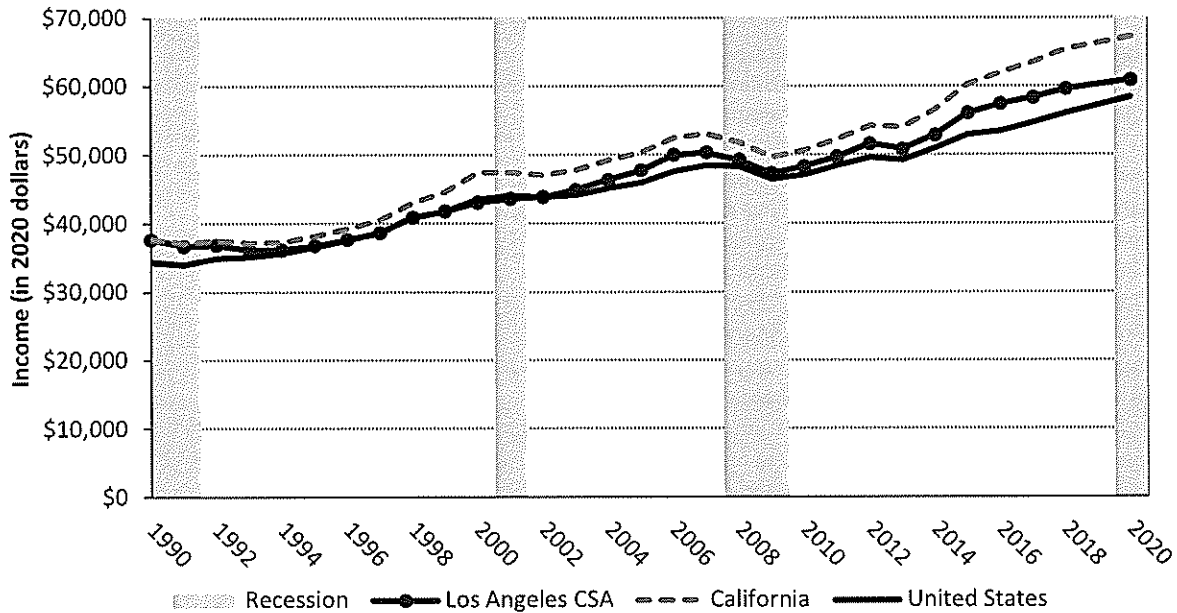
Note: Excludes retail companies, hospitals, utilities, nonprofits, and government organizations.

(a) Indicates Fortune 1000 headquarter company ranking.

Sources: "Employers," *Orange County Business Journal*, 30 November 2020; "Private-Sector Employers," *Los Angeles Business Journal*, 31 August 2020; *County of Ventura FY2020 Comprehensive Annual Financial Report*, <https://www.ventura.org/auditor-controllers-office/financial-reports>; *Riverside County FY2020 Comprehensive Annual Financial Report*, <https://www.auditorcontroller.org/ReportsPublications.aspx>; *San Bernardino County FY2019 Comprehensive Annual Financial Report*, <https://www.sbcounty.gov/ATC/Services/Documents>; Fortune 500, <https://fortune.com>, accessed July 2021.

Per Capita Personal Income. Historically, per capita personal income (in 2020 dollars) has been consistently lower in the Los Angeles CSA than in California, as shown on Figure 17. However, per capita income in the Los Angeles CSA has been slightly higher than in the U.S. from 1990 through 2020. Real wage and salary income decreased in the Los Angeles CSA during the 2007-2009 recession, falling 2.4% between 2007 and 2008, and 5.9% between 2008 and 2009. In contrast, population in the Los Angeles CSA increased nearly 1.0% per year during the 2007-2009 recession. Certain factors, including decreasing wage and salary income and increasing population, contributed to the decrease in per capita personal income growth in the Los Angeles CSA between 2007 and 2010.

Figure 17
PER CAPITA PERSONAL INCOME (IN 2020 DOLLARS)
 Los Angeles CSA, State of California, and United States



Note: The Los Angeles CSA consists of Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.
 Source: Woods & Poole Economics, Inc., June 2021.

Forecasts of per capita personal income in the Los Angeles CSA in 2027 are based on an average annual growth rate of 1.9% between 2020 and 2027. The 2020-2027 growth in total personal income is projected to be partially driven by the growth in earnings for workers in healthcare and social assistance, leisure and hospitality, and professional and technical services.

Household Income above \$100,000. The percentage of households with annual income of \$100,000 or more is an indicator of potential demand for air travel. Table 6 shows that in 2020, the Los Angeles CSA ranked second in the U.S. with approximately 2.3 million or 37.8% of households with income of \$100,000 or more. According to Consumer Expenditure Survey data from the U.S. Bureau of Labor Statistics, 55% of airline fare expenditures are made by households with annual income of \$100,000 or more.²⁶

²⁶ Source: *Who's Buying for Travel* 12th edition, New Strategist Publications, 2018. Data in *Who's Buying for Travel* are based on the U.S. Department of Labor, Bureau of Labor Statistics' "Consumer Expenditure Survey," an ongoing nationwide survey of household spending.

Table 6
**2020 HOUSEHOLDS WITH INCOME OF \$100,000 AND ABOVE
 BY METROPOLITAN REGION**

Rank	Combined Statistical Area	Households with Income of \$100,000 and above	Percent of Households in the CSA with Income of \$100,000 or above
1	New York-Newark CSA	3,518,773	42.0%
2	Los Angeles CSA	2,285,053	37.8
3	Washington-Baltimore-Arlington CSA	1,737,708	48.0
4	San Jose-San Francisco-Oakland CSA	1,673,480	49.6
5	Chicago-Naperville CSA	1,351,859	36.7

Note: Calculations of 2020 data are based on 2021 and 2026 forecasts from Esri.
 Source: 2021 Esri Market Profiles, accessed July 2021.

Visitor Activity

Table 7 summarizes visitor data for Los Angeles County in 2018, 2019 and 2020, as provided by the Los Angeles Tourism & Convention Board. In 2019 (the year prior to the COVID-19 pandemic), there were 50.7 million day and overnight visitors to Los Angeles County, 700,000 more than the record tourism in 2018 of 50.0 million visitors. Approximately 65.0% of visitors to Los Angeles County in 2018 and 2019 were overnight visitors.

Data in Table 7 show that Los Angeles County’s approximately 25.8 million domestic overnight visitors in 2019 represented a 2.0% increase over 2018. The 7.4 million international overnight visitors in 2019 was 1.3% lower than the level in 2018.

In 2020, travel restrictions resulting from the COVID-19 pandemic had a significant impact on the number of visitors to Los Angeles County. Between 2019 and 2020, there was a -51.2% decrease in total overnight visitors. The decrease in international visitors was -78.4% between 2019 and 2020 while the number of domestic visitors fell by -43.4% during the same period.

The Los Angeles CSA offers both leisure and business travelers numerous entertainment attractions, cultural institutions, shopping districts, dining selections, recreational options, professional sporting events, and scenic parks and vistas. World famous attractions in the Los Angeles CSA include Disneyland, Universal Studios, the Hollywood Walk of Fame, the Getty Center, and many others.

Table 7
VISITOR ACTIVITY IN LOS ANGELES COUNTY

	2018	Percent of total	2019	Percent of total	Percent increase/ (decrease) 2018-2019	2020	Percent of total	Percent increase/ (decrease) 2019-2020
Overnight visitors	32,800,000	65.6%	33,200,000	65.5%	1.2%	16,200,000	60.2%	(51.2%)
Day visitors	17,200,000	34.4	17,500,000	34.5	1.7	10,700,000	39.8	(38.9)
Total visitors	50,000,000	100.0%	50,700,000	100.0%	1.4%	26,900,000	100.0%	(46.9%)
Overnight visitors								
Domestic	25,300,000	77.1%	25,800,000	77.7%	2.0%	14,600,000	90.1%	(43.4%)
International	7,500,000	22.9	7,400,000	22.3	(1.3)	1,600,000	9.9	(78.4)
Total overnight visitors	32,800,000	100.0%	33,200,000	100.0%	1.2%	16,200,000	100.0%	(51.2%)
International visitors								
Mexico	1,776,000	23.6%	1,731,000	23.3%	(2.5)%	n.a.	n.a.	n.a.
China (ex. Hong Kong)	1,200,000	16.0	1,173,000	15.8	(2.3)	n.a.	n.a.	n.a.
Canada	780,000	10.4	773,000	10.4	(0.9)	n.a.	n.a.	n.a.
Australia	426,000	5.7	421,000	5.7	(1.2)	n.a.	n.a.	n.a.
United Kingdom (a)	382,000	5.1	383,000	5.2	0.3	n.a.	n.a.	n.a.
Japan	349,000	4.6	347,000	4.7	(0.6)	n.a.	n.a.	n.a.
South Korea	335,000	4.5	333,000	4.5	(0.6)	n.a.	n.a.	n.a.
France	307,000	4.1	326,000	4.4	6.2	n.a.	n.a.	n.a.
Germany	237,000	3.2	242,000	3.3	2.1	n.a.	n.a.	n.a.
Brazil	117,000	1.6	101,000	1.4	(13.7)	n.a.	n.a.	n.a.
Other overseas	1,609,000	21.4	1,593,000	21.5	(1.0)	n.a.	n.a.	n.a.
Total international visitors	7,075,000	100.0%	7,423,000	100.0%	(1.3)%			

Note: Columns may not add to totals shown due to rounding. n.a. means data are not available.

(a) Includes England, Wales, Scotland, and Northern Ireland.

Source: Los Angeles Tourism & Convention Board, August 2021.

Convention Business. Prior to the COVID-19 pandemic, many business travelers visited the Los Angeles CSA to attend conventions and other events. The Los Angeles Convention Center (LACC) is located in downtown Los Angeles and, prior to the pandemic, hosted an average of 350 events annually with approximately 2.5 million visitors. Covering a site of 54 acres, the LACC has 720,000 square feet of exhibit hall space, 147,000 square feet of meeting room space, a 299-seat theater, and parking for over 5,600 vehicles.²⁷

In March 2020, large public gatherings in Los Angeles County were suspended and events at the LACC were canceled due to the COVID-19 pandemic. Despite its closure, the LACC was awarded the Global Biorisk Advisory Council (GBAC) STAR accreditation on outbreak prevention, response, and recovery in July 2020. GBAC STAR is recognized as the gold standard of safe venues and provides third-party validation to ensure the adoption of best practices for systematically sanitizing facilities in the era of the COVID-19 pandemic. The LACC was the first

²⁷ Facility Quick Facts, Los Angeles Convention Center, <https://www.lacclink.com/about/lacc-quick-facts>, accessed July 2021.

convention center on the West Coast to receive the GBAC STAR accreditation.²⁸ Guided by public health experts, ASM Global (LACC’s operator) has also implemented VenueShield and the Blue Tower Program to ²⁹collect and monitor data, adopt new technology and equipment, and update best practices for cleaning and safety for the facility’s attendees, contractors, and staff.³⁰

A new State of California Public Health Order removed the majority of pandemic response restrictions on June 15, 2021, and replaced them with more limited provisions for large public gatherings and events. Since reopening in mid-June 2021, the LACC has announced 2021 and 2022 meetings and conventions for the LA Art Show, California Bridal & Wedding Expo, Pri-Med Conference, Build Expo, Wekfest, L.A. Auto Show, ComiCon, and others.³¹

In December 2018, the Los Angeles City Council approved a \$500 million plan to build additional exhibit, meeting room, multi-purpose space, and parking at LACC. When completed, the LACC will have a total of 1,180,000 square feet of useable space. The expanded LACC facility will be able to attract larger conventions, accommodate multiple, large-scale events, and become the centerpiece of a 100-acre entertainment campus in downtown Los Angeles that includes Staples Center and the L.A. Live event center. ASM Global is currently working with city officials to obtain construction approvals for the project.³²

Marriott will open AC and Moxy branded hotels at the Fig + Pico mixed-use project adjacent to the LACC. Developed by the Lightstone Group, the dual-branded 37-story hotel tower will include 727 guestrooms in the two hotels and 8,600 square feet of retail and restaurant space. Project completion is expected in 2022.³³

International Travel. In 2019, Los Angeles County attracted 7.4 million overnight international visitors, a decrease of -1.3% compared to the 2018 levels. The number of visitors from the United Kingdom, France, and Germany increased between 2018 and 2019, although visitors from all other countries shown in Table 7 decreased during the same period. The number of visitors from Brazil decreased by 16,000 between 2018 and 2019, a decrease of 13.7%. While the reduction in visitors from China (27,000) and Mexico (45,000) between 2018

²⁸ “LACC Becomes the First Convention Center on the West Coast to earn GBAC STAR™ Accreditation,” 8 July 2020, <https://www.lacclink.com/news/detail/los-angeles-convention-center-is-the-first-convention-center-on-the-west-coast-to-earn-gbac-star-accreditation>, accessed July 2021.

²⁹ Country of origin data for international visitors to Los Angeles County in 2020 are not available.

³⁰ COVID-19 Status Update, Los Angeles Convention Center, <https://www.lacclink.com/covid-19>, accessed July 2021.

³¹ Events, Los Angeles Convention Center, <https://www.lacclink.com/events>, accessed July 2021.

³² “Los Angeles to Expand Conventions Center,” 10 January 2019, North Star Meetings Group, <https://www.northstarmetingsgroup.com/News/Event-Venues/Los-Angeles-convention-center-expansion-moves-forward>; “AEG Convention Center Development Greenlit,” 4 January 2019, *Los Angeles Business Journal*, <http://labusinessjournal.com/news/2019/jan/04/aeg-convention-center-development-greenlit>; accessed July 2021.

³³ “Construction Activity in DTLA Remains Robust Amid Pandemic,” 16 February 2021, *Los Angeles Daily News*, <https://www.dailynews.com/2021/02/16/construction-activity-in-dtla-remains-robust-amid-pandemic>, accessed July 2021.

and 2019 was large compared to Brazil, on a percentage basis the number of Chinese and Mexican visitors each decreased 2.5% or less.

Of Los Angeles County's 7.4 million international visitors in 2019, 33.8% were from Mexico and Canada, while the majority of international visitors (66.2%) were from other countries. China was home to the second highest number of visitors (nearly 1.2 million) from a single country. In 2016, Los Angeles became the first U.S. city to host over one million visitors from China, a milestone that was repeated in 2017 (1.1 million), 2018 (1.2 million), and 2019 (1.2 million). Viewed on a regional basis, visitors from Australia, Japan, and South Korea—the top three countries in the Asia-Pacific region (excluding China)—accounted for a total of 1.1 million visitors to Los Angeles County in 2019. Similarly, Europe was the second largest regional market in 2019, with the top three countries (United Kingdom, France, and Germany) generating 951,000 visitors to Los Angeles County.

Although the COVID-19 pandemic has had a negative effect on international travel at the Airport, the Los Angeles CSA's international links are underscored by the fact that, according to the U.S. Census Bureau, 30.0% of the population is foreign-born compared with 13.4% of the U.S. population.³⁴

Economic Outlook

Economic growth in the United States, the State of California, and the Los Angeles CSA influences the demand for passenger and cargo services at the Airport. In addition, growth in airline traffic at the Airport is influenced by global economies. Consequently, economic assumptions that underlie the forecasts of enplaned passengers prepared for this 2021 DE Report were based on a review of global, national, State, and regional economic forecasts, as well as analyses of historical socioeconomic trends and airline traffic trends.

Global Economy. In advanced economies, the successful development and distribution of COVID-19 vaccines has allowed the reopening of face-to-face services as the rates of new cases and hospitalizations have decreased. Indicators of economic activity and employment have strengthened. For example, the reopening of the U.S. economy, and consequent increase in U.S. imports, has helped exporters of manufactured goods in developing markets and promoted a recovery in world trade. However, global economic recovery is threatened by the spread of new coronavirus variants and poor access to vaccines in developing countries. The U.S. has an essential role in globally-coordinated efforts to accelerate vaccine distribution in developing economies. The International Monetary Fund (IMF) estimates that international cooperation on COVID-19 vaccines could speed world economic recovery while adding approximately \$9 trillion to global income by 2025.³⁵ Data in Table 8 show that from 2020

³⁴ 2015-2019 American Community Survey 5-Year Estimates, U.S. Census Bureau, Table B05002 Place of Birth by Nativity and Citizenship Status, accessed July 2021.

³⁵ Global Economic Prospects, 8 June 2021, World Bank, <https://www.worldbank.org/en/publication/global-economic-prospects>; World Economic Outlook: Managing Divergent Recoveries, April 2021, International Monetary Fund, <https://www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021>, accessed June 2021.

through 2027, the projected annual growth rate of real global GDP will rise to 3.4%, higher than the rate of growth between 2010 and 2019.

With continued progress on international vaccine distribution and recovery in global economic growth from 2021 through 2027, demand for business and leisure travel, including airline travel to the Los Angeles CSA, will likely increase.

Table 8
HISTORICAL AND PROJECTED GLOBAL REAL GROSS DOMESTIC PRODUCT GROWTH RATES

Region/Country	Average annual real GDP growth	
	Historical 2010-2019	Projected 2020-2027
China (including Hong Kong and Macau)	7.2%	5.5%
Asia (excluding China, Hong Kong, and Macau)	3.3	3.5
Africa	3.3	3.3
Middle East	3.1	3.2
Latin America	1.7	2.9
Canada	2.1	2.7
United States	2.3	2.6
Former Soviet Union	2.1	2.6
Europe	1.6	2.6
World	3.0	3.4

Source for historical and projected: U.S Department of Agriculture, Economic Research Service, *International Macroeconomic Data, Projected Real GDP Values*, updated January 7, 2021.

National Economy. Real GDP growth in the U.S. during the Forecast Period will be positive as the economy continues to reopen following greater control of the COVID-19 virus. The unemployment rate is expected to continue to decrease as discouraged workers rejoin the labor market. Job growth is anticipated to be strong for lower-wage workers and in virus-sensitive sectors such as leisure and hospitality. Higher pay, combined with government transfers and accumulated household savings, will support consumer spending. Supply chain disruptions and low inventories are expected to place upward pressure on core price inflation, though only on a transitory basis.

However, concerns about future higher inflation and lower employment growth are reflected in decreasing business confidence. Some business leaders question whether the recent upswing in prices is indeed transitory or if it will become an impediment to long-term economic expansion. Public health concerns, retirements, incentive effects from unemployment benefits, or delays in reopening schools and childcare may result in a slower rebound in labor force

participation. This in turn may create labor market pressures that could push wages and prices higher.³⁶

The most recently published forecast (May 2021) by business economists from the National Association for Business Economics (the NABE) indicates consensus for annual real U.S. GDP growth of 6.5% in 2021 and 4.4% in 2022. The NABE forecast also estimates an average annual U.S. unemployment rate of 5.6% in 2021 and 4.3% in 2022.³⁷

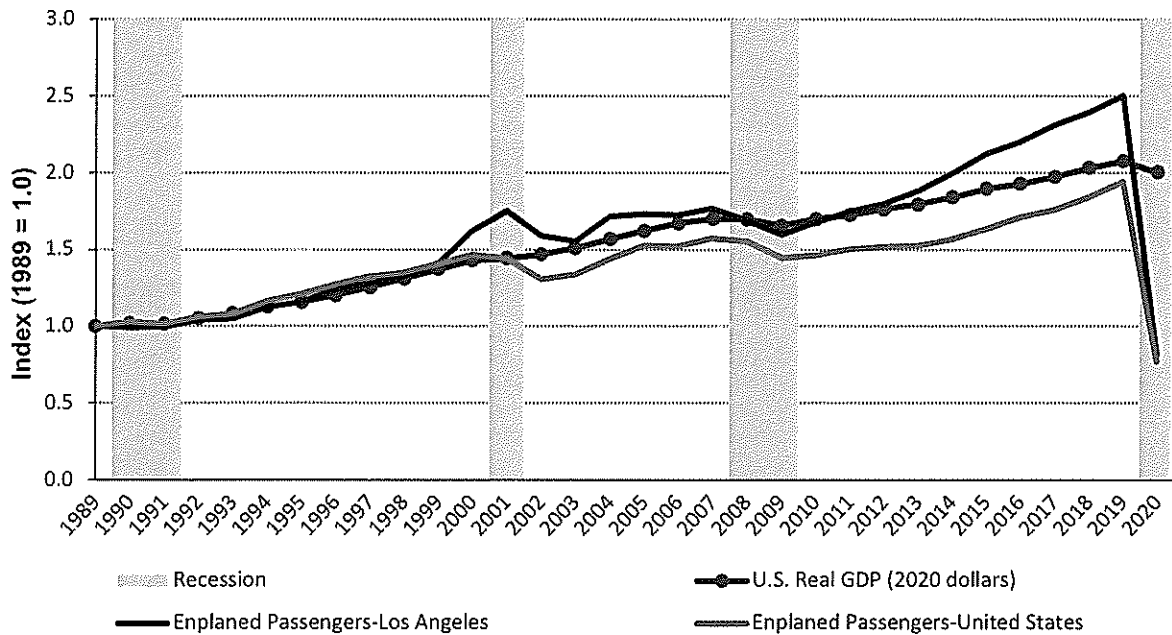
Figure 18 presents trends in U.S. real GDP (in 2020 dollars) and numbers of enplaned passengers at the Airport and in the nation in 1989 through 2020 (using 1989 as the index year). Trends in passenger traffic in the United States and at the Airport since 1989 have closely correlated with trends in real GDP, including decreases during the 1990-1991 and 2007-2009 recessions. From 1989 through 2019, U.S. real GDP increased an average of 2.5% per year, while the number of enplaned passengers increased at averages of 2.2% per year in the nation and 3.1% per year at the Airport. In 2020, U.S. real GDP decreased 3.5%; the number of enplaned passengers fell approximately 60% in the U.S. and 67% at the Airport.

During the 2007-2009 recession, the number of passengers enplaned at the Airport decreased 7.3% while enplaned passengers in the United States decreased 5.1%. As growth resumed in the national economy, the number of enplaned passengers increased 49.6% at the Airport and 33.0% in the U.S. between 2010 and 2019.

³⁶ Beige Book, 2 June 2021, Board of Governors of the Federal Reserve System, <https://www.federalreserve.gov/monetarypolicy/beigebook202106.htm>; Monetary Policy Report, 9 July 2021, Board of Governors of the Federal Reserve System, https://www.federalreserve.gov/monetarypolicy/mpr_default.htm; An Overview of the Economic Outlook: 2021 to 2031, February 2021, Congressional Budget Office, <https://www.cbo.gov/publication/56982>; Economic Indicators, United States – Business Confidence, June 2021, Moody's Analytics, <https://www.economy.com/united-states/business-confidence/seasonally-adjusted>, accessed July 2021.

³⁷ Source: National Association for Business Economics, *NABE Outlook*, May 2021.

Figure 18
TRENDS IN U.S. REAL GROSS DOMESTIC PRODUCT AND ENPLANED PASSENGERS



Sources: U.S. GDP—U.S. Department of Commerce, Bureau of Economic Analysis, www.bea.gov, accessed July 2021.

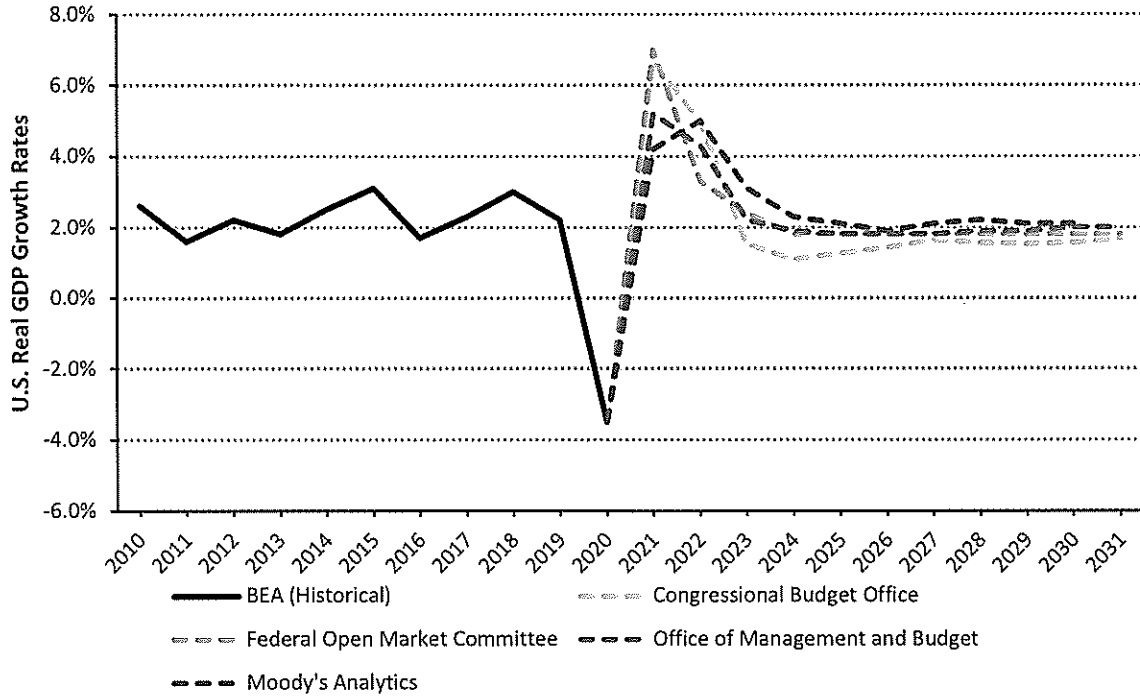
Los Angeles International Airport enplaned passengers—Department management records.

U.S. enplaned passengers—U.S. Department of Transportation, Federal Aviation Administration, Preliminary CY 2020 Passenger Boarding Data, accessed July 2021.

2021-2031 Real GDP Growth Rate Forecasts. Figure 19 shows historical real U.S. gross domestic product (GDP) growth from the Bureau of Economic Analysis (BEA) and growth forecasts for the U.S. between 2021-2031 from the Congressional Budget Office (CBO), Federal Reserve Open Market Committee (FOMC), and Moody’s Analytics. The decrease in real U.S. GDP in 2020 (-3.5%) was a result of the lockdowns, business closures, and extensive unemployment caused by the COVID-19 pandemic.

The 2021 real GDP growth forecasts shown on Figure 19 range from 4.2% (Moody’s Analytics) to 7.0% (FOMC). The forecasts predict 2022 growth rates between 3.3% (FOMC) and 5.0% (CBO and Moody’s). All the forecasts project lower real GDP growth in 2023, 2024, and 2025 compared to 2022. From 2026-2031, the forecasts expect real GDP growth in the U.S. to average approximately 2.0%.

Figure 19
2021-2031 U.S. REAL GDP GROWTH RATE FORECASTS



Sources: Bureau of Economic Analysis, Annual Real Gross Domestic Product, Chained 2012 Dollars, July 2021; Congressional Budget Office, Budget and Economic Data, 10-Year Economic Projections, July 2021; Board of Governors of the Federal Reserve System, Federal Open Market Committee, Summary of Economic Projections, June 2021; Office of Management and Budget, Budget of the U.S. Government Fiscal Year 2021, February 11, 2020; Moody's Analytics, U.S. Real Gross Domestic Product Forecast, May 2021.

California Economy. California has a diverse and vibrant economy that accounts for approximately 14.7% of U.S. GDP and ranks as the fifth largest economy globally (between Germany and the United Kingdom).³⁸ Real gross state product in California fell by less than one percent in 2020 (-0.6%) indicating significant economic resiliency given that in 2020 California had the highest number of COVID-19 pandemic cases (2,426,078) and deaths (32,068) of any state. U.S. GDP growth in 2020 was -3.5%.³⁹

Employment in California rebounded significantly between May 2020 and May 2021 with an 8.2% increase in total nonagricultural employment; employment growth in the U.S. overall was

³⁸ World Development Indicators, The World Bank, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?year_high_desc=true, accessed July 2021; Woods & Poole Economics, Inc., June 2021.

³⁹ U.S. Department of Commerce, Bureau of Economic Analysis, www.bea.gov; 2021 Economic Forecast, 20 June 2021, LAEDC Institute of Applied Economics, LAEDC-2021-Economic-Forecast_Final.pdf; COVID Data Tracker, Centers for Disease Control and Prevention, https://covid.cdc.gov/covid-data-tracker/#compare-trends_totalcases, accessed July 2021.

9.0% during the same period. Regardless of California's job gains over the past year, its total nonagricultural employment is still 7.4% below its February 2020 peak and lags behind national jobs recovery. Total nonagricultural employment in the U.S. is 4.9% below its February 2020 peak.⁴⁰

However, comparisons between California's economic recovery and the U.S. overall must account for the state's higher level of pandemic restrictions, including mask mandates, business closures, and prohibitions of large gatherings. Full recovery in California's leisure and hospitality sector is not expected to occur until travel and tourism return to pre-pandemic levels. Nevertheless, job gains are anticipated in leisure/hospitality as well as professional and business services, information, education/health, transportation/warehousing, and construction. Combined, these six sectors are expected to account for approximately 94% of employment gains in California from 2021 through 2022.⁴¹

Los Angeles CSA Economy. Data on Figure 20 shows that the Los Angeles CSA economy ranks second among U.S. metro areas with a gross regional product of more than \$1.3 trillion. As in other metro regions throughout the U.S., economic activity in the Los Angeles CSA experienced a dramatic reduction in 2020 with the spread of COVID-19. Stay-at-home orders, business closures, travel restrictions, prohibitions against large gatherings, and other safety measures resulted in a rapid decrease in consumer spending and employment.

The impact of the COVID-19 pandemic on the Los Angeles CSA's job market has varied considerably based on the industry. For example, some office and knowledge workers quickly transitioned to remote work. In some industries, working from home has proved so popular among employees and so cost-effective for businesses that the COVID-19 pandemic has possibly changed the nature and place of work permanently. Conversely, there has been a high rate of small business closures and job losses for low-income workers employed in non-essential service industries that rely on person-to-person interaction. In addition, a large percentage of women have left the labor force because of a lack of childcare options and the prevalence of women working in service jobs that have been negatively affected by the pandemic.⁴²

Regardless of these challenges, a recent report published by the Los Angeles Economic Development Corporation (LAEDC) Institute of Applied Economics shows employment gains in the Los Angeles CSA in leisure/hospitality, transportation/warehousing, information,

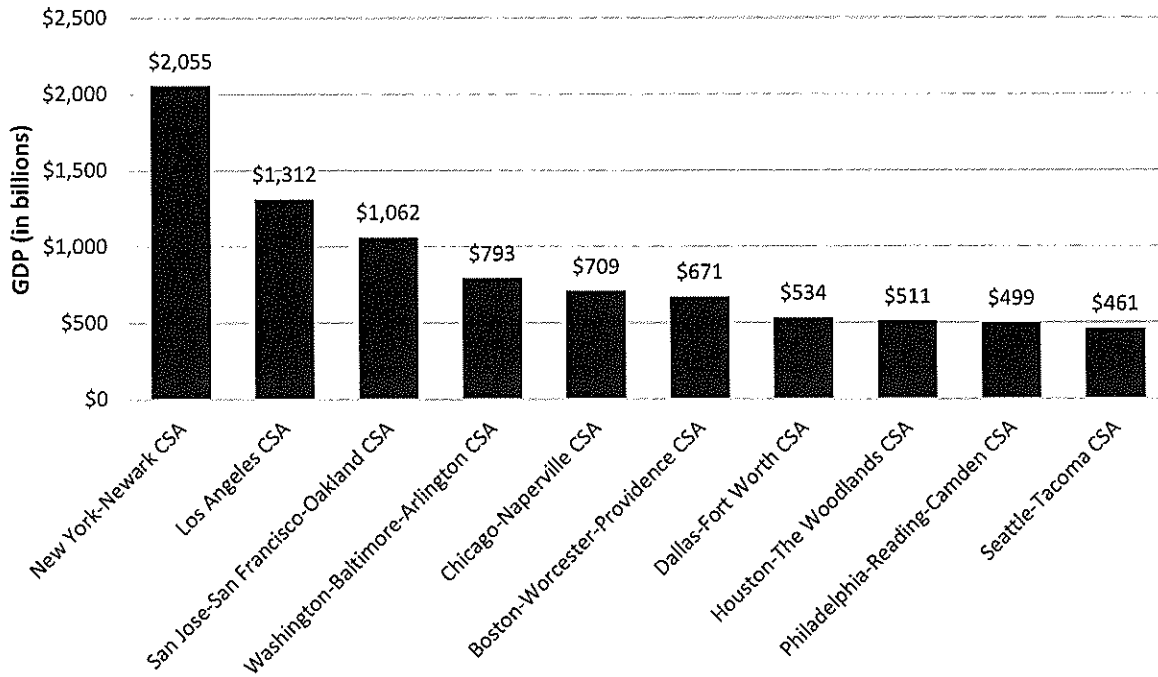
⁴⁰ U.S. Department of Labor, Bureau of Labor Statistics; California Employment Development Department, Labor Market Information Division, July 2021.

⁴¹ California Economic Outlook, 28 April 2021, Bank of the West, <https://www.bankofthewest.com/alpha/wealth-management/insights/economic-report/california-economic-outlook-april-2021.html>; "UCLA Anderson Forecast Anticipates Near-Record Growth as Economic Recovery Continues," 10 March 2021, UCLA Newsroom, <https://newsroom.ucla.edu/releases/anderson-forecast-anticipates-robust-growth-march-2021>; Beige Book, Federal Reserve Bank of San Francisco, 2 June 2021, Board of Governors of the Federal Reserve System, <https://www.federalreserve.gov/monetarypolicy/beigebook202106.htm>; *2021 Economic Forecast*, 20 June 2021, LAEDC Institute of Applied Economics, LAEDC-2021-Economic-Forecast_Final.pdf, accessed July 2021.

⁴² California Economic Outlook, 28 April 2021, Bank of the West, <https://www.bankofthewest.com/alpha/wealth-management/insights/economic-report/california-economic-outlook-april-2021.html>; *2021 Economic Forecast*, 20 June 2021, LAEDC Institute of Applied Economics, LAEDC-2021-Economic-Forecast_Final.pdf, accessed July 2021.

professional and business services, and education/health. In total, these five sectors are anticipated to account for approximately 83% of job gains in the Los Angeles CSA from 2021 through 2022.⁴³

Figure 20
2020 GROSS REGIONAL PRODUCT FOR TOP 10 METRO REGIONS



Note: Amounts shown in 2020 dollars.

Source: Woods & Poole Economics, Inc., June 2021.

⁴³ 2021 Economic Forecast, 20 June 2021, LAEDC Institute of Applied Economics, LAEDC-2021-Economic-Forecast_Final.pdf, accessed July 2021.

PASSENGER TRAFFIC AND AIRLINE SERVICE TRENDS

Trends in the number of enplaned passengers and airline service at the Airport are discussed in this section. The airlines serving the Airport, airline shares of enplaned passengers, top O&D markets for the Airport, and airline fares and yields are also discussed.

Airlines Serving the Airport

Table 9 lists the passenger airlines serving the Airport as of September 2021. A total of 15 U.S. flag airlines provided scheduled passenger service, including 5 network airlines, 4 regional airlines, and 6 low-cost airlines. Scheduled international passenger service was provided by 38 foreign-flag airlines, including 11 European airlines, 12 Asian airlines, 4 Middle Eastern airlines, 3 South Pacific airlines, 3 Latin American/Caribbean airlines, 3 Mexican airlines, and 2 Canadian airlines. In addition, 23 airlines provided scheduled all-cargo service as of September 2021.

Table 9
PASSENGER AIRLINES SERVING LOS ANGELES INTERNATIONAL AIRPORT
 September 2021

U.S.- flag airlines	Foreign-flag airlines		
Network Airlines	Asia	Latin America	Middle East/Africa
Alaska Airlines	Air China	Avianca Airlines (c)	El Al Israel
American Airlines	All Nippon Airways	Copa	Emirates
Delta Air Lines	Asiana Airlines	LATAM Airlines (d)	Qatar Airways
Hawaiian Airlines	Cathay Pacific Airways		Turkish Airlines
United Airlines	China Airlines	Europe	
	China Southern Airlines	Aeroflot	Mexico
Regional Airlines	EVA Airways	Air France	Aeroméxico
Boutique Air	Japan Airlines Co.	British Airways	VivaAerobus
Horizon Air (a)	Korean Air Lines	Finnair	Volaris (e)
SkyWest (b)	Philippine Airlines	Iberia	
Southern Airways Express	Singapore Airlines	KLM	Canada
	Xiamen Airlines	LOT	Air Canada
Low-Cost Airlines		Lufthansa	WestJet
Allegiant Air	South Pacific	SAS	
Frontier Airlines	Air New Zealand	SWISS	
JetBlue Airways	Air Tahiti Nui	Virgin Atlantic Airways	
Southwest Airlines	Fiji Airways		
Spirit Airlines			
Sun Country Airlines			

Note: Airlines providing scheduled service are shown.

(a) Horizon Airlines flies for Alaska Airlines.

(b) SkyWest Airlines flies for Alaska Airlines, American Airlines, Delta Air Lines, and United Airlines.

(c) Avianca Airlines includes Avianca Costa Rica and Avianca El Salvador.

(d) Includes LATAM Peru.

(e) Includes Volaris Costa Rica.

Source: OAG schedules accessed September 2021.

Enplaned Passenger Trends

Table 10 shows domestic and international enplaned passengers as well as originating and connecting passengers at the Airport from FY 2000 through FY 2020. The table also includes the March – December period for 2019 and 2020 to demonstrate the impact of the COVID-19 pandemic on passenger travel at the Airport.

Growth in the number of enplaned passengers at the Airport has exceeded national averages. From FY 2014 through FY 2019, growth in the number of enplaned passengers at the Airport increased on average 5.2% per year. During the same period, the number of enplaned passengers in the U.S. increased an average of 4.2% per year⁴⁴.

During 2020, the Airport experienced a 75% decrease in the number of international enplaned passengers, falling from 12.9 million in 2019 to 3.2 million in 2020. By the end of FY 2020, domestic passengers accounted for 71.5% of total enplaned passengers at the Airport, while international passengers accounted for 28.5% of the total. Although passenger volumes decreased in 2020 like most other airports in the nation, the Airport continued to mark its sixth consecutive year of growth in originating passenger share, where it grew from 76.4% in FY 2014 to an estimated 82.4% by the end of FY 2020, enhancing its position as the busiest O&D airport in the U.S., which is supported by regional economic drivers discussed earlier.

Prior to the COVID-19 pandemic, the Airport's number of enplaned passengers increased an average of 5.2% per year between FY 2014 and FY 2019. The growth in the number of enplaned passengers in FY 2019 was partially the result of strong growth in new airline service and additional seat capacity introduced by airlines at the Airport in recent years. From FY 2014 through FY 2019, the number of scheduled seats at the Airport increased by an average of 2.0% per year, which is higher than the average for the U.S. (1.7% for the same period⁴⁵). Between FY 2018 and FY 2019, the number of scheduled seats at the Airport increased 1.2%. Factors contributing to the expansion of airline capacity at the Airport include growing competition among domestic airlines that have been competing for passenger market share at the Airport, as well as the entry of several new foreign-flag airlines and new service on several international routes.

⁴⁴ U.S. Department of Transportation, T100 Database; represents average annual growth in the total number of U.S. enplaned passengers from the 12-months ended June 2014 through the 12-months ended June 2019.

⁴⁵ OAG schedules.

Table 10
HISTORICAL ENPLANED PASSENGERS AND ORIGINATING AND CONNECTING PASSENGERS

Fiscal Year	Enplaned Passengers			Annual Percent Change			Enplaned passengers		Percent of Total	
	Domestic	Int'l	Total	Domestic	Int'l	Total	Originating	Connecting	Originating	Connecting
2000	24,880,727	8,350,995	33,231,722	-%	-%	-%	25,409,525	7,822,197	76.5%	23.5%
2005	22,143,442	8,404,809	30,548,251	4.2	7.2	5.0	24,339,886	6,208,365	79.7	20.3
2006	22,030,697	8,624,449	30,655,146	(0.5)	2.6	0.3	24,253,196	6,401,950	79.1	20.9
2007	22,374,333	8,429,137	30,803,470	1.6	(2.3)	0.5	24,149,520	6,653,950	78.4	21.6
2008	22,427,379	8,714,960	31,142,339	0.2	3.4	1.1	24,633,456	6,508,883	79.1	20.9
2009	20,662,591	7,666,428	28,329,019	(7.9)	(12.0)	(9.0)	22,530,522	5,798,497	79.5	20.5
2010	21,127,610	7,875,532	29,003,142	2.3	2.7	2.4	22,736,952	6,266,190	78.4	21.6
2011	22,151,724	8,128,847	30,280,571	4.8	3.2	4.4	23,304,564	6,976,007	77.0	23.0
2012	23,019,627	8,497,290	31,516,917	3.9	4.5	4.1	24,063,472	7,453,445	76.4	23.6
2013	23,855,876	8,668,302	32,524,178	3.6	2.0	3.2	24,983,829	7,540,349	76.8	23.2
2014	25,016,409	9,316,116	34,332,525	4.9	7.5	5.6	26,213,331	8,119,194	76.4	23.6
2015	26,237,839	9,883,929	36,121,768	4.9	6.1	5.2	27,957,630	8,164,138	77.4	22.6
2016	28,070,161	10,888,408	38,958,569	7.0	10.2	7.9	30,906,141	8,052,428	79.3	20.7
2017	29,510,834	12,091,290	41,602,124	5.1	11.2	6.8	33,045,970	8,556,154	79.4	20.6
2018	30,604,926	12,948,089	43,553,015	3.7	7.1	4.7	35,103,730	8,449,285	80.6	19.4
2019	31,170,044	13,037,420	44,207,464	1.8	0.7	1.5	36,403,735	7,803,729	82.3	17.7
2020	22,483,684	8,945,773	31,429,457	(27.9)	(31.4)	(28.9)	25,884,614	5,544,834	82.4	17.6
Effect of the COVID-19 Pandemic										
Mar-Dec 2019	26,849,095	11,033,776	37,882,871				31,359,315	6,523,556	82.8	17.2
Mar-Dec 2020	6,769,368	1,475,673	8,245,041	(74.8)	(86.6)	(78.2)	7,338,287	906,754	89.0	11.0
Average annual percent increase (decrease)										
2000-2005	(2.3%)	0.1%	(1.7%)	(0.9%)			(0.9%)		(4.5%)	
2005-2010	(0.9)	(1.3)	(1.0)	(1.4)			(1.4)		0.2	
2009-2019	4.2	5.5	4.6	4.9			4.9		3.0	
2014-2019	4.5	7.0	5.2	6.8			6.8		(0.8)	

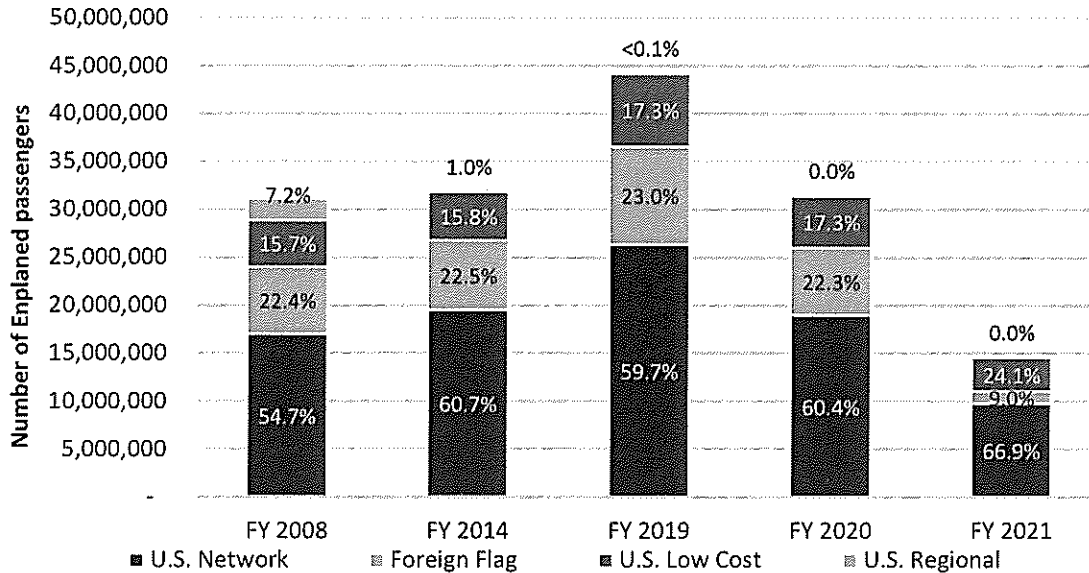
Sources: Department records; U.S. Department of Transportation O&D Survey Data accessed via AirlineData, Inc., accessed July 2021.

The percentage of connecting passengers at the Airport has been slowly decreasing over the past 10 years (FY 2009 through FY 2019), and in FY 2018 the number of connecting passengers represented less than 20% of the number of enplaned passengers at the Airport for the first time. In FY 2020, the percentage of connecting passengers at the Airport decreased further to an estimated low of 17.6% of the number of enplaned passengers (5.5 million), while originating passengers accounted for an estimated 82.4% of enplaned passengers (25.9 million), as carriers reduced their network due to the pandemic and focused on connecting passengers at their main hub airports elsewhere in the U.S.

Enplaned passenger traffic at the Airport by airline type in FY 2008, FY 2014, FY 2019, FY 2020, and FY 2021 is shown on Figure 21. U.S. network airlines continue to account for the largest share of enplaned passengers at the Airport. In FY 2019, the U.S. network and regional airlines accounted for approximately 59.7% of total enplaned passengers, while the foreign-flag airlines and U.S. low-cost airlines (LCCs) accounted for 23.0% and 17.3% of total enplaned passengers at the Airport, respectively. However, the pandemic has shifted airline type shares in FY 2020 and FY 2021 given the lack of international nonstop services offered by foreign flag carriers. This resulted in U.S. LCCs increasing their share of enplaned passengers at the Airport in FY 2021 by 6.8%, compared to FY 2019. In FY 2021, U.S. Network carrier shares increased by 7.2% compared to FY 2019, while foreign flag carriers decreased the greatest from 23.0% to 9.0%, a reduction of 14.0% from FY 2019 and FY 2021.

In comparison, the U.S. network airlines, foreign-flag airlines, U.S. low-cost, and U.S. regional airlines accounted for 54.7%, 22.4%, 15.7%, and 7.2% of total enplaned passengers at the Airport, respectively, in FY 2008. Between FY 2008 and FY 2019, the U.S. regional airlines' share of enplaned passengers at the Airport decreased from approximately 7.2% to less than 0.1%. This decrease reflects a reduced reliance by the U.S. network airlines on their regional affiliates that provide service for the network airlines using smaller regional aircraft.

Figure 21
HISTORICAL ENPLANED PASSENGERS BY AIRLINE TYPE
 Los Angeles International Airport



Notes: Excludes nonscheduled airlines. Totals may not add to 100.0% due to rounding.
 Sources: Department records.

Enplaned Passenger Market Shares

Airline service at the Airport is diverse and highly competitive, with no single airline accounting for more than 22.1% of total enplaned passengers in FY 2021. Table 11 presents a comparison of FY 2019 (pre-Covid) and FY 2021 enplaned passengers at the Airport by airline.

As shown on Figure 22 and Table 11, Delta Air Lines was the busiest airline at the Airport in terms of number of enplaned passengers in FY 2021, accounting for 22.1% of enplaned passengers at the Airport. American Airlines has the second largest market share of enplaned passengers at the Airport, accounting for 20.2% of enplaned passengers. Prior to FY 2021, American Airlines had been the busiest airline at the Airport in terms of number of enplaned passengers with approximately 19.0% of total enplaned passengers at the Airport since FY 2015. United Airlines has the third largest market share of enplaned passengers at the Airport, accounting for 14.9% of enplaned passengers in FY 2021. U.S. low-cost airline Southwest Airlines is the fourth busiest airline at the Airport, accounting for 10.4% of total enplaned passengers in FY 2021.

The majority of U.S. airlines at the Airport increased their market share of enplaned passengers between FY 2019 and FY 2021 as international airlines significantly reduced service as a result of the COVID-19 pandemic.

Table 11
ENPLANED PASSENGERS BY AIRLINE
 Los Angeles International Airport

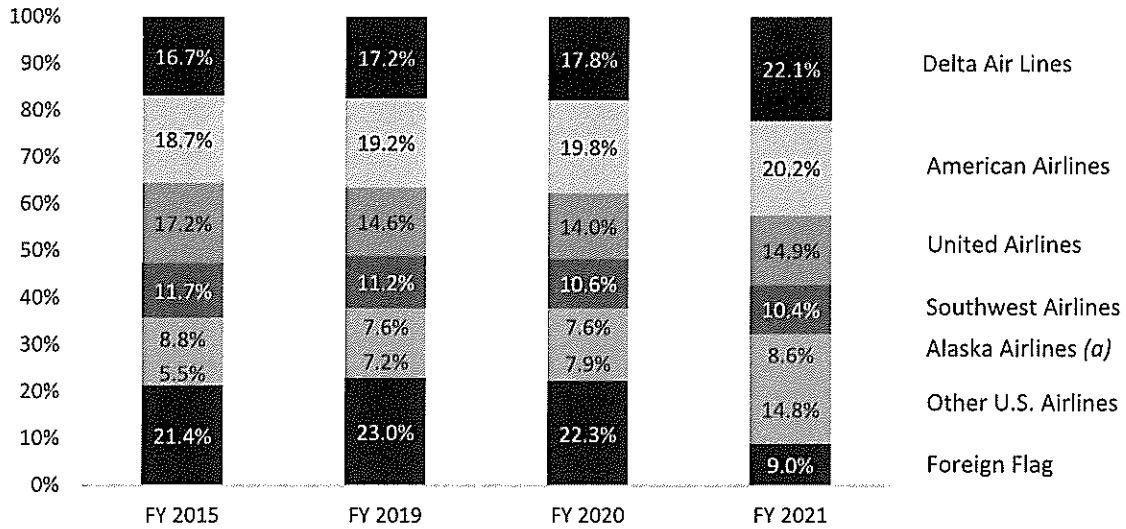
	Enplaned passengers		Percent of Airport total	
	FY 2019	FY 2021	FY 2019	FY 2021
U.S.-FLAG AIRLINES				
Network and regional airlines				
Delta Air Lines	7,624,050	3,220,176	17.2%	22.1%
American Airlines	8,470,061	2,947,247	19.2	20.2
United Airlines	6,444,715	2,170,164	14.6	14.9
Alaska Airlines	3,343,980	1,254,373	7.6	8.6
Hawaiian Airlines	518,062	173,243	1.2	1.2
All other	14,693	6,512	0.0	0.0
Subtotal – network and regionals	26,415,561	9,771,715	59.8%	67.0%
Low-cost airlines				
Southwest Airlines	4,955,873	1,523,531	11.2%	10.4
Spirit Airlines	1,257,930	935,538	2.8	6.4
JetBlue Airways	920,655	675,008	2.1	4.6
Frontier Airlines	146,362	186,000	0.3	1.3
All other	350,497	195,696	0.8	1.3
Subtotal – low-cost carriers	7,631,317	3,515,773	17.3%	24.1%
Total – U.S.-flag airlines	34,046,878	13,287,488	77.0%	91.0%
FOREIGN-FLAG AIRLINES (a)				
Volaris	421,391	234,033	1.0%	1.6%
Aeroméxico	400,446	110,998	0.9	0.8
Avianca	324,083	80,099	0.7	0.5
VivaAerobus	57,729	73,849	0.1	0.5
Turkish Airlines	114,626	67,351	0.3	0.5
Qatar Airways	77,960	56,305	0.2	0.4
Lufthansa	315,443	51,415	0.7	0.4
Air France	309,134	45,401	0.7	0.3
Korean Airlines	251,471	44,591	0.6	0.3
Emirates	140,969	43,256	0.3	0.3
China Southern	224,701	41,383	0.5	0.3
Philippine Airlines	225,634	38,636	0.5	0.3
All other	7,296,999	418,986	16.5	2.9
Total – foreign-flag airlines	10,160,586	1,306,303	23.0%	9.0%
Airport total	44,207,464	14,593,791	100.0%	100.0%

Notes: The U.S. network airlines include associated regional affiliates. Columns may not add to totals shown due to rounding.

Source: Department records.

(a) In FY 2021, certain foreign airlines ceased or substantially reduced service to the Airport as a result of the negative effects of the COVID-19 pandemic.

Figure 22
AIRLINE MARKET SHARES OF ENPLANED PASSENGERS
 Los Angeles International Airport



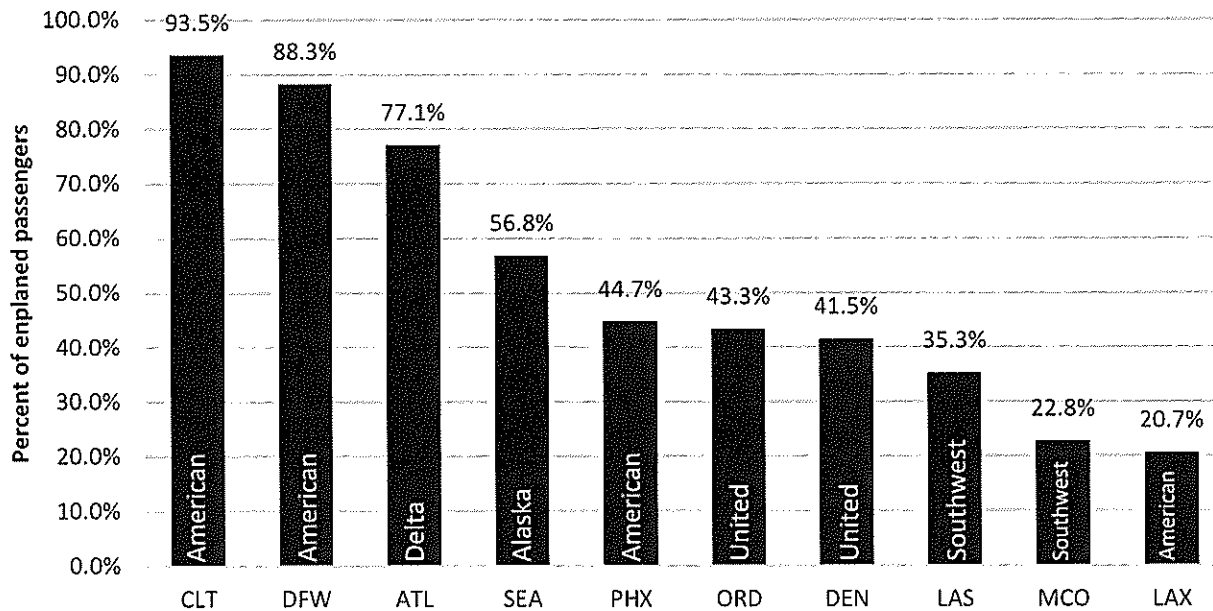
Notes: U.S. network airlines include associated regional affiliates. Totals may not add to 100.0% due to rounding.
 Source: Department records.

(a) Reflects the consolidation of Virgin America and Alaska Airlines.

As shown on Figure 23, during the 12-month period ending December 2020 (the most recent domestic and international traffic data available), the share of enplaned passengers carried by the largest airline at the Airport, American Airlines⁴⁶ (20.7% share of total enplaned passengers in 2020), is less than the busiest airlines at the other top 10 U.S. airports. Among the Airport’s top 10 large hub U.S. airport peers, the Airport offers the greatest diversity of air carriers and does not rely solely on a single carrier’s hub strategy for growth, unlike Charlotte Douglas International, Dallas Fort Worth International, and Hartsfield-Jackson Atlanta International airports, which are major hub airports for American Airlines and Delta Air Lines that rely on high passenger connecting rates and account for greater than 75% of total enplanements in 2020.

⁴⁶ Since December 2020 Delta Air Lines has become the largest airline at the airport in terms of enplaned passenger market share, as indicated on Table 11 and Figure 22.

Figure 23
SHARE OF PASSENGERS CARRIED BY LARGEST AIRLINE AT TOP 10 U.S. AIRPORTS
 2020



CLT = Charlotte Douglas International	ORD = Chicago O'Hare International
DFW = Dallas/Fort Worth International	DEN = Denver International
ATL = Hartsfield-Jackson Atlanta International	LAS = McCarran Las Vegas International
SEA = Seattle-Tacoma International	MCO = Orlando International
PHX = Phoenix Sky Harbor International	LAX = Los Angeles International

Notes: Top 10 airports based on total enplaned passengers in 2020. Results on Figure 23 are different than shown in Table 11 due to the use of different data sources.

Source: U.S. Department of Transportation, T100 database, accessed July 2021 through AirlineData Inc., for the airports shown.

Domestic Origin-Destination Market

For the 12 months ended March 2021 (the latest available domestic O&D traffic data), the top 20 domestic passenger markets accounted for 70.7% of domestic O&D passengers at the Airport, as shown in Table 12. New York and Dallas/Ft. Worth were the top two destination markets for O&D passengers accounting for 7.3% and 6.3%, respectively, of domestic O&D passengers at the Airport. Other major markets at the Airport include Chicago, Miami, and Atlanta. Each of the top 20 domestic markets has nonstop service offered by at least two airlines, according to OAG forward September 2021 schedules.

Table 12
DOMESTIC ORIGIN-DESTINATION MARKETS AND AIRLINE SERVICE
 Los Angeles International Airport

Rank	Market	O&D passengers (000s)	Percent of domestic O&D passengers	Air miles from LAX	Average daily scheduled nonstop departures		Number of airlines providing nonstop service	
					2019	2021	2019	2021
1	New York (a)	989.4	7.3%	2,469	50	35	6	6
2	Dallas/Fort Worth (b)	846.7	6.3%	1,237	28	23	5	5
3	Chicago (c)	788.9	5.8%	1,746	28	23	5	4
4	Miami (d)	628.3	4.7%	2,342	12	14	4	4
5	Atlanta	595.2	4.4%	1,946	17	15	5	3
6	San Francisco (e)	581.4	4.3%	329	81	68	6	7
7	Denver	541.1	4.0%	862	24	24	6	6
8	Houston (f)	540.0	4.0%	1,382	18	20	4	5
9	Washington (g)	532.1	3.9%	2,305	20	13	6	6
10	Las Vegas	529.8	3.9%	236	38	29	8	7
11	Seattle	421.7	3.1%	954	29	22	4	4
12	Orlando	397.5	2.9%	2,217	6	8	4	4
13	Phoenix	335.8	2.5%	370	23	22	4	4
14	Austin	283.1	2.1%	1,067	12	14	5	7
15	Detroit	273.5	2.0%	1,744	8	7	2	2
16	Boston	265.7	2.0%	2,611	14	12	5	4
17	Salt Lake City	264.5	2.0%	590	16	18	5	6
18	Minneapolis/St. Paul	248.7	1.8%	1,536	9	8	3	3
19	Philadelphia	238.6	1.8%	2,401	8	6	3	2
20	Nashville	232.3	1.7%	1,494	6	8	4	4
	Cities listed	9,534.0	70.7%		445	389		
	Other cities	3,959.9	29.3%		235	201		
	All cities	13,493.9	100.0%		680	590		

Notes: O&D passenger data for the 12 months ended March 2021. Columns may not add to totals shown due to rounding. Nonstop departure schedules reference the month of September.

(a) Newark Liberty International, LaGuardia, and John F. Kennedy International airports.

(b) Dallas-Fort Worth International Airport and Love Field.

(c) Chicago O'Hare and Chicago Midway international airports.

(d) Miami and Fort Lauderdale Hollywood international airports.

(e) San Francisco, Oakland, and Mineta San José international airports.

(f) Bush Intercontinental Airport/Houston and William P. Hobby Airport.

(g) Reagan Washington National, Baltimore/Washington International Thurgood Marshall, and Washington Dulles International airports.

Sources: U.S. Department of Transportation, O&D Survey; OAG schedules.

International Origin-Destination Market

For the 12 months ended May 2021 (the latest available international data), the busiest 20 international passenger markets accounted for 63.9% of total international O&D passengers at the Airport, as shown in Table 13.

Table 13
INTERNATIONAL ORIGIN-DESTINATION MARKETS AND AIRLINE SERVICE
 Los Angeles International Airport

Rank	Market	O&D Passengers (000s)		Variance (%)	Percent of international O&D passengers (2021)	Average daily scheduled nonstop departures		Number of airlines providing nonstop service	
		2019	12-months ending May 2021			2019	2021	2019	2021
1	Guadalajara	866.6	479.1	-45%	12.4%	9	9	5	4
2	San Jose del Cabo	522.4	333.2	-36%	8.6%	4	7	4	6
3	Mexico City (a)	666.5	281.5	-58%	7.3%	10	9	5	5
4	Cancun	531.1	281.4	-47%	7.3%	3	5	4	5
5	Puerto Vallarta	360.7	198.8	-45%	5.2%	4	5	4	5
6	San Salvador	337.9	156.7	-54%	4.1%	4	5	2	4
7	Seoul (b)	734.5	98.6	-87%	2.6%	4	4	2	2
8	Guatemala City	268.3	96.8	-64%	2.5%	2	3	3	4
9	Manila	627.0	76.5	-88%	2.0%	2	1	1	1
10	London (c)	1,233.4	58.7	-95%	1.5%	10	5	6	3
11	San Jose	191.1	54.3	-72%	1.4%	1	2	2	3
12	San Juan	94.4	48.5	-49%	1.3%	-	-	-	-
13	Guangzhou	198.2	46.6	-76%	1.2%	1	0	1	1
14	Tokyo (d)	873.0	41.0	-95%	1.1%	9	4	6	4
15	Taipei (e)	383.7	38.0	-90%	1.0%	4	2	2	2
16	Liberia	99.8	37.9	-62%	1.0%	1	1	2	3
17	Paris (f)	779.7	37.6	-95%	1.0%	5	3	5	2
18	Istanbul	84.1	33.6	-60%	0.9%	1	2	1	1
19	Tehran	64.2	33.3	-48%	0.9%	-	-	-	-
20	Dubai	96.7	33.0	-66%	0.9%	1	1	1	1
	Cities listed	9,013.2	2,465.1	-73%	63.9%	75	68		
	Other cities	14,555.7	1,394.1	-90%	36.1%	95	43		
	All cities	23,569.0	3,859.2	-84%	100.0%	171	111		

Notes: O&D passenger data for 2019 and 12 months ended May 2021. Data are for international O&D passengers. Columns may not add to totals shown due to rounding.

(a) Mexico City (Benito Juarez) and Toluca international airports.

(b) Incheon and Gimpo international airports.

(c) Heathrow, Gatwick, Stansted, Luton, and London City airports.

(d) Tokyo International Airport/Haneda and Tokyo Narita International Airports.

(e) Taoyuan International and Sungshan airports.

(f) Charles de Gaulle and Orly international airports.

Sources: International Air Transport Association Airport; OAG schedules.

Seven of the top 10 international markets are located in nearby Mexico and Central America. Guadalajara was the busiest O&D market accounting for 12.4% of total international O&D passengers, followed by San Jose del Cabo (8.6%), Mexico City (7.3%), Cancun (7.3%), and Puerto Vallarta (5.2%). Many of the nearby Latin American markets are expected to return and even exceed the 2019 number of average daily nonstop service, given the relatively faster paced recovery evidenced in those markets. Most demand to Mexico has already recovered more than 50% of 2019 levels, especially among leisure destinations. London, which was the busiest O&D market in CY 2019, is ranked tenth as of 12-months ending May 2021, where traffic demand continues to remain nearly non-existent at about 95% below 2019 levels.

Airfares

Table 14 provides a comparison of average domestic one-way airfares⁴⁷ paid by passengers using the Airport and the four closest commercial service airports in the Los Angeles CSA, using data for the 12-months ended March 2021. While the Airport's overall domestic airfare for all cities on a weighted average basis is the highest among the Los Angeles CSA airports, this higher average fare is primarily driven by the high fares and large traffic volume in the premium Los Angeles–New York O&D passenger market, likely the result of business travel between those two markets. When comparing fares in other top domestic passenger markets, the Airport's airfares are competitive to airline service offered at other Los Angeles CSA airports.

The Airport accounted for approximately 89.7% of Los Angeles CSA domestic O&D passengers in all of its top 10 long-haul markets (1,500 miles or more) through the 12 months ended March 2021 (the latest available data). This reflects the Airport's role in the Los Angeles CSA providing service on longer haul domestic trips. The Airport accounted for more than 66.1% of domestic O&D passengers in most of the top medium-haul markets in the Los Angeles CSA. In short-haul markets, the Airport accounted for approximately 49.4% share of Los Angeles CSA domestic O&D passengers.

Scheduled Airline Service

In September 2021, the airlines serving the Airport are expected to provide scheduled services to 88 domestic destinations and 66 international destinations. This compares to 87 domestic destinations and 87 international destinations as of September 2019. On average, 678 daily departures are scheduled, which includes 570 daily domestic departures and 108 daily international departures.

International service was provided to seven international regions—Europe, the Middle East, Asia, the South Pacific, Canada, Mexico, and Latin America/the Caribbean—as shown on Figure 24.

⁴⁷ The airfares that airlines report to the U.S. Department of Transportation are exclusive of many ancillary charges (fees for checked baggage and preferred aircraft seating, for example) and may understate the passenger's actual cost of airline travel given the increased implementation of such fees beginning in 2008.

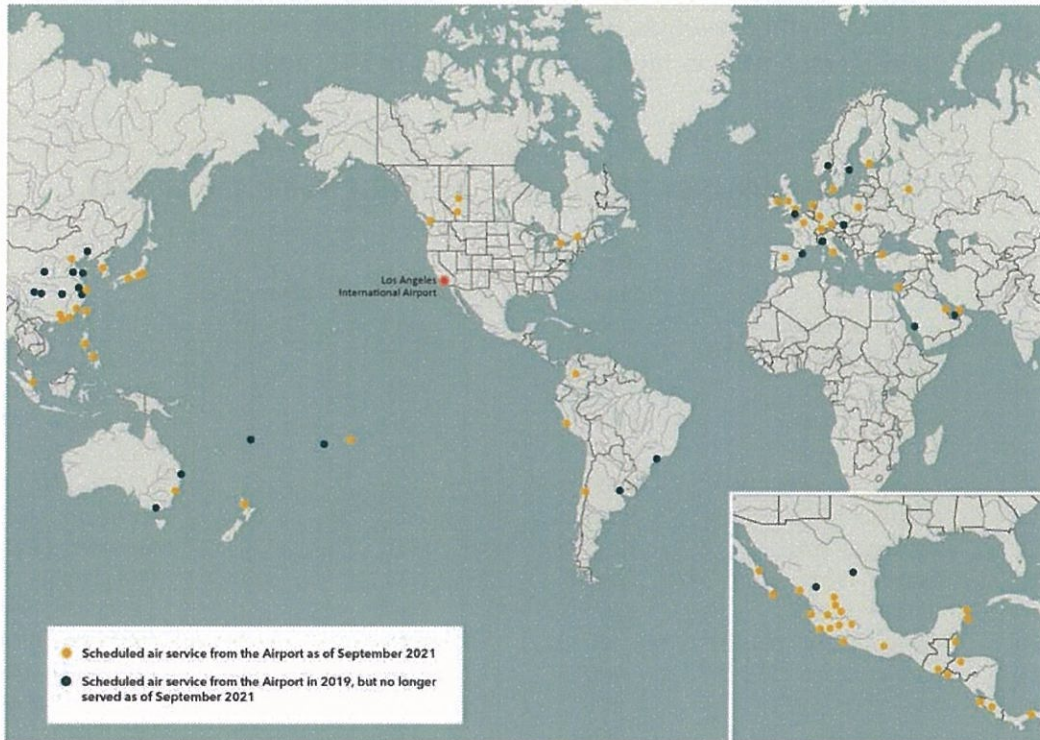
Table 14
COMPARISON OF AIRFARES IN LOS ANGELES' TOP 20 DOMESTIC O&D MARKETS
 Los Angeles CSA Air Carrier Airports

Rank	Market	LAX O&D passengers (000s)	Air miles from LAX	Length of haul	LAX Share of Los Angeles CSA	Average one-way domestic airfare paid				
						LAX	John Wayne	LA/Ontario	Burbank	Long Beach
1	New York (a)	989.4	2,469	Long	94%	\$218	\$188	\$162	\$114	\$184
2	Dallas/Fort Worth (b)	846.7	1,237	Medium	75%	\$87	\$173	\$136	\$154	\$79
3	Chicago (c)	788.9	1,746	Long	89%	\$96	\$183	\$154	\$140	\$69
4	Miami (d)	628.3	2,342	Long	95%	\$142	\$179	\$152	\$133	\$85
5	Atlanta	595.2	1,946	Long	86%	\$152	\$224	\$197	\$175	\$112
6	San Francisco (e)	581.4	329	Short	45%	\$74	\$82	\$81	\$76	\$71
7	Denver	541.1	862	Medium	57%	\$59	\$88	\$69	\$100	\$48
8	Houston (f)	540.0	1,382	Medium	83%	\$94	\$164	\$146	\$121	\$92
9	Washington (g)	532.1	2,305	Long	88%	\$141	\$162	\$154	\$141	\$106
10	Las Vegas	529.8	236	Short	60%	\$46	\$68	\$72	\$63	\$48
11	Seattle	421.7	954	Medium	53%	\$105	\$126	\$116	\$126	\$76
12	Orlando	397.5	2,217	Long	87%	\$104	\$173	\$126	\$145	\$77
13	Phoenix	335.8	370	Short	44%	\$66	\$81	\$82	\$76	\$64
14	Austin	283.1	1,067	Medium	77%	\$84	\$143	\$122	\$124	\$72
15	Detroit	273.5	1,744	Long	88%	\$149	\$195	\$172	\$138	\$149
16	Boston	265.7	2,611	Long	90%	\$203	\$179	\$184	\$108	\$138
17	Salt Lake City	264.5	590	Medium	52%	\$109	\$164	\$115	\$120	\$120
18	Minneapolis/St. Paul	248.7	1,536	Long	86%	\$100	\$203	\$143	\$118	\$94
19	Philadelphia	238.6	2,401	Long	85%	\$140	\$167	\$159	\$141	\$92
20	Nashville	232.3	1,494	Medium	72%	\$106	\$126	\$123	\$102	\$92
	Cities listed	9,534.0			72%	\$116	\$121	\$112	\$94	\$76
	Other cities	3,959.9			63%	\$155	\$140	\$138	\$122	\$101
	All cities	13,493.9			69%	\$128	\$128	\$124	\$104	\$85

Note: Short-haul flights are 500 miles or less, medium-haul flights are 501 to 1,500 miles, and long-haul flights are more than 1,500 miles. Data reflects the 12 months ended March 2021.

- (a) Newark Liberty International, LaGuardia, and John F. Kennedy International airports.
- (b) Dallas-Fort Worth International Airport and Love Field.
- (c) Chicago O'Hare and Chicago Midway international airports.
- (d) Miami and Fort Lauderdale Hollywood international airports.
- (e) San Francisco, Oakland, and Mineta San José international airports.
- (f) Bush Intercontinental Airport/Houston and William P. Hobby Airport.
- (g) Reagan Washington National, Baltimore/Washington International Thurgood Marshall, and Washington Dulles International airports. Sources: U.S. Department of Transportation, O&D Survey via AirlineData, Inc.

Figure 24
SCHEDULED INTERNATIONAL AIRLINE SERVICE IN SEPTEMBER 2021
 Los Angeles International Airport



ASIA	SOUTH PACIFIC	NORTH AMERICA	EUROPE
China • Beijing • Guangzhou • Hong Kong • Shanghai • Shenzhen • Xiamen Japan • Osaka • Tokyo (Haneda) • Tokyo (Narita) Philippines • Cebu • Manila Seoul, South Korea Singapore, Singapore Taipei, Taiwan	Auckland, New Zealand Sydney, Australia Tahiti, French Polynesia LATIN AMERICA Costa Rica • Liberia • San Jose Belize City, Belize Bogota, Colombia Guatemala City, Guatemala Lima, Peru Panama City, Panama San Pedro Sula, Honduras San Salvador, El Salvador Santiago, Chile	Canada • Calgary • Edmonton • Montreal • Toronto • Vancouver Mexico • Aguascalientes • Cancun • Cozumel • Guadalajara • Ixtapa/Zihuatanejo • Leon/Guanajuato • Loreto • Manzanillo • Mazatlan • Mexico City • Morelia • Oaxaca • Puerto Vallarta • San Jose del Cabo • Uruapan • Zacatecas	United Kingdom • London • Manchester Germany • Frankfurt • Munich Amsterdam, Netherlands Copenhagen, Denmark Dublin, Ireland Helsinki, Finland Istanbul, Turkey Madrid, Spain Moscow, Russia Paris, France Rome, Italy Warsaw, Poland Zurich, Switzerland MIDDLE EAST Doha, Qatar Dubai, United Arab Emirates Tel Aviv, Israel

Source: OAG schedules accessed July 2021.

FARE REVENUE AT LARGE HUB AIRPORTS

The Airport is a highly desirable market for both domestic and international airlines. Table 15 shows that during the 12-month period ending March 2021, the airlines serving the Airport generated \$1.7 billion in fare revenue, which is 14.6% more fare revenue than the next largest airport (Hartsfield-Jackson Atlanta International Airport or ATL) and the most fare revenue of all the large hub U.S. airports.

Table 15
DOMESTIC AIRLINE FARE REVENUE AT LARGE HUB U.S. AIRPORTS

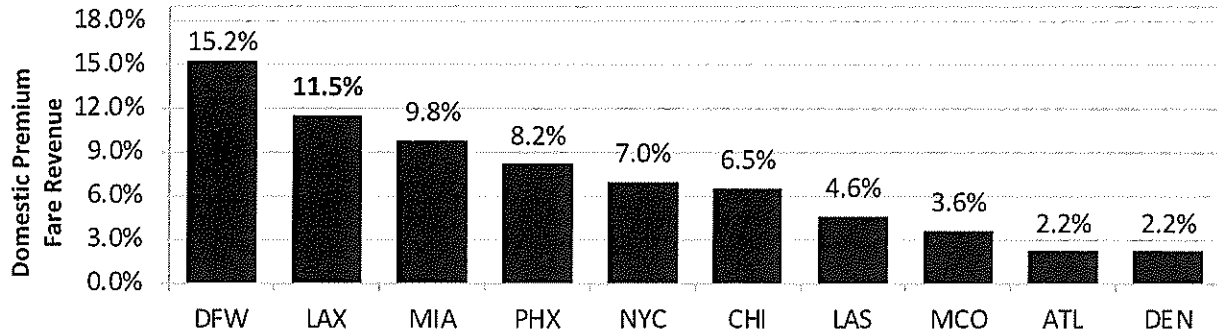
Revenue rank	O&D passengers rank	Airport	Fare revenue (\$ millions)	Revenue rank	O&D passengers rank	Airport	Fare revenue (\$ millions)
1	4	Los Angeles - LAX	\$1,721	16	14	Minneapolis - MSP	792
2	5	Atlanta - ATL	1,502	17	15	Detroit - DTW	788
3	1	Denver - DEN	1,485	18	19	San Diego - SAN	762
4	6	Phoenix - PHX	1,431	19	18	Boston - BOS	742
5	7	Dallas/Ft Worth - DFW	1,327	20	13	Miami - MIA	733
6	2	Orlando - MCO	1,219	21	25	New York - JFK	656
7	3	Las Vegas - LAS	1,206	22	24	Charlotte - CLT	633
8	10	Seattle - SEA	1,165	23	17	Philadelphia - PHL	633
9	8	Chicago - ORD	1,074	24	22	Baltimore - BWI	529
10	20	Salt Lake City - SLC	897	25	23	Nashville - BNA	521
11	21	San Francisco - SFO	847	26	27	LaGuardia - LGA	443
12	11	New York - EWR	827	27	26	Chicago - MDW	356
13	9	Ft Lauderdale - FLL	824	28	28	Washington - IAD	346
14	16	Houston - IAH	814				
15	12	Tampa - TPA	798				

Source: U.S. Department of Transportation, O&D Survey, 12-months ending March 2021 through AirlineData Inc., for the airports shown.

Premium airline revenue, which includes fare revenue generated by passengers that traveled in business class or first class, is a desirable and profitable market to serve and is a very large segment of the market served at the Airport.

Figure 25 shows that the Airport ranks second among the busiest 10 U.S. large hub airport O&D markets in terms of the percent of total domestic fare revenues that each airport generated from domestic premium fare revenues. The combination of a large O&D passenger market and large percentage of premium fare passengers makes the Airport one of the most valuable airports to serve in the U.S.

**Figure 25
DOMESTIC PREMIUM FARE REVENUES AS A PERCENT OF TOTAL DOMESTIC FARE REVENUE
AT THE BUSIEST 10 U.S. LARGE HUB AIRPORT O&D MARKETS**



*Markets with multiple airports:
 NYC= EWR, JFK, and LGA
 MIA = FLL and MIA
 DFW = DAL and DFW
 CHI = MDW and ORD

LAX = Los Angeles International
 MCO = Orlando International
 LAS = McCarran Las Vegas International
 PHX = Phoenix Sky Harbor International
 DEN = Denver International
 ATL = Hartsfield-Jackson Atlanta International

Source: U.S. Department of Transportation, O&D Survey, 12-months ending March 2021 through AirlineData Inc., for the airports shown.

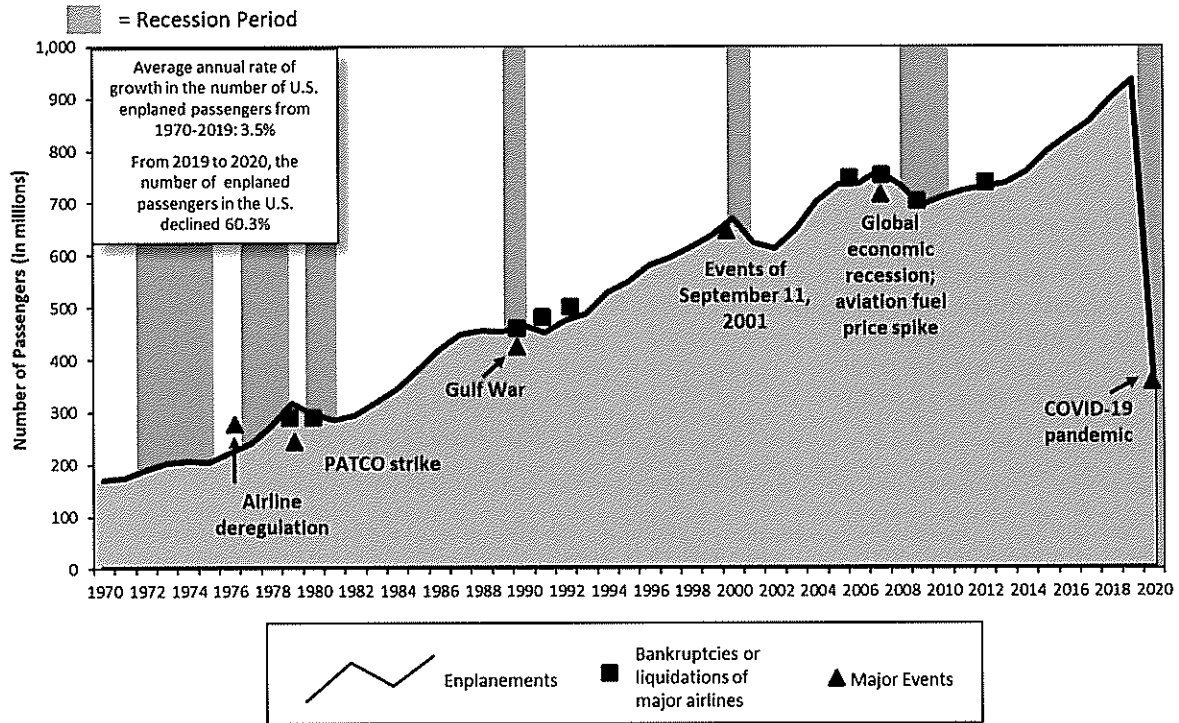
KEY FACTORS AFFECTING FUTURE AIRLINE TRAFFIC

Historically, airline passenger traffic nationwide has correlated closely with the state of the U.S. economy and levels of real disposable income. As shown on Figure 26, recessions in the U.S. economy in 2001 and 2008-2009 contributed to a reduction in airline travel in those years, likely as a result of high unemployment and reduced discretionary income. However, the aviation industry has recovered from prior recessions and passenger traffic has increased. From 1970 through 2020, the total numbers of domestic and international enplaned passengers in the United States increased an average of 3.5% per year. From 2019 to 2020, the total number of passenger traffic in the United States decreased by 60.3% as the result of the negative effects on air travel from the COVID-19 pandemic, which was the largest single year decrease in passenger traffic from 1970 through 2020.

The Airport has consistently rebounded from external events and periods of weak demand in aviation activity. After the events of September 11, 2001, similar to other airports across the nation, the Airport was affected by significant passenger and seat capacity reductions associated with airline bankruptcy reorganizations and sharply rising fuel prices. By FY 2008, approximately 7 years after the events of September 11, 2001, the number of enplaned passengers at the Airport were approximately 90.0% of the pre-September 11, 2001 number of enplaned passengers of 33.8 million in FY 2001. However, in FY 2009, the number of enplaned

passengers at the Airport decreased to 28.3 million as the recession in 2008-2009 resulted in decreasing airline travel demand at the Airport, the nation and internationally. As a result of the 2008-2009 recession and the recovery from that event, the number of enplaned passengers at the Airport did not reach pre-September 11, 2001, numbers at the Airport until FY 2014.

Figure 26
TOTAL U.S. ENPLANED PASSENGERS



Note: PATCO = Professional Air Traffic Controllers Organization.

Source: Airlines for America (formerly Air Transport Association of America) through 1997; thereafter, U.S. Department of Transportation Bureau of Transportation Statistics.

The number of enplaned passengers at the Airport in each year FY 2012 through FY 2020 exceeded the number of enplaned passengers at the Airport during the recession in 2008-2009, in part due to a strong O&D market and continued growth in the numbers of domestic and international passengers using the Airport.

As a result of the COVID-19 pandemic starting in or around March 2020, significant decreases in aviation activity and seat capacity occurred at the Airport, in the United States, and globally as a result of, among other reasons, widespread travel restrictions, border closures, quarantines, and concerns regarding the exposure to and transmission of COVID-19. From 2019 to 2020, the number of enplaned passengers at the Airport decreased by 67.4% and 60.3% for the nation.

In December 2020, vaccines to protect against COVID-19 became available and vaccinations against COVID-19 started to occur. As of the date of this 2021DE Report, the rate of full

vaccination⁴⁸ was approximately 54.0% in the United States and 29.6% worldwide. As a result of the availability of COVID-19 vaccines and loosening travel restrictions, domestic air travel at the Airport and the United States has increased during the first five months of 2021 as compared to the same period of 2020⁴⁹.

The major factors that continue to affect the airline industry and that are expected to influence airline service and traffic levels at the Airport during the Forecast Period are discussed below.

Airline Bankruptcies and Consolidation, Alliances, and New Entrants

Since the terrorist attacks of September 11, 2001, American Airlines, Delta Air Lines, Southwest Airlines and United Airlines have transformed their business models through a combination of bankruptcy, mergers, and the formation of new or strengthening alliances with domestic and global airlines. The domestic airline industry, which includes the addition of two new airlines in 2021, will continue to evolve as it emerges from the negative effects of the COVID-19 pandemic through, potentially, higher fares, limited domestic seat capacity growth, or by focusing on premium business and leisure passengers to generate more revenue.

U.S. Airline Bankruptcies and Consolidation. The events of September 11, 2001, and the difficult operating conditions caused by high fuel prices and a global recession led to a number of airline bankruptcies and mergers over the past two decades. Between 2002 and 2011, all of the major U.S. network airlines (US Airways, United Airlines, Northwest Airlines, Delta Air Lines, and American Airlines) filed for Chapter 11 bankruptcy protection to reorganize and lower operating costs.

The U.S. airline industry has been moving toward consolidation, with many high-profile mergers and acquisitions. Mergers among the U.S. network airlines have included: Delta Air Lines and Northwest Airlines (October 2008), United Airlines and Continental Airlines (August 2010), and American Airlines and US Airways (December 2013). Other mergers included low-cost airline Frontier Airlines and regional airline Midwest Airlines in April 2010, Southwest Airlines and AirTran Airways in April 2011, and Alaska Airlines and Virgin America (December 2016).

As a result of airline mergers, seat capacity has become more concentrated among fewer airlines. The three largest U.S. network airlines, as measured by numbers of enplaned passengers (American Airlines, Delta Air Lines, and United Airlines), currently have a strong presence at the Airport, as shown in Table 11, and as indicated in FY 2019 and FY 2021, respectively: American Airlines (19.2% and 20.2%), Delta Air Lines (17.2% and 22.1%), and United Airlines (14.6% and 14.9%).

Airline Alliances. Airlines worldwide have sought to increase revenues, share costs, and expand the reach of their route networks by developing international partnerships through

⁴⁸ Data accessed on September 9, 2021, www.google.com.

⁴⁹ 2019 traffic levels were not used for purposes of this comparison since the first 3-months of 2019 did not experience substantial decreases in aviation activity due to the COVID-19 pandemic.

multilateral alliances or joint ventures. The three busiest airline alliances accounted for approximately 67.3% of total enplaned passengers at the Airport in FY 2019 (prior to the COVID-19 pandemic), which amount increased to 71.2% in FY 2021. In recent years, antitrust immunity has been granted to a number of joint ventures within the global alliances, allowing airlines to more closely coordinate operations, including pricing, and increase cost savings in international markets.

In February 2021, American Airlines (the busiest airline at the Airport as measured by the number of enplaned passengers in FY 2020) and JetBlue Airways (the seventh busiest airline at the Airport as measured by the number of enplaned passengers in FY 2020) received regulatory approval for and started a new Northeast-focused alliance whereby JetBlue is flying certain domestic routes previously flown by American Airlines and each airline is providing passengers with reciprocal mileage earning benefits.

In March 2021, Alaska Airlines (the fifth busiest airline at the Airport as measured by the number of enplaned passengers in FY 2020) joined the oneworld alliance with American Airlines and, similar to the JetBlue Airways and American Airlines Northeast-focused alliance, passengers on Alaska Airlines will have reciprocal mileage earning benefits with American and oneworld partners.

New Entrants. In 2021, Avelo Airlines and Breeze Airways began service in markets that have been largely ignored or underserved by larger airlines (e.g., Southwest Airlines, United Airlines). In July 2021, Avelo had 49 total scheduled departures per week with Boeing 737-800 aircraft and Breeze had 91 total scheduled departures per week with Embraer E195 and E190 aircraft. Only Avelo Airlines provides service to an airport in the Los Angeles CSA other than Los Angeles International Airport.

A number of domestic and international airlines have filed for bankruptcy protection (e.g., Virgin Australia, Avianca Holdings, LATAM and others) or have ceased operations (Miami Air International, Trans State Airlines, Compass Airlines, and others) as a result of substantial decreases in air travel resulting from the COVID-19 pandemic.

Given the Airport's diverse air service market and large O&D market, any future U.S. airline consolidation caused by bankruptcies or mergers, or airlines ceasing operations is not anticipated to have a detrimental long-term effect on airline service at the Airport and any introduction of new airline service at the Airport will strengthen an already diverse and competitive air service market.

Airline Capacity Discipline

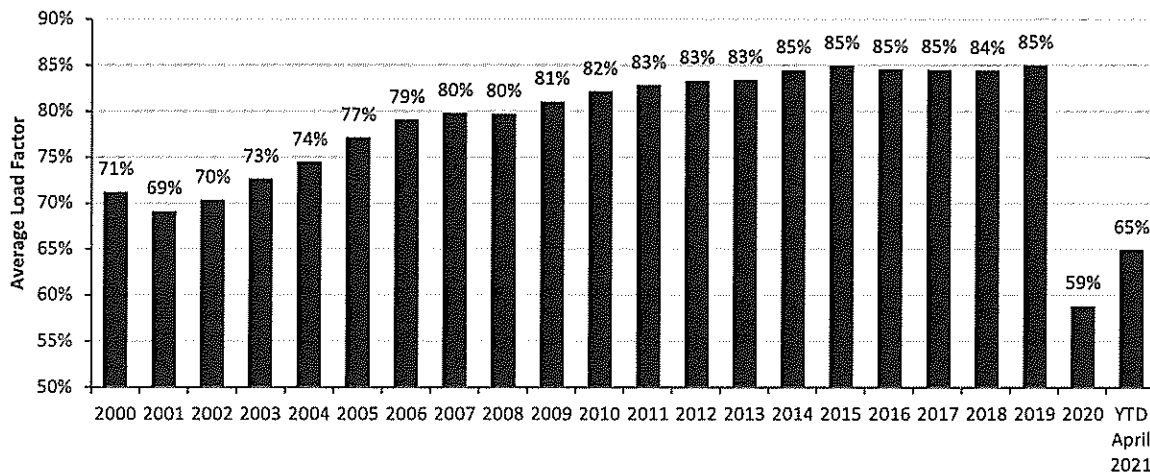
A new focus on capacity discipline among U.S. airlines emerged from the 2008-2009 national recession and financial crises as the network airlines and the low-cost airlines substantially reduced seat capacity and withdrew service from less profitable and low passenger demand markets. Large-hub airports, such as the Airport, have experienced fewer decreases in seat capacity as compared to smaller regional markets across the United States, which have lost

commercial service as a result. Airline emphasis has shifted from increasing market share to managing supply-and-demand on specific routes. Airlines are expected to maintain capacity discipline in the near term, emphasizing slower capacity growth and the use of right-sized aircraft to serve their markets.

Seat capacity reductions in the U.S. in 2008 and 2009, as well as the current airlines’ emphasis on seat capacity control, have resulted in an all-time high in passenger load factors. Figure 27 shows the upward trend in U.S. domestic airline aircraft load factors since 2000. The average domestic airline aircraft load factor was approximately 71% in 2000. The decrease in the average load factor in 2001 occurred as passenger traffic decreased faster than the airlines could adjust to the effects of September 11, 2001 by reducing capacity. Following 2001, load factors in the United States rose steadily to approximately 85% in 2014 and have remained level through 2019. From FY 2014 through FY 2019, the average domestic load factors at the Airport were slightly higher than the national averages for the same years.

Seat capacity reductions in the U.S. in 2020 and for the first four months of 2021 (the latest available data) decreased as a result of the economic closures, travel restrictions, border closures, and public health concerns associated with the COVID-19 pandemic. The load factor in 2020 was 59%, the lowest amount in the past 20 years.

Figure 27
HISTORICAL U.S. DOMESTIC AIRLINE SERVICE AIRCRAFT LOAD FACTORS



Note: Includes scheduled airline service only.
 Sources: U.S. Department of Transportation, T100 Onboard Data.

Low-Cost Airline Growth

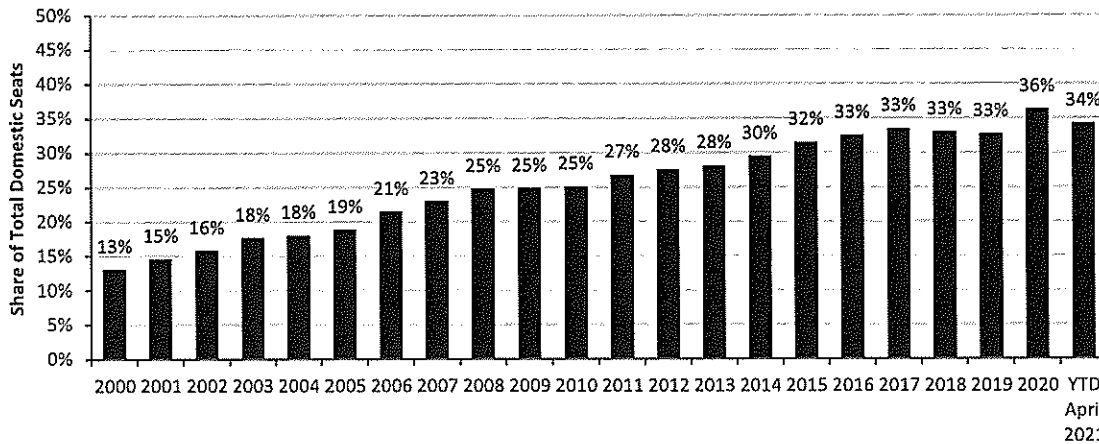
In the early 2000s, U.S.-flag low-cost airlines expanded rapidly and increased their market shares of passenger traffic in the U.S. The low-cost airlines, including Allegiant Air, Frontier Airlines, JetBlue Airways, Southwest Airlines, Spirit Airlines popularized the no frills, low-cost

business model. As shown on Figure 28, low-cost airlines provided approximately 13.0% of U.S. domestic seat capacity in 2000. By 2020, low-cost airlines accounted for approximately 33.0% of overall U.S. domestic seat capacity.

While rising fuel prices and the economic downturn forced network airlines to reduce domestic seat capacity and focus on more profitable international routes, the low-cost airlines increased their domestic market shares of passengers. Between 2003 and 2009, the low-cost airlines (including Allegiant Air, Frontier Airlines, JetBlue Airways, Southwest Airlines, and Spirit Airlines) added approximately 84 billion domestic seat miles to their route systems. In comparison, American Airlines, Delta Air Lines, and United Airlines experienced a 20% average reduction in mainline domestic seat capacity over the same period, for a combined reduction of 85 billion domestic seat miles.

A similar shift occurred since March 2020 when the negative effects of the COVID-19 pandemic started to occur where low-cost airlines such as Southwest Airlines, JetBlue Airways and Allegiant Air expanded service in their route systems while American Airlines, Delta Air Lines, and United Airlines reduced their overall seat capacity. From 2019 to 2020, low-cost airlines reduced total seat capacity by 31%, while network airlines such as American Airlines, Delta Air Lines, and United Airlines reduced total seat capacity by 41%.

Figure 28
LOW-COST AIRLINE SHARES OF TOTAL U.S. DOMESTIC AIRLINE AIRCRAFT SEATS



Sources: Official Airline Guides schedules; Innovata schedules.

In recent years, there have been fewer distinctions between the low-cost airlines and the network airlines. The lowering of the network airline cost structures and consolidation of airline networks has allowed the network airlines to compete more effectively with the low-cost airlines. In addition, most of the network airlines have begun to offer fare classes that directly compete with the low-cost airlines. With these fare classes, the network airlines are

able to offer a similar level of service to the low-cost airlines in their existing mainline aircraft and compete at a similar price point.

The low-cost airlines have also begun to expand into international markets once dominated by U.S. network airlines and foreign flag airlines. JetBlue Airways has built a strong presence in the Caribbean and Latin America, and recently started to serve London Heathrow Airport from John F. Kennedy International Airport in New York, where JetBlue Airways is based. With the acquisition of Air Tran Airways in 2011, Southwest Airlines started serving Caribbean and Mexican routes, and now serves certain destinations in Central America.

The market share of enplaned passengers on low-cost airlines at the Airport continued to increase during the COVID-19 pandemic from approximately 17.3% in FY 2019 to 24.1% in FY 2021 (see Table 11), due, in part, to increases in service by Spirit Airlines and JetBlue Airways.

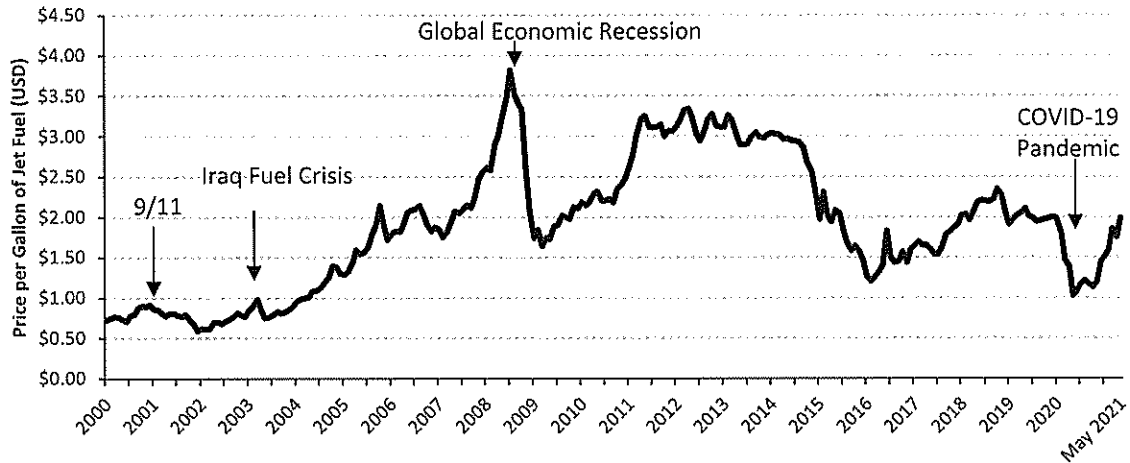
In October 2020, JetBlue Airways moved its base of operations from Long Beach Airport to Los Angeles International Airport where it is looking to significantly increase the number of domestic destinations served from the Airport as well as to start international service. The market share of enplaned passengers on JetBlue increased from 2.1% in FY 2019 (pre-COVID) to 4.6% in FY 2021 (after its relocation to the Airport), and the market share of Spirit Airlines (another low-cost airline) increased from 2.8% in FY 2019 to 6.4% in FY 2021.

It is expected that the low-cost airlines will continue to increase domestic service at the Airport and expand service to international markets in the coming years.

Fuel Cost Impacts

The price of aviation fuel is a critical and uncertain factor affecting airline operating economics. Fuel prices are particularly sensitive to worldwide political instability and economic uncertainty. Figure 29 shows the historical fluctuation in fuel prices since 2000. Beginning in 2003, fuel prices rapidly increased from political unrest in Iraq and other oil-producing countries, as well as other factors influencing the demand for and supply of oil. In 2008, a spike in crude oil prices drove up jet fuel prices to an unprecedented high of \$3.82 per gallon, forcing many airlines to introduce fuel surcharges. Fuel prices fell sharply in the second half of 2008 but rose again in 2011. The price of fuel increased to such high levels that fuel represented the largest operating expense for airlines, accounting for between 30% and 40% of expenses for most airlines in 2011 through 2014.

Figure 29
HISTORICAL AVIATION FUEL PRICES



Sources: U.S. Department of Transportation, Bureau of Transportation Statistics, Airline Fuel Cost and Consumption (U.S. Carriers - Scheduled), January 2000 - June 2019, www.transtats.bts.gov.

From June 2014 to June 2017, the average price of aviation fuel decreased by approximately 50%, reflecting continued growth in U.S. oil production, strong global supply, and weakening outlooks for growth in the global economy and oil demand. Airline industry analysts hold differing views on how oil and aviation fuel prices may change in the near term. Continued low fuel prices could result in dramatic changes in the aviation industry, such as lower airline operating costs potentially resulting in lower passenger ticket prices, which would likely result in increased travel demand.

From August 2017 through the end of 2019 aviation fuel prices rose steadily but remained below the highs in 2008 and between 2011 and 2015. Beginning in January 2020, aviation fuel prices began to decrease as demand was reduced because of the economic slowdown caused by the COVID-19 pandemic. Aviation fuel prices reached a low point in May 2020 at \$1.03 per gallon and have been steadily rising since.

Fuel prices have been and will likely continue to be volatile and may increase over the long term as global energy demand increases in the face of finite oil supplies.

Aircraft Trends

Between 2001 and 2007, many airlines transferred a number of less profitable routes to their regional airline partners to reduce costs. Trends at the Airport mirrored the national trend, with an increase in the number of regional aircraft operations.

Beginning with the fuel price spike in 2008, airlines began to reduce the number of 50-seat regional jets in their fleets, which aircraft had been widely used as feeder aircraft for the network airlines. Airlines such as Delta Air Lines, United Airlines, and American Airlines have

recently grounded or sold hundreds of these small regional jets and have transitioned towards larger, more fuel-efficient aircraft.

Aircraft such as the Boeing 777, the Boeing 787, and Airbus A350 with technology such as, but not limited to, new airframe, engine, and wing designs continue to improve aircraft range and fuel efficiency and will continue to result in new nonstop service around the world, providing service to markets that may lack significant feeder traffic from a hub carrier.

Trends in nonstop service continue to emerge in the narrow body aircraft segment as well, with improved economics of service on smaller routes. In early 2019, Airbus began delivering their small narrow body jet aircraft, the Airbus A220 (previously known as Bombardier's CSeries), providing fuel efficient and comfortable aircraft that serve the 100-135 seat market. The Airbus A321LR and A321XLR aircrafts provide fuel-efficient longer-range operations in the 180-220 seat market. JetBlue Airways uses the A321LR in its flights from John F. Kennedy International Airport to London Heathrow Airport, which started in August 2021.

After the accidents on foreign carriers Lion Air in 2018 and Ethiopian Airlines in 2019 involving the Boeing 737 MAX, the FAA and world aviation regulators grounded all Boeing 737 MAX aircraft, impacting U.S. carriers that rely on this aircraft, including Southwest Airlines, United Airlines, and American Airlines. This resulted in significant flight cancellations until the Boeing 737 MAX returned to service in late 2020. Although the Boeing 737 MAX flights were grounded, the Boeing 737 MAX only represented 1.0% of Southwest Airlines U.S. daily flights, 0.3% of American Airlines U.S. daily flights, and 0.2% of United Airlines U.S. daily flights in 2019. Other aircraft in the fleets of the affected airlines at the Airport replaced the grounded Boeing 737 MAX flights.

As an initial response to reduced demand for air travel caused by the COVID-19 pandemic, many airlines accelerated planned aircraft retirements. By the end of 2020, however, total commercial aircraft retirements were flat compared to 2019⁵⁰. Instead, many airlines focused on placing portions of their aircraft fleet in storage to reduce short-term operating costs while allowing for the aircraft to be re-introduced as air travel demand returns⁵¹.

Throughout 2020, the growth in domestic air travel has exceeded the growth in international air travel. In response to the more rapid growth in demand for domestic air travel, airlines have responded by using widebody aircraft that would normally be used for international service, such as the Boeing 777 or the Airbus A330, to service domestic routes. As a result, the number of scheduled U.S. domestic flights during the second quarter of 2021 on widebody aircraft was 40% greater than during the second quarter of 2019. As demand for international travel returns, it is likely, although not certain, that many airlines will re-deploy their widebody fleets away from domestic service and back toward more profitable international routes.

⁵⁰ Source: <https://aviationweek.com/air-transport/aircraft-retirements-due-covid-19-not-prevalent-expected>

⁵¹ Source: <https://www.wsj.com/articles/planes-grounded-by-covid-19-largely-avoid-the-junkyard-for-now-11622799001>

Capacity of the Airport

In addition to any future constraints that may be imposed by the capacity of the national air traffic control system, future growth in airline traffic at the Airport will also depend on the capacity of the Airport itself. The forecasts in this 2021DE Report are based on the assumptions that, during the Forecast Period, neither available airfield, terminal capacity, nor demand management initiatives will constrain traffic growth at the Airport.

AIRLINE TRAFFIC FORECASTS

Forecasts of enplaned passengers and landed weight at the Airport are discussed in this section. Historically, the forecast of aviation activity has been based on analyses of historical trends in airline service and traffic at the Airport, historical and forecast socioeconomic growth in the Los Angeles CSA, forecast GDP growth in the United States and other world regions, and expected future trends in airline traffic, as discussed in earlier sections.

The forecast of airline traffic at the Airport is based on (1) assumptions about when the numbers of enplaned passengers at the Airport are expected to reach FY 2019 levels, which is based, in part, on recent positive trends in passenger levels at the Airport and the U.S. and (2) an assumed rate of growth in the number of enplaned passengers at the Airport after FY 2019 levels are reached and during the remaining years of the Forecast Period.

It was assumed that airline service at the Airport will not be constrained by the availability or cost of aviation fuel, long-term limitations in airline aircraft fleet capacity, limitations in the capacity of the air traffic control system or the Airport, or government policies or actions that restrict growth.

Underlying Assumptions

During the Forecast Period, it was assumed that:

General Assumptions

- The U.S. economy will experience sustained GDP growth averaging approximately 2.6% per year.⁵²
- COVID-19 vaccines to treat COVID-19 and its variants will continue to be produced and made available to the public, and the rate of vaccination in the U.S. and internationally will increase.
- Economic closures, travel restrictions or other similar actions will be less impactful on the propensity of people to use air travel as compared to the months following the widespread emergence of the COVID-19 pandemic.

⁵² U.S Department of Agriculture, Economic Research Service, International Macroeconomic Data, Projected Real GDP Values, updated January 7, 2021.

- The use of video technology during and after the COVID-19 pandemic for business purposes will continue but will not have a material effect on business travel.
- Despite the recent emergence of the Delta variant of COVID-19, there will be no major disruption of airline service or passenger travel behavior as a result of airline bankruptcies or liquidations, international hostilities, terrorist acts or threats, or public health crises such as, but not limited to, pandemics similar to COVID-19.

Airport-Specific Assumptions

- The Los Angeles CSA will continue to be a major destination market for U.S. leisure and business travelers and a top global destination for tourism, meetings, and conventions, despite economic closures, travel restrictions, and significant decreases in business and leisure travel at the Airport during most of the COVID-19 pandemic.
- Despite recent business closures and travel restrictions from the COVID-19 pandemic, Los Angeles will remain a major economic center and the Airport will maintain its role as a leading O&D passenger airport and one of the largest international gateway airports in the U.S., which will attract additional domestic and international airline service and passenger traffic.
- International travel restrictions and border closures will be lessened or removed, and the busiest international markets (as measured by passenger numbers) served from the Airport will be similar to levels experienced in FY 2019 (the year prior to the COVID-19 pandemic).
- Competition among the airlines serving the Airport will ensure the continued availability of competitive airfares, with no significant increase in airline concentration.
- The mix of airlines serving the Airport will continue to be diverse and sufficient to accommodate O&D passenger demand at the Airport and in the Los Angeles CSA.
- Average one-way airfares charged by airlines at the Airport on major routes will continue to be lower than or competitive to the fares at competing airports within the Los Angeles CSA.
- The percentage of passengers connecting at the Airport will not change materially.
- Airlines providing scheduled service at the Airport will continue to add seat capacity to meet increasing passenger demand at the Airport and industry trends reflecting increased aircraft load factors and the use of larger aircraft will continue.

Enplaned Passengers

Total enplaned passengers at the Airport are forecast to reach FY 2019 levels by FY 2025 as a result of the forecast rate of recovery in domestic enplaned passengers, which are forecast to reach FY 2019 levels by FY 2024, and the forecast rate of recovery to FY 2019 levels by international enplaned passengers, which are forecast to reach FY 2019 levels by FY 2025. After FY 2025, the number of enplaned passengers are assumed to increase at 1.7% per year through

the remaining years of the Forecast Period, which rate of growth is equal to the actual 20-year (FY 1999 - FY 2019) average annual rate of growth in domestic and international passenger traffic at the Airport that includes the following economic and other major events:

- The events of September 11, 2001.
- The recession and financial crisis in 2008-2009.
- Economic growth prior to and after 2001 and 2008-2009.

In addition to the underlying assumptions described in the section above, the following other assumptions were made regarding the rate of growth in domestic and international enplaned passengers.

Domestic Enplaned Passengers. The forecast of domestic enplaned passengers was based on the following assumptions:

- FY 2022 was assumed to decrease 27.6% relative to FY 2019, the actual decrease in domestic enplaned passengers in June 2021 (the latest available data) relative to June 2019. The decrease in June 2021 relative to June 2019 was used because it reflects the most recent month when vaccination rates in the nation are at the highest point since COVID-19 vaccines were made available and is representative of the propensity of people to travel as well as the widespread reduction or elimination of business and travel destination closures.
- FY 2023 was assumed to decrease 14.0% relative to FY 2019. The 14.0% decrease relative to FY 2019 is equal to even monthly increases in domestic enplaned passengers from the end of FY 2022 to the beginning of FY 2024.
- After FY 2024 (the year domestic enplaned passengers are equal to the number of domestic enplaned passengers in FY 2019), domestic enplaned passengers are assumed to increase at 1.4% per year, which is equal to the actual 20-year (FY 1999 - FY 2019) average annual rate of growth in domestic enplaned passengers at the Airport that includes the major events described above.

International Enplaned Passengers. It was assumed that international enplaned passengers would reach FY 2019 levels by FY 2025 using the following assumptions:

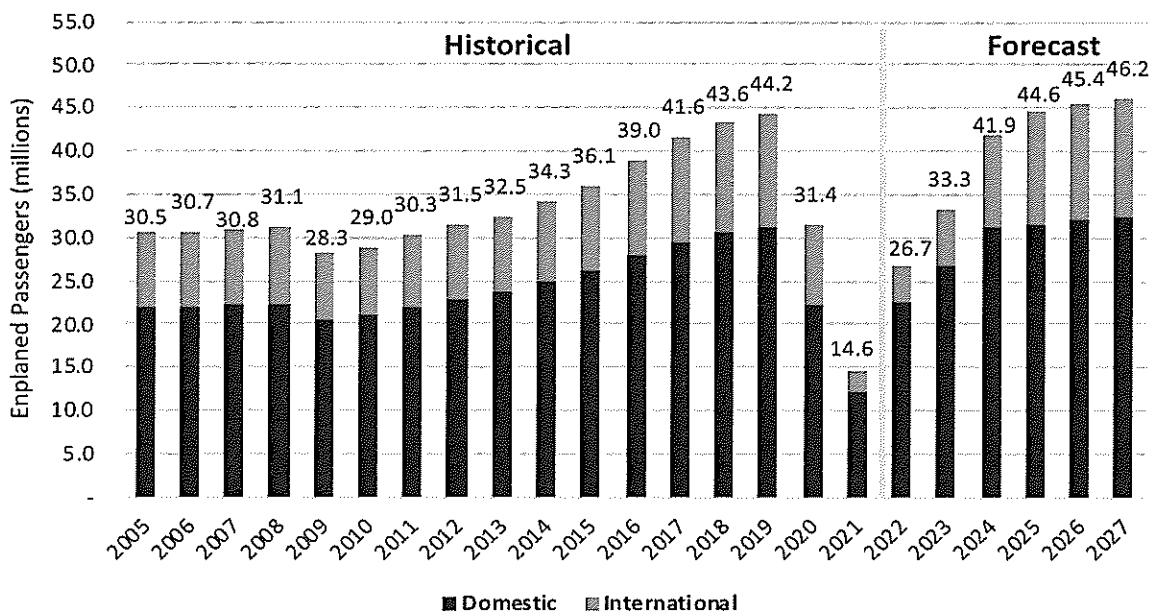
- FY 2022 is assumed to decrease 67.9% relative to FY 2019, the actual decrease in international enplaned passengers in June 2021 relative to June 2019. The decrease in June 2021 relative to June 2019 was used because it has the highest rate of international vaccinations since vaccinations became available, it reflects the opening of certain countries and the lessening of travel restrictions resulting from the widespread availability of COVID-19 vaccines, but it also reflects the continued closure of other countries given concerns about the COVID-19 pandemic.
- FY 2023 and FY 2024 are assumed to decrease 50.5% and 17.9% respectively, relative to FY 2019. The 50.5% and 17.9% decreases relative to FY 2019 result from

even monthly increases from the end of FY 2022 to the beginning of FY 2025 when it has been assumed in this 2021DE Report that the international rate of vaccination would increase and economic closures, travel restrictions and other barriers to international travel would be reduced or eliminated.

- After FY 2025 (the year international enplaned passengers are equal to the number of international enplaned passengers in FY 2019), the number of international enplaned passengers are assumed to increase at 2.6% per year, which is equal to the actual 20-year (FY 1999 – FY 2019) average annual rate of growth in international enplaned passengers at the Airport that includes the major events described above.

From FY 2019 (pre-COVID-19 pandemic) through FY 2027, the total number of enplaned passengers at the Airport is forecast to increase an average of 0.6% per year, from 44.2 million to approximately 46.2 million, as shown on Figure 30 and in Table 16.

Figure 30
HISTORICAL AND FORECAST ENPLANED PASSENGERS
 Los Angeles International Airport



Note: For Fiscal Years ending June 30.

Sources: Los Angeles International Airport records; WJ Advisors LLC.

Table 16
AIRLINE TRAFFIC FORECASTS
 Los Angeles International Airport

	Historical			Forecast				Average annual growth FY 2019-FY 2027		
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025		FY 2026	FY 2027
ENPLAINED PASSENGERS										
Domestic	31,170,044	22,483,684	12,385,980	22,565,799	26,810,405	31,170,044	31,597,580	32,030,979	32,470,324	0.5%
International	13,037,420	8,945,773	2,207,811	4,180,713	6,458,650	10,709,870	13,037,420	13,380,981	13,733,595	0.7%
Total explained passengers	44,207,464	31,429,457	14,593,791	26,746,513	33,269,055	41,879,914	44,635,000	45,411,960	46,203,919	0.6%
Annual percent increase (decrease)	1.5%	(28.9%)	(53.6%)	83.3%	24.4%	25.9%	6.6%	1.7%	1.7%	

Notes: For Fiscal Years ending June 30. Columns may not add to totals shown due to rounding.

Sources: Historical, Department records. Forecast: WJ Advisors LLC.

SECTION 2

AIRPORT FACILITIES AND CAPITAL PROGRAM

AIRPORT FACILITIES AND CAPITAL PROGRAM

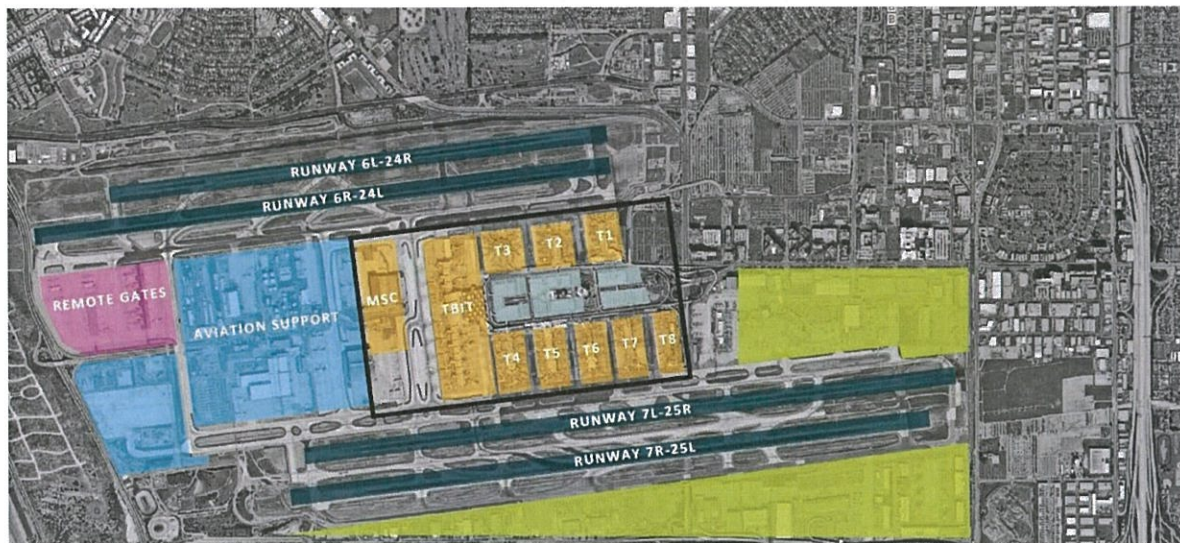
AIRPORT FACILITIES







The Airport occupies approximately 3,800 acres of land and is located approximately 15 road miles from downtown Los Angeles. The primary Airport facilities, as shown on Figure 31, include: nine passenger Terminals (collectively, the CTA), public parking facilities, the Airfield Area, the aviation support area, remote gates, and cargo facilities. As discussed later in this section of this 2021DE Report and shown on Figure 35, the Department is in the process of constructing a new APM System between the CTA and a new ConRAC, which, when both projects are completed, would be part of the Airport’s facilities.

Figure 31

PRIMARY FACILITIES

Los Angeles International Airport

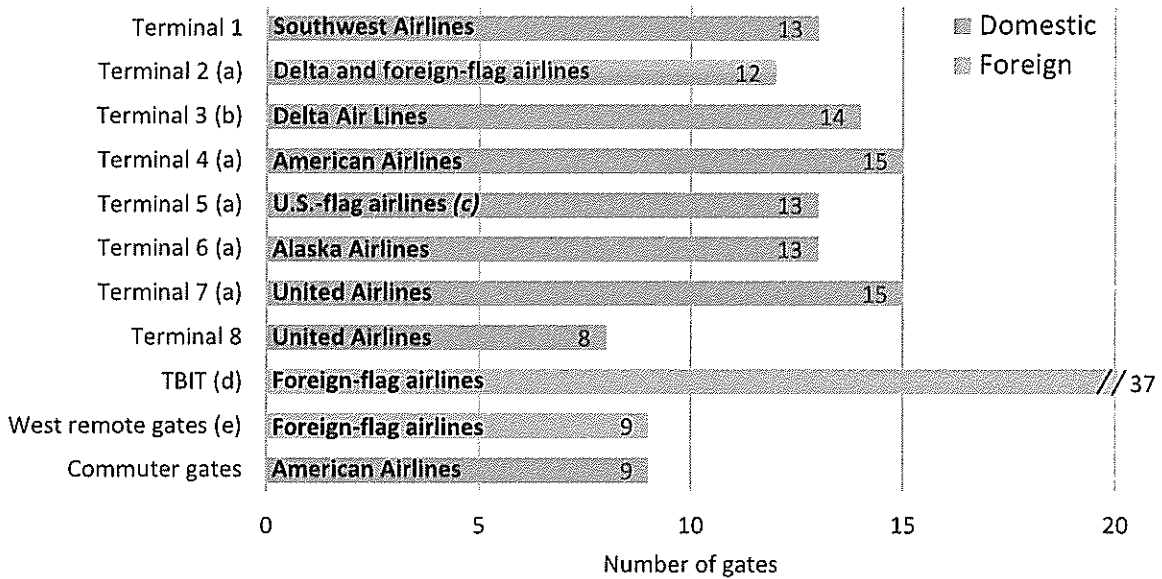


- | | | | |
|---|--|---|--|
|  Central Terminal Area |  Public Parking |  Airfield Area |  Cargo Facilities |
|  Remote Gates |  Aviation Support | | |

The CTA is accessed via upper- and lower-level roadways. As shown on Figure 32, eight of the nine Terminals primarily accommodate domestic airline service while the TBIT primarily accommodates international airline service.

West of the aviation support area are 9 remote gates used by airlines when no gates are available in the CTA. Passengers are bused between the remote gates and certain Terminals.

Figure 32
AIRPORT TERMINALS AND GATES
 Los Angeles International Airport



Note: All information as of August 2021.

(a) Primarily domestic with some international flights.

(b) Terminal 3 is currently closed for construction. The Department expects to open Terminal 3 in 2022.

(c) American Airlines, Spirit Airlines, JetBlue Airways, Hawaiian Airlines, Frontier Airlines, Allegiant Air, and Sun Country Airlines.

(d) Includes TBIT and Midfield Satellite Concourse – North gates.

(e) Does not include hard stand positions without boarding bridges.

Source: Department records.

Public parking facilities at the Airport include close-in and remote parking, as listed on Table 17:

Table 17
EXISTING PUBLIC PARKING FACILITIES
 Los Angeles International Airport

Public parking facility	Spaces
Close-in parking	
Central Terminal Area garages	7,718
Remote parking (a)	
Cell phone waiting surface lot	21
Airport total	7,739

Source: Department records.

(a) Does not include 2,690 public parking spaces in economy parking Lot E that the Department closed in April 2020. Also does not include approximately 4,300 remote economy public parking spaces the Department expects to open in October 2021 as part of the ITF West facility.

As shown on Figure 31, the Airport has four east-west parallel runways, configured in two pairs. Runways 6L-24R and 6R-24L are located north of the CTA and Runways 7L-25R and 7R-25L are located south of the CTA. Each of the four runways is equipped with an instrument landing system for arrivals.

Cargo facilities are located in two primary areas at the Airport: east of the CTA and south of Runway 7R-24L. These facilities provide more than 2 million square feet of storage and cargo handling space for the all-cargo airlines and for the passenger airlines that provide belly cargo services. Directly west of the CTA is the aviation support area consisting of miscellaneous aircraft maintenance facilities, Department buildings, and FAA facilities.

AIRPORT CAPITAL PROGRAM AND FUNDING SOURCES

Department management periodically develops and updates its Airport Capital Program for the redevelopment, improvement, and expansion of Airport facilities. The Airport Capital Program is developed based on anticipated facility needs, current and forecast airline traffic, available funding sources, project priorities, and other relevant information that is available to the Department when the Airport Capital Program is developed.

Currently the Department’s published capital program totals \$14.9 billion. This \$14.9 billion includes certain projects that are outside of the Forecast Period, have already been completed, and includes APM System and ConRAC Developer milestone payments. Table 18 summarizes the differences between the Airport published capital program of \$14.9 billion and the \$11.5 billion Airport Capital Program included in this 2021DE Report.

Table 18
AIRPORT CAPITAL PROGRAM COST RECONCILIATION
 Los Angeles International Airport
 (in billions)

	Estimated Cost
Published Airport Capital Program	\$14.9
Less: APM System and ConRAC Developer Milestone Payments	(1.3)
Less: Portion of Terminal 4 Project Outside of Forecast Period	(0.6)
Less: Projects Already Completed, VNY Projects, and Facility Maintenance Program	(1.6)
Plus: Estimated APM Relief Event Payment	0.1
Equals: Airport Capital Program Included on Exhibit A	\$11.5

Note: Columns may not add to totals shown due to rounding.
 Source: Department records.

The Airport Capital Program, which is estimated to cost approximately \$11.5 billion, was initiated in or around FY 2016 and is currently expected to be completed by the end of FY 2026. According to the Department, approximately \$6.1 billion of the Airport Capital Program was completed through the end of FY 2021. Of the \$11.5 billion in Airport Capital Program project costs, approximately \$5.4 billion is ongoing or is expected to be initiated and completed by the end of FY 2026.

While the Department continues to review the Airport Capital Program and may delay the timing or reduce the scope and cost of individual projects included in the Program given the substantial reduction in the number of enplaned passengers due to the COVID-19 pandemic, it was assumed in this 2021DE Report that the Department will implement and complete the remaining \$5.4 billion of projects in the Airport Capital Program by the end of FY 2026.

Certain projects in the Airport Capital Program are expected to be undertaken and initially funded by one or more airlines serving the Airport. The completed facilities would then be acquired by the Department and the airlines would be reimbursed. All other Airport Capital Program project costs are to be funded by the Department.

The financial forecasts included in this 2021DE Report reflect assumed changes in Pledged Revenues, LAX M&O Expenses, and Debt Service, and certain availability payments (APs), as discussed below, associated with the financing, construction, and completion of the Airport Capital Program.

Exhibit A, provided at the end of this 2021DE Report along with all financial exhibits, presents the anticipated funding sources for the approximate \$11.5 billion⁵³ Airport Capital Program.

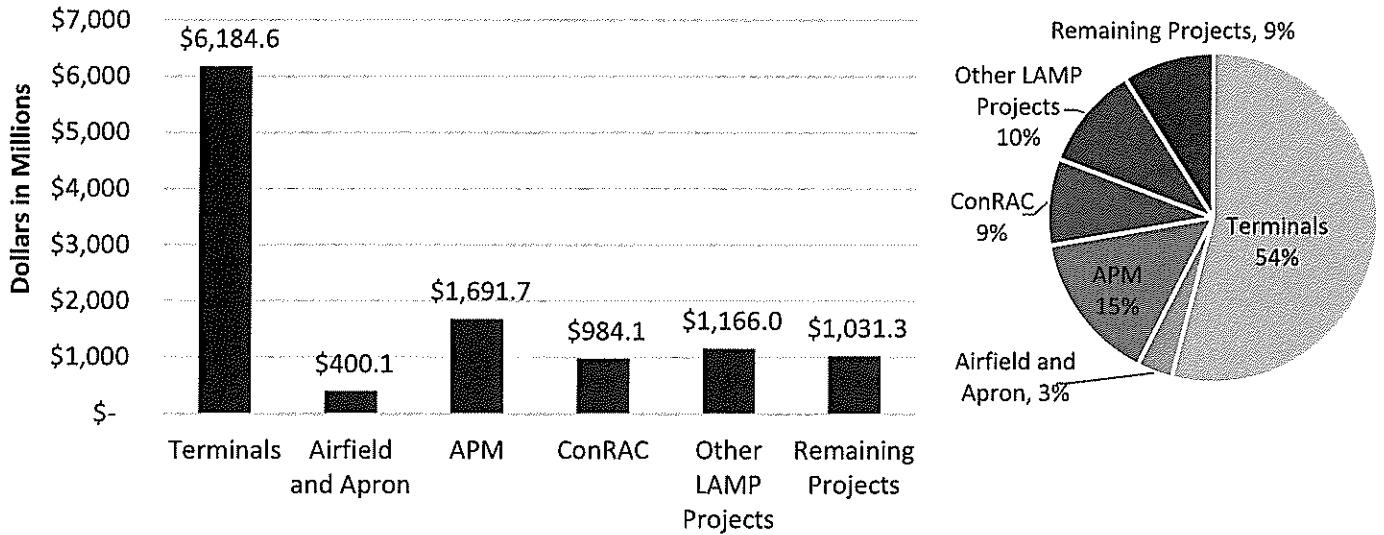
Terminals

- **MSC – North Project.** This project was completed and operational in FY 2021 and consists of the development of a new 15-gate, 1.0 million square-foot concourse west of the Tom Bradley International Terminal (TBIT)/Bradley West terminal complex that can serve domestic and international airline operations, and associated apron improvements. This project is estimated to cost \$1.7 billion (\$1.5 billion for terminal improvements and \$0.2 billion for the apron improvements).
- **North Terminal Improvement Program – Delta Air Lines.** This project includes the complete renovation of Terminal 3, renovations to Terminal 2, a secure connector to the north side of TBIT, infrastructure improvements supporting the planned APM System, and various enabling projects. Delta Air Lines is providing construction funding and undertaking these improvements, which are to be purchased by the Department in phases when the portions of the project are complete and have been included in the annual calculation of the Terminal Buildings Rate. This project is estimated to cost \$1.8 billion; approximately \$92.3 million of this cost is expected to be funded with net proceeds from the sale of the proposed Series 2021D Bonds. This project is expected to be completed by the end of FY 2024.

⁵³ Excludes the portion of the Terminal 4 project that occurs after FY 2026, APM and ConRAC developer milestone payments, VNY projects, facility maintenance program costs, and completed projects (e.g., Terminal 1 and Terminal 6/7/8) that, when included, equal \$3.4 billion.

Figure 33
AIRPORT CAPITAL PROGRAM BY AREA
 Los Angeles International Airport

Total Capital Program = \$11.5 Billion



Note: Pie chart may not total 100% due to rounding.
 Source: Department records.

- Terminal 4 Improvement Project – American Airlines.** This project includes the construction of a connector between Terminal 4 and Terminal 5 that would connect to the new APM System. This project is estimated to cost approximately \$1.1 billion; approximately \$105.2 million of this cost is expected to be funded with net proceeds from the sale of the proposed Series 2021D Bonds. This project is expected to be completed by the end of FY 2026. American Airlines is providing construction funding and undertaking these improvements, which are to be acquired by the Department when the project is completed and has been included in the forecast Terminal Buildings Rate.

The Department currently expects that an additional \$612.0 million in improvements to Terminal 4 may be required to complete the renovation of that terminal, but that the \$612.0 million of additional improvements would be completed after the Forecast Period in this 2021DE Report. Additional Pledged Revenues, LAX M&O Expenses, annual debt service payments, and other costs associated with the \$612.0 million of future Terminal 4 project costs are not included in the financial forecasts in this 2021DE Report.

- **Terminal 6 Project – Alaska Airlines.** This project includes the modernization of Terminal 6 by increasing the amount of holdroom space, enhancing the security screening checkpoint, installing new passenger boarding bridges, and certain other operational improvements. Under a letter of intent with the Department, Alaska Airlines would be providing construction funding and undertaking these improvements, which would be purchased by the Department in phases when portions of the project are complete and have been included in the annual calculation of the Terminal Buildings Rate. This project is estimated to cost approximately \$232.6 million; approximately \$81.0 million of this cost is expected to be funded with net proceeds from the sale of the proposed Series 2021D Bonds. This project is expected to be completed by the end of FY 2024.
- **Terminal 1.5 Project.** This project was completed and operational in FY 2021 and consists of the development of a new terminal building between Terminal 1 and Terminal 2 that links the two terminals directly, resulting in a single unified facility. Southwest Airlines provided construction funding and undertook these improvements, which are to be acquired by the Department and are included in the annual calculation of the Terminal Buildings Rate. This project is estimated to cost \$497.2 million; approximately \$56.3 million of net proceeds from the sale of the proposed Series 2021D Bonds is expected to be used to retire commercial paper previously used for this project.
- **TBIT Core and APM System Interface.** This project will provide vertical circulation elements in TBIT to accommodate passenger circulation and connections to the APM System. While associated with the APM System, the cost of this project will be allocated to the Airport’s Terminal cost center. This project is estimated to cost \$277.7 million; approximately \$88.9 million of this cost is expected to be funded with net proceeds from the sale of the proposed Series 2021D Bonds. This project is expected to be completed by the end of FY 2023.
- **MSC/Bradley West Baggage Project.** This project includes construction of outbound baggage systems supporting the combined operations of both the TBIT and the MSC – North Project. The project includes construction of baggage conveyance systems, explosives trace detection workstations, an on-screen resolution control room, and installation/integration of explosives detection system machines to be provided by the TSA. An airline consortium is providing construction funding and undertaking these improvements, which are to be acquired by the Department when the project is completed and has been included in the forecast Terminal Buildings Rate. This project is currently estimated to cost \$264.0 million; approximately \$116.0 million of this cost is expected to be funded with net proceeds from the sale of the proposed Series 2021D Bonds. This project is expected to be completed by the end of FY 2025.
- **Terminal 5 Core and APM System Interface.** This project will provide vertical circulation elements in Terminal 5 to accommodate passenger circulation and connections to the

APM System. While associated with the APM System, this project will be allocated to the Airport’s Terminal cost center. This project is estimated to cost \$214.5 million; approximately \$65.7 million of this cost is expected to be funded with net proceeds from the sale of the proposed Series 2021D Bonds. This project is expected to be completed by the end of FY 2023.

- **Other Terminal Projects.** These projects consist of the south terminal power upgrade, central terminal area (CTA) fire, water, pipe replacement, closed circuit television improvements, other baggage system projects, future terminal planning, and other miscellaneous terminal improvements. These projects are estimated to cost \$325.8 million and are expected to be completed during the Forecast Period.

Airfield and Apron

- **Taxiway P Construction (formerly known as Taxiway C14).** This project includes the construction of a new 3,600-foot long by 82-foot-wide north-south crossfield taxiway that will provide unimpeded access between the north and south airfields. This project is estimated to cost \$120.2 million and is expected to be completed by the end of FY 2022.
- **Runway 7R-25L Reconstruction.** This project includes the reconstruction of Runway 7R-25L and associated exit taxiways. This project is estimated to cost \$25.6 million and is expected to be completed by the end of FY 2022.
- **Other Airfield and Apron Projects.** These projects consist of the bus yard parking lot relocation, cargo complex electrification, storm water improvements, maintenance facility relocation, a new fire drill training facility, and other miscellaneous airfield improvements. These improvements are estimated to cost \$61.9 million and are expected to be completed during the Forecast Period.

Landside Access Modernization Program (LAMP) projects include the APM System project, the ConRAC, the LAMP Enabling Project, the Intermodal Transportation Facility (ITF-West), and the LAMP Acquisitions and Right of Way Project. The APM System project, the LAMP Enabling Project, and the LAMP Acquisitions and Right of Way Project are Access cost center projects. The Rate Agreement defines the types of projects that are Access projects as well as the basis for allocating related capital and operating costs to direct Airport cost centers, including, but not limited to, the following airline areas: Terminals, Airfield, and Apron.

APM System

APM System Project Description. The APM System will provide fast, convenient, and reliable access to the CTA 24 hours a day for passengers, employees, rental car customers, and other users of the Airport. The APM System, as depicted on Figure 34 and Figure 35, will be above grade and will transport passengers between the CTA and other Airport facilities, including a new ConRAC, a light rail station, new public parking facilities, and multiple locations

for passenger pick up and drop off. The APM System project includes three APM stations within the CTA: (1) a West Station located between Terminals 3 and 4, east of TBIT, (2) a North Center Station located between Terminals 2 and 6, north of the existing Airport Traffic Control Tower and Center Way, and (3) an East Station located between Terminals 1 and 7.

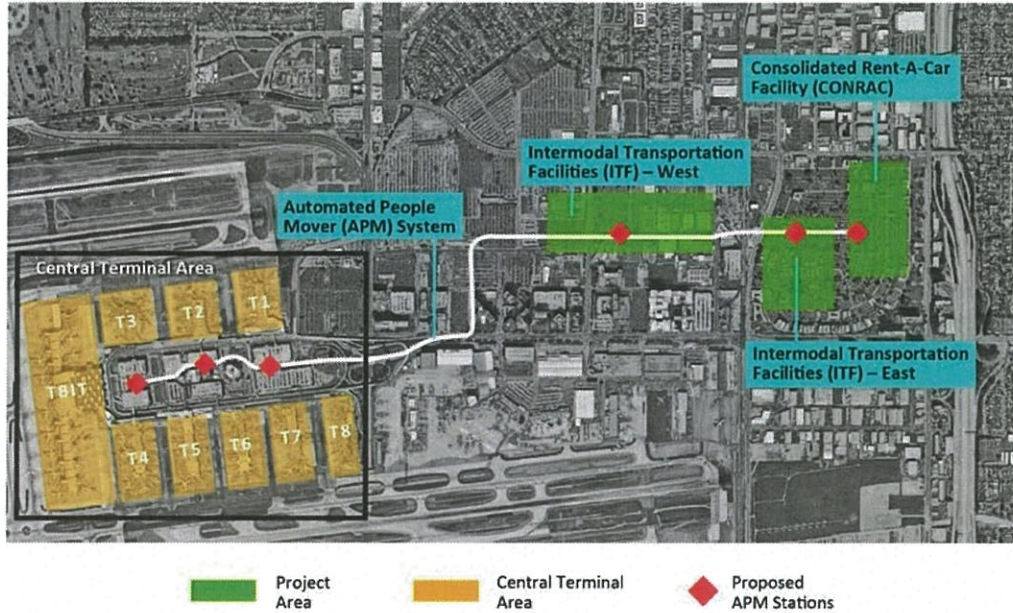
The APM System project also includes three proposed stations outside of the CTA: (1) at the multi-modal/transit facility (ITF-East) located at 96th Street/Aviation Boulevard planned by the Los Angeles County Metropolitan Transportation Authority (Metro), (2) the ITF-West, and (3) the new ConRAC. The Metro project at 96th Street/Aviation Boulevard is expected to be a separate and independent project (to be completed by Metro) to provide the opportunity for Airport passengers to access the Metro regional rail system.

Figure 34

DEPICTION OF APM SYSTEM
Los Angeles International Airport



Figure 35
APM SYSTEM AND OTHER PROJECTS
 Los Angeles International Airport



Project Delivery Method and Funding. The APM System project is being designed, built, financed, operated, and maintained under a 30-year contract between LAX Integrated Express Solutions (APM Developer) and the Department. Through a series of milestone payments to the APM Developer during construction of the APM System and just after APM date of beneficial occupancy (DBO) expected to occur in FY 2024, plus certain other APM System costs paid by the Department, the Department is currently expected to fund approximately \$1.7 billion of the estimated APM System project costs (which includes an estimated relief event payment by LAWA to the Developer of approximately \$97.0 million).

Department Financial Obligations. The Department is obligated to make APM APs to the APM Developer starting after APM DBO through the last year of the APM Contract. The annual APM AP compensates the APM Developer for expenses associated with operating the APM System (APM M&O APs) and the APM Capital APs. In FY 2025, the first full Fiscal Year after APM DBO, APM M&O APs are estimated to be \$33.0 million and APM Capital APs are estimated to be \$70.7 million. These amounts do not include debt service on Future Bonds the Department is expected to issue to fund the Department’s portion of APM System project costs.

The APM M&O APs are LAX M&O Expenses under the Senior Revenue Bond Indenture. LAWA M&O Expenses allocated to the APM System and APM M&O APs are collectively referred to as the APM System M&O Costs.

The APM Capital APs are an unsecured obligation of the Department paid from available funds of the Department, after the payment and deposit of all amounts required under the flow of funds⁵⁴ set forth in the Senior Revenue Bond Indenture.

The term APM System Capital Costs includes the following: (1) APM Capital APs, (2) debt service on the Series 2018E Subordinate Bonds, the Series 2019E Subordinate Bonds, the Series 2020D Senior Bonds, and a portion of the Series 2021B Subordinate Bonds issued by the Department, and debt service on Future Bonds expected to be issued by the Department to fund certain APM System project costs, and (3) amortization of Department Funds (if any) used to fund the Department's portion of APM System project costs.

Allocation of APM System Costs to Airport Cost Centers. The APM System project is an Access cost center project under the Rate Agreement.

Pursuant to the Rate Agreement, the percentage of site acreage by Airport cost center would be used to allocate annual APM System M&O Costs and APM System Capital Costs to direct Airport cost centers.

Use of PFC Revenues to Pay APM System Capital Costs. The Department currently expects to seek approval from the FAA to impose a \$4.50 PFC and use some of the revenues from the PFC to pay a portion of APM System Capital Costs that are PFC-eligible.

Consolidated Rent-a-Car Facility

The ConRAC will be located east of the CTA (see Figure 31) and is expected to open at the end of FY 2023 (ConRAC DBO).

The ConRAC is depicted on Figure 36 and will include, among other things, a customer service building, a ready/return area, a vehicle storage area, quick turnaround facilities, and an APM System station for rental car and other customers to use the APM System to travel between the ConRAC, the CTA and other Airport facilities. When ConRAC DBO is reached, the rental car companies will not be allowed to operate brand-specific shuttle buses to and from the CTA but will be required to use the APM System.

The ConRAC will serve the second largest rental car market in the United States as measured by gross revenues in FY 2019 (prior to the negative effects of the COVID-19 pandemic) and is expected to enhance the customer experience and safety with an easy-to-find consolidated location conveniently linked to the CTA by the APM System, improve traffic flow on the CTA and surrounding neighborhood roadways, free up CTA curb space, and create operational efficiencies.

⁵⁴ Includes (a) the payment of LAX M&O Expenses, (b) the payment of Senior Bonds and deposits to the Senior Reserve Fund(s), (c) the payment of Subordinate Obligations and deposits to the Subordinate Reserve Fund(s), (d) the payment of Third Lien Obligations and deposits to any reserve funds established for Third Lien Obligations, and (e) deposits to the LAX M&O Reserve Account.

Figure 36
DEPICTION OF CONSOLIDATED RENT-A-CAR FACILITY
 Los Angeles International Airport



The Department executed a concession lease and agreement (the CLA) in 2018 with each of the Airport rental car concessionaires (the Concessionaires) that provides, among other things, for the use and occupancy of the ConRAC when ConRAC DBO is reached, as well as to make the following payments to the Department starting at ConRAC DBO: concession fees, Land Rent, M&O Fees, common transportation system (CTS)⁵⁵ Contributions, and other payments.

Two of the Concessionaires that executed the CLA filed for Chapter 11 bankruptcy in May 2020: Hertz, including its brands Dollar/Thrifty and Advantage, including its brand EZ Rent A Car. Hertz (including each of its brands) represented approximately 27.6% of the rental car gross revenue market share at the Airport for the 12-month period ending May 2021. Hertz emerged from bankruptcy on June 30, 2021, and assumed the CLA, and will use and lease space starting at ConRAC DBO. As of February 2020, Advantage ceased operating at the Airport.

The CLA's initial term expires on the 20-year anniversary of the ConRAC DBO. The term of the CLA can be extended by 5-years, either at the election of the Department or automatically under certain conditions.

Provided below is an overview of how the ConRAC will be delivered, funding sources, payment obligations of the Department, the CLA, and the use of annual CFC revenues prior to and after ConRAC DBO.

Project Delivery Method and Funding. The ConRAC project will be designed, built, financed, operated, and maintained under a 28-year contract (ConRAC Contract) that was executed between the Department and LA Gateway Partners (ConRAC Developer) in 2018.

⁵⁵ In the CLA, the CTS is the portion of the APM System that is expected to be used by rental car customers, which is approximately 41% of total ridership on the APM System.

According to the Department, the following sources of funds are currently expected to be used to pay for the cost of the ConRAC project:

- **ConRAC Developer Capital.** Beginning at ConRAC DBO, the Department will make ConRAC APs to the ConRAC Developer, including a ConRAC Capital AP and a ConRAC M&O AP. The ConRAC Capital AP compensates the ConRAC Developer for designing, building, and financing (equity and debt) the Developer's portion of the ConRAC project. The ConRAC M&O AP compensates the ConRAC Developer for the cost of operating and maintaining the ConRAC. The ConRAC AP would increase each year from ConRAC DBO through the remaining term of the ConRAC Contract based on structured payment increases and defined inflation indexes.

ConRAC Capital APs are an unsecured obligation of the Department and paid from available funds of the Department, similar to the treatment of APM Capital APs described above. ConRAC Capital APs are not included in estimates of Debt Service, but instead are used to calculate a combined debt service and AP coverage rate to demonstrate the ability of the Department to meet all of its obligations (secured and unsecured, including the APM Capital APs and the ConRAC Capital APs).

ConRAC M&O APs are currently expected to be treated as LAX M&O Expenses under the Senior Revenue Bond Indenture. LAWA M&O Expenses allocated to the ConRAC, ConRAC M&O APs, and other ConRAC Developer M&O Expenses⁵⁶ are collectively referred to as the ConRAC M&O Costs.

- **ConRAC Special Facility Obligations.** The net proceeds of ConRAC Special Facility Obligations are currently expected to be used by the Department to make milestone payments to the ConRAC Developer. The ConRAC Special Facility Obligations are currently expected to be issued prior to ConRAC DBO, but not under the Revenue Bond Indentures.
- **CFC Revenues.** CFC revenues include the amounts collected by the Department through the end of FY 2021 and are expected to be collected by the Department from FY 2022 through ConRAC DBO. The Department intends to use a majority of all CFC revenues collected prior to ConRAC DBO to make some or all of the milestone payments to the ConRAC Developer.

The Department currently collects revenue from a \$9.00 CFC per rental car transaction day (up to a 5-day maximum), the maximum amount allowable CFC per rental car transaction in the State of California

- **Department Funds.** A small portion of the cost of the ConRAC will be funded from Department Funds.

⁵⁶ Includes M&O Expenses in addition to those already included in the ConRAC M&O AP, which expenses have not been estimated by the Department, but are expected to be recovered from the M&O Fees paid by ConRAC Concessionaires to the Department.

In this 2021DE Report, the term ConRAC Capital Costs includes the following: (1) ConRAC Capital APs, (2) debt service on ConRAC Special Facility Obligations, and (3) amortization of Department Funds used to fund the Department's portion of ConRAC project costs.

Department Financial Obligations to ConRAC Developer. The Department is expected to make ConRAC APs to the ConRAC Developer starting after ConRAC DBO through the last year of the ConRAC Contract. Total ConRAC M&O AP and ConRAC Capital AP in FY 2024, the first full year after ConRAC DBO, are estimated to be equal to \$45.0 million.

Use of CFC Revenues. Figure 37 shows the currently expected use of forecast CFC revenue starting on ConRAC DBO. Annual CFC revenues remaining after paying annual ConRAC Capital Costs plus annual Concessionaire CTS Contributions under the CLA would be used to pay up to 41% of the following total annual costs: APM System Capital Costs and APM System M&O Costs. The 41% share represents the estimated rental car customer use of the APM System, which amount is included in the CLA.

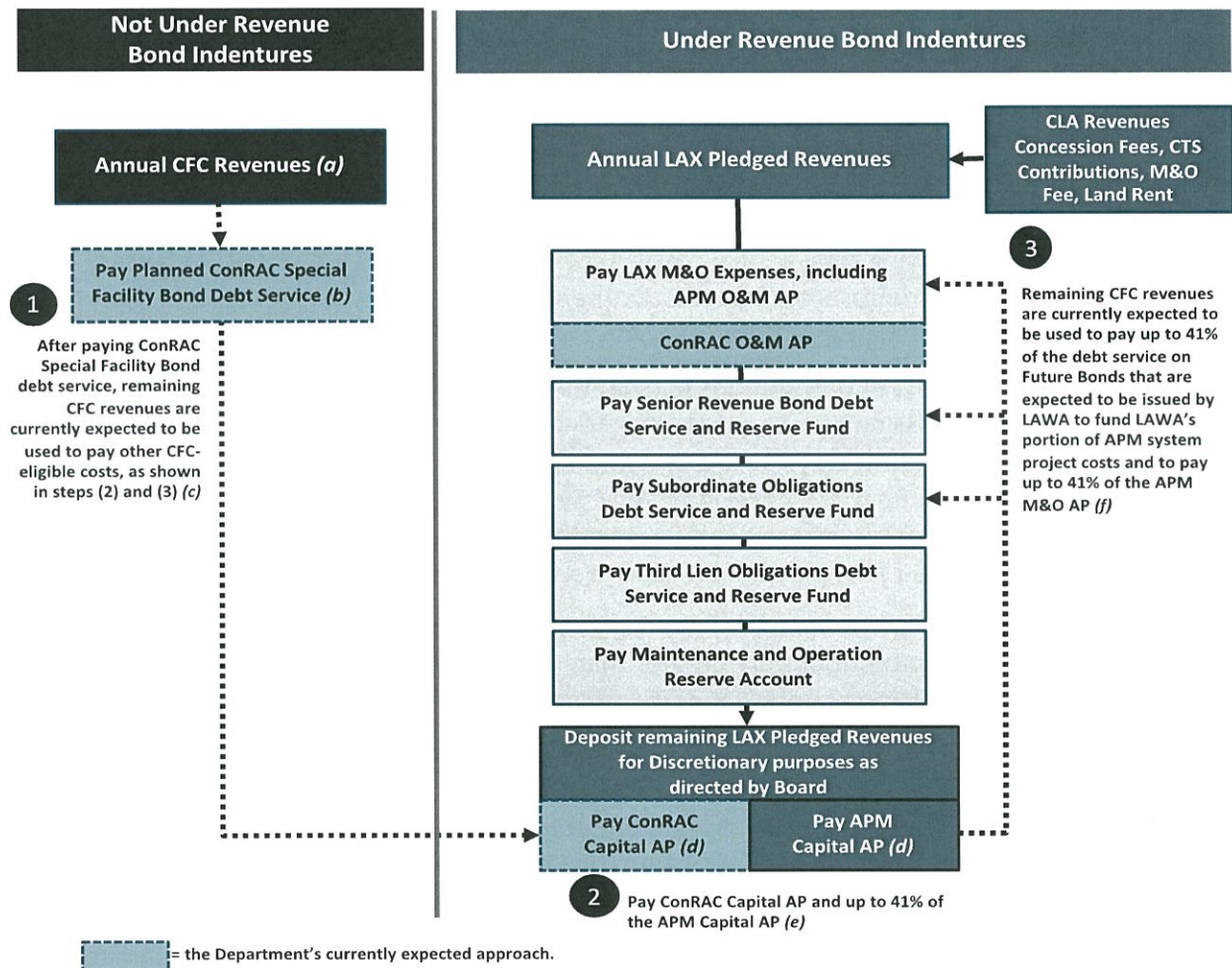
While Concessionaire CTS Contributions pursuant to the CLA are a known and escalating payment by the Concessionaires to the Department, a decrease in rental car transaction days (up to the 5-day maximum) may cause a reduction in the CFC revenues that would otherwise have been used to pay up to 41% of annual APM System Capital Costs and APM System M&O Costs. If that were to occur, it is currently expected by the Department that revenues from public parking and other sources at the Airport would be used to pay those costs.

Pursuant to the CLA, if CFC revenues remaining after annual ConRAC Capital Costs plus Concessionaire CTS Contributions are greater than the 41% share of APM System Capital Costs and APM System M&O Costs, a portion of the excess amount is to be distributed as an abatement of Concessionaire CTS Contributions and a portion is distributed to the Department to pay other CFC-eligible costs.

Figure 37 also shows the sources of revenue under the CLA, including revenue from the Concession Fee, Land Rent, the M&O Fee, and the Concessionaire CTS Contribution.

At the request of the Department, the ConRAC Developer may undertake certain other projects, including, but not limited to, the construction of a new Airport employee parking lot, the cost of which is currently expected to be paid from Department Funds and not from CFC or other revenues pursuant to the CLA.

Figure 37
EXPECTED USE OF ANNUAL CFC REVENUES AND INCLUSION OF REVENUES AND CERTAIN COSTS RELATED TO THE CLA IN PLEDGED REVENUES
 Effective ConRAC DBO
 Los Angeles International Airport



- (a) CFC revenues are not currently defined as Pledged Revenues under the Revenue Bond Indentures.
- (b) The ConRAC Special Facility Obligations are not currently expected by the Department to be issued under the Revenue Bond Indentures.
- (c) Reflects Department management's current expectation.
- (d) Unsecured obligations of the Department that may also be paid from any available funds of the Department after the payment and deposit of amounts required under the flow of funds pursuant to the Revenue Bond Indentures. See this 2021DE Report for additional information.
- (e) Pursuant to the CLA, up to 41% of annual APM System Capital Costs and APM System M&O Costs can be paid from remaining annual CFC revenues plus annual Concessionaire CTS Contributions.
- (f) In addition to certain net proceeds of the issuance of the Series 2018E Bonds, Series 2019E Bonds, Series 2020D Bonds, and Series 2021B Bonds, the Department currently expects that Future Bonds will be issued to fund the remaining portion of the Department's share of APM System project costs.

Other LAMP Projects

Certain other projects related to the LAMP are described below:

- **Intermodal Transportation Facility-West (ITF-West Phase 1):** The ITF-West Phase 1 is expected to be used by passengers currently accessing the CTA because it would provide a convenient location east of the CTA for passengers, well-wishers, and Airport employees to drop off or pick-up passengers, or park and then ride the APM System into the CTA. The fully completed ITF-West (Phase 1 and Phase 2) is expected to include an above-grade, four to five-level parking garage. Phase 1, which is included in the Airport Capital Program, includes space for up to 4,700 vehicles and is anticipated to be completed by the end of FY 2022. Phase 2, which is expected to include space for up to 3,000 additional vehicles, may be constructed after the Forecast Period and is not included in the Airport Capital Program at this time. Pedestrian walkways would connect the new ITF-West to the APM.

The ITF-West Phase 1 is estimated to cost approximately \$296.1 million. The Department will also build an ITF-East in the future (after the Forecast Period), but the cost of that project is not included in the Airport Capital Program.

- **LAMP Enabling Project:** This project includes a range of utility and infrastructure improvements to ensure that the APM System can be delivered on schedule. The project is estimated to cost \$695.8 million and is expected to be completed by the end of FY 2026.
- **LAMP Right of Way Acquisitions and Relocations:** This project includes the acquisition and relocation of certain properties to allow for the construction of the APM System and certain remaining projects (discussed below). The project is estimated to cost \$174.1 million and is expected to be completed by the end of FY 2024.

Remaining Projects

- **Noise Mitigation and Soundproofing:** This project consists of the soundproofing of residences located near the Airport that are significantly affected by aircraft noise. Also, the Department is currently implementing a voluntary program of acquisition of residences located in the Manchester Square and Belford areas that are affected by aircraft noise. This project is estimated to cost \$384.1 million and is expected to be completed during the Forecast Period.
- **Airport Police Station and Facilities:** This project includes the construction of a central Airport police facility just north of the Airfield Area, allowing the Airport police department to consolidate certain functions that are now distributed across multiple facilities. This project is estimated to cost approximately \$217.3 million and to be completed by the end of FY 2022.

- **Power Distribution Facility:** This project replaces existing facilities and provides more reliable power transmission and greater capacity to support planned Airport growth. This project is estimated to cost approximately \$158.7 million; approximately \$47.6 million of this cost is expected to be funded with net proceeds from the sale of the proposed Series 2021D Bonds. This project is expected to be completed by the end of FY 2024.
- **Other:** These projects include a range of infrastructure, information technology, security, and other projects estimated to cost \$271.1 million and are expected to be completed during the Forecast Period.

FUNDING THE AIRPORT CAPITAL PROGRAM

The Department expects to pay the estimated costs of the Airport Capital Program using the funding sources shown in Exhibit A and Figure 38, as discussed below. To the extent that the Department does not receive the funding reflected below, the Department would (1) defer projects or reduce project scopes, as appropriate, (2) issue additional Airport revenue bonds, or (3) use additional Department funds.

Airport Revenue Bonds

As shown in Exhibit A, the net proceeds of the proposed Series 2021D Bonds, Future Bond proceeds, and prior bond proceeds are expected to fund \$6.6 billion or 57.6% of Airport Capital Program project costs. Details of the proposed Series 2021D Bonds and proposed Series 2021E Bonds, Future Bond proceeds, and prior bond proceeds are discussed below. Exhibit B presents the estimated sources and uses of the proposed Series 2021DE Bonds, as provided by the Department's Co-Financial Advisor.

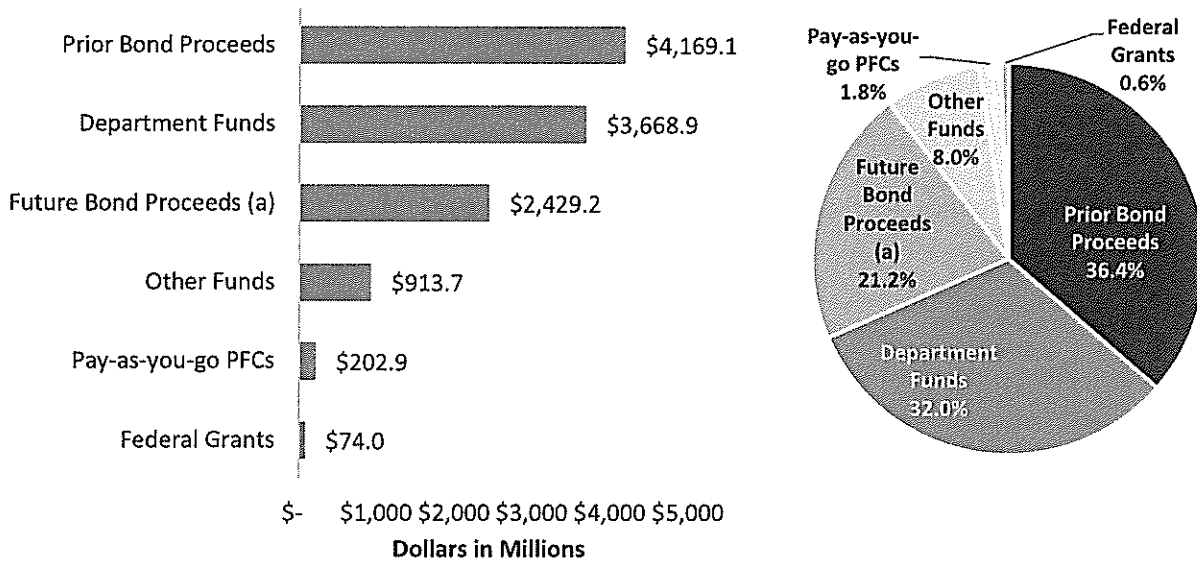
Proposed Series 2021D Bond Proceeds. As shown in Exhibit A, approximately \$652.9 million of the proposed Series 2021D Bond proceeds are expected to be used to fund certain Airport Capital Program project costs and reimburse the Department for certain project expenditures previously paid with Department Funds.

In addition to funding a portion of the costs of the Airport Capital Program, the net proceeds from the sale of the proposed Series 2021D Bonds would also be used to:

- Make a deposit to the Subordinate Debt Service Reserve Fund.
- Refund \$2.3 million in outstanding Subordinate Commercial Paper used to pay the interest portion of debt service on certain Airport Capital Program projects.
- Pay the costs of issuance, including underwriters' discount and financing, legal, and other costs for issuance of the proposed Series 2021D Bonds.

Figure 38
FUNDING THE AIRPORT CAPITAL PROGRAM
 Los Angeles International Airport

Total Capital Program = \$11.5 Billion



Note: See Exhibit A for additional information.

Source: Department records.

(a) Includes the Series 2021D bond proceeds. Does not include the Series 2021E bond proceeds discussed below.

Proposed Series 2021E Bond Proceeds. The proposed Series 2021E Bonds are being issued to refund the interest on certain outstanding Senior Bonds and Subordinate Bonds and to:

- Make a deposit to the Subordinate Debt Service Reserve Fund.
- Pay the costs of issuance, including underwriters’ discount and financing, legal, and other costs for issuance of the proposed Series 2021E Bonds.

Future Bond Proceeds. As shown in Exhibit A, approximately \$1.4 billion of future Senior Bond proceeds and approximately \$336.6 million of future Subordinate Obligation proceeds (for a total of approximately \$1.8 billion) are expected to be used to fund a portion of Airport Capital Program project costs.

Exhibit B presents the estimated sources and uses of funds for Future Bonds, as provided by the Department’s Co-Financial Advisor—based on the assumption that Future Bonds issued to fund projects in the airfield or apron, and the Department’s share of APM System project costs will be Subordinate Obligations, and that Future Bonds issued for all other projects in the Airport

Capital Program will be Senior Bonds. The Department may use any combination of Senior Bonds and Subordinate Obligations to fund these or other projects in the Airport Capital Program.

The net proceeds of Future Bonds are assumed to be used to:

- Pay certain Airport Capital Program costs.
- Pay capitalized interest.
- Make deposits to the Senior Debt or Subordinate Debt Service Reserve Funds.
- Pay the issuance costs of Future Bonds.

Prior Bond Proceeds. As shown in Exhibit A, approximately \$4.2 billion of prior revenue bond proceeds are expected to fund a portion of Airport Capital Program project costs.

Department Funds

As reflected in Exhibit A, Department Funds are expected to fund approximately \$3.7 billion or 32.0% of Airport Capital Program project costs.

The Department generates cash each year from the operation of the Airport, after all obligations under the Senior Revenue Bond Indenture and the Subordinate Revenue Bond Indenture have been met. Department funds can be used for any lawful purpose.

The estimated use of Department funds reflected in Exhibit A is based on an internal Department policy that unrestricted cash plus the balance in the Maintenance and Operation Reserve Fund must be greater than or equal to (1) annual LAX M&O Expenses plus (2) Senior Aggregate Annual Debt Service plus (3) Subordinate Aggregate Annual Debt Service⁵⁷.

Other Funds

As reflected in Exhibit A, approximately \$913.7 million of other funding (including pay-as-you-go CFC revenues, special facility obligations proceeds, and Department of Water and Power funds) is expected to be used to fund the Airport Capital Program.

Passenger Facility Charge Revenues

As reflected in Exhibit A, PFC revenues on a pay-as-you-go basis are expected to fund approximately \$202.9 million or 1.8% of Airport Capital Program project costs.

The Department also expects to use PFC revenues in each Fiscal Year of the Forecast Period to pay a portion of the debt service on certain outstanding Bonds that were issued to finance all or

⁵⁷ Senior Aggregate Annual Debt Service and Subordinate Aggregate Annual Debt Service is (1) net of PFC revenues, CFC revenues, and Coronavirus Relief Grants used to pay debt service and (2) excludes APM Capital APs and ConRAC Capital APs. See the "Financial Performance" section of this 2021DE Report for additional information.

a portion of the costs of PFC-eligible projects. For more detail see the “Financial Performance” section of this 2021DE Report.

The overall Airport Capital Program funding plan, forecast airline revenues, and other key financial results reflected in this 2021DE Report assume that the current \$4.50 PFC level at the Airport will remain in effect throughout the Forecast Period and that the Department will submit and receive approval for future PFC applications for eligible costs of certain projects in the Airport Capital Program.

Federal Grants (Excluding Coronavirus Relief Grants)

The Department receives varying amounts of FAA grants-in-aid under the federal Airport Improvement Program (AIP) for the costs of eligible projects. As shown in Exhibit A, the Department expects to receive approximately \$74.0 million in AIP grant funds which is expected to fund approximately 0.6% of Airport Capital Program project costs.

See the “Financial Performance” section of this 2021DE Report for information regarding the Department’s current expectations to use Coronavirus Relief Grants to pay certain LAX M&O Expenses and Debt Service.

PROJECTS NOT INCLUDED IN THE AIRPORT CAPITAL PROGRAM

The Department is considering future projects at the Airport that are not included in the Airport Capital Program (referred to as Other Projects) and is expected to incur costs related to the Other Projects during the Forecast Period. While these projects have proceeded through various stages of definition, each project remains subject to certain changes that may be identified in the environmental permitting and preliminary design process. Funding sources for the Other Projects are currently being developed and will likely change as agreements to implement the Other Projects are finalized. Several different approvals, including approval by the Board of Airport Commissioners (the Board), are required prior to the Department proceeding with the Other Projects. Other Project scopes, costs and funding plans remain subject to substantial revision.

The largest components of the Other Projects consist of, but are not limited to, new terminals, ITF-East, roadway improvements, Airfield and aircraft parking improvements, and potential additional APM System stations.

In April 2019, the Department initiated an environmental review process on the Airfield and Terminal Modernization Project, which includes potential Airfield, Terminal, and landside roadway improvements at the Airport. The Airfield improvements would increase efficiency and safety on the north side of the Airfield; the Terminal improvements would include construction of extension of Terminal 1 toward Sepulveda Boulevard, referred to as Terminal 1 East; construction of Terminal 9 south of Century Boulevard and east of Sepulveda Boulevard; new arrival and departures roadways; and a new APM System station. New Terminals also

include an expansion to the south of the Midfield Satellite Concourse. According to the Department, these new projects would preliminarily be completed in or around 2028.

According to the Department, and prior to the date when the Other Projects become part of the Airport Capital Program, the cost to implement these projects will continue to be refined as better information becomes available related to construction costs, inflation, project scope, project phasing, or assumed method of project delivery. As discussed below, a portion of those costs may be paid by private developers (or reimbursed by the Department to the private developers) and may be phased in over several years. Other approvals as well as LAWA Board award of agreements are required prior to initiating construction.

It is possible that the following changes in the future financial results of the Airport could occur if and when the Other Projects are ready and available for their intended use:

- Pledged Revenues may increase as a result of new revenue from one or more Other Projects
- LAX M&O Expenses may increase as a result of additional LAX M&O Expenses associated with certain Other Projects
- Capital costs paid from Pledged Revenues may increase as a result of additional annual debt service on Airport Revenue Bonds⁵⁸ that the Department may issue in the future to fund a portion of the Other Projects

The Department expects that the specific funding sources for the Other Projects and the sources of repayment for the financing of the Other Projects would be determined when the final scopes are determined. Some of the determinations to be made by the Department include, but are not limited to, whether or not certain operating expenses associated with the Other Projects would constitute LAX M&O Expenses under the Revenue Bond Indentures, and if certain capital costs related to the Other Projects would be funded with the net proceeds from the sale of Senior Bonds or Subordinate Obligations under the Revenue Bond Indentures.

The use of any combination of capital sources from those described above to finance Other Projects would be determined by the Department, in consideration of any number of factors, including, but not limited to:

- The availability of moneys from, but not limited to, the funding sources described above
- Capital and bond market conditions at the time any such additional bonds are issued
- Forecast airline costs per enplaned passenger and debt service coverage requirements for the Airport

⁵⁸ These bonds would be in addition to the Future Bonds assumed in this 2021DE Report.

SECTION 3

FINANCIAL PERFORMANCE

FINANCIAL PERFORMANCE

FINANCIAL FRAMEWORK

The Department accounts for Airport financial operations and results according to generally accepted accounting principles for governmental entities and the requirements of the Senior Revenue Bond Indenture and the Subordinate Revenue Bond Indenture. Other key documents that influence Airport financial operations are the agreements with the airlines for their use and lease of Airport facilities.

The financial forecasts presented in this 2021DE Report reflect the Department's expected course of action during the Forecast Period to generate Pledged Revenues sufficient to meet the Senior Bond Rate Covenant and the Subordinate Obligations Rate Covenant.

Under the Senior Bond Rate Covenant, the Department has covenanted to establish, fix, prescribe, and collect rates, tolls, fees, rentals, and charges for the use of the Airport so that, in each Fiscal Year:

- Pledged Revenues are at least equal to the amount of required deposits to various funds and accounts during such Fiscal Year, and
- Net Pledged Revenues, together with any Transfer, are equal to at least 125% of the Senior Bond Aggregate Annual Debt Service on outstanding Senior Bonds.

The Subordinate Obligations Rate Covenant of the Subordinate Revenue Bond Indenture requires the Department, in each Fiscal Year, to generate Subordinate Pledged Revenues to:

- Meet the payment requirements of funds and accounts under the Subordinate Revenue Bond Indenture, and
- Together with any Transfer, be at least equal to 115% of Subordinate Aggregate Annual Debt Service on outstanding Subordinate Obligations.

Any Transfer from the LAX Revenue Account to the Debt Service Fund for purposes of meeting the Senior Bond Rate Covenant shall not exceed 25% of Senior Bond Aggregate Annual Debt Service on outstanding Senior Bonds and shall not exceed 15% of Subordinate Aggregate Annual Debt Service on outstanding Subordinate Obligations. No Transfers were assumed in this 2021DE Report for the purposes of calculating debt service coverage requirements.

An overview of recent historical Airport financial results is provided in this section and the assumptions used as the basis for forecasting Pledged Revenues, LAX M&O Expenses, debt service on Senior Bonds and Subordinate Obligations, and deposits to funds and accounts established under the Senior and Subordinate Revenue Bond Indentures are discussed.

FINANCIAL EFFECTS OF THE COVID-19 PANDEMIC ON THE AIRPORT

The COVID-19 global pandemic resulted in substantial reductions in flights and passengers at the Airport beginning March 2020. As a point of reference, FY 2021 was fully impacted by the COVID-19 pandemic; the last four months of FY 2020 were impacted; and FY 2019 was the last full year prior to any COVID-19 impacts. Given the unprecedented nature and uncertainty surrounding the COVID-19 pandemic, the Department took a series of operational, commercial, and financial actions to prioritize strong cash liquidity and debt service coverage, and also assist airline and nonairline tenants serving the Airport.

Department actions included, but were not limited to, (1) reducing LAX M&O Expenses, (2) implementing temporary tenant payment relief programs, and (3) establishing a recovery task force. Targeted LAX M&O Expense reductions included a hiring freeze; deferring non-essential discretionary spending; limiting approvals of contracts and task orders to those that are essential to key capital projects and critical tasks; limiting overtime to those activities that are necessary for safety, critical operations, or emergency management; encouraging voluntary furloughs or reduced work schedules for certain hourly employees; implementing a retirement incentive program. These targeted LAX M&O Expense reductions resulted in FY 2021 LAX M&O Expense savings of \$24.5 million (3.1% lower) than budget or \$95.0 million lower (11%) than FY 2020 actual M&O Expenses.

In 2020, the Department also adopted a temporary terminal and airfield fee relief program with respect to passenger airlines serving LAX (the Passenger Airline Temporary Relief Program). The Passenger Airline Temporary Relief Program permits eligible passenger air carriers subject to a terminal lease or the Airport Terminal Tariff to apply for payment relief. Key elements of the Passenger Airline Temporary Relief Program were as follows:

- Deferral of terminal and airfield fees payable from April through May 2020.
- All airlines were required to start repayment of any deferred amounts on July 1, 2020. For airlines that were a party to an Amended and Restated Rate Agreement by July 31, 2020, repayment of the deferred amounts were required to be made over a six-month period, starting July 1, 2020, to be paid in equal monthly installments. For airlines that were not party to an Amended and Restated Rate Agreement by July 31, 2020, the remaining deferred amounts were to be fully repaid on or before August 1, 2020.
- On June 18, 2020, the LAWA Board approved keeping landing fees and apron fees unchanged through CY 2020.

All deferrals as part of the Passenger Airline Temporary Relief Program have been repaid by the eligible passenger air carriers.

Despite recent and widespread domestic COVID-19 vaccinations and recent increases in the number of enplaned passengers using the Airport, Department management implemented a series of new multi-year strategic objectives to strengthen the competitive position of the Airport in the route network of domestic and international airlines during and after the COVID-19 pandemic. The multiyear plan, referred to as the "Airline Cost Stabilization and Recovery

Plan” (the Plan) is focused on the continued stability of Airport financial operations during and after the negative effects of the COVID-19 pandemic and strengthening the competitive position of the Airport by:

- Lowering the annual fixed costs of the Airport through a restructuring of annual Debt Service payments, deferral of annual amortization charges and use of Coronavirus Relief Grants in the near term, which results in lower annual costs and associated airline rates and charges associated with the Terminals, Airfield/Apron, and certain other airline-used facilities at the Airport to better match current and near-term airline passenger levels with the use of those facilities during the effects of the COVID-19 pandemic.
- Transitioning the operation and management of certain common-use baggage and passenger boarding bridge equipment (collectively, the Common Use Equipment) from an airline consortium to the Department, which allows the Department to lower the airline cost of using the Common Use Equipment.

For nonairline tenants, the Department adopted a fee relief program for Airport concessionaires and service providers (the Concessionaires and Services Temporary Relief Program). The Concessionaires and Services Temporary Relief Program permitted concessionaires and service providers to apply for relief.

During the first program (from April 1, 2020, to June 30, 2020), the Department only required payment of the specific percentage fees defined in each concessionaire or service provider agreement instead of the specific minimum annual guarantee (MAG), and, if applicable, deferred receipt of in-terminal concession storage rent. For off-airport rental car companies, the Department only required payment of the lesser of (1) 10% of gross sales, or (2) the specified license fee. Accrued amounts were required to be remitted to the Department in six equal monthly installments beginning July 1, 2020, with no late fees or interest charges on amounts paid in full within this six-month payment period.

On October 1, 2020, a Second Relief Program was put in place after the LAWA Board approved the Second Letter Agreements for the Concessionaire Relief Program to (1) abate or adjust the MAG through June 30, 2021 for certain concession agreements (collectively, the Concession Agreements), (2) defer storage rent through December 31, 2020 and allow the payback of deferred storage rent to commence January 1, 2021 for certain concession agreements (collectively, the In-Terminal Concession Agreements), (3) extend the current expiration dates of the respective individual In-Terminal Concession Agreements (as conditioned in the applicable Second Letter Agreements) and Terminal Media Operator Agreement (TMO Agreement) by 24 months, and (4) authorize the Chief Executive Officer to have two consecutive twelve-month options to delay the required mid-term refurbishment dates for the respective individual In-Terminal Concession Agreements at his or her sole discretion.

In May 2020, the Department created a COVID-19 Recovery Task Force that includes seven work streams to address LAWA’s operations and communications during the pandemic. The

Recovery Task Force comprises seven work streams, each of which is led by one or more Deputy Executive Director (DED):

- Bringing Employees Back to Work
- Getting Passengers Back to the Airport
- Improving Fiscal Position
- Completing Construction and Repairs Faster
- Setting LAWA up for Success
- Making LAWA Airports Safer
- Engaging and Communicating with Stakeholders

In addition to Department actions, the federal government passed the following legislation which, among other things, includes the award of certain grants to the operators of all U.S. airports to assist with managing the financial effects of the COVID-19 pandemic: the CARES Act, the Coronavirus Response and Relief Supplemental Appropriation Act (the CRRSA Act), and most recently, the American Rescue Plan Act (the ARP Act) and collectively, the Coronavirus Relief Grants).

Table 19 summarizes the Coronavirus Relief Grants awarded to the Department, expenditures, and the remaining grant amounts expended by the Department.

Table 19
CORONAVIRUS RELIEF GRANTS AWARDED TO LOS ANGELES WORLD AIRPORTS
 Los Angeles International Airport
 (in millions)

Source of Funds	Award	Amount Expended through FY 2021	Remaining Award Amount to Be Expended
CARES Act	\$323.6	\$323.6	\$0.0
CRRSA Act	72.3	0.0	72.3
ARP Act	303.8	0.0	303.8
Total	\$699.7	\$323.6	\$376.1

Source: Department records.

Under the Revenue Bond Indentures, the Coronavirus Relief Grants are not included in the definition of Pledged Revenues. However, any LAX M&O Expenses and Debt Service paid using grants, including Coronavirus Relief Grants, can be excluded from the calculation of Debt Service coverage pursuant to the Revenue Bond Indentures.

In connection with the Airline Cost Stabilization and Recovery Plan described earlier in this 2021DE Report, the Department used a total of \$323.6 million of the Coronavirus Relief Grants to pay operating expenses and Debt Service in FY 2020 and FY 2021, costs that would have

otherwise been paid by the airlines or by other operating revenues of the Airport. This helped to (1) substantially reduce airline costs at the Airport and (2) replace lost nonairline revenues due to reductions in the number of passengers using the Airport.

The Department currently expects to use CRRSA Act and ARP Act grants in FY 2022 and FY 2023 to (1) substantially reduce airline costs at the Airport, (2) replace lost nonairline revenues due to reductions in passengers, (3) reduce near-term costs of certain airline common use equipment as discussed later in this 2021DE Report, and (4) pay certain LAX M&O Expenses and/or Debt Service.

PLEGGED REVENUES

Exhibit C presents actual and forecast Pledged Revenues for the Airport. Actual FY 2021 results are preliminary, unaudited and subject to change.

Pledged Revenues decreased 10.6% in FY 2020 and 23.3% in FY 2021. Pledged Revenues in FY 2021 were 31.5% lower than FY 2019 Pledged Revenues. Pledged Revenues are forecast to increase 28.4% from FY 2021 to FY 2022.

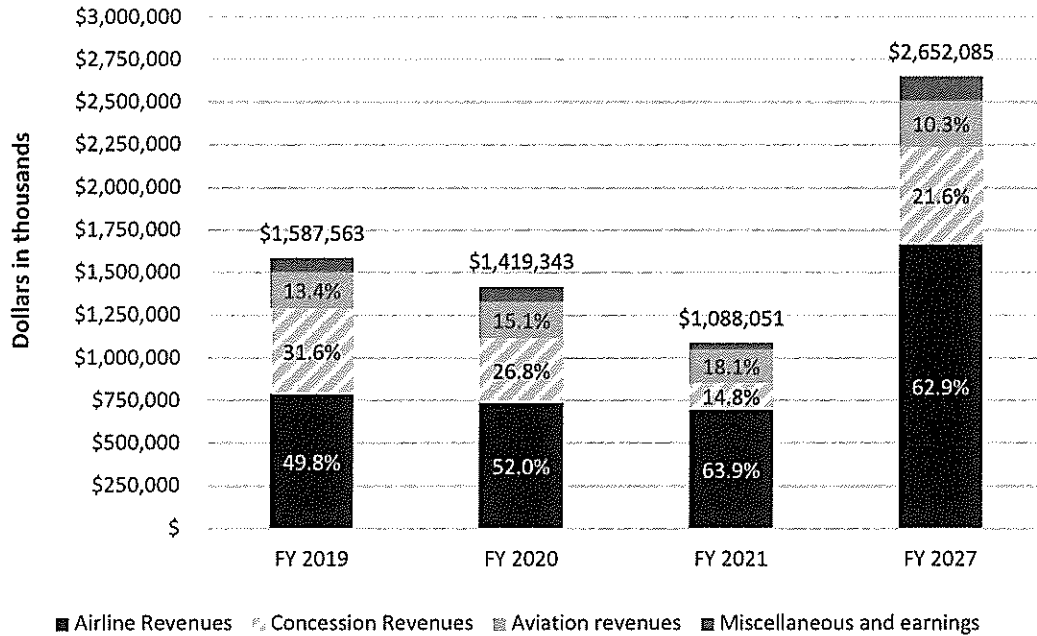
Figure 39 presents the major sources of Pledged Revenues for the Airport from FY 2019 through FY 2021 and forecast from FY 2022 through FY 2027.

Airline revenues and concession revenues accounted for 81.4%, 78.8%, and 78.7% of Pledged Revenues in FY 2019, FY 2020, and FY 2021 respectively. Airline revenues include terminal building rentals, landing fees, and apron fees. Concession revenues include, but are not limited to, public parking fees, rental car concession fees, and terminal building concession revenues.

Pledged Revenues totaled approximately \$1.6 billion in FY 2019, \$1.4 billion in FY 2020 and \$1.1 billion in FY 2021 and are forecast to increase to approximately \$2.7 billion by FY 2027, an average increase of 6.6% per year between FY 2019 (pre-COVID-19) and FY 2027. The forecast increase in airline revenues is primarily driven by significant Department capital investments in airline areas and the cost-recovery basis for calculating annual airline rates and charges.

The major sources of Pledged Revenues and the assumptions used to forecast Pledged Revenues are discussed below.

Figure 39
ACTUAL FY 2019, 2020, 2021 AND FORECAST FY 2027 PLEDGED REVENUES
 Los Angeles International Airport



Notes: Percentages reflect shares of total Pledged Revenues. Percentages for investment earnings and miscellaneous revenues are not shown, but they accounted for 3.9% and 1.3% of Pledged Revenues, respectively, in FY 2019, 4.8% and 1.3%, respectively, in FY 2020, 1.9% and 1.3%, respectively, in FY 2021 and are forecast to account for 2.4% and 2.9%, respectively, in FY 2027. Columns may not total 100% due to rounding.

Airline Revenues

Overview. Forecast airline terminal building rentals, landing fees, and apron fees, in total and expressed on a per enplaned passenger basis, are shown on Exhibit C-1. Airline revenues (including airline lounge payments) totaled approximately \$790.8 million in FY 2019 (accounting for 49.8% of Pledged Revenues), \$737.8 million in FY 2020 (accounting for 52.0% of Pledged Revenues), \$694.8 million in FY 2021 (accounting for 63.9% of Pledged Revenues), and are forecast to be approximately \$1.7 billion in FY 2027 (accounting for 62.9% of Pledged Revenues), as shown on Exhibit C.

Forecasts of airline terminal building rentals, landing fees, and apron fees incorporated in this 2021DE Report were calculated pursuant to the methodologies in the Tariff, Rate Agreement, prior terminal leases, and the Air Carrier Operating Permits, as discussed in the following paragraphs.

In connection with the implementation of the Airline Cost Stabilization and Recovery Plan, certain changes were required to the Tariff and the Rate Agreement, which changes required

airline approval (Tariff changes) and amendments (Rate Agreement changes) to become effective. All Department changes to the Tariff and Rate Agreement were adopted by the LAWA Board in June 2021.

In general, the changes to the Tariff and Rate Agreement were mostly related to transitioning the calculation of certain airline rates, fees, and charges from (1) a calendar year to fiscal year basis and (2) from the previous year's actual LAX M&O Expenses, certain Pledged Revenues, and aviation activity in the calculation of airline rentals, rates, fees, and charges to using budgeted Fiscal Year data. With these changes, all airline rentals, rates, fees, and charges at the Airport are to be recalculated by the Department each year, becoming effective on July 1 and will be based on the Department's annual operating budget not prior year's actual results.

LAX Passenger Terminal Tariff. Airlines occupy and use terminal space at the Airport under the terms of the Tariff that became effective on January 1, 2013. The Tariff has no term or expiration date but is subject to change from time to time by the LAWA Board. As noted above, certain changes were made to the Tariff in June 2021. The Tariff applies to all terminals at the Airport

Terminal rates under the Tariff are designed to recover all costs, including administrative and access costs, allocable to terminal space. The fees and charges established under the Tariff are as follows:

- **Terminal Buildings Rate** – An equalized rate per square foot calculated by the Department by dividing the total of all capital costs and LAX M&O Expenses allocated by the Department to the passenger terminals at the Airport by the total rentable areas in the Terminals.
- **Federal Inspection Services (FIS) Rate** – An equalized rate calculated by the Department by dividing the total of all capital costs and LAX M&O Expenses allocated by the Department to FIS areas at the Airport by the number of international passengers passing through the FIS facilities.
- **Common Use Area Rates and Charges** – Rates and charges calculated by the Department based on the airlines' use of common areas in the terminals, such as baggage claim systems, holdrooms, outbound baggage systems, passenger boarding bridges, , and ticket counters.
- **Terminal Special Charges** – Charges calculated by the Department for use by the Aeronautical Users of certain equipment and services at the Airport that are not otherwise billed to aeronautical users through the rates and charges described above, such as, certain custodial services and terminal airline support systems.

Rate Agreement. All airlines currently serving the Airport have entered into the Rate Agreement with the Department, as discussed more fully below. As noted above, certain changes were made to the Rate Agreement and adopted by the LAWA Board in June 2021. Airlines that do not enter into a Rate Agreement will be subject to the Tariff described above and will not participate in the credits for concession revenues described below.

Pursuant to the Rate Agreement, the airlines consent to and waive rights to challenge the application of the Tariff rate-setting methodology.

Under the Rate Agreement during the Forecast Period:

- The Department calculates an equalized Terminal Buildings Rate.
- The Department provides a credit to the airlines for a portion of the concession revenues generated in the LAX terminals (known as Tier One Revenue Sharing) in the calculation of the Terminal Buildings Rate and the FIS Fee.
- The Department established the Terminal Renewal and Improvement Fund (TRIF), which is funded with annual net revenues from the application of the Airport Terminal Tariff. Amounts deposited in the TRIF are required to be used by the Department to fund, together with debt and grant funding, terminal related capital improvements. Deposits into the TRIF may not exceed \$139.2 million annually or a maximum unused fund balance of \$556.7 million. These limits are subject to annual consumer price index increases.
- The Department can include the amortization of TRIF-funded capital projects in the cost base for the calculation of the Terminal Buildings Rate five years after any such TRIF-funded project is put in service.
- 50% of the amount in the TRIF, which is not otherwise committed to projects, in excess of the TRIF limits described above, are required to be deposited in a Revenue Sharing Fund. Amounts deposited in the Revenue Sharing Fund are required to be distributed to airlines executing the Rate Agreement as a credit against any amount due in the following priority: first, against Terminal Buildings Charges and second, against landing fees.

Air Carrier Operating Permit. Airlines operating at the Airport use landing and apron facilities pursuant to a 10-year Air Carrier Operating Permit scheduled to expire June 30, 2022, with an option to extend for another 10 years. The Air Carrier Operating Permit can be terminated with a 30-day notice from the airlines or the Department. The Air Carrier Operating Permit sets forth (1) how landing and apron fees are to be calculated each year and (2) various terms and conditions related to the use of landing and apron facilities, including, but not limited to, insurance requirements and indemnification provisions. It was assumed that the option to extend the Air Carrier Permit for another 10 years will be executed.

Forecast of Airline Revenues. The forecast of airline revenues is presented in Exhibit C-1 (along with the calculation of airline cost per enplaned passenger). The forecast of airline revenues is based on:

- The rate-setting principles in the Rate Agreement and the Air Carrier Operating Permit.
- The forecast of LAX M&O Expenses, debt service on Senior Bonds and Subordinate Obligations, and other costs that are allocable to airline cost centers and included in the annual calculation of airline rates and charges. The forecast of LAX M&O Expenses includes the APM M&O APs to the APM Developer, the ConRaC M&O APs to the ConRAC

Developer along with the estimated future impacts of Terminal and Airfield and Apron projects reflected on Exhibit D.

- Assumptions regarding the amount of new terminal space associated with the completion of certain projects in the Airport Capital Program during the Forecast Period.
- Additional revenues from the transition of Common Use Equipment from the Airline Consortium to the Department to offset the increase in LAX M&O Expenses from the transition.

Exhibit C-2 presents forecast airline Terminal rentals through FY 2027. Terminal Building costs are recovered according to the commercial compensatory rate-setting methodology (with certain credits) prescribed in the Rate Agreement. The net cost requirement of the Terminals cost center is divided by total rentable space in the Terminals to determine the average rental rate (Terminal Buildings Rate) per square foot. Airlines that lease space from the Department are charged this average rate per square foot. For those airlines that do not lease space, but operate on a common-use basis, the Terminal Buildings Rate is used to calculate the net requirement of all common-use space, which is then recovered based on a common-use methodology.

Exhibit C-3 presents forecast landing and apron fee revenues, calculated according to a cost center compensatory (cost-based) rate-setting methodology prescribed in the Air Carrier Operating Permit, under which (1) the cost requirements of the Airfield Area cost center are recovered through landing fees assessed per 1,000-pound unit of total aircraft landed weight and (2) the cost requirements of the Apron Area cost center are recovered through apron fees assessed per 1,000-pound unit of passenger airline aircraft landed weight.

Aviation and Other Revenues

Aviation Revenues at the Airport (other than airline revenues discussed above) include building rent, land rentals, aircraft parking fees, fuel fees, and other aviation revenues. Aviation Revenues in FY 2019, FY 2020, and FY 2021 accounted for 13.4%, 15.1%, and 18.1% of Pledged Revenues, respectively. For purposes of this 2021DE Report, inflation was assumed to equal 2.0% per year.

Land Rentals. The Department leases land to multiple aviation users of the Airport. Uses of the land include aircraft maintenance, cargo facilities, automobile parking⁵⁹, and the ConRAC, starting at ConRAC DBO.

Land rentals in FY 2019, FY 2020, and FY 2021 accounted for 7.4%, 8.1% and 10.1% of Pledged Revenues, respectively. Land rentals decreased from \$118.1 million in FY 2019 to \$115.5 million in FY 2020 and \$109.6 million in FY 2021, as a result of certain previously leased property that is being re-purposed for certain Airport capital projects.

⁵⁹ The Department owns the Skyview Center parking facilities and collects rent from the operator of the facilities. All other revenue associated with automobile parking is reflected in Automobile Parking in Exhibit C.

Land rental revenue for FY 2022 through FY 2027 is forecast based, in part, on the Department's estimates of changes to existing land rental agreements and expected new land rental agreements other than new ground rent from the rental car Concessionaires using and occupying the new ConRAC when it opens. Land rental revenue (excluding revenue from the new ConRAC) is estimated to increase at an average annual rate of 3.2% between FY 2022 and FY 2027.

Starting at ConRAC DBO, additional land rent revenue has been included in the financial forecasts presented in this 2021DE Report, and is based on the following assumptions: (1) the estimated square footage of the ConRAC site (excluding any square footage associated with non-rental car purposes, such as an Airport employee parking lot), (2) the forecast land rent rate, and (3) increases in the land rent rate to account for inflation and fair market value assessments.

Total land rental revenue is forecast to increase at an average annual rate of 6.1% between FY 2022 and FY 2027.

Building Rentals. The Department leases buildings, other than the Terminals, to multiple aviation users, including the passenger and cargo airlines. Uses of the space include aircraft maintenance, cargo facilities, and administrative offices. Building rentals also include terminal building rents from entities other than airlines. Building rentals in FY 2019, FY 2020, and FY 2021 accounted for 5.5%, 6.5%, and 7.3% of Pledged Revenues, respectively. Building rentals increased from \$86.9 million in FY 2019 to \$91.7 million in FY 2020 and decreased to \$79.7 million in FY 2021 as a result of reductions in rent for buildings, hangars, and warehouses on land that is being re-purposed for certain Airport capital projects.

Building rental revenue for FY 2022 through FY 2027 is forecast based, in part, on the Department's estimates of changes to existing building rental agreements and expected new building rental agreements. Building rental revenue is estimated to increase at an average annual rate of 1.4% between FY 2022 and FY 2027.

Other Aviation Revenues. This category includes other miscellaneous revenues generated from aviation users of the Airport, including revenues from aircraft parking, fuel flowage fees, and the TSA. Other aviation revenues in FY 2019, FY 2020, and FY 2021 accounted for 0.5%, 0.5%, and 0.7% of Pledged Revenues, respectively. Other aviation revenues are forecast to increase with inflation, except for those subcategories related to aircraft activity (e.g., aircraft parking and fuel flowage fees), which are driven by inflation plus the forecast growth in landed weight.

Concession Revenues

Concession revenues totaled \$501.2 million in FY 2019 (accounting for 31.6% of Pledged Revenues), \$380.3 million in FY 2020 (accounting for 26.8% of Pledged Revenues), and \$161.4 million in FY 2021 (accounting for 14.8% of Pledged Revenues). Concession revenues are

forecast to be \$257.3 million in FY 2022 (accounting for 18.4% of Pledged Revenues). Concession revenues are forecast to total approximately \$572.1 million in FY 2027 as presented in Exhibit C (accounting for 21.4% of Pledged Revenues). As described below, the Department has entered into multiple agreements with concessionaries for the provision of non-airline services at the Airport.

In this section of the 2021DE Report, certain sources of concession revenue are shown on a per originating passenger basis—a reasonable approximation of the amount that each originating passenger spends on concessions. Because FY 2021 originating passenger data are not available as of the date of this 2021DE Report, the percentage of actual originating passengers to total enplaned passengers in FY 2020 has been assumed and, when multiplied by enplaned passengers in FY 2021, was used to estimate the number of originating passengers at the Airport in FY 2021.

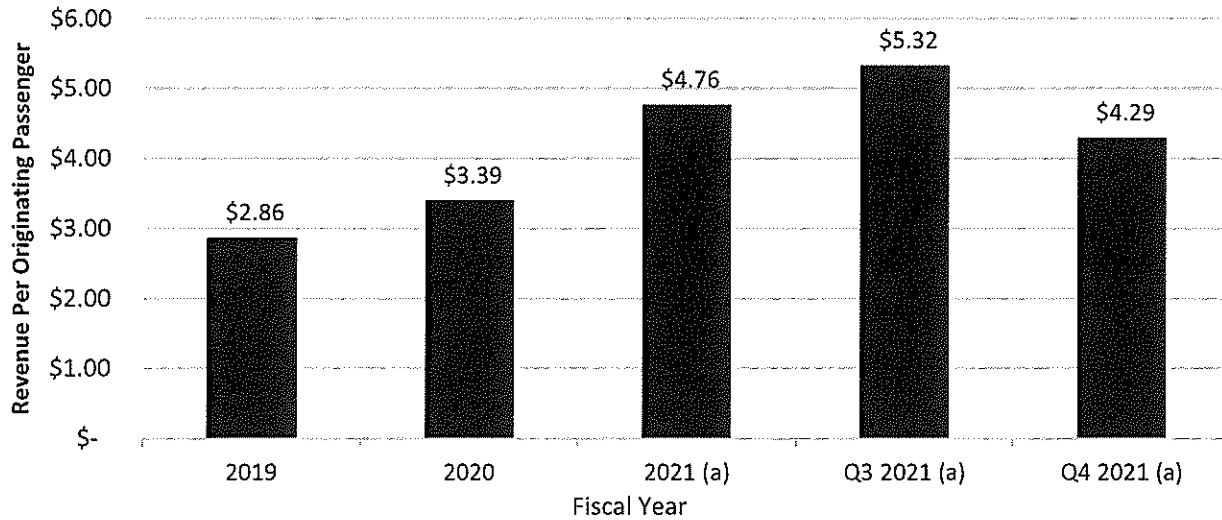
Automobile Parking Revenues. Automobile parking is currently provided in the CTA garages and a cell phone waiting lot. For the five years from FY 2014 to FY 2019, annual automobile parking revenues increased at an average annual growth rate of 5.5%. In FY 2019, automobile parking revenues totaled \$104.3 million, and accounted for 6.6% of Pledged Revenues.

Automobile parking revenues were lower in FY 2020 due to the reduction in the number of passengers using the Airport caused by the COVID-19 pandemic. On March 30, 2020, the Department closed the Economy Lot E due to the decrease in demand. As a result of reduced passenger traffic and parking lot closure, public parking revenue in FY 2020 decreased by \$16.5 million, from \$104.3 million in FY 2019 to \$87.8 million in FY 2020. In FY 2021, automobile parking revenues decreased by another \$30.5 million to \$57.3 million and accounted for 5.3% of Pledged Revenues.

Figure 40 shows average automobile parking revenue per originating passenger for FY 2019, FY 2020, FY 2021, and the most recent quarterly automobile parking revenue per originating passenger in FY 2021. Public parking revenue per originating passenger was \$2.86 in FY 2019, \$3.39 in FY 2020 and \$4.76 in FY 2021.

As passenger traffic at the Airport has recovered, revenues per originating passenger have increased in quarters three and four of FY 2021, likely as a result of longer parking durations and increased use of parking facilities at the Airport as compared to other modes of transportation (e.g., taxis).

Figure 40
AUTOMOBILE PARKING REVENUE PER ORIGINATING PASSENGER
 Los Angeles International Airport



Source: Department management records.

(a) Results based on preliminary, unaudited, financial results and originating passenger estimates for FY 2021 as described above.

Table 20 lists the public parking facilities at the Airport⁶⁰, as well as the number of spaces and current parking rates.

Parking facilities in the CTA are operated for the Department by ABM Onsite Services-West under a 7-year management contract that became effective June 1, 2021, and has two one-year extension options. Under this contract, the Department receives 100% of the gross parking revenues from these facilities and compensates ABM Onsite Services-West for certain expenses it incurs in operating the facilities.

The LAWA Board approved a plan for the Department to implement demand-based parking rates, with discounts for pre-booking, as reflected in Table 20. The Department currently expects to implement the new rates in FY 2022, but the forecast of public parking revenues presented in this 2021DE Report does not assume that the Department will implement the new rates during the Forecast Period.

The Department also intends to implement a series of enhancements to its public parking facilities through its current parking operator ABM Onsite Services-West, including, but not limited to, use of smart parking technologies that are focused on enhancing customer service and experience when using Airport parking facilities. The Department currently expects that the

⁶⁰ The Department owns the Skyview Center parking facilities; however, these facilities are managed under a separate operating agreement and the revenue is recorded under Land Rent in Exhibit C.

implementation of these and other types of enhancements to its public parking facilities will result in increases in revenue per originating passenger and total public parking revenues. In this 2021DE Report, the forecast of public parking revenues does not include any such increases.

Table 20
EXISTING PUBLIC PARKING FACILITIES AND RATES
 Los Angeles International Airport

Public Parking	Number of Spaces	24-hour rate	Hourly rate
Close-in parking			
CTA garages	7,718	<u>Current:</u> \$40.00 <u>LAWA Board approved rates (a):</u> General = \$50-\$60 with up to 70% online pre-booking discount Premium/Valet = \$60-\$80 with up to 70% online pre-booking discount	<u>Current:</u> \$5.00 first hour, \$4.00 each 30-minutes thereafter <u>LAWA Board approved rates (a):</u> General = \$7-\$11 first hour, \$6-\$10 each 30-minutes thereafter, with up to 70% online pre-booking discount Premium/Valet = \$9-\$13 first hour, \$8-\$12 each 30-minutes thereafter, with up to 70% online pre-booking discount
Remote parking (b)			
Cell phone waiting lot	21	n.a.	n.a.
Airport total	7,739		

Note: n.a. = not applicable.

Source: Department records.

(a) LAWA Board approved rates, but not effective as of the date of this 2021DE Report.

(b) Does not include 2,690 public parking spaces in economy parking Lot E that the Department closed in April 2020. Also does not include approximately 4,300 remote economy public parking spaces the Department expects to open in October 2021 as part of the ITF West facility.

Multiple facilities near the Airport also provide parking for Airport patrons. The Department does not impose a privilege fee on these off-Airport parking facilities operated by private companies but does impose a trip fee for the shuttle bus operations of off-Airport parking companies.

The forecast of public parking revenues is based on information provided in the Department's forecast of public parking revenues and the following assumptions: (1) the number of available parking spaces by public parking facility during the Forecast Period⁶¹, (2) the historical and forecast amount of revenue per parking space, (3) approximately 4,300 remote public parking spaces will open at the ITF West facility in October 2021, and (4) assumed annual inflation starting in FY 2024 to account for expected future increases in public parking rates.

Rental Car Revenues. The Department has executed rental car concession agreements (Existing Rental Car Agreements) with 11 rental car companies serving the Airport (Existing Rental Car Concessionaires). The Department has exercised its right to extend the Existing Rental Car Agreements through the ConRAC DBO.

The Existing Rental Car Agreements require each Existing Rental Car Concessionaire to pay the Department a concession fee equal to 10% of its annual gross revenues or a minimum annual guarantee, whichever is greater. The rental car concession revenues are shown in the Concession Revenues section of Exhibit C at the end of this 2021DE Report. In FY 2021, rental car concession revenues accounted for 3.1% of Pledged Revenues, which was based on a concession fee equal to 10.0% of annual gross revenues.

Figure 41 presents the Existing Rental Car Concessionaires' market shares of gross revenues in FY 2021.

The following companies and their brands have Existing Rental Car agreements with the Department: Alamo, Avis⁶², Budget, Dollar, Enterprise, Fox, Hertz, National, Sixt, and Thrifty. These companies operate rental car facilities on and off-Airport property and transport their passengers to and from the CTA on their own branded shuttle buses.

Certain other rental car companies provide rental car services to Airport passengers, but do not have Existing Rental Car Agreements with the Department. These off-Airport companies are required to have a license agreement with the Department and pay a fixed fee per month (these other companies do not pay a percentage of gross revenues).

Between FY 2014 and FY 2019, rental car concession revenues increased an average growth rate of 1.5% per year. However, during this time rental car concession revenues per originating passenger decreased on average by 4.8% per year. The decreases in on-Airport rental car concession revenues per originating passenger were likely the result of the number of

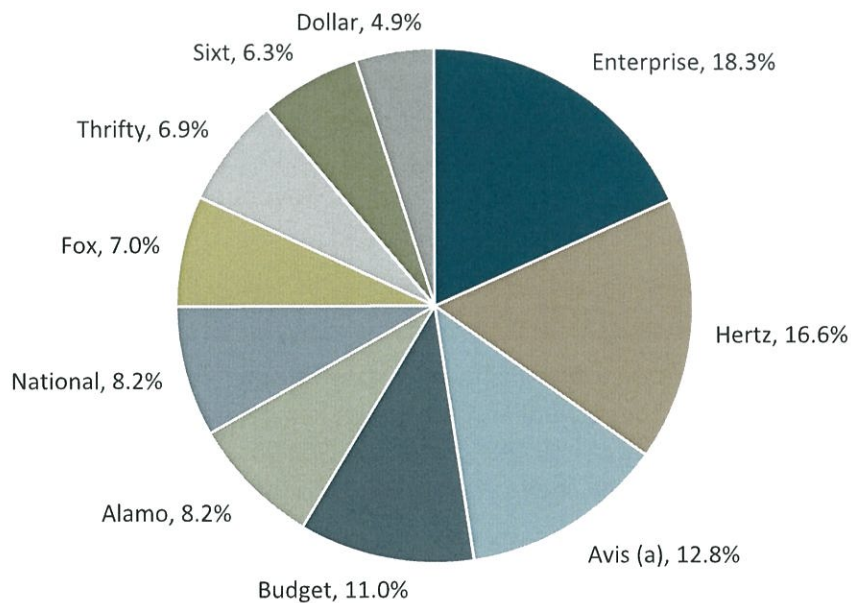
⁶¹ During the Forecast Period, the number of available public parking spaces are currently expected to change due to the construction of certain projects included in the Capital Program as well as the opening of the ITF-West Phase 1 parking garage by the end of FY 2022.

⁶² Avis also operates the brand Zipcar

originating passengers increasing at a greater rate than rental car transactions and concession revenues as well as the introduction of Transportation Network Companies (the TNCs) such as Uber and Lyft at the Airport during the same period.

In FY 2019, rental car concession revenues totaled \$82.6 million, and accounted for 5.2% of Pledged Revenues. Rental car concession revenues were lower in FY 2020 due to the reduction in the number of enplaned passengers using the Airport caused by the COVID-19 pandemic and by the payment deferrals pursuant to the Department’s Concessionaires and Services Temporary Relief Program, which resulted in a \$17.4 million reduction in revenues to \$65.2 million in FY 2020. In FY 2021, rental car concession revenues decreased by \$31.5 million to \$33.7 million and accounted for 3.1% of Pledged Revenues.

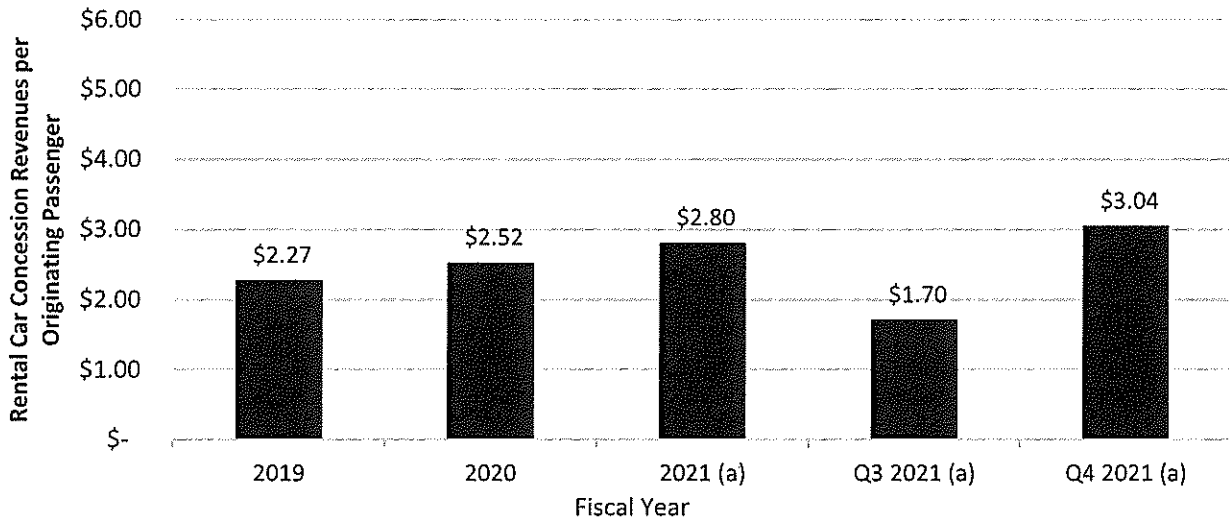
Figure 41
ON-AIRPORT RENTAL CAR COMPANY SHARES OF FY 2021 GROSS REVENUES
 Los Angeles International Airport



Notes: The sector shares may not total 100% due to rounding.
 (a) Avis includes Zipcar
 Source: Department records.

Figure 42 shows rental car concession revenue per originating passenger for FY 2019, FY 2020, FY 2021, and recent quarterly rental car concession revenue per originating passenger in FY 2021. Rental car concession revenue per originating passenger was \$2.27 in FY 2019, \$2.52 in FY 2020 and \$2.80 in FY 2021.

Figure 42
ON-AIRPORT RENTAL CAR CONCESSION REVENUES PER ORIGINATING PASSENGER
 Los Angeles International Airport



Source: Department records.

(a) Results based on preliminary, unaudited, financial results and originating passenger estimates for 2021 as described above.

As passenger traffic at the Airport has recovered, rental car concession revenue per originating passenger fluctuated in quarters three and four of FY 2021, potentially as a result of seasonal passenger traffic patterns and the availability of rental cars.

Two of the Concessionaires that executed the CLA filed for Chapter 11 bankruptcy following the COVID-19 pandemic: Hertz, including its brands Dollar/Thrifty, and Advantage, including its brand EZ Rent A Car. Hertz (including each of its brands) represented approximately 28.4% of the rental car gross revenue market share at the Airport for FY 2021. Hertz emerged from bankruptcy on June 30, 2021, and has assumed the CLA and will use and lease space in the ConRAC starting at ConRAC DBO. In February 2020, Advantage ceased operating at the Airport.

The CLA’s initial term expires on the 20-year anniversary of the ConRAC DBO, with one option to extend the CLA for 5 years by the Department through written notice to the Concessionaires, or automatically if certain Concessionaire transaction day targets are achieved pursuant to the CLA.

Certain business arrangements in the CLA start on ConRAC DBO and include, but are not limited to, the following:

1. The payment by the Concessionaires to the Department of the greater of a minimum annual guarantee or a 10% Concession Fee of rental car gross revenues.
2. The payment of ConRAC site Land Rent by Concessionaires to the Department.
3. The payment of an M&O Fee by Concessionaires to the Department for ConRAC M&O Costs.
4. The payment of an annual Concessionaire CTS Contribution to the Department to pay up to 41.0% of the annual APM System M&O Costs and APM System Capital Costs.

Forecast revenues from items 1 through 4 above have been included in the financial forecasts presented in this 2021DE Report (see Exhibit C), starting at ConRAC DBO. Rental car concession revenues are included in the Concession Revenues section of Exhibit C. ConRAC land rental revenues are included in the Land Rentals line in the Aviation Revenues section of Exhibit C. Revenues associated with items 3 and 4 are included in the Miscellaneous Revenues section of Exhibit C.

In addition to the payments described above, the Existing Rental Car Concessionaires (and the Concessionaires under the CLA) are required to collect a CFC that is approved by the LAWA Board and remit the revenues to the Department. The Department currently imposes a \$9.00 CFC on rental car customers per rental car transaction day (up to a 5-day maximum). See the section of this 2021DE Report titled "Consolidated Rent-a-Car Facility" regarding the use of CFC revenues prior to and after ConRAC DBO.

For companies choosing not to sign the CLA, the Department would (subject to LAWA Board approval) require off-Airport companies to (1) pick up and drop off their customers at the new ConRAC and use the APM System and (2) pay a transportation fee to the Department, that would be established to cover their customers' prorated use of the APM System. Transportation fee revenue from off-Airport companies would be included in Pledged Revenues and used to pay annual APM operating and capital costs. Because the amount of the Transportation fee has not been established by the Department, no such forecast Transportation fee revenue has been included in the financial Forecasts presented in this 2021DE Report.

The forecast of concession fees under the Existing Rental Car Agreement and new CLA was based on the following assumptions:

- The estimated number of arriving passengers, which was based on the forecast of enplaned passengers presented earlier in this 2021DE Report.
- The estimated number of transactions per arriving passenger was assumed to be flat during the Forecast Period with the exception of a 5.0% increase in FY 2024 (the first full year of ConRAC operation).

- The estimated amount of concession fees per transaction was assumed to be flat through ConRAC DBO, increasing with inflation thereafter.

Rental car concession fees are forecast to increase from \$58.4 million in FY 2022 to \$96.4 million in FY 2027.

Revenues pursuant to the new CLA other than concession fees were forecast on the basis of:

- **Land Rent.** The land rent rate was assumed to increase at 2.5% per year (the minimum annual adjustment in the CLA) with an assumed fair market value adjustment every 5 years. The square footage of the ConRAC site was assumed to remain unchanged during the Forecast Period.
- **M&O Fee.** The M&O Fee was assumed to be equal to annual ConRAC M&O Costs, which, for purposes of this 2021DE Report, is equal to the annual ConRAC O&M AP.
- **Concessionaire CTS Contribution.** The annual Concessionaire CTS Contribution was assumed to increase by 2.5% per year, as stipulated in the CLA. Other adjustments to the amount of the annual Concessionaire CTS Contribution are included in the new CLA but were not considered in this 2021DE Report since the adjustments would occur beyond the Forecast Period.

Duty Free Revenues. The Department has entered into a duty-free merchandise concession agreement with DFS Group L.P. (DFS) for the design, construction, development, and operation of duty-free merchandise concessions at all Airport Terminals. The agreement with DFS is scheduled to expire in September 2024. Under the agreement with DFS, the Department receives a certain percentage of the concessionaire’s gross sales at the Airport, subject to a minimum annual guarantee, plus 10% of any gross sales in excess of \$175 million.

As a result of the reduced passenger traffic, duty free revenues in FY 2020 decreased by \$29.2 million, from \$84.9 million (5.3% of Pledged Revenues) in FY 2019 to \$55.7 million (3.9% of Pledged Revenues) in FY 2020. In FY 2021, duty free revenues decreased by another \$50.6 million to \$5.1 million and accounted for 0.5% of Pledged Revenues. As a result of a forecast increase in the number of enplaned passengers using the Airport in FY 2022, duty free revenues are forecast to increase to \$12.5 million (0.9% of Pledged Revenues) in FY 2022.

Duty free revenues are forecast to increase based, in part, on growth in the number of international passengers at the Airport and inflation.

Terminal Concession Revenues. Terminal concession revenues include fees paid by retail and food and beverage concessionaires in the Airport terminals. The Department has entered into multiple agreements for the provision of terminal concessions. These agreements are organized into two groups:

- **Retail and Food and Beverage Concessions**—The Department directly manages the concession programs in Terminals 4, 5, 7, and 8. The Department has entered into several agreements with companies to provide retail and food and beverage concessions

in these terminals. The agreements for retail concessions and food and beverage Concessions are scheduled to expire in June 2025. These concessionaires pay the Department the greater of either a percentage of gross receipts or a minimum annual guarantee.

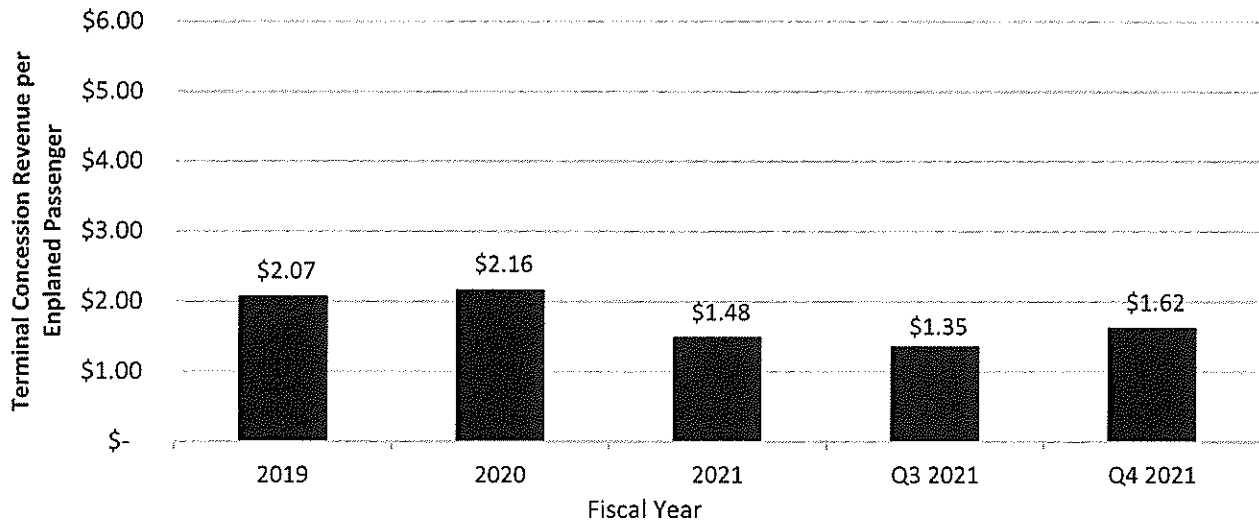
- **Terminal Commercial Manager Concessions**—These concessions are operated under two separate concession agreements that the Department has entered into with Westfield Airports, LLC (Westfield). One agreement is for Terminal 2, TBIT, and MSC North. The second agreement is for Terminals 1, 3, and 6. Westfield serves as the master developer and manager of the concessions in these terminals. Westfield was sold to Unibail-Rodamco SE (Unibail-Rodamco) in 2018. As a result of the merger, the Department was notified by Unibail-Rodamco that the corporate name for Westfield was changed to URW Airports, LLC (URW). Both Terminal Commercial Manager agreements with URW are scheduled to expire in 2034. Under the Department's agreements with URW, the Department receives the greater of a minimum annual guarantee or rent (consisting of a base percentage of URW's revenues plus a contingent percentage additional rent if gross sales exceed certain benchmarks).

For the five years from FY 2014 to FY 2019, annual terminal concession revenues increased at an average annual growth rate of 6.4%. In FY 2019, terminal concession revenues totaled \$91.4 million, and accounted for 5.8% of Pledged Revenues.

Terminal concession revenues were lower in FY 2020 due to the reduction in the number of enplaned passengers at the Airport caused by the COVID-19 pandemic and by payment deferrals pursuant to the Concessionaires and Services Temporary Relief Program, which resulted in a \$23.6 million reduction in revenues to \$67.9 million in FY 2020. In FY 2021, Terminal concession revenues decreased by \$46.3 million to \$21.5 million and accounted for 2.0% of Pledged Revenues.

Figure 43 shows average terminal concession revenue per enplaned passenger for FY 2019, FY 2020, FY 2021 and recent quarterly terminal concession revenue per originating passenger in FY 2021. Terminal concession revenue per enplaned passenger was \$2.07 in FY 2019, \$2.16 in FY 2020 and \$1.48 in FY 2021.

Figure 43
TERMINAL CONCESSION REVENUE PER ENPLANED PASSENGER
 Los Angeles International Airport



Source: Department management records.

As passenger traffic at the Airport has recovered, terminal concession revenue per enplaned passenger has been lower relative to prior Fiscal Years, likely as a result of limited concession openings and reduced service hours.

The forecasts of retail and food and beverage concession revenues and terminal commercial management revenues were developed together based, in part, on the Department’s FY 2022 budget and combined per passenger spend rates for the three categories along with traffic recovery. It was assumed that as the Department’s existing retail concession agreements and existing food and beverage concession agreements expire during the Forecast Period, new agreements would be executed with similar terms and conditions and financial performance.

Terminal Advertising. The Department has entered into a Terminal Media Operator concession agreement with JCDecaux Airport, Inc. (JCDecaux) for advertising sponsorship and other media throughout the Terminal. Terminal advertising revenue in FY 2019, FY 2020, and FY 2021 accounted for 2.0%, 2.0%, and 0.9% of Pledged Revenues, respectively. The agreement with JCDecaux is scheduled to expire in December 2023.

For purposes of this 2021DE Report, it was assumed that following expiration of the agreement with JCDecaux, a new agreement would be executed with similar terms and conditions and financial performance. Terminal advertising revenues are forecast to increase with 2.0% inflation.

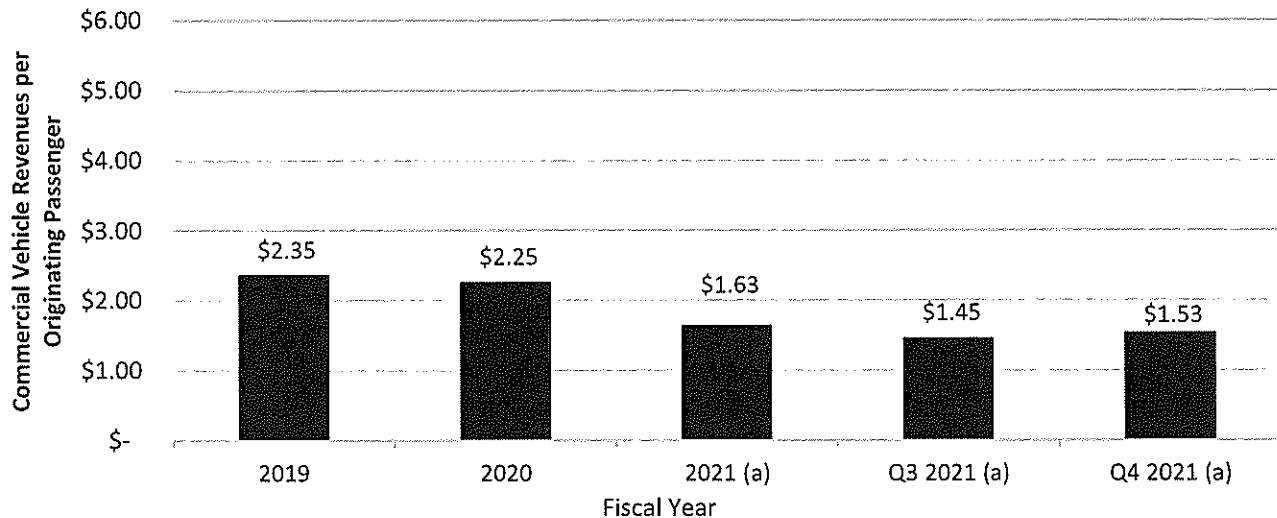
Commercial Vehicle Revenues. The Department generates revenues from a per trip fee on all bus, limousine, and taxicab operators, as well as TNCs such as Uber and Lyft. For the five years from FY 2014 to FY 2019, commercial vehicle revenues increased at an average annual growth rate of 33.1% driven by the introduction of TNC’s at the Airport.

Commercial vehicle revenues benefited from the introduction of TNC’s at the Airport when the Department entered into agreements with Lyft, Inc. (December 2015) and Raiser-CA, LLC (doing business as Uber) (January 2016) to allow each company access to the Airport. Under those agreements, the Department receives a \$4.00 fee for each drop-off or pick-up at the Airport.

Commercial vehicle revenues were lower in FY 2020 due to the reduction in the number of passengers using the Airport caused by the COVID-19 pandemic. As a result of the reduced passenger traffic, commercial vehicle revenue in FY 2020 decreased by \$27.3 million, from \$85.6 million in FY 2019 to \$58.3 million in FY 2020. In FY 2021, commercial vehicle revenues decreased by \$31.2 million to \$27.1 million and accounted for 2.5% of Pledged Revenues.

Figure 44 presents the trend of commercial vehicle revenues paid to the Department per originating passenger at the Airport for FY 2019, FY 2020 and FY 2021 and recent quarterly commercial vehicle revenue per originating passenger in FY 2021. Commercial vehicle revenue per originating passenger was \$2.35 in FY 2019, \$2.25 in FY 2020 and \$1.63 in FY 2021. Commercial vehicle revenue per originating passenger remains below pre-COVID levels.

Figure 44
COMMERCIAL VEHICLE REVENUES PER ORIGINATING PASSENGER
 Los Angeles International Airport



Source: Department records.

(a) Results based on a preliminary, unaudited, financial results and originating passenger estimates for FY 2021 as described above.

Commercial vehicle revenues, including revenues from Uber and Lyft, are forecast to increase with inflation and passenger growth.

Other Concession Revenue. Revenues in this category primarily include fees generated from foreign exchange, telecommunications, luggage carts, and automated teller machine transactions. Other concession revenue in FY 2019, FY 2020, and FY 2021 accounted for 1.3%, 1.2%, and 0.6% of Pledged Revenues, respectively. Other concession revenue is forecast to increase with inflation and enplaned passenger growth.

Investment Earnings

Investment earnings on moneys held in the LAX Revenue Fund, Reserve Fund, and M&O Reserve Fund (funds defined under the Senior Revenue Bond Indenture) are defined as Pledged Revenues under the Senior Revenue Bond Indenture. Investment earnings in FY 2019, FY 2020, and FY 2021 accounted for 3.9%, 4.8% and 1.9% of Pledged Revenues, respectively. The forecast of investment earnings is based on an assumed increase in the investment earnings rate and estimated increases in LAX Revenue Fund, Debt Service Reserve Fund, and M&O Reserve Fund balances during the Forecast Period.

Miscellaneous Revenues

Miscellaneous Revenues include (1) federal subsidies associated with the Series 2009C and Series 2010C Subordinate Build America Bonds (BABs), (2) certain Airport sales and services, and (3) starting with ConRAC DBO, Concessionaire CTS Contributions and the M&O Fee described in the "Rental Car Revenues" section of this 2021DE Report. Miscellaneous revenues accounted for 1.3% of Pledged Revenues in FY 2019, FY 2020, and FY 2021.

The forecast of the BABs subsidies is based on (1) the assumption that federal sequestration will continue, (2) debt service schedules for the associated BABs, and (3) historical subsidies.

The forecast of Concessionaire CTS Contributions for FY 2023 through FY 2027 was based on the forecast Concessionaire CTS Contribution at ConRAC DBO and 2.5% growth in FY 2025 through FY 2027, each as specified in the CLA. The M&O Fee is assumed to be equal to annual ConRAC M&O Costs, which for purposes of this 2021DE Report is equal to the annual ConRAC O&M AP. All other miscellaneous revenues are forecast based on assumed rates of inflation.

LAX M&O EXPENSES

Exhibit D presents LAX M&O Expenses by expense type and by Airport cost center. As defined in the Senior Revenue Bond Indenture, LAX M&O Expenses are substantially all maintenance and operating expenses of the Airport, excluding (1) depreciation, (2) administrative costs allocated to other airports operated and maintained by the Department, and (3) any expenses of the Airport paid from sources other than Pledged Revenues.

FY 2022 Budget LAX M&O Expenses

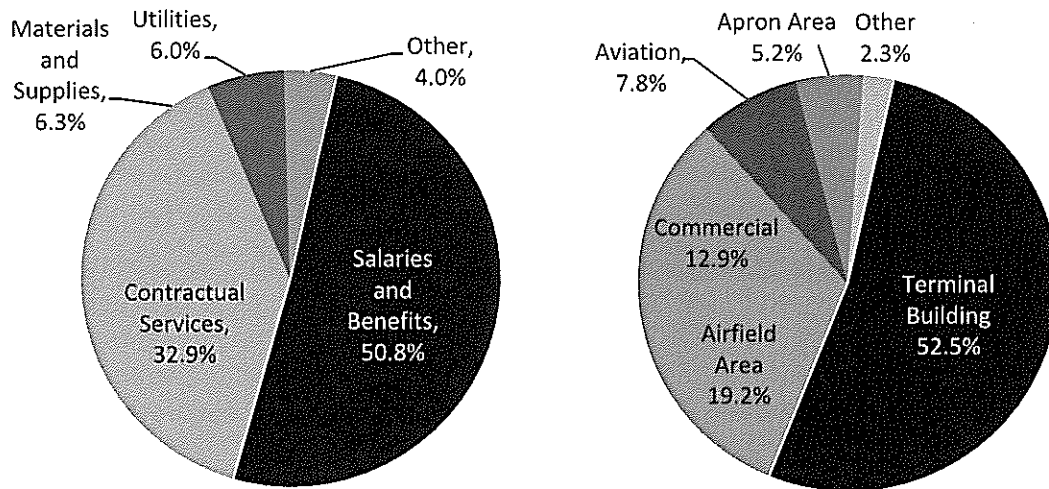
The Department’s LAX M&O Expenses budget for FY 2022 was used as the basis for forecasting LAX M&O Expenses.

Historically, salaries and benefits have represented the single largest category of expense at the Airport, which is typical of most U.S. airports, and is expected to be the case in FY 2022 (approximately 50.7%) and during each Fiscal Year of the Forecast Period at the Airport. The next largest category of expense at the Airport is contractual services, which includes expenses associated with various technical, professional service, management, and other contracts. Other categories of LAX M&O Expenses include materials and supplies, utilities, and other operating expenses⁶³.

The major categories of budgeted FY 2022 LAX M&O Expenses and the allocation to Airport cost centers are shown on Figure 45.

The Department’s LAX M&O Expenses budget for FY 2022 includes expenses related to the transition of the operation and management of certain Common Use Equipment from an airline consortium to the Department.

Figure 45
FY 2022 BUDGET LAX MAINTENANCE AND OPERATION EXPENSES



Notes: The percentages by major category in this figure are prior to adjustments to exclude M&O Expenses associated with administrative expenses allocated to other airports operated by the Department and LAX M&O Expenses paid from grants. The sector shares may not add to 100.0% due to rounding.
Source: The Department’s FY 2022 budget.

⁶³ Includes expenses associated with administrative services and advertising and public relations.

Forecast LAX M&O Expenses

Forecast LAX M&O Expenses in FY 2023 through FY 2027 are based on (1) the Department's FY 2022 budget and its plans for operating Airport facilities throughout the Forecast Period, (2) assumed inflationary and real (net of inflation) increases in the costs of labor, services, utilities, and supplies, and (3) estimates of additional expenses associated with new or expanded Airport facilities included in the Airport Capital Program to be placed in service during the Forecast Period (as described below).

The Department expects that certain projects in the Airport Capital Program, including but not limited to, the APM System project, and the ConRAC project will result in additional increases in LAX M&O Expenses during the Forecast Period.

LAX M&O Expenses are forecast to increase from a budget of approximately \$861.7 million in FY 2022 to approximately \$1.2 billion in FY 2027, an average annual increase of 6.3% per year. The forecast of LAX M&O Expenses includes the APM M&O APs to the APM Developer and the ConRAC M&O APs to the ConRAC Developer.

As reflected on Exhibit D, as part of the Airline Cost Stabilization and Recovery Plan discussed previously, the Department used approximately \$258.9 million of Coronavirus Relief Grants to pay certain LAX M&O Expenses in FY 2020 and FY 2021 and expects to use an additional \$125.1 million in FY 2022 and FY 2023 to substantially reduce airline costs at the Airport and replace lost nonairline revenues due to reductions in passengers. LAX M&O Expenses paid using grants, including Coronavirus Relief Grants, can be excluded from the calculation of Debt Service coverage pursuant to the Revenue Bond Indentures.

DEBT SERVICE

Exhibit E presents Senior Bond Aggregate Annual Debt Service and Subordinate Aggregate Annual Debt Service for outstanding Senior Bonds and Subordinate Obligations, respectively, as well as for the proposed Series 2021DE Bonds and Future Bonds.

Principal of and interest on Senior Bonds or Subordinate Obligations paid with PFC revenues, CFC revenues, and Coronavirus Relief Grants are excluded from Senior Bond Aggregate Annual Debt Service and Subordinate Aggregate Annual Debt Service for purposes of meeting the Senior Bond and Subordinate Obligations Rate Covenants. Exhibit E reflects PFC revenues, CFC revenues, and Coronavirus Relief Grants expected to be used by the Department each Fiscal Year to pay debt service. The actual amount of PFC revenues, CFC revenues, and Coronavirus Relief Grants that the Department will use to pay debt service may vary from year to year.

As shown in Exhibit E, Senior Bond Aggregate Annual Debt Service is projected to increase from approximately \$52.1 million in FY 2021 to approximately \$299.6 million in FY 2027. Subordinate Aggregate Annual Debt Service is projected to increase from approximately \$123.8 million in FY 2021 to approximately \$340.6 million in FY 2027.

The Department uses a commercial paper program to assist with short-term borrowing needs pursuant to the Subordinate Revenue Bond Indenture. The Department is currently authorized to issue up to \$500 million of commercial paper. As of September 1, 2021, the Department's current outstanding Commercial Paper Notes balance is approximately \$241.9 million including the Series A, Series B, Series C, and Series D Subordinate Commercial Paper Notes. As reflected on Exhibit E, the Commercial Paper Notes are expected to be repaid with Future Bonds, with the exception of certain Commercial Paper Notes previously used to pay for the Skywest property acquisition which are assumed to remain outstanding during the Forecast Period.

Proposed Series 2021DE Bonds

Debt service on the proposed Series 2021DE Bonds was estimated by the Department's Co-Financial Advisor. The proposed Series 2021DE Bonds are assumed to be issued as fixed-rate bonds with a final maturity date of May 2051. An all-in true interest cost of approximately 3.07% on the proposed Series 2021DE Subordinate Bonds was assumed by the Co-Financial Advisor.

Future Senior Bonds and Subordinate Obligations

Debt service projected for future Senior Bonds and Subordinate Obligations expected to be issued during the Forecast Period (as shown in Exhibit E) was also provided by the Co-Financial Advisor, based on the following assumptions:

- An assumed fixed interest rate of 6.00% for both future Senior Bonds and future Subordinate Obligations.
- Capitalized interest and other costs of issuance to be funded from the net proceeds of Future Bonds; debt service on Future Bonds included in the financial forecasts presented in this 2021DE Report is net of capitalized interest.
- The Future Bonds for each project will be amortized over the lower of the project's expected useful life or 30 years, whichever occurs first.
- Future Bonds issued to pay for airfield, apron, or LAMP projects will be Subordinate Obligations.
- Future Bonds issued for all other projects in the Airport Capital Program will be Senior Bonds.

USE OF PFC AND CFC REVENUES DURING FORECAST PERIOD

PFC Revenues

In addition to using PFC revenues on a pay-as-you-go basis to help fund certain Airport Capital Program projects (as reflected on Exhibit A), the Department uses PFC revenues to pay a portion of the debt service on certain outstanding Bonds that were issued to finance all or a portion of the costs of PFC-eligible projects.

PFC revenues are not included in the definition of Pledged Revenues under the Revenue Bond Indentures. For purposes of meeting the Rate Covenants, the portion of principal and interest on Senior Bonds and Subordinate Obligations paid with PFC revenues are excluded from the calculation of Senior Bond Aggregate Annual Debt Service and Subordinate Obligations Aggregate Annual Debt Service.

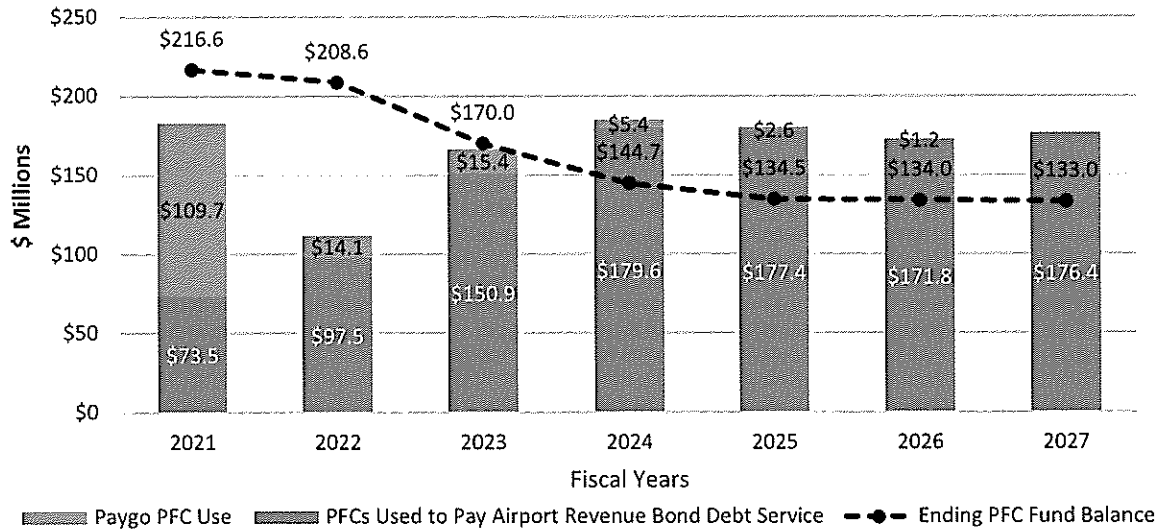
To date, the FAA has authorized the Department to collect and use \$6.0 billion in PFC revenues at the Airport at the \$4.50 PFC level for approved projects. As previously discussed, the Department expects to seek FAA approval for additional PFC authorization to pay a portion of PFC-eligible annual APM System Capital Costs. As of June 30, 2021, the Department had collected a total of \$3.0 billion in PFC revenues (including interest income) and expended approximately \$2.8 billion on FAA-approved PFC-eligible projects.

Figure 46 presents the Department's currently expected use of PFC revenues to (1) pay revenue bond debt service and (2) pay for certain Airport Capital Program costs on a pay-as-you-go basis through the Forecast Period, and also reflects the estimated ending PFC Fund balance. The Department currently plans to maintain approximately 75% of annual PFC revenues used to pay debt service in the PFC Fund each Fiscal Year to have a reserve for potential future passenger traffic downturns at the Airport.

The overall Airport Capital Program funding plan, forecast airline revenues, and other key financial results presented in this 2021DE Report assume that the current \$4.50 PFC level at the Airport will remain in effect during the Forecast Period and that the Department will submit and receive approval for future PFC applications to use PFC revenues to pay PFC-eligible costs of certain projects in the Airport Capital Program.

As reflected on Exhibit E, the Department currently expects to use between \$63.4 million and \$113.8 million of annual PFC revenues to pay Senior Debt Service between FY 2022 to FY 2027, and between \$34.1 million and \$88.4 million of annual PFC revenues to pay Subordinate Obligation Debt Service between FY 2022 to FY 2027.

Figure 46
USE OF PFC REVENUES AND ENDING PFC FUND BALANCE
 Los Angeles International Airport



CFC Revenues

As discussed in detail in the “Consolidated Rent-A-Car Facility” section of this 2021DE Report, the Department currently collects revenue from a \$9.00 CFC per rental car transaction day (up to a 5-day maximum), the maximum amount allowable CFC per rental car transaction in the State of California. The Department currently expects to use a majority of all CFC Revenues collected prior to ConRAC DBO to make some or all of the milestone payments to the ConRAC Developer. The Department has collected \$539.4 million of CFC Revenues through FY 2021 and has expended \$448.2 million on ConRAC-related project costs through FY 2021.

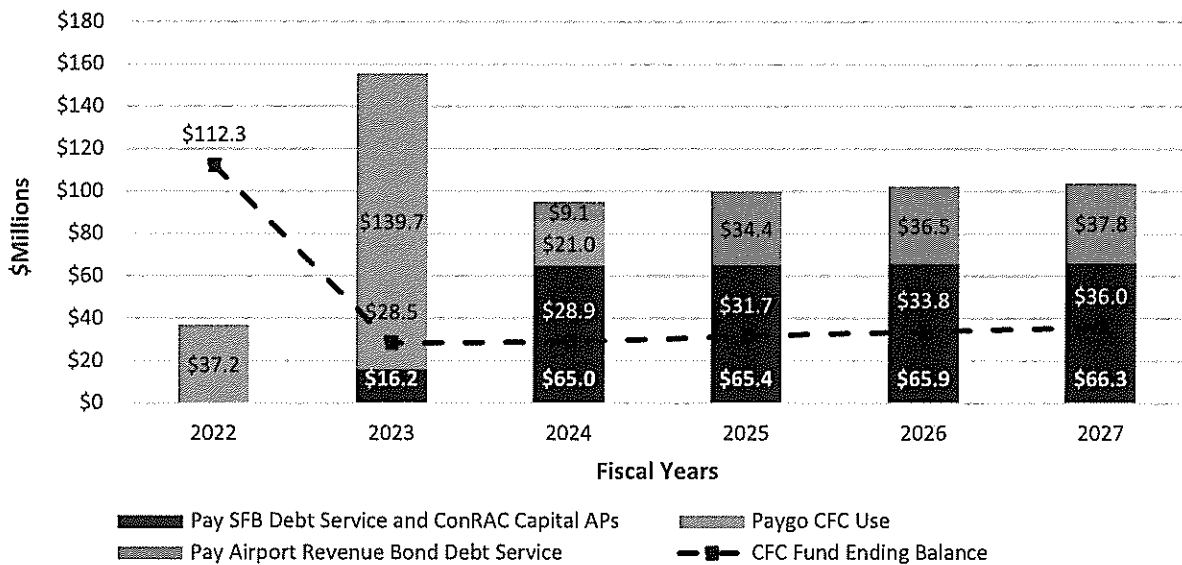
After ConRAC DBO, the Department currently expects to use CFC Revenues to (1) pay debt service on ConRAC Special Facility Obligations, (2) pay ConRAC Capital APs, and (3) maintain a minimum balance in the CFC Fund equal to annual ConRAC Special Facility Obligations debt service. The Department expects to use remaining CFC Revenues to help pay up to 41% of Senior Revenue Bond Debt Service and Subordinate Obligation Debt Service associated with the APM System. CFC Revenues expected to be used to pay Senior Revenue Bond Debt Service and Subordinate Obligation Debt Service is presented on Exhibit E.

CFC Revenues are not included in the definition of Pledged Revenues under the Revenue Bond Indentures. For purposes of meeting the Rate Covenants, the portion of principal and interest on Senior Bonds or Subordinate Obligations paid with CFC Revenues are excluded from the calculation of Senior Bond Aggregate Annual Debt Service and Subordinate Obligations Aggregate Annual Debt Service.

Figure 47 presents the Department’s currently expected use of CFC revenues to (1) pay ConRAC project costs during construction on a pay-as-you-go basis, (2) pay ConRAC Special Facility Obligation debt service through the Forecast Period, (3) pay ConRAC Capital APs through the Forecast Period, and (4) to pay a portion of estimated Senior Bond or Subordinate Obligation debt service (as reflected on Exhibit E—Debt Service). Figure 47 also reflects the forecast ending CFC Fund balance, which provides a reserve for potential future passenger traffic downturns at the Airport.

As reflected on Exhibit E, the Department expects to use between \$0.2 million and \$37.8 million of annual CFC revenues to pay Subordinate Obligation Debt Service between FY 2022 to FY 2027.

Figure 47
USE OF CFC REVENUES AND ENDING CFC FUND BALANCE
 Los Angeles International Airport



Coronavirus Relief Grants

As discussed earlier, the Department currently expects to use CRSSA Act and ARP Act grants in FY 2022 and FY 2023 to (1) substantially reduce airline costs at the Airport, (2) replace lost nonairline revenues due to reductions in the number of passengers using the Airport, (3) reduce near-term costs of certain airline Common Use Equipment, and (4) pay certain Debt Service.

Coronavirus Relief Grants are not included in the definition of Pledged Revenues under the Revenue Bond Indentures. For purposes of meeting the Rate Covenants, the portion of principal and interest on Senior Bonds or Subordinate Obligations paid with Coronavirus Relief Grants are excluded from the calculation of Senior Bond Aggregate Annual Debt Service and Subordinate Obligations Aggregate Annual Debt Service.

FLOW OF FUNDS AND DEBT SERVICE COVERAGE UNDER THE REVENUE BOND INDENTURES

Exhibit F presents the forecast application of Pledged Revenues to the various funds and accounts under the Senior Revenue Bond Indenture and the Subordinate Revenue Bond Indenture and the calculation of debt service coverage according to the Senior Rate Covenant and the Subordinate Obligations Rate Covenant.

Pledged Revenues remaining after the payment of LAX M&O Expenses, Senior Bond debt service, Subordinate Obligations debt service, and other fund deposit requirements are available for any lawful Airport purpose.

The Senior Bond Rate Covenant is forecast to be met in each Fiscal Year of the Forecast Period:

- As reflected in Exhibit F, Pledged Revenues are forecast to exceed the amount of required deposits to various funds and accounts under the Senior Revenue Bond Indenture during each Fiscal Year of the Forecast Period, and
- As reflected in Exhibit F and on Figure 48, Net Pledged Revenues are forecast to equal at least 125% of the Senior Bond Aggregate Annual Debt Service, taking into account outstanding Senior Bonds and future Senior Bonds (and assuming no Transfers).

Under the Senior Revenue Bond Indenture, any Transfer taken into account for purposes of meeting the Senior Bond Rate Covenant shall not exceed 25% of Senior Bond Aggregate Annual Debt Service on outstanding Senior Bonds. No Transfers were assumed during the Forecast Period for the purposes of calculating Senior debt service coverage requirements.

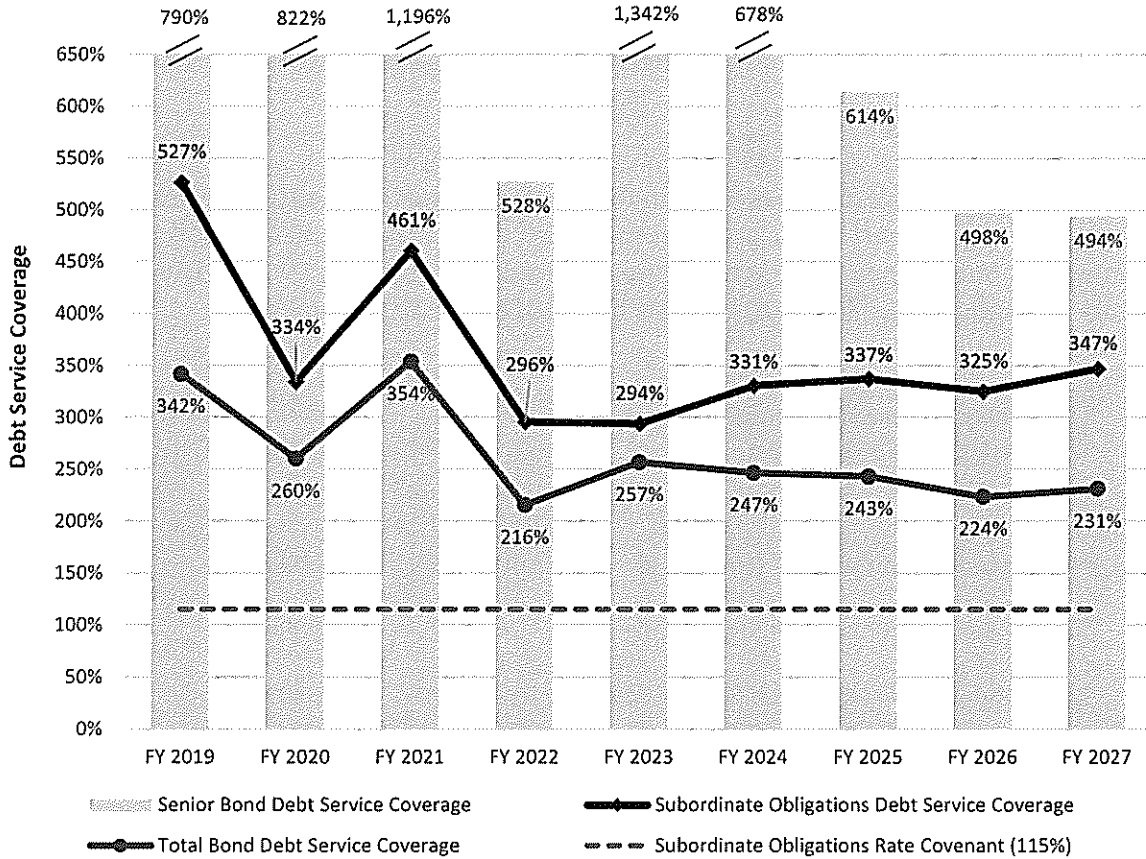
The Subordinate Obligations Rate Covenant is forecast to be met in each Fiscal Year of the Forecast Period:

- As reflected in Exhibit F, Subordinate Pledged Revenues are forecast to exceed the amount of required deposits to various funds and accounts under the Subordinate Revenue Bond Indenture during each Fiscal Year of the Forecast Period, and
- As reflected in Exhibit F and on Figure 48, Subordinate Pledged Revenues are forecast to equal at least 115% of the Subordinate Aggregate Annual Debt Service, taking into account outstanding Subordinate Obligations, and future Subordinate Obligations.

Under the Subordinate Revenue Bond Indenture, any Transfer taken into account for purposes of meeting the Subordinate Obligations Rate Covenant shall not exceed 15% of Subordinate Aggregate Annual Debt Service on outstanding Subordinate Obligations. No Transfers were assumed during the Forecast Period for the purposes of calculating Subordinate Obligations debt service coverage requirements.

Table 15 of the Official Statement for the proposed Series 2021DE Bonds provides historical data on debt service coverage for Senior Bonds and Subordinate Obligations.

Figure 48
FORECAST DEBT SERVICE COVERAGE UNDER THE REVENUE BOND INDENTURES
 Los Angeles International Airport



Note: Includes debt service on Senior Bonds, existing Subordinate Obligations, including existing Subordinate Commercial Paper Notes, and estimated debt service on the proposed Series 2021DE Subordinate Bonds, Future Bonds, and future Subordinate Commercial Paper Notes. Debt service is net of capitalized interest, if any. Source of Debt Service: Co-Financial Advisor.

PROJECTION OF DEBT SERVICE AND AVAILABILITY PAYMENT COVERAGE

A projection of coverage was prepared for informational purposes only to demonstrate the ability of the Department to meet all of its secured and unsecured obligations, which includes (a) all Debt Service on existing Senior and Subordinate Bonds, the proposed Series 2021DE Bonds, and Future Bonds and (b) the annual APM Capital AP and the annual ConRAC Capital AP, both of which are unsecured obligations of the Department that are not required to be included in the calculation of debt service coverage under the Revenue Bond Indentures.

The total annual revenues used to calculate coverage for informational purposes only are equal to (1) forecast annual Net Pledged Revenues plus (2) forecast annual CFC revenues that are currently expected by the Department to be used to pay the ConRAC Capital APs.

The projection of coverage (including the annual APM Capital AP and ConRAC Capital AP) is shown at the bottom of Exhibit F and ranges from 196% to 252% between FY 2023 and FY 2027.

SENSITIVITY ANALYSIS

The forecast financial results presented in this 2021DE Report were tested to determine the sensitivity of the forecast financial results in the last year of the Forecast Period assuming that the numbers of enplaned passengers at the Airport do not return to FY 2019 levels in FY 2025 but are delayed in returning to 2019 levels by 1 (2026) to 2 (2027) years.

Sensitivity Analyses (Enplaned Passengers recovering to FY 2019 levels)	Forecast 2027		
	Base (2025)	+1 Year (2026)	+2 Years (2027)
CPE	\$33.56	\$34.58	\$35.28
Net Revenues Remaining ⁶⁴ (\$ millions)	\$713.1	\$695.2	\$685.4
Senior Revenue Bond Debt Service Coverage	494%	489%	486%
Subordinate Obligation Debt Service Coverage	347%	340%	336%
Overall Indenture Debt Service Coverage	231%	228%	226%

Under the sensitivity analyses, forecast debt service coverage exceeds the Revenue Bond Rate Covenant and the Subordinate Obligation Rate Covenant.

⁶⁴ Net Revenues Remaining equals Net Pledged Revenues less Senior Aggregate Annual Debt Service less Subordinate Aggregate Annual Debt Service less any required reserve deposits under the Revenue Bond Indentures.

Exhibit A
ESTIMATED CAPITAL PROGRAM COSTS AND SOURCES OF FUNDS (a)
 Los Angeles International Airport
 (dollars in thousands)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

	Estimated Project Costs	Sources of Funds					Series 2021D			Total
		AIP Grants	Pay-as-you-go PFCs	Department Funds	Other Funds (b)	Prior Bond Proceeds	Bond Proceeds		Senior	
							Subordinate	Subordinate		
TERMINAL PROJECTS										
Midfield Satellite Concourse -- North Project	\$ 1,497,994	\$ -	\$ 5,960	\$ 296,017	\$ -	\$ 1,196,017	\$ -	\$ -	\$ -	\$ 1,497,994
Acquisition of Tenant Managed Terminal Projects	\$ 1,817,920	\$ -	\$ -	\$ 262,949	\$ -	\$ 439,832	\$ 92,264	\$ -	\$ 1,022,874	\$ 1,817,920
North Terminal Improvement Program - Delta Air Lines (c)	1,056,930	-	-	324,580	-	446,485	105,224	-	180,640	1,056,930
Terminal 4 Project - American Airlines (c)(d)	232,556	-	-	7,550	-	10,700	80,964	-	133,342	232,557
Terminal 6 Project - Alaska Airlines (c)	\$ 3,107,406	\$ -	\$ -	\$ 595,080	\$ -	\$ 897,018	\$ 278,453	\$ -	\$ 1,356,856	\$ 3,107,406
Acquisition of Tenant Managed Terminal Projects Total	\$ 497,219	\$ -	\$ -	\$ 2,397	\$ -	\$ 438,567	\$ 56,255	\$ -	\$ -	\$ 497,219
Terminal 1.5 Project (c)	263,979	-	-	89,708	-	58,308	115,963	-	-	263,979
Midfield Satellite Concourse/Bradley West Baggage Project (c)	277,701	-	-	25,287	-	134,441	88,902	-	29,071	277,701
TBIT Core and APM System Interface (c)	214,524	-	-	19,411	-	129,363	65,749	-	-	214,524
Terminal 5 Core and APM System Interface (c)	325,782	-	-	325,782	-	-	-	-	-	325,782
Other Terminal Projects (e)	\$ 6,184,695	\$ -	\$ 5,960	\$ 1,353,683	\$ -	\$ 2,853,714	\$ 605,322	\$ -	\$ 1,365,927	\$ 6,184,605
TERMINAL PROJECTS TOTAL										
AIRFIELD AND APRON PROJECTS										
Midfield Satellite Concourse -- North Apron Project	\$ 192,387	\$ -	\$ -	\$ 46,868	\$ -	\$ 145,519	\$ -	\$ -	\$ -	\$ 192,387
Taxiway P Construction (formerly Taxiway C-14)	120,224	60,200	-	12,431	-	47,594	-	-	-	120,224
Runway 7R-25L Reconstruction	25,565	-	-	6,018	-	19,547	-	-	-	25,565
Other Airfield and Apron Projects (f)	61,890	-	-	61,890	-	-	-	-	-	61,890
AIRFIELD AND APRON PROJECTS TOTAL	\$ 400,066	\$ 60,200	\$ -	\$ 127,206	\$ -	\$ 212,660	\$ -	\$ -	\$ -	\$ 400,066
LANDSIDE ACCESS MODERNIZATION PROGRAM										
APM System (g)(h)	\$ 1,691,699	\$ -	\$ -	\$ 491,040	\$ -	\$ 864,075	\$ -	\$ 336,583	\$ -	\$ 1,691,699
Consolidated Rent-a-Car Facility (ConRAC) (i)	984,118	-	-	888,745	-	-	-	-	-	984,118
LAMP Enabling Project (h)	695,769	-	-	670,769	25,000	-	-	-	-	695,769
Intermodal Transportation Facility (ITF-West Ph.1) (by LAWA) (i)	296,149	-	-	296,149	-	-	-	-	-	296,149
LAMP Right of Way Acquisitions & Relocations (h)	174,052	-	-	174,052	-	-	-	-	-	174,052
LANDSIDE ACCESS MODERNIZATION PROGRAM TOTAL	\$ 3,841,787	\$ -	\$ -	\$ 1,727,384	\$ 913,745	\$ 864,075	\$ -	\$ 336,583	\$ -	\$ 3,841,787
REMAINING PROJECTS										
Noise Mitigation and Soundproofing	\$ 384,079	\$ 13,750	\$ 196,939	\$ 173,391	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 384,079
Airport Police Station & Facilities	217,335	-	-	16,038	-	201,296	-	-	-	217,335
Power Distribution Facility (c)	158,723	-	-	-	-	37,358	47,568	73,796	-	158,723
Infrastructure (k)	20,802	-	-	20,802	-	-	-	-	-	20,802
Landside (l)	50,614	-	-	50,614	-	-	-	-	-	50,614
Miscellaneous (m)	199,749	-	-	199,749	-	-	-	-	-	199,749
REMAINING PROJECTS TOTAL	\$ 1,031,301	\$ 13,750	\$ 196,939	\$ 460,593	\$ -	\$ 238,654	\$ 47,568	\$ -	\$ 73,796	\$ 1,031,301
TOTAL CAPITAL PROGRAM	\$ 11,457,759	\$ 73,950	\$ 202,899	\$ 3,666,866	\$ 913,745	\$ 4,169,103	\$ 652,891	\$ 336,583	\$ 1,439,723	\$ 11,457,759

(a) Only includes projects expected to be completed by FY 2026 to show one full year of financial forecasts following completion of the Capital Program. The Department's published Capital Program of \$14.9 billion includes \$3.4 billion of completed projects, developer payments, and projects after FY 2026 that are not reflected in this Exhibit A.

(b) For ConRAC, includes (1) pay-as-you-go CFC revenues and (2) proceeds of special facility obligations expected to be issued by the Department and secured by CFC revenues. For Enabling Projects, includes \$25 million of Dept. of Water & Power funds.

(c) To be partially funded with the net proceeds of the Series 2021D Subordinate Bonds.

(d) The Department expects that a future phase associated with this project will be constructed after the Forecast Period and be completed by the end of FY 2028. The Department currently expects the future phase to cost approximately \$612 Million. It is estimated that the cost of the future phase will be funded from a combination of cash generated by the Department after the Forecast Period and Future Bond proceeds issued after the Forecast Period.

(e) Includes closed circuit television improvements, pipe replacement in the CTA, utilities improvements, bag system improvements, certain future terminal planning costs, and other miscellaneous terminal improvements.

(f) Includes improvements to stormwater connections, a replacement of the fire drill training facility, utilities improvements, and other miscellaneous terminal improvements.

(g) Includes costs to be paid by the Department. Does not include costs to be paid by the APM Developer during construction.

(h) This project is assumed to be an Access Cost Center project.

(i) Does not include costs to be paid by ConRAC Developer during construction.

(j) This project is assumed to be allocated to the Commercial Cost Center.

(k) Includes drainage and utility improvements.

(l) Includes projects for landside accessibility, auxiliary curb project, Bradley West traffic mitigations, and parking structure improvements.

(m) Includes settlements with local jurisdictions, site preparation, safety, communications, security, and other miscellaneous improvements.

Source: City of Los Angeles, Department of Airports.

Exhibit B
ESTIMATED SOURCES AND USES OF BOND FUNDS
 Los Angeles International Airport
 (dollars in thousands)

Proposed Series 2021DE Subordinate Bonds	Future Series					Total Future Bond Series	Total Series 2021DE Subordinate Bonds and Future Bond Series
	2022	2023	2024	2025	2026		
SENIOR BONDS							
Sources of funds							
Par amount	\$ 870,080	\$ 838,070	\$ 260,790	\$ 89,075	\$ 65,535	\$ 2,123,550	\$ 2,123,550
Interest income	-	-	-	-	-	-	-
Reoffering premium	-	-	-	-	-	-	-
Total sources of funds	\$ 870,080	\$ 838,070	\$ 260,790	\$ 89,075	\$ 65,535	\$ 2,058,015	\$ 2,123,550
Uses of funds							
Project costs funded with bond proceeds	\$ 608,914	\$ 600,286	\$ 184,652	\$ 44,772	\$ 1,098	\$ 1,439,723	\$ 1,439,723
Restructured debt service	22,883	47,491	-	-	-	70,374	70,374
Repayment of Commercial Paper Notes used to pay capitalized interest	49,024	24,461	16,671	21,931	47,336	159,423	159,423
Capitalized interest	111,279	89,829	36,273	14,559	11,316	263,256	263,256
Debt service reserve fund deposit	69,273	67,618	20,583	6,918	5,129	169,521	169,521
Costs of issuance	4,350	4,190	1,304	445	328	10,618	10,618
Underwriters discount	4,350	4,190	1,304	445	328	10,618	10,618
Contingency	6	3	3	4	1	17	17
Total uses of funds	\$ 870,080	\$ 838,070	\$ 260,790	\$ 89,075	\$ 65,535	\$ 2,058,015	\$ 2,123,550
SUBORDINATE BONDS							
Sources of funds							
Par amount	\$ 681,120	\$ 166,710	\$ 276,640	\$ -	\$ -	\$ 612,930	\$ 1,294,050
Interest income	-	-	-	-	-	-	-
Reoffering premium	92,281	-	-	-	-	-	92,281
Total sources of funds	\$ 773,401	\$ 166,710	\$ 276,640	\$ -	\$ -	\$ 612,930	\$ 1,386,331
Uses of funds							
Project costs funded with bond proceeds	\$ 652,891	\$ 136,381	\$ 114,782	\$ -	\$ -	\$ 336,583	\$ 989,474
Restructured debt service	73,961	6,900	-	-	-	58,764	132,725
Repayment of Commercial Paper Notes used to pay capitalized interest	2,299	-	134,923	-	-	134,923	137,222
Capitalized interest	-	-	2,121	-	-	27,008	27,008
Debt service reserve fund deposit	42,169	13,935	22,045	-	-	49,507	91,676
Costs of issuance	609	13,645	848	-	-	3,065	3,674
Underwriters discount	1,469	834	1,383	-	-	3,065	4,534
Contingency	3	7	3	-	-	16	19
Total uses of funds	\$ 773,401	\$ 166,710	\$ 276,640	\$ -	\$ -	\$ 612,930	\$ 1,386,331

Source: Public Resources Advisory Group.
 Note: Columns or rows may not add to totals shown because of rounding.

Exhibit C
PLEGGED REVENUES
 Los Angeles International Airport
 Fiscal Years Ending June 30
 (dollars in thousands)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

	Actual 2019	Actual 2020	Actual 2021	Forecast							
				2022	2023	2024	2025	2026	2027		
Airline Revenues											
Terminal Building rentals (a)	\$ 495,033	\$ 479,762	\$ 472,378	\$ 598,434	\$ 687,776	\$ 891,153	\$ 1,052,978	\$ 1,107,132	\$ 1,144,489		
Landing and apron fees	295,724	258,013	222,412	266,893	350,527	422,745	486,605	509,464	522,651		
Total Airline Revenues	\$ 790,758	\$ 737,776	\$ 694,789	\$ 865,327	\$ 1,038,303	\$ 1,313,898	\$ 1,539,583	\$ 1,616,595	\$ 1,667,141		
Annual increase/(decrease)		-6.7%	-5.8%	24.5%	20.0%	26.5%	17.2%	5.0%	3.1%		
Aviation Revenues (b)											
Land rentals (c)	\$ 118,145	\$ 115,523	\$ 109,556	\$ 126,282	\$ 128,061	\$ 158,062	\$ 158,460	\$ 164,133	\$ 170,084		
Building rent (d)	86,913	91,715	79,704	86,622	83,979	86,145	88,356	90,677	92,995		
Aircraft parking	1,943	2,375	2,035	1,925	2,203	2,538	2,674	2,751	2,830		
Fuel fees	981	641	1,095	1,146	1,311	1,510	1,591	1,637	1,684		
Other aviation revenue (e)	4,466	4,318	4,616	3,987	4,563	5,257	5,539	5,699	5,864		
Total Aviation Revenues	\$ 212,448	\$ 214,572	\$ 197,006	\$ 219,962	\$ 220,117	\$ 253,512	\$ 256,620	\$ 264,897	\$ 273,457		
Annual increase/(decrease)		1.0%	-8.2%	11.7%	0.1%	15.2%	1.2%	3.2%	3.2%		
Concession Revenues											
Auto parking (f)	\$ 104,274	\$ 87,789	\$ 57,259	\$ 80,520	\$ 107,976	\$ 142,739	\$ 154,815	\$ 160,505	\$ 166,416		
Rental cars	82,607	65,181	33,686	58,441	64,697	82,349	89,521	92,901	96,412		
Duty free	84,912	55,732	5,140	12,542	24,220	50,203	85,558	89,569	93,768		
Duty paid terminal concessions											
Food & beverage	\$ 25,464	\$ 18,819	\$ 7,148	\$ 13,100	\$ 17,762	\$ 24,371	\$ 26,494	\$ 27,494	\$ 28,533		
Retail	12,185	9,462	5,982	10,963	11,644	12,564	12,498	12,970	13,460		
Terminal commercial management	53,794	39,606	8,419	15,430	26,871	47,356	51,481	53,424	55,443		
Duty paid terminal concessions total	\$ 91,443	\$ 67,888	\$ 21,549	\$ 39,493	\$ 56,277	\$ 84,291	\$ 90,473	\$ 93,888	\$ 97,436		
Commercial vehicles revenue (g)	85,601	58,336	27,130	43,664	45,329	57,062	60,815	61,874	62,953		
Foreign exchange	11,769	8,995	1,025	-	3,000	7,321	11,769	12,214	12,676		
Telecommunications	1,729	1,074	853	678	915	1,235	1,667	1,730	1,795		
Other concession revenue (h)	7,156	7,459	5,108	3,550	4,438	5,548	6,935	7,197	7,469		
Terminal advertising	31,676	27,876	9,672	18,450	22,140	26,568	31,882	32,520	33,170		
Total Concession Revenues	\$ 501,167	\$ 380,331	\$ 161,423	\$ 257,339	\$ 328,992	\$ 457,315	\$ 533,435	\$ 552,398	\$ 572,095		
Annual increase/(decrease)		-24.1%	-57.6%	59.4%	27.8%	39.0%	16.6%	3.6%	3.6%		

Exhibit C (Page 2 of 2)

PLEGGED REVENUES

Los Angeles International Airport
Fiscal years ending June 30th
(dollars in thousands)

	Actual		Prelim. Actual	Forecast						
	2019	2020		2021	2022	2023	2024	2025	2026	2027
Miscellaneous Revenues										
Build America Bonds subsidy (Series 2009C)	\$ 5,980	\$ 5,719	\$ 5,779	\$ 5,828	\$ 5,592	\$ 5,345	\$ 5,089	\$ 4,820	\$ 4,541	
Build America Bonds subsidy (Series 2010C)	1,369	1,465	1,379	1,465	1,465	1,465	1,465	1,465	1,465	
Other Airport sales & services	3,639	4,082	3,737	6,473	6,602	6,734	6,868	7,006	7,147	
Common Transportation System Contributions (f)	-	-	-	-	-	22,224	45,279	46,411	47,571	
ConRAC Concessionaire M&O Fee (j)	-	-	-	-	1,810	7,295	7,463	7,634	7,810	
Miscellaneous revenues (k)	9,720	7,178	3,654	6,458	6,587	6,719	6,853	6,991	7,130	
Total Miscellaneous Revenues	\$ 20,708	\$ 18,444	\$ 14,549	\$ 20,224	\$ 22,056	\$ 49,783	\$ 73,016	\$ 74,327	\$ 75,664	
Annual increase/(decrease)		-10.9%	-21.1%	39.0%	9.1%	125.7%	46.7%	1.8%	1.8%	
Investment Earnings	\$ 62,483	\$ 68,220	\$ 20,283	\$ 41,299	\$ 40,964	\$ 43,935	\$ 47,816	\$ 54,006	\$ 63,728	
Total Pledged Revenues	\$ 1,587,563	\$ 1,419,343	\$ 1,088,051	\$ 1,404,151	\$ 1,650,431	\$ 2,118,443	\$ 2,450,471	\$ 2,562,223	\$ 2,652,085	
Annual increase/(decrease)		-10.6%	-23.3%	29.1%	17.5%	28.4%	15.7%	4.6%	3.5%	

(a) Net of Tier 2 Revenue Sharing credits. Additional common use fees are included starting in FY 2022 associated with transition of certain common use facilities from airline consortium to the Department.

(b) Other than Airline Terminal rentals, landing fees, and apron fees.

(c) Includes revenues associated with the Park One property and Skyview. Starting in FY 2023, includes additional land rent from the ConRAC Concessionaires.

(d) Decreases in FY 2020 and FY 2021 related to previously-leased land that was re-purposed for certain Airport capital projects.

(e) Includes (1) passenger terminal building rents from entities other than airlines and (2) rents from buildings other than the passenger terminals.

(f) Decrease in FY 2021 related to previously-leased buildings, hangars, warehouses on land that was re-purposed for certain Airport capital projects.

(g) Includes certain TSA revenues and other aviation fees.

(h) Forecast reflects (1) various increases and decreases in spaces by facility related to construction of Airport projects, (2) new ITF-West phase 1 parking garage estimated to open October 2021, and (3) expected ITF West parking rate increase when APM system opens.

(i) Includes bus, limousine, taxi cab, and transportation network company (e.g. Uber/Lyft) revenues.

(j) Includes, among other items, luggage carts and automated teller machine revenue.

(k) ConRAC Concessionaire Common Transportation System Contributions used to pay a portion of annual estimated APM operating and capital costs.

(l) Payment from ConRAC Concessionaires to the Department for the ConRAC M&O AP. Excludes the variable M&O expenses of the ConRAC (also to be paid by the ConRAC Concessionaires).

(m) Includes certain other TSA revenues.

Exhibit C-1
AIRLINE REVENUES AND COST PER ENPLAINED PASSENGER
 Los Angeles International Airport
 Fiscal Years Ending June 30
 (amounts in thousands, except cost per enplained passenger)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and

	Actual		Estimated		Forecast				
	2019	2020	2021	2022	2023	2024	2025	2026	2027
AIRLINE REVENUES									
Airline Terminal Rentals	\$ 495,033	\$ 501,964	\$ 472,378	\$ 598,434	\$ 687,776	\$ 891,153	\$ 1,058,840	\$ 1,147,519	\$ 1,166,942
Less: Tier Two Revenue Sharing (a)	-	(22,201)	-	-	-	-	(5,862)	(40,388)	(22,453)
Net Airline Terminal Rentals	\$ 495,033	\$ 479,762	\$ 472,378	\$ 598,434	\$ 687,776	\$ 891,153	\$ 1,052,978	\$ 1,107,132	\$ 1,144,489
Less: Airline Lounge Payments	\$ (32,250)	\$ (27,215)	\$ (33,330)	\$ (44,694)	\$ (48,520)	\$ (55,649)	\$ (64,357)	\$ (67,730)	\$ (68,845)
Net Airline Terminal Payments -- Aeronautical	\$ 462,783	\$ 452,547	\$ 439,048	\$ 553,739	\$ 639,256	\$ 835,504	\$ 988,621	\$ 1,039,401	\$ 1,075,644
Signatory Airline Landing and Apron Fees	295,172	257,698	222,260	266,893	350,527	422,745	486,605	509,464	522,651
Subtotal Signatory Airline Revenues	\$ 757,955	\$ 710,245	\$ 661,308	\$ 820,632	\$ 989,784	\$ 1,258,249	\$ 1,475,227	\$ 1,548,865	\$ 1,598,296
Non-Signatory landing fees (b)	553	315	151	-	-	-	-	-	-
Less: Landing Fees associated with all-cargo carriers	(28,233)	(36,253)	(72,357)	(47,960)	(58,034)	(63,648)	(65,880)	(60,865)	(47,837)
Total Passenger Airline Revenues	\$ 730,274	\$ 674,307	\$ 589,103	\$ 772,672	\$ 931,750	\$ 1,194,601	\$ 1,409,346	\$ 1,488,000	\$ 1,550,459
Enplained passengers	44,207	31,429	14,594	26,747	33,269	41,880	44,635	45,412	46,204
Airline cost per enplained passenger	\$ 16.52	\$ 21.45	\$ 40.37	\$ 28.89	\$ 28.01	\$ 28.52	\$ 31.57	\$ 32.77	\$ 33.56

(a) Pursuant to the Rate Agreement, the following amounts, if any, are credited to Signatory Airlines as Tier Two Revenue Sharing: (1) amounts in the Terminal Renewal and Improvement Fund above the maximum balance specified in the Rate Agreement and (2) Net Terminal Cash Flow generated each year above the annual maximum specified in the Rate Agreement.

(b) None assumed after FY 2021.

Exhibit C-2
AIRLINE TERMINAL RENTALS
 Los Angeles International Airport
 Fiscal Years Ending June 30
 (dollars in thousands)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

	Forecast					
	2022	2023	2024	2025	2026	2027
Demised Premises	\$ 393,124	\$ 428,175	\$ 493,504	\$ 598,735	\$ 658,210	\$ 669,044
Common Use Fees	84,811	107,109	184,279	235,247	254,235	258,330
Federal Inspection Service Fees	108,329	140,077	200,901	212,120	222,052	226,249
Terminal Special Charges	12,170	12,415	12,469	12,739	13,022	13,320
Total airline terminal rentals	\$ 598,434	\$ 687,776	\$ 891,153	\$ 1,058,840	\$ 1,147,519	\$ 1,166,942

Note: Total airline terminal rentals above are before Tier 2 revenue sharing is credited to the airlines, and differs from the amount shown on Exhibit C. Tier 2 revenue sharing can be seen on Exhibit C-1.

Exhibit C-3
LANDING AND APRON FEES
 Los Angeles International Airport
 Fiscal Years Ending June 30
 (in thousands, except for rates)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

	Forecast					
	2022	2023	2024	2025	2026	2027
LANDING FEES						
Operating Expense	\$ 166,406	\$ 177,832	\$ 193,282	\$ 206,168	\$ 216,231	\$ 226,791
Amortization Expense	31,760	35,363	51,318	58,931	59,794	58,062
Senior Debt Service	1,705	2,586	5,280	5,645	5,957	6,023
Subordinate Debt Service	19,393	60,951	73,267	93,619	99,764	99,494
Less: Credit for Build America Bonds subsidy (Series 2009C)	(11,655)	(5,592)	(5,345)	(5,089)	(4,820)	(4,541)
Less: Credit for Build America Bonds subsidy (Series 2010C)	(2,931)	(1,465)	(1,465)	(1,465)	(1,465)	(1,465)
Debt Service Coverage (a)	-	-	-	-	-	-
APM AP-C	-	-	10,632	21,901	22,559	23,235
M&O Reserve	-	3,001	3,910	3,244	2,676	2,766
Van Nuys Reliever Net Costs	3,271	3,676	4,111	4,576	5,074	5,605
Total Airfield Requirement (Fees)	\$ 207,949	\$ 276,351	\$ 334,989	\$ 387,531	\$ 405,768	\$ 415,971
APRON FEES						
Operating Expense	\$ 45,224	\$ 47,301	\$ 50,185	\$ 53,393	\$ 56,010	\$ 58,758
Amortization Expense	8,876	9,471	12,537	14,240	14,660	14,505
Senior Debt Service	3,730	3,838	5,401	5,654	5,917	6,133
Subordinate Debt Service	1,114	12,768	16,316	20,209	21,537	21,542
Debt Service Coverage (a)	-	-	-	-	-	-
APM AP-C	-	-	2,298	4,734	4,876	5,022
M&O Reserve	-	798	1,018	845	697	720
Total Apron Requirement (Fees)	\$ 58,944	\$ 74,176	\$ 87,756	\$ 99,074	\$ 103,696	\$ 106,680
TOTAL LANDING AND APRON FEES	\$ 266,893	\$ 350,527	\$ 422,745	\$ 486,605	\$ 509,464	\$ 522,651

(a) Debt service coverage is 0.25x for Senior Debt Service and 0.15x for Subordinate Debt Service. Only debt service coverage above and beyond amortization expenses, if any, is included in the Landing Fee and Apron Fee calculations.

Exhibit D
LAX MAINTENANCE AND OPERATION EXPENSES
 Los Angeles International Airport
 Fiscal Years Ending June 30
 (dollars in thousands)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

	Actual		Preliminary Actual Unaudited		Budget		Forecast			
	2019	2020	2021	2022	2023	2024	2025	2026	2027	
BY TYPE OF EXPENSE										
Salaries and Benefits (b)	\$ 456,948	\$ 532,563	\$ 484,582	\$ 439,246	\$ 469,093	\$ 497,399	\$ 521,335	\$ 547,825	\$ 575,216	
Contractual Services (c)	220,990	230,647	189,612	284,572	305,692	345,636	378,210	396,316	415,029	
Administrative Services (d)	4,250	5,608	(220)	3,111	3,322	3,522	3,692	3,879	4,073	
Materials and Supplies	53,414	55,493	43,751	54,777	58,413	61,885	64,874	68,165	71,573	
Utilities	46,191	47,334	40,788	51,714	55,207	58,526	61,345	64,461	67,684	
Advertising and Public Relations	3,851	3,167	1,012	2,257	2,410	2,555	2,678	2,815	2,955	
Other Operating Expenses	15,457	15,944	17,877	29,044	30,974	32,815	34,399	36,146	37,953	
Subtotal	\$ 801,102	\$ 890,756	\$ 777,401	\$ 864,721	\$ 925,110	\$ 1,002,339	\$ 1,066,533	\$ 1,119,605	\$ 1,174,482	
Less: Administrative expenses allocated to other airports	(2,728)	(3,088)	(3,016)	(3,064)	(3,095)	(3,126)	(3,157)	(3,189)	(3,221)	
Operating Expenses	\$ 798,374	\$ 887,668	\$ 774,385	\$ 861,657	\$ 922,015	\$ 999,213	\$ 1,063,376	\$ 1,116,416	\$ 1,171,261	
Less: Other adjustments (d)	(11,455)	(33,368)	(59,441)							
LAX M&O Expenses before use of Coronavirus Relief Grants	\$ 786,919	\$ 854,300	\$ 714,944	\$ 861,657	\$ 922,015	\$ 999,213	\$ 1,063,376	\$ 1,116,416	\$ 1,171,261	
Annual increase/(decrease)	0.3%	8.6%	-16.3%	20.5%	7.0%	8.4%	6.4%	5.0%	4.9%	
Use of Coronavirus Relief Grants to pay M&O Expenses	-	(9,670)	(249,226)	(20,000)	(105,100)	-	-	-	-	
LAX M&O Expenses after use of Coronavirus Relief Grants	\$ 786,919	\$ 844,630	\$ 465,718	\$ 841,657	\$ 816,915	\$ 999,213	\$ 1,063,376	\$ 1,116,416	\$ 1,171,261	
Equipment/Vehicles (e)				5,229	5,584	5,921	6,206	6,522	6,848	
Total LAX M&O Expenses after use of Coronavirus Relief Grants + Equipment/Vehicles				\$ 846,886	\$ 822,500	\$ 1,005,134	\$ 1,069,582	\$ 1,122,938	\$ 1,178,109	
SUMMARY BY COST CENTER										
Terminal Building		\$ 455,302	\$ 496,650	\$ 528,082	\$ 561,700	\$ 590,410	\$ 619,721			
Apron Area		45,224	47,301	50,185	53,393	56,010	58,758			
Airfield Area		166,406	177,832	193,282	206,168	216,231	226,791			
Aviation		67,582	64,646	62,937	67,733	70,989	74,404			
Commercial		112,211	120,000	148,419	157,248	164,791	172,702			
Other / Exclusions		20,162	21,170	22,228	23,340	24,507	25,732			
Less: Use of CARES grants		(20,000)	(105,100)							
Total LAX M&O Expenses after use of Coronavirus Relief Grants + Equipment/Vehicles		\$ 846,886	\$ 822,500	\$ 1,005,134	\$ 1,069,582	\$ 1,122,938	\$ 1,178,109			

(a) Source: City of Los Angeles, Department of Airports. LAX M&O Expenses + Equipment/Vehicles does not tie exactly to the Department's Adopted Budget due to certain adjustments related to capitalized salaries and benefits and other similar adjustments. As a result these numbers do not match exactly to Table 11 of the Official Statement.

(b) Actual FY 2019, FY 2020, and FY 2021 includes \$11.3 million, \$33.4 million, and \$59.4 million respectively for GASB 68 pension liability amount that is deducted below in the "other adjustments" line, and is only shown through FY 2021 so that Operating Expenses are consistent with Table 11 of the Official Statement. The GASB 68 pension liability amount or corresponding deduction below is not forecast (not reflected in FY 2022-FY 2027).

(c) Starting in FY 2022, includes costs associated with common use equipment transitioned from airline consortium to the Department. Starting in FY 2024, includes the estimated APM M&O AP and ConRAC M&O AP. FY 2025 reflects the first full Fiscal Year for those items. The ConRAC M&O AP included in this exhibit does not include the variable M&O expenses of the ConRAC to be paid by ConRAC Concessionaires.

(d) Includes expenses excluded from LAX M&O Expenses, including certain expenses paid with grants/other sources. Actual FY 2019, FY 2020, and FY 2021 amounts also includes the deduction of \$11.3 million, \$33.4 million, and \$59.4 million of GASB 68 pension liability. Other adjustments are not forecast as they are not expected to have a material impact on future LAX M&O Expenses.

(e) Includes equipment/vehicle expenses under \$100K. Equipment/vehicle expenses over \$100K paid for by Department funds and amortized over the useful life of the asset.

Exhibit E
DEBT SERVICE
 Los Angeles International Airport
 Fiscal Years Ending June 30
 (dollars in thousands)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast
	2019	2020	2021	2022	2023	2024	2025	2026	2027
SENIOR BOND DEBT SERVICE (a)									
Existing Senior Bond Debt Service									
Series 2009A	\$ 27,591	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Series 2010A	58,651	54,903	6,171	-	-	-	-	-	-
Series 2010D	52,044	39,764	5,874	-	-	-	-	-	-
Series 2012A	11,261	9,884	6,587	6,588	6,595	6,592	6,594	11,010	11,015
Series 2012B	9,074	9,072	9,072	9,073	9,071	9,070	9,070	4,649	4,649
Series 2012C	10,143	-	-	-	-	-	-	-	-
Series 2013A	8,534	8,534	6,222	8,534	8,534	15,154	15,154	15,156	15,156
Series 2015A	17,565	17,573	15,161	17,563	17,564	17,567	17,569	17,567	17,569
Series 2015B	3,139	3,138	3,140	3,136	3,136	3,139	3,135	3,140	3,136
Series 2015D	20,511	20,512	19,276	20,518	20,514	20,513	20,513	20,518	20,511
Series 2015E	-	2,153	2,149	2,145	2,148	2,148	2,150	2,148	2,148
Series 2016C	16,041	25,353	8,871	25,749	25,746	5,753	5,753	5,753	5,753
Series 2018B	12,363	11,325	5,544	11,325	11,325	27,905	28,166	28,173	28,170
Series 2020A	-	6,565	22,466	49,810	42,531	41,693	46,550	51,080	47,171
Series 2020B	-	-	15,427	26,038	26,038	57,598	52,950	48,671	57,644
Series 2020C	-	-	5,649	12,373	15,589	23,429	25,980	25,896	25,899
Series 2020D	-	-	-	-	-	7,352	8,032	8,036	8,033
Total Existing Senior Bond Debt Service	\$ 249,065	\$ 208,776	\$ 131,608	\$ 192,858	\$ 188,789	\$ 237,913	\$ 241,231	\$ 241,795	\$ 246,851
Future Senior Bond Debt Service									
Future Senior Bond Debt Service	\$ -	\$ -	\$ -	\$ -	\$ 5,590	\$ 36,722	\$ 98,370	\$ 140,453	\$ 140,815
Senior Bond Debt Service to be restructured	-	-	-	(32,883)	(47,491)	-	-	-	-
Total Future Senior Bond Debt Service	\$ -	\$ -	\$ -	\$ (32,883)	\$ (41,901)	\$ 36,722	\$ 98,370	\$ 140,453	\$ 140,815
Total Senior Bond Debt Service	(C)=(A)+(B)	\$ 249,065	\$ 208,776	\$ 131,608	\$ 169,975	\$ 146,888	\$ 339,600	\$ 382,248	\$ 387,666
Less: PFC revenues used to pay Senior Bond Debt Service (b)	(D)	\$ (147,680)	\$ (138,857)	\$ (69,012)	\$ (63,424)	\$ (84,794)	\$ (109,590)	\$ (91,793)	\$ (88,034)
Less: Coronavirus Relief Grants used to pay Senior Debt Service		-	-	(10,544)	-	-	-	-	-
Senior Aggregate Annual Debt Service (a)	(E)=(C)+(D)	\$ 101,385	\$ 69,919	\$ 52,052	\$ 106,551	\$ 62,093	\$ 225,762	\$ 290,455	\$ 299,632
Allocation to Direct Cost Centers									
Terminal Building	\$ 86,481	\$ 66,879	\$ 59,634	\$ 99,324	\$ 53,853	\$ 150,369	\$ 209,567	\$ 273,058	\$ 281,956
Apron Area	1,016	294	285	3,730	3,838	5,401	5,654	5,917	6,133
Airfield Area	3,606	1,042	1,009	1,705	2,586	5,280	5,645	5,957	6,023
Aviation	3,932	1,074	1,062	1,068	984	1,906	2,038	2,114	2,112
Commercial	6,350	629	605	725	833	2,089	2,857	3,409	3,408
Less: Coronavirus Relief Grants used to pay Senior Debt Service	-	-	(10,544)	-	-	-	-	-	-
Senior Aggregate Annual Debt Service	=(E)	\$ 101,385	\$ 69,919	\$ 52,052	\$ 106,551	\$ 62,094	\$ 225,762	\$ 290,455	\$ 299,632

Exhibit F
FLOW OF FUNDS AND DEBT SERVICE COVERAGE
 Los Angeles International Airport
 Fiscal Years Ending June 30
 (amounts in thousands, except coverage ratios)

The forecasts presented in this exhibit were prepared using information from the sources identified and assumptions provided by, or reviewed with and agreed to by, Department management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

	Actual	Actual	2020	2021	2022	2023	2024	2025	2026	2027
FLOW OF FUNDS										
Pledged Revenues										
Airline Revenues	\$ 790,758	\$ 737,776	\$ 694,789	\$ 865,327	\$ 1,038,303	\$ 1,313,898	\$ 1,559,583	\$ 1,616,595	\$ 1,667,141	\$ 1,667,141
Aviation Revenues	212,448	214,572	197,006	219,962	220,117	253,512	256,620	264,897	273,457	273,457
Concession Revenues	501,167	380,331	161,423	257,339	328,992	457,315	533,435	552,398	572,095	572,095
Miscellaneous Revenues	20,708	18,444	14,549	20,224	22,056	49,783	73,016	74,327	75,664	75,664
Investment Earnings	62,483	68,220	20,283	41,299	40,964	43,935	47,816	54,006	63,728	63,728
Total Pledged Revenues	[A] \$ 1,587,563	\$ 1,419,343	\$ 1,088,051	\$ 1,404,151	\$ 1,650,431	\$ 2,118,443	\$ 2,450,471	\$ 2,562,223	\$ 2,652,085	\$ 2,652,085
LAX M&O Expenses before use of Coronavirus Relief Grants	786,919	854,300	714,944	861,657	922,015	999,213	1,063,376	1,116,416	1,171,261	1,171,261
Use of Coronavirus Relief Grants	-	(9,670)	(249,226)	(20,000)	(105,100)	-	-	-	-	-
LAX M&O Expenses after use of Coronavirus Relief Grants	[B] \$ 786,919	\$ 844,630	\$ 465,718	\$ 841,657	\$ 816,915	\$ 999,213	\$ 1,063,376	\$ 1,116,416	\$ 1,171,261	\$ 1,171,261
Net Pledged Revenues	[C]=[A]-[B] \$ 800,644	\$ 574,713	\$ 622,333	\$ 562,494	\$ 833,516	\$ 1,119,231	\$ 1,387,095	\$ 1,445,807	\$ 1,480,823	\$ 1,480,823
Remaining Flow of Funds costs										
Senior Aggregate Annual Debt Service (a)	\$ 101,385	\$ 69,919	\$ 52,052	\$ 106,551	\$ 62,094	\$ 165,045	\$ 225,762	\$ 290,455	\$ 299,632	\$ 299,632
Subordinate Aggregate Annual Debt Service (b)	132,790	151,062	123,811	154,277	262,497	288,650	344,551	355,438	340,647	340,647
M&O Reserve	14,122	13,924	-	-	14,969	19,173	15,907	13,120	13,120	13,563
Total - Remaining Flow of Funds costs	[G]=[D]+[E]+[F] \$ 248,297	\$ 234,905	\$ 175,863	\$ 260,829	\$ 339,560	\$ 472,867	\$ 586,220	\$ 659,012	\$ 653,842	\$ 653,842
APM Capital AP	-	-	-	-	-	34,296	70,650	72,769	74,953	74,953
ConRAC Capital AP	-	-	-	-	9,378	37,653	38,083	38,518	38,959	38,959
Net revenues remaining (c)	[K=C-G-H-I-J] \$ 552,346	\$ 339,808	\$ 446,470	\$ 301,665	\$ 484,578	\$ 574,415	\$ 692,142	\$ 675,507	\$ 713,070	\$ 713,070

Exhibit F (page 2 of 2)
FLOW OF FUNDS AND DEBT SERVICE COVERAGE
 Los Angeles International Airport
 Fiscal Years Ending June 30 (dollars in thousands)

	Preliminary									
	Actual					Forecast				
	2019	2020	2021	2022	2023	2024	2025	2026	2027	
DEBT SERVICE COVERAGE PURSUANT TO INDENTURES										
Senior Bond Debt Service Coverage										
Pledged Revenues										
LAX M&O Expenses after use of CARES grants										
Net Pledged Revenues										
Senior Aggregate Annual Debt Service (a)										
Senior Bond Debt Service Coverage (d)										
Subordinate Obligation Debt Service Coverage										
Net Pledged Revenues										
Less: Senior Aggregate Annual Debt Service										
Net Subordinate Pledged Revenues										
Subordinate Aggregate Annual Debt Service (b)										
Subordinate Obligation Debt Service Coverage (d)										
Total Debt Service Coverage										
Net Pledged Revenues										
Senior and Subordinate Aggregate Annual Debt Service										
Total Debt Service Coverage Pursuant to Indentures (d)										

DEBT SERVICE COVERAGE INCLUDING APM AND CONRAC CAPITAL AP FOR INFORMATIONAL PURPOSES ONLY

Net Pledged Revenues	\$	833,516	\$	1,119,231	\$	1,387,095	\$	1,445,807	\$	1,480,823
Add CFC Revenues used to pay ConRAC AP-C (not included in Pledged Revenues)		9,378		37,653		38,083		38,518		38,959
Adjusted Net Pledged Revenues	\$	842,894	\$	1,156,884	\$	1,425,178	\$	1,484,325	\$	1,519,782
Senior Aggregate Annual Debt Service	\$	62,094	\$	165,045	\$	225,762	\$	290,455	\$	299,632
Subordinate Aggregate Annual Debt Service		262,497		288,650		344,551		355,438		340,647
Plus: APM Capital AP		-		34,296		70,650		72,769		74,953
Plus: ConRAC Capital AP		9,378		37,653		38,083		38,518		38,959
Debt Service including APM Capital AP and ConRAC Capital AP	\$	333,969	\$	525,644	\$	679,046	\$	757,180	\$	754,190
Total Debt Service Coverage including APM and ConRAC Capital AP for Informational Purposes Only (d)		2,52		2,20		2,10		1,96		2,02

(a) Senior Aggregate Annual Debt Service is (i) net of PFC revenues and Coronavirus Relief Grants used to pay Senior Debt Service, and (ii) net of capitalized interest.
 (b) Subordinate Aggregate Annual Debt Service is (i) net of PFC revenues, CFC revenues, and Coronavirus Relief Grants used to pay Subordinate Obligation Debt Service, and (ii) net of capitalized interest.
 (c) These amounts are available to the Department to use for discretionary purposes.
 (d) No Transfers were assumed for purposes of calculating debt service coverage ratios.

**ATTACHMENT 5
ECONOMIC IMPACT STUDY WORK SAMPLE**



The Statewide Economic Impact of the University of New Mexico

November 2023

Acknowledgements

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UNM | **Rainforest
Innovations**

The Statewide Economic Impact of The University of New Mexico

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The Statewide Economic Impact of The University of New Mexico

Executive Summary

The University of New Mexico (UNM) is one of New Mexico's most valuable economic assets. Comprised of the Albuquerque main campus and Health Sciences Center (HSC), Sandoval Regional Medical Center (SRMC) in Rio Rancho, and branch campuses in Taos, Valencia County, Los Alamos, and Gallup, UNM enhances workforce productivity, attracts revenue and investment, and drives economic growth statewide.

UNM's quantifiable economic impact has four major components: university operations, student expenditures, alumni human capital, and technologic innovation and transfer. Together, these components accounted for 47,053 jobs, \$1.9 billion in labor income, and \$5.2 billion in economic output in 2022.

Operations

UNM's operational expenditures totaled \$3.4 billion in academic year 2022. That year, UNM employed over 16,000 faculty and staff and paid roughly \$2 billion in wages, salaries, and benefits. UNM's 2022 non-labor operational expenditures exceeded \$1.4 billion.

Spending by UNM generates a net positive economic impact when funds originating outside the state are spent in New Mexico. Roughly half of UNM's operational spending meets both these criteria. As these monies are re-spent within the New Mexico economy by UNM's suppliers and employees, they stimulate additional economic activity resulting in further increases in employment, wages, and productivity. When these multiplier effects are accounted for, the total economic impact of UNM operations is 32,098 jobs, \$1.8 billion in labor income, and \$2.8 billion in economic output.

Student Spending

Over 23,000 full and part-time students attended UNM in 2022. Eighty-two percent of students enrolled during the 2022 academic year were New Mexico residents. Net spending (spending not otherwise counted as revenue to UNM) by the school's 4,204 non-resident students totaled \$62.7 million, supporting 979 full and part-time jobs, \$27.4 million in labor income, and \$93.5 million in economic output.

Alumni Human Capital

As the state's flagship university and home to New Mexico's only school of law and public school of medicine, UNM provides state businesses and institutions with a highly skilled professional workforce and serves as the training ground for New Mexico's political, business, and community leaders. Over 114,800 UNM alumni currently reside in New Mexico. The education they obtained at UNM enhances their economic productivity and increases their earning capacity. In 2022, working-age UNM alumni who resided in New Mexico earned roughly \$3 billion more than they would have had they not graduated from college. Approximately 34 percent of these funds were reinvested in the New Mexico economy as purchases from local businesses, institutions, and households, resulting in an induced economic impact of \$2.2 billion in additional economic activity and 13,545 additional job-years.

The Statewide Economic Impact of The University of New Mexico

Research, Innovation and Technology Transfer

UNM contributes to the innovation economy through basic and applied research, the translation of research into economically viable and socially relevant innovation, and support for the entrepreneurs who bring new technologies to market. Research universities like UNM power the innovation economy by fortifying the nation's knowledge workforce and by advancing technology. The University of New Mexico is among the nation's top research institutions and is the only university in the state to be classified 'R1' by the Carnegie Commission on Higher Education. This prestigious designation is reserved for U.S. doctoral universities with very highest levels of research activity.

UNM faculty, staff, and students conduct cutting-edge research across a spectrum of disciplines, attracting over \$511 million in contract and grant funding in 2022. UNM's technology-transfer and economic-development organization, UNM Rainforest Innovations, fosters innovation and entrepreneurship by helping UNM researchers commercialize their inventions. In 2022, New Mexico based startups affiliated with UNM Rainforest Innovations employed roughly 274 New Mexicans, paid an estimated \$21.6 million in wages and salaries and generated \$39.1 million in total output. The additional economic activity stimulated by these new firms resulted in a total of 431 jobs, \$29.4 million in labor income and \$64.2 million in economic output.

This analysis captures UNM's quantifiable contribution to the New Mexico economy, but it is not a comprehensive inventory of the many ways UNM supports the states' economic growth and prosperity. Numerous entities throughout UNM help make New Mexico a great place to live, work, and do business through a vast array of initiatives including internships, community engagement, support for the disadvantaged and disenfranchised, civic engagement, and expanded access to arts and culture, to name just a few. Furthermore, education enhances human capital in ways that don't show up as higher earnings for individual graduates. Societal benefits of education include improvements in health, enhanced social cohesion, increased civic engagement, and lower crime rates, all of which are important but difficult to measure and monetize.



The Statewide Economic Impact of The University of New Mexico

Introduction

The University of New Mexico (UNM) benefits the New Mexico economy in a variety of important ways. Comprised of the main campus and Health Sciences Center in Albuquerque, Sandoval Regional Medical Center in Rio Rancho, and branch campuses in Taos, Valencia County, Los Alamos, and Gallup, UNM enhances workforce productivity, improves quality of life, stimulates innovation, and drives economic growth statewide. This report quantifies, to the greatest extent possible, UNM’s impact on the New Mexico economy in academic year 2022.

This report is an update of the 2020 Statewide Economic Impact of the University of New Mexico, which was released in August 2021. Neither this study nor its predecessor is directly comparable to earlier studies of UNM’s economic impact conducted by the UNM Bureau of Business and Economic Research in 2004 and 2011 or to previous studies of New Mexico State University’s economic impact. These studies, although similar, differ in a variety of ways, including the types of economic impacts estimated, the time period(s) assessed, the models and data sources used, and some underlying assumptions.

UNM Background

With over 16,000 faculty and staff and a \$2 billion payroll, UNM is one of New Mexico’s major employers.

Table 1 UNM Employment, all campuses, 2022*

	Staff	Faculty	Total
Main Campus	2,993	1,124	4,117
Health Sciences Center	2,594	1,298	3,892
Gallup Branch Campus	79	60	139
Los Alamos Branch Campus	40	14	54
Taos Branch Campus	93	30	123
Valencia Branch Campus	101	36	137
UNM Hospitals	6,424	n/a	6,424
Sandoval Regional Medical Center	602	n/a	602
UNM Medical Group	680	n/a	680
UNM Continuing Ed.	193	n/a	193
Total	13,719	2,562	16,281

*Includes temporary and part-time employees

Sources: UNM Office of Institutional Analytics, UNM Medical Group, and UNM Hospitals

The Statewide Economic Impact of The University of New Mexico

Economic Impact

UNM’s quantifiable economic impact has four major components: university operations, student expenditures, alumni productivity, and technology transfer. Together these components account for 47,053 jobs, \$1.9 billion in annual labor income, and \$5.2 billion in economic output. Each component of economic impact is addressed separately in the following sections. Each impact estimate employs a different methodology, although all rely, to some degree, on Input-Output (I-O) analysis utilizing the IMPLAN® modeling system. Specific data and methodologies are described in the individual sections.

Table 2 UNM Economic Impact Summary Results

	Employment (Job years)	Labor Income (\$ millions)	Output (\$ millions)
UNM Operations	32,098	\$1,196.90	\$2,831.3
Student Spending	979	\$27.4	\$93.5
Alumni Income	13,545	\$616.9	\$2,195.7
Technology Transfer	431	\$29.4	\$64.2
Total	47,053	\$1,871	\$5,185

I-O Modeling with IMPLAN®

The IMPLAN® modeling system was used to estimate the impact of UNM operations on the New Mexico economy. IMPLAN® is a widely used software package and database for estimating regional economic impacts¹ using input-output (I-O) analysis. I-O analysis is based on the premise that regional economies are composed of interconnected households, industries, and institutions. These sectors purchase output from each other and supply inputs to each other in a complex web of interdependencies. A significant change to one sector will therefore impact the many other sectors to which it is connected.

In an I-O model, the initial economic change is called the "direct" effect. As the initial change travels outward through the regional economy it produces "indirect" and "induced" effects. Multipliers represent the mathematical relationship between the initial change in one sector of the economy and the changes in employment, income, and productivity it catalyzes in other sectors.

Direct effects represent the initial change to the industry in question.

Indirect effects result when the industries that supply the industry in question respond to the change in demand.

Induced effects reflect changes in local spending that result from income changes in the directly and indirectly affected industry sectors.

The Statewide Economic Impact of The University of New Mexico

In this report, economic impact is estimated using an export-base methodology wherein only expenditures funded with revenue originating outside the state are considered to have a net positive impact on the state economy. As such, state and local funding, including appropriations and contracts, are assumed to have a *no net* impact on the state economy because, if they did not go to the university, they would likely be spent elsewhere in New Mexico and generate similar benefits. Conversely, federal revenue is considered to originate entirely out-of-state.

In order to generate a positive net economic impact, UNM revenue derived from sources outside New Mexico must be spent inside New Mexico. UNM expenditures of federal and other out-of-state funds on employee compensation, locally produced goods and services, and construction therefore generate direct economic impact. Indirect impacts are the jobs and economic activity created by businesses in UNM’s supply chain when they produce goods and services for UNM. Induced impacts result when employees of UNM and its suppliers use their wages and salaries to purchase goods and services in the regional economy.

The output of the IMPLAN® model is expressed in employment, labor income, and output. Employment includes all full-time, part-time, and temporary jobs created by or as a result of UNM. Employment is expressed in single years of employment or “job years.” Labor income includes all forms of employment compensation including employee wages, salaries and benefits as well as income received by sole proprietors of small businesses. Output is a measure of total sales or receipts and can be interpreted, in this context, as net contributions to gross state product.

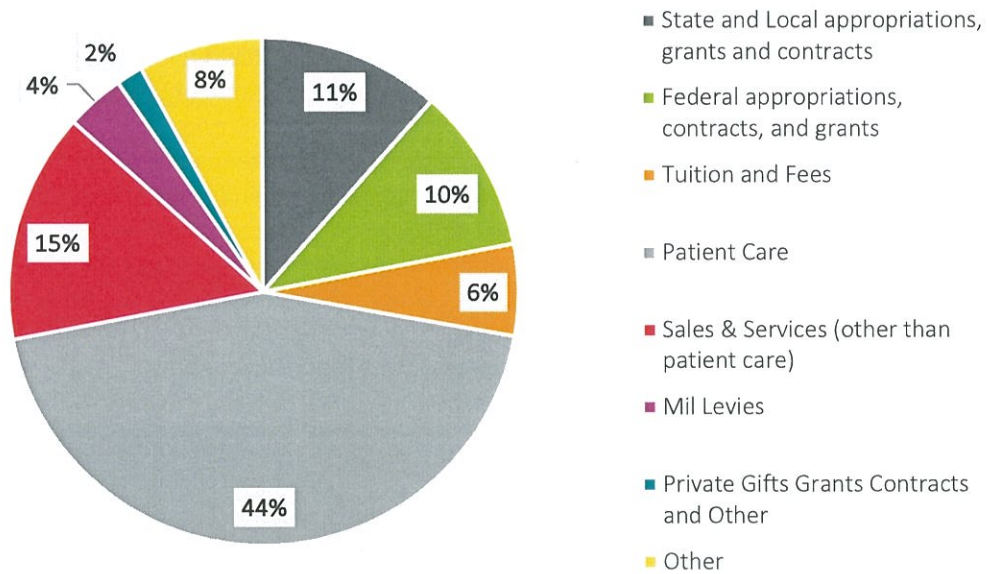


University Operations

In academic year 2022, UNM made over \$3.4 billion in operational expenditures. As noted earlier, university operations have a net positive impact on the New Mexico economy when they are funded by revenue that originates outside the state. Roughly half of UNM’s annual revenue, about \$1.9 billion, comes from out-of-state sources including tuition and fees paid by non-residents, federal grants, and payments by Medicare, Medicaid, and other federal payors for clinical services provided by UNM Hospitals, SRMC, and UNM Medical Group.

The Statewide Economic Impact of The University of New Mexico

Figure 1 UNM 2022 Revenue by Source



Source: University of New Mexico - Consolidated Total Operations Current Funds. Statements of Revenues, Expenses and Changes in Net Position for the twelve months ended June 30, 2022

1.1 Revenue

Clinical services provided by UNM Hospitals, Sandoval Regional Medical Center (SRMC) and UNM Medical Group made up the single largest share of UNM’s revenue in 2022 (44%). Sales and services were the second largest component of UNM revenue.

Figure 1 shows 2022 UNM revenue by source. Payments from Medicare, Medicaid, the Indian Health Service, the Veterans Administration and other primarily federal sources made up 63 percent of net patient revenue from UNM Hospital, UNM Behavioral Health services, and SRMC and 50 percent of net patient revenue from UNM Medical Group. Thus, the majority UNM’s clinical services revenue originates outside New Mexico.

Tuition and fees, including scholarships and grants, constituted 5.8 percent of UNM’s 2022 revenue. That year, 18 percent of UNM students were non-residents. Although non-resident tuition rates are considerably higher than in-state rates, a large percentage of non-residents pay in-state tuition, thus, the share of tuition and fees paid by non-residents was assumed to be proportional to their share of the overall student body.

Table 3 shows UNM operations revenue and the share of revenue derived from out-of-state sources. Overall, 48 percent of UNM’s 2022 operating revenue was derived from sources outside New Mexico. When spent in New Mexico, this externally sourced revenue produces a positive net economic impact.

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Table 3 UNM 2022 Operating Revenue (\$ millions)

	Revenue	Percent From Outside NM	External Source Revenue
Tuition & Fees	\$212.10	17%	\$36.06
State Appropriations	\$349.20	10%	\$34.92
Federal Grants & Contracts	\$380.00	100%	\$380.01
Clinical Services	\$1,606.40	63%	\$1,012.03
Mil Levies	\$134.50	0%	\$0.00
State & Local Grants & Contracts	\$69.00	10%	\$6.90
Private Gifts, Grants & Contracts	\$62.00	86%	\$53.32
Sales & Services (non-patient care)	\$532.00	17%	\$90.44
Other	\$287.80	48%	\$138.15
Total	\$3,633.00	48%	\$1,751.83

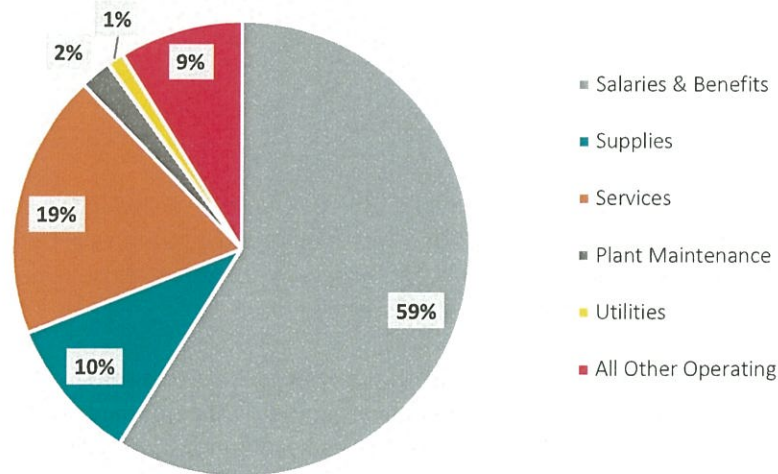
Note: Bond proceeds are not included in revenue.

Source: University of New Mexico - Consolidated Total Operations Current Funds. Statements of Revenues, Expenses and Changes in Net Position for the twelve months ended June 30, 2022

1.2 Expenditure

UNM’s 2022 consolidated operational expenditures totaled over \$3.4 billion. Employee compensation and benefits accounted for the majority of spending. In addition to educational services, UNM’s expenditures support the provision of research and development services, student services such as the Student Health Center and recreational facilities, and auxiliary operations, such as bookstores, residence halls, and cafeterias.

Figure 2 2022 UNM Operations Spending



Source: University of New Mexico - Consolidated Total Operations Current Funds. Statements of Revenues, Expenses and Changes in Net Position for the twelve months ended June 30, 2022

Table 4 shows the spending used to calculate the economic impact of UNM operations displayed by functional expense category. ‘Public Service,’ which includes clinical operations,

The Statewide Economic Impact of The University of New Mexico

accounts for over two-thirds of expenditures. Clinical operations include all the patient care activities of the HSC campus and off-campus facilities including UNM Hospitals, SRMC, and UNM Medical Group operations as well as medical residents training at UNM hospitals. Instruction and research are UNM’s second and third largest expense categories respectively, each accounting for 7.4 percent of total expenditures in 2022.

Table 4 UNM 2022 Expenditures by Functional Expense Category (\$ thousands)

	Compensation	Supplies	Services	Plant Maintenance	Utilities	All Other Operating	Capital	Total
Instruction	\$228,353	\$5,018	\$5,497	\$1,462	\$255	\$12,748	\$60	\$253,393
Research	\$130,163	\$12,785	\$17,858	\$4,370	\$794	\$86,036	\$386	\$252,392
Public Service*	\$1,231,109	\$300,614	\$561,876	\$31,781	\$1,108	\$90,841	\$62,622	\$2,279,952
Academic Support	\$40,255	\$1,302	\$3,789	\$554	\$1	\$1,573	\$256	\$47,728
Student Services	\$22,378	\$907	\$2,664	\$276	\$0	\$4,209	\$0	\$30,434
Institutional Support	\$54,498	\$2,447	\$6,680	\$1,744	\$1	\$6,006	\$15	\$71,391
Plant	\$71,820	\$10,937	\$17,563	\$29,189	\$34,155	\$24,497	\$5,140	\$193,301
Student Aid	\$6,653	\$606	\$470	\$61	\$3	\$23,711	\$34	\$31,538
Student Activities	\$4,938	\$1,207	\$711	\$990	\$136	\$1,019	\$0	\$9,002
Intercollegiate Athletics	\$12,705	\$2,064	\$3,621	\$346	\$618	\$12,034	\$0	\$31,386
Auxiliary Enterprises	\$13,047	\$1,338	\$3,917	\$2,284	\$2,119	\$13,634	\$0	\$36,339
All Other	\$145,124	\$624	\$2,910	\$570	\$247	\$16,105	\$0	\$165,580
Total	\$1,961,043	\$339,847	\$627,556	\$73,626	\$39,436	\$292,413	\$68,513	\$3,402,434

*Includes clinical services
Source: UNM Financial Services

1.3 Methodology

The economic impact of UNM operations was measured by entering the share of UNM’s 2022 spending that occurred in New Mexico and was funded by sources external to New Mexico into a model of the New Mexico economy and observing the effect those expenditures had on households, institutions, and other industrial sectors.

IMPLAN[®] was used to create the model of the New Mexico economy. In order to accurately capture the interplay between UNM expenditures and other components of the state economy, UNM’s 2022 spending was distributed across the corresponding industrial sectors within the IMPLAN[®] model. This allocation process linked UNM’s expenditures to the economic multipliers specific to each industrial activity.

1.4 Results

UNM’s 2022 operational expenditures contributed \$2.8 billion in net economic output and

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supported 32,098 jobs providing over \$1.2 billion in income to New Mexico workers and small business owners. Consistent with the export-base methodology described earlier, only expenditures made in New Mexico with funds originating outside New Mexico were counted in the estimation of UNM’s economic impact. Employee compensation and construction spending were counted as 100 percent in-state, while payments for goods and services supplied by out-of-state vendors were excluded. Depreciation and debt service payments were also excluded from calculations of net economic impact.

Table 5 Economic Impact of University Operations, 2022 (\$ millions)

Impact Type	Employment	Labor Income	Output
Direct	26,180	\$921.12	\$1,759.62
Indirect	1,999	\$87.32	\$420.26
Induced	3,919	\$188.46	\$651.39
Total Impact	32,098	\$1,196.90	\$2,831.27

Student Expenditures

Over 23,000 full-time and part-time students attended UNM in Spring 2022. Eighty-two percent of students enrolled during the 2021-2022 school year were New Mexico residents. Net spending by the university’s 4,204 international and out-of-state students totaled \$62.7 million, supporting 979 full-and part-time jobs, \$27.4 million in labor income, and \$93.5 million in economic output.

2.1 Data

Students from outside New Mexico made up 18 percent of UNM’s 2022 full-time student body. Spending by students who have temporarily moved to New Mexico to attend UNM has a positive impact on the New Mexico economy. Conversely, spending by students who lived in New Mexico prior to attending UNM is not counted toward net economic impact because it is assumed that in the absence of UNM those expenditures would still have been made in New Mexico.

Table 6 shows estimated annual expenditures by traditional, full-time UNM students. It is important to note that the values for tuition and fees assume no financial aid. Most UNM students have some form of financial aid and thus average actual expenditures for both tuition and fees for both resident and non-resident students are considerably lower than those presented in the table.

Table 6 2022 Estimated Average UNM Student Costs

Estimated Costs	Resident	Non-Resident
Tuition & Fees	\$11,126	\$34,045
Room & Board - Traditional	\$10,350	\$10,350
Books & Supplies	\$1,330	\$1,330
Transportation	\$2,220	\$2,220
Miscellaneous	\$2,488	\$2,488
Total	\$27,514	\$50,433

*Full time

Source: UNM Office of Admissions. <https://admissions.unm.edu/costs-financial-aid/index.html>

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2.2 Methodology

To estimate the economic impact of non-resident student expenditures, the number of out-of-state and international students was multiplied by an estimate of per capita student expenditures. To avoid double counting, tuition, fees and student spending at establishments owned or operated by the university such as the bookstore and residence halls were excluded from estimated student expenditures. Similarly, an estimate of income earned by non-resident students employed by UNM was also subtracted from non-resident student expenditures because these funds have already been counted in university operations spending. Student spending, net of tuition and fees, is assumed to average \$16,388 annually, or \$68.9 million for 4,204 international and out-of-state students. Subtracting 18 percent of UNM revenue from housing, food, and bookstores and 18 percent of salaries paid to UNM student employees yields \$62.7 million in net non-resident student spending (Table 7). This amount is distributed across the corresponding IMPLAN® industrial sectors. For retail purchases (books, supplies, some food, and “miscellaneous”) only the retail margin (47%) is counted as an in-state expenditure.

Table 7 2022 Net UNM Non-Resident Student Spending (\$million)

Housing	\$21.79
Food	\$17.83
Books & Supplies	\$5.09
Transportation	\$8.50
Miscellaneous	\$9.52
Total	\$62.74

Source: Author calculations and UNM Office of Admissions

2.3 Results

Model results are shown in Table 8. In 2022, spending by non-resident UNM students supported 979 full and part-time jobs, \$27.4 million in labor income, and \$93.5 million in economic output.

Table 8 Economic Impact of Student Expenditure (\$ millions)

Impact Type	Employment	Labor Income	Output
Direct	748.7	\$18.2	\$62.7
Indirect	113.5	\$4.6	\$16.0
Induced	117	\$4.7	\$14.8
Total	979	\$27.4	\$93.5

Alumni Human Capital

Higher education is an investment in human capital. UNM graduates who stay in New Mexico contribute to the state economy through their enhanced workforce productivity. Increased labor productivity translates into higher earnings for UNM alumni and more productive capital translates into higher income for businesses that employ UNM alumni.

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Despite the state's many attributes, New Mexico has difficulty attracting and retaining talent. In recent decades, population growth has stalled and the state has experienced net out-migration of young adults. Reversing the "brain drain" is critical to growing the state economy. Attending college in New Mexico increases the likelihood of settling in New Mexico after graduation.² UNM supports the state's long-term economic health by providing high-achieving New Mexico students access to high-quality, affordable higher education without leaving New Mexico.

There is a strong and well-documented relationship between higher levels of educational attainment and higher earnings.³ Studies have also shown that that the impact of a college education on earnings is roughly equivalent to the differential in earnings between college-educated and high school-educated workers.⁴

Higher-incomes also enable college graduates to purchase more goods and services than their less-educated peers.⁵ When those goods and services are produced locally, the additional spending has a positive impact on the local economy. Because income is positively correlated with educational attainment, the local economic impact of the increased human capital attributable to a UNM education can be measured by comparing spending on locally produced goods and services by college-educated New Mexicans to spending on locally produced goods and services by New Mexico adults who graduated high school but did not attend college.

3.1 Data

UNM has over 200,000 living alumni. Fifty-eight percent, or about 114,800 alums, have a New Mexico home address.⁶ The economic impact estimate presented here assumes a 40-year working life and thus considers only alumni who graduated in 1983 or later. Ninety percent (103,399) of the UNM alumni currently residing in New Mexico graduated between 1983 and 2022.

Table 9 shows average 2021 income by educational attainment for New Mexico workforce participants ages 25 through 64, as well as the difference between average income at each level of educational attainment; the average income of adults with just a high school diploma; and the present value of the income differential between high school and college graduates over a 40-year working life.

In 2021, a New Mexico worker with no education beyond a regular high school diploma had average income of \$37,614. Bachelor's degree holders, in contrast, had average income of \$65,799, a difference of \$28,185 or 75 percent.⁷ Over 40 years of employment, the increment to income resulting from a bachelor's degree would total \$1.13 million and have a present value of \$651,491.⁸ The present value of the lifetime incremental income from a professional degree like an MD or JD is roughly \$2.6 million (**Table 9**).

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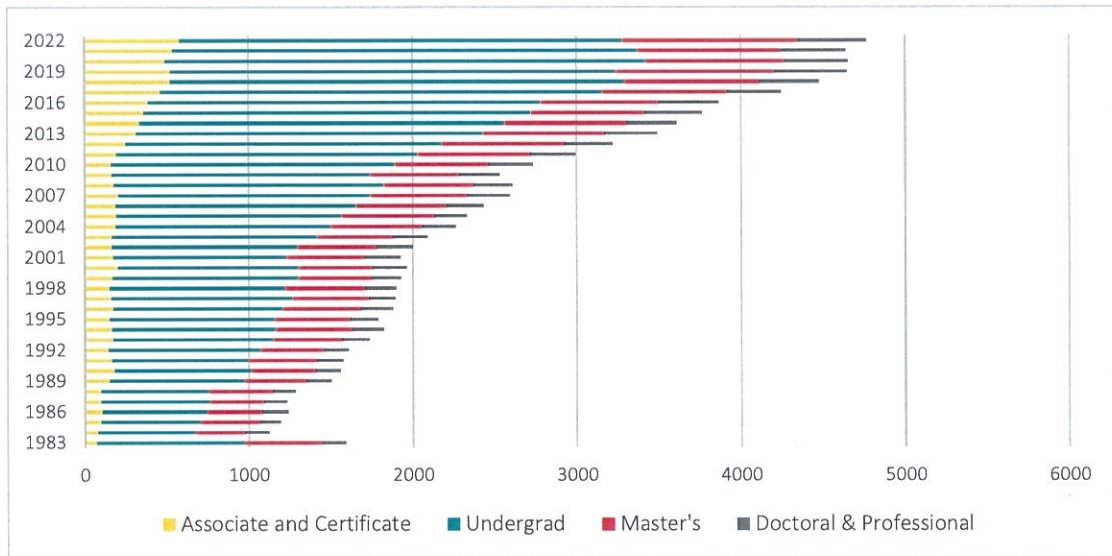
Table 9 Income by Educational Attainment, NM Labor Force Participants Ages 25 through 64, 2021

	Average Annual Income	Incremental Income from Additional Education	
		Income Differential	Present Value (40-Yr Career)
High school diploma or equiv.	\$37,614	\$0	\$0
Some college, <1 year	\$43,964	\$6,349	\$146,763
1+ years of college, no degree	\$43,025	\$5,410	\$125,060
Associate's degree	\$44,782	\$7,167	\$165,669
Bachelor's degree	\$65,799	\$28,185	\$651,491
Master's degree	\$78,275	\$40,660	\$939,857
Professional degree	\$149,671	\$112,057	\$2.6 MM
Doctoral degree	\$118,744	\$81,130	\$1.9 MM

Source: 2021 American Community Survey New Mexico Public Use Microdata and author calculations

Figure 3 shows UNM alumni with a 2023 New Mexico address by highest degree attained and graduation year.

Figure 3 UNM Alumni Residing in New Mexico by Highest Degree and Year of Graduation

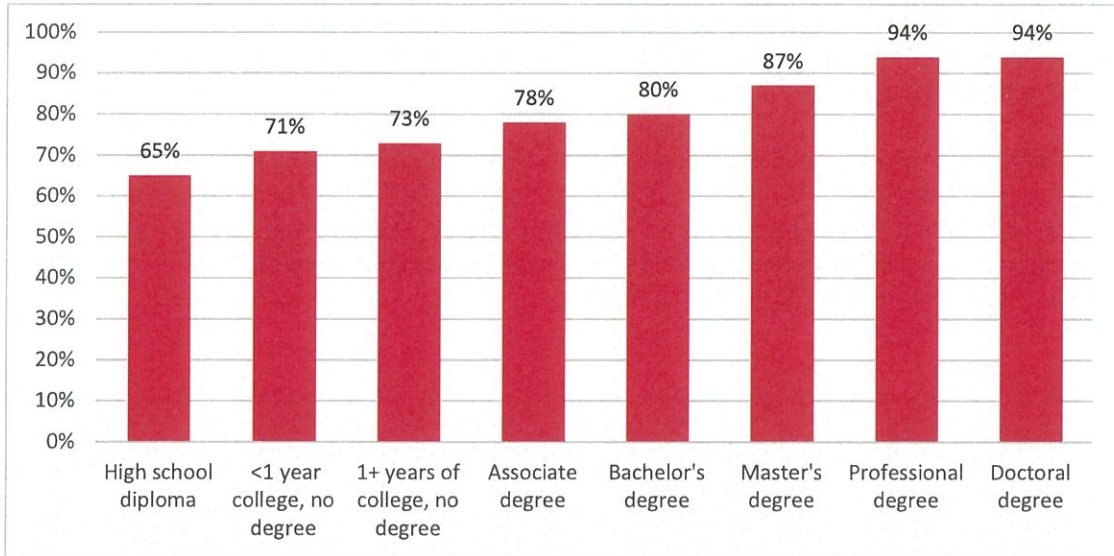


Source: UNM Foundation

College graduates are more likely than non-graduates to participate in the labor force.⁹ Figure 4 shows 2021 labor force participation rates for New Mexicans ages 25 through 64 by highest level of education. Eighty percent of working-age bachelor’s degree holders are in the labor force compared to 65 percent of New Mexicans with a high school diploma or equivalent.

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Figure 4 Labor Force Participation Rates: New Mexicans 25-64 by Educational Attainment, 2021



Source: U.S. Census 2021 1-Year American Community Survey

Each year, UNM alumni residing in New Mexico earn roughly \$3 billion more than they would with just a high school diploma (Table 10).

Table 10 NM Residents Awarded a UNM Degree 1983-2022: Income Increase from UNM Education

Highest degree attained	UNM Alumni	Alumni Workforce Participation	Incremental to Annual Income from Education	Total Additional Annual Income
Associates & certificate	9,560	78%	\$7,167	\$53.4 MM
Undergraduate degree	61,058	80%	\$28,185	\$1.4 B
Master's degree	22,969	87%	\$40,660	\$812.5 MM
Professional degree	997	94%	\$112,057	\$105 MM
Doctoral degree	8,815	94%	\$81,130	\$672.3 MM
Total	103,399	75%		\$3.0 B

Source: UNM Foundation, U.S. Census 2021 5-Year American Community Survey, and author calculations

Economists refer to the share of household income devoted to the purchase of goods and services as the “marginal propensity to consume” (MPC). The U.S. Bureau of Labor Statistics’ Consumer Expenditure Survey (CES) collects data on the spending patterns of households in the U.S. Data from the CES can be parsed by household characteristics such as region, income, and education. CES data for households in the western U.S. were used to estimate the marginal propensity to consume for New Mexicans at different levels of income and education.¹⁰ Because the present analysis is concerned with the share of consumption spending that remains in the New Mexico economy, the data were further parsed to identify the subset of purchases most likely to be made locally. For purposes of this analysis, the share of income devoted to consumption of locally produced goods and services is referred to as the “marginal propensity to consume - local” (MPC-L). To estimate the MPC-L, the goods and services included in the CES were categorized as “local” or “non-local.” Housing, healthcare, utilities, personal services, property maintenance, and restaurant expenditures were assumed to be entirely local, whereas most goods, including food for consumption at home, clothing, vehicles, gasoline, medical

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equipment, and drugs, as well as some services, such as insurance, were assumed to be produced outside New Mexico.^{11,12} These percentages were applied to the additional income, net of federal payroll taxes, attributable to higher education. Calculations and the resulting estimate of total in-state spending are presented in **Table 11**.

Additional spending by UNM graduates on locally produced goods and services totaled roughly \$863.3 million in 2022. UNM alumni residing in New Mexico spent an additional \$215.6 million on state and local taxes, which were recycled into the local economy through government expenditures on public services. The annual increment to in-state spending attributable to UNM degrees therefore totaled \$1.08 billion in 2022.

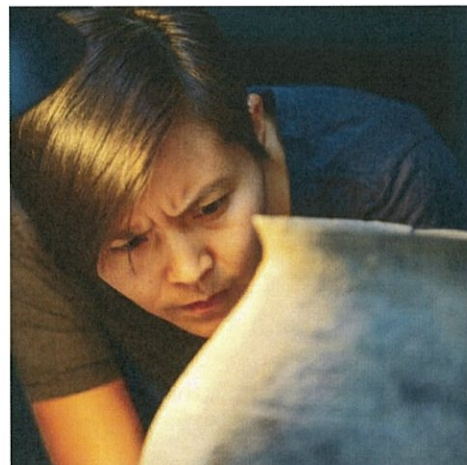
Table 11 Additional Annual Local Spending by UNM Graduates by Highest Degree Earned (\$ Millions)

Highest Degree Attained	MPC-L	Additional Annual Local Spending	State & Local Taxes	Total NM Spending
Associates & certificate	43%	\$19.5	\$3.8	\$23.3
Undergraduate degree	34%	\$397.9	\$98.3	\$496.2
Master's degree	33%	\$227.9	\$58.0	\$285.9
Professional degree	33%	\$29.5	\$7.5	\$37.0
Doctoral degree	33%	\$188.6	\$48.0	\$236.6
Total	34%	\$863.3	\$215.6	\$1,079

Source: UNM Foundation, US Census American Community Survey, and author calculations

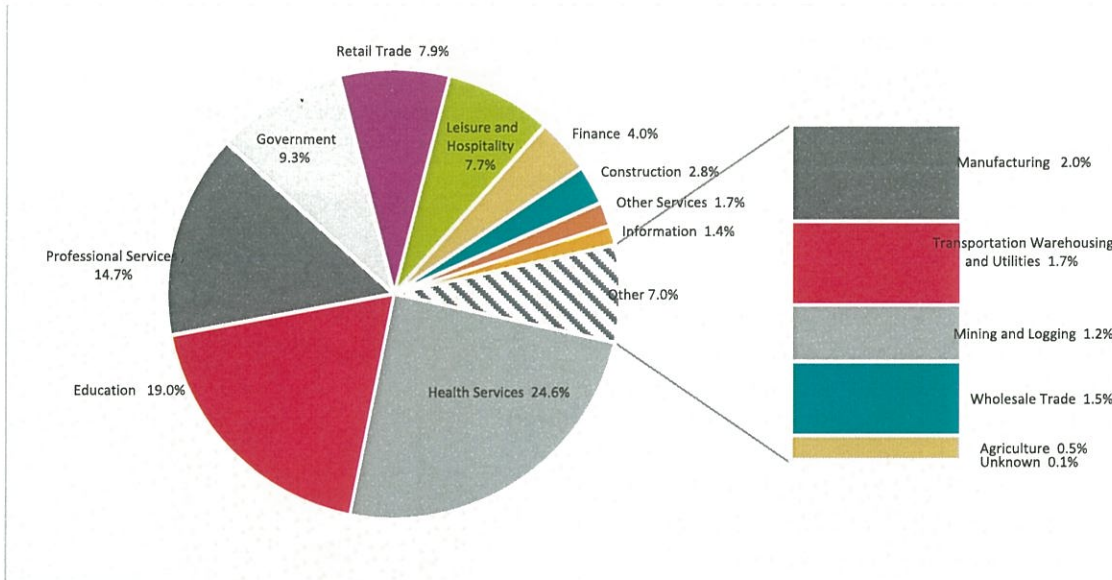
The skills UNM graduates bring to the labor force make New Mexico businesses more productive. The specific knowledge that alumni obtain through higher education enhance the performance of the businesses they work for. This effect is captured in the higher wages commanded by university graduates and the higher incomes of in-state business owners. Skilled labor also acts as a complement to improved technologies and other forms of non-labor business capital. Thus, employers of UNM alumni generate higher profits as a result of the increased productivity of their capital assets.

Figure 5 shows the sector of employment for the 11,956 members of the 2014-15 UNM graduating class who stayed in New Mexico. The health services sector employs the single largest share of UNM graduates, followed by education services, and professional services.



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Figure 5 2014-15 UNM Graduates Working in New Mexico, by Sector of Employment



Source: UNM Office of Institutional Analytics

3.2 Methodology

A college degree increases lifetime earnings potential. The UNM alumni that live and work in New Mexico impact the state economy by spending approximately \$863.3 million on locally produced goods and services. When UNM alumni use the additional money they have earned as a result of attending college to make purchases from New Mexico vendors they create induced economic impacts. To model these impacts in IMPLAN®, the additional income attributable to higher education was allocated to New Mexico households and the model was configured to assume that 34 percent of income was spent on locally produced goods and services and 8.4 percent was devoted to state and local taxes. Additional local spending by UNM alumni and the induced impacts generated by that spending are presented in Table 12.

Table 12 Economic Impact of UNM Alumni Human Capital (\$ Millions)

	Employment	Labor Income	Output
	13,545	\$616.9	\$2,195.7

Research, Innovation and Entrepreneurship

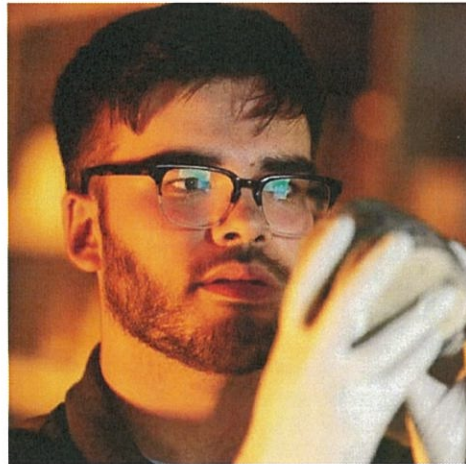
UNM contributes to the innovation economy by conducting basic and applied research, translating research into economically viable and socially relevant innovation, and by supporting the entrepreneurs who bring new technologies to market.

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Research

Scientific research is the first step in the development of transformational technologies. Research spending is part of UNM’s operational spending and thus its economic impact is already captured in the estimate of UNM’s operational economic impact presented earlier in this report. However, because research is critical both to UNM’s institutional mission and to the innovation that drives economic growth,¹³ this section highlights the specific ways research contributes to UNM’s economic impact.

Research universities like UNM power the innovation economy by fortifying the nation’s knowledge workforce and by generating new technologies. The University of New Mexico is among the nation’s top research institutions and is the only university in the state to be classified ‘R1’ by the Carnegie Commission on Higher Education. This prestigious designation is reserved for U.S. doctoral universities with very highest levels of research activity.¹⁴



Research on UNM’s main and branch campuses is overseen by the Vice President for Research.¹⁵ At the Health Sciences Center, research is overseen by the HSC Office of Research.¹⁶ In academic year 2022, UNM main and branch campuses employed 326 active principal investigators across 808 externally funded research initiatives.¹⁷ The UNM Health Sciences Center (HSC) is New Mexico’s only academic medical center. In addition to delivery exceptional healthcare services, the HSC seeks to meet New Mexico’s diverse and pressing health needs by conducting cutting

UNM Health Sciences Center Research Centers, Institutes & Networks

Clinical & Translational Science Center
 Comprehensive Cancer Center
 Center for Infectious Disease and Immunity

Signature Research Programs

Brain and Behavioral Health
 Cardiovascular & Metabolic Disease
 Infectious Diseases & Immunity
 Child Health Research
 Environmental Health Sciences

Extramurally Funded Centers & Institutes

Brain Vascular Malformation Consortium
 Center for Molecular Discovery
 Diabetes Prevention & Outcomes Center
 Fetal Alcohol Deficits Center
 Interdisciplinary HPV Prevention Center

Prevention Research Center
 UNM Pediatric Clinical Trials
 Spatio Temporal Modeling Center (STMC)

Other Centers, Institutes & Networks

Center on Aging
 Center for Development & Disability
 Center for Disaster Medicine
 Center for Healthcare Equity in Kidney Disease (CHEK-D)
 Facility for Advanced Cell Engineering (FACE)
 Illuminating the Druggable Genome Knowledge Management Center
 Institute for Ethics
 Center for Forensic Imaging
 Center for Memory and Aging
 Center for Native American Health
 Institute for Resilience, Health and Justice

Source: <https://hsc.unm.edu/research/centers-programs/>

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edge research. At any given time, the HSC manages over 300 clinical trials and 900 major research projects.

UNM Grand Challenges

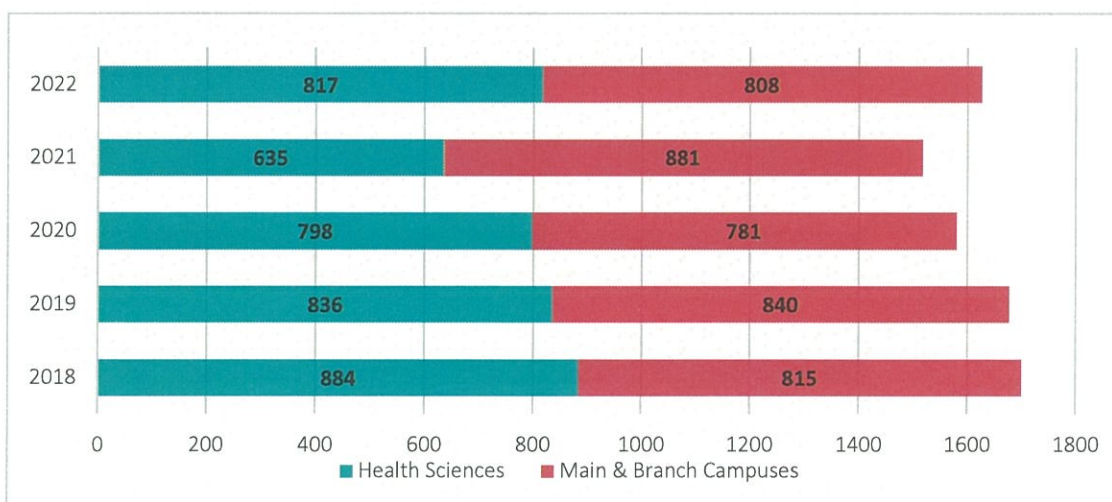
President Garnett S. Stokes launched The University of New Mexico Grand Challenges initiative in 2018. The interdisciplinary initiative was designed to tackle the most critical challenges facing New Mexico. Already, Grand Challenges teams have achieved many of the program’s goals, including greater cross-disciplinary collaborations, community engagement, and increased extramural funding. An initial investment by UNM of \$2.1M leveraged over \$50M in external research funding for programs directly connected to Grand Challenges. In 2022, the Grand Challenges program was re-imagined to more broadly engage faculty, researchers, staff, and students from across UNM; foster collaboration and team research; provide researchers with structured support and training; and continue building UNM’s research capacity.¹⁸

UNM Main Campus Research Centers and Institutes

- Bureau of Business and Economic Research (BBER)
- Center for Advanced Research Computing (CARC)
- Center on Alcohol, Substance Use, and Addictions (CASAA)
- Center for High Technology Materials (CHTM)
- Center for Micro Engineered Materials (CMEM)
- Established Program to Stimulate Competitive Research (EPSCoR)
- Geospatial and Population Studies (GPS)
- Land Grant Studies Program (LGSP)
- Southwest Hispanic Research Institute (SHRI)

In 2022, 10 new Grand Challenge teams were selected, each focusing on a different statewide imperative: STEM Education, Sustainable Space Research, Data Literacy, Child Health, Just Energy Transition, Housing Justice, Basic Needs, Indigenous Child Development, Mental Health, and Culturally Responsive Literacy. The teams, comprised of UNM faculty, staff, post-docs and graduate students, were selected through a competitive application process and represent all UNM campuses.

Figure 6 UNM Research Awards 2018 - 2022

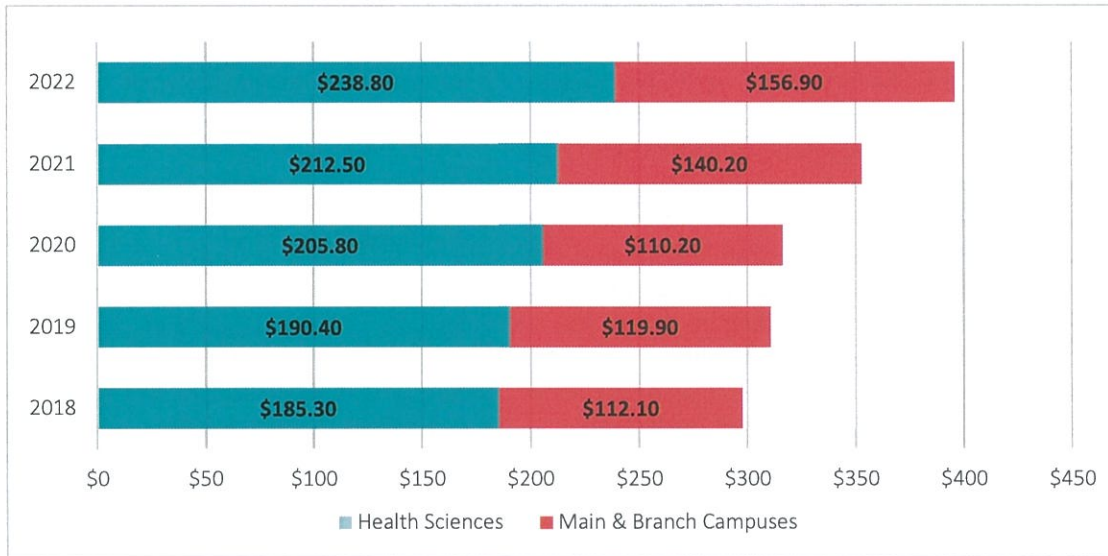


Source: UNM Office of the Vice President for Research

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Figure 7 shows total award amounts. The 1,625 external funding awards received by UNM researchers in 2022 totaled \$395.7 million.

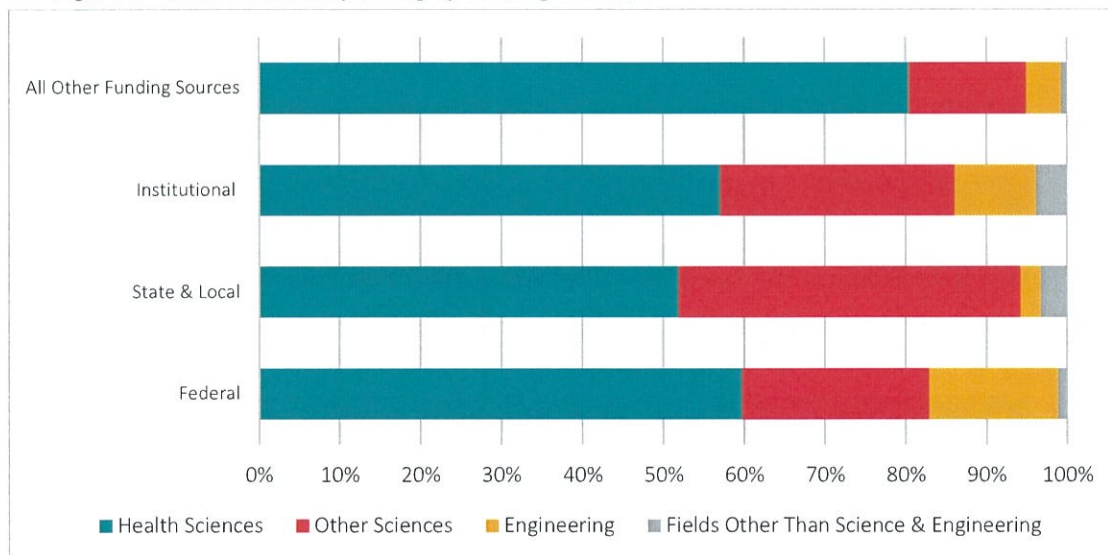
Figure 7 UNM Research Award Amounts 2018 -2022 (\$ Millions)



Source: UNM Office of the Vice President for Research

Two-thirds of funding for research originates outside New Mexico and thus generates a net increase in economic activity when it is spent in New Mexico and circulates through the New Mexico economy. Figure 8 shows UNM research spending by academic discipline and funding source.

Figure 8 UNM Research Spending by Funding Source, SY 2022



Source: UNM Office of the Vice President for Research

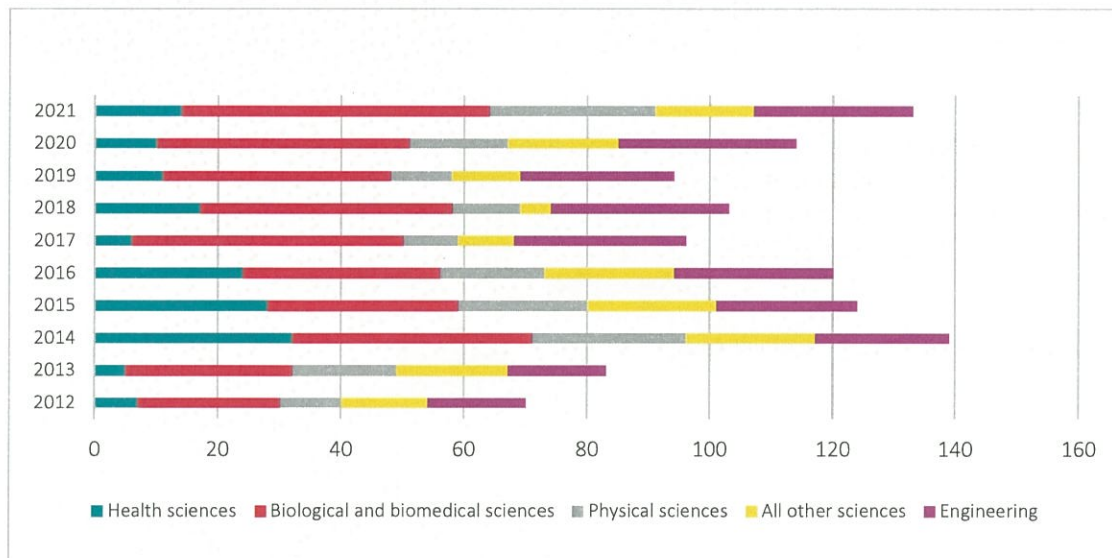
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Research is also critical to UNM’s academic mission. Learning how to conduct laboratory and field research is a key component of graduate and advanced undergraduate education in science and engineering fields. The research awards secured by UNM researchers provide important research and employment opportunities to graduate students and post-doctoral students.



Postdoctoral researchers (or “postdocs”) are individuals who have received PhDs and are advancing their research skills and professional qualifications by conducting research under the guidance of more senior academic researchers at a host institution. Post-doctoral appointments are typically funded with resources external to the university. Postdocs are essential contributors to many UNM research initiatives. They contribute to the scholarly mission of the university by publishing and presenting their research in academic journals and at professional symposia. **Figure 9** shows UNM post-docs by field and year from 2012 through 2021.

Figure 9 UNM Post Doctorates in Science, Engineering, and Health Sciences



Source: National Center for Science and Engineering Statistics, Survey of Graduate Students and Post doctorates in Science and Engineering.

Innovation and Entrepreneurship

UNM fosters entrepreneurship and innovation in a wide variety of ways including courses, conferences, technical assistance, and support for business development. A full accounting of these activities is well beyond the scope of this report. Instead, this section describes some of UNM’s more prominent business development programs and initiatives. These efforts strengthen

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and diversify New Mexico’s economy by launching new businesses, supporting existing businesses and/or by cultivating a robust innovation ecosystem.

Technology Transfer

Technology transfer is the movement of discoveries and knowledge from the research institutions where they originate to the commercial marketplace. University technology transfer offices license intellectual property developed by university researchers to companies that seek to develop and produce the technology for specific applications. Commercialization of technologies developed at UNM helps create jobs through new startups and product sales, and may give rise to new industries or industrial clusters.

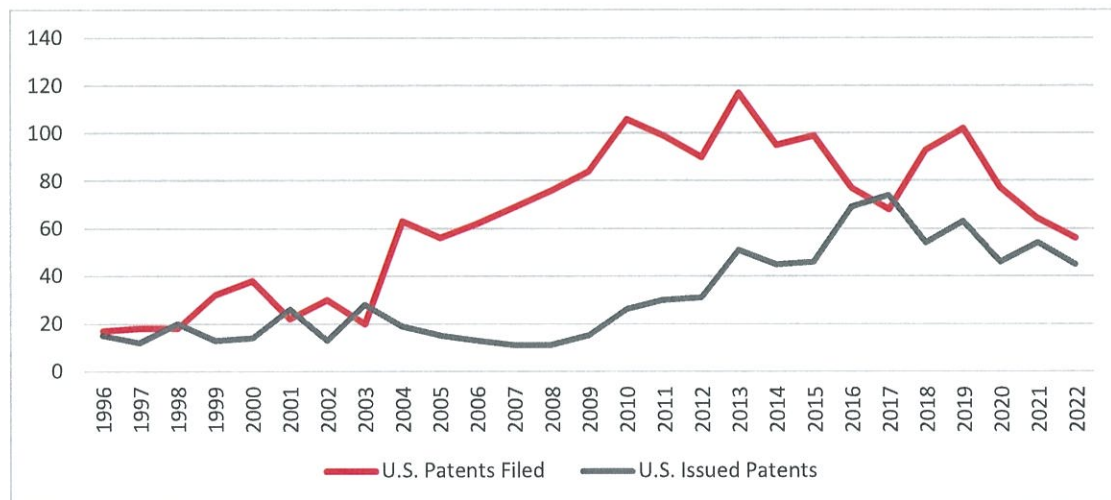
UNM Rainforest Innovations

UNM Rainforest Innovations is a nonprofit corporation formed to protect and commercialize technologies invented at UNM. UNM Rainforest Innovations files patents, identifies licensing opportunities and facilitates the formation of startup companies. As the technology transfer and economic development organization of New Mexico’s flagship research university, Rainforest Innovations is a core component of New Mexico’s innovation ecosystem and an economic driver of high-tech industry.

Key metrics for each step in the technology transfer process are depicted in **Table 13**. Disclosure of an invention to UNM Rainforest Innovations is the first step UNM inventors take toward commercialization. In 2022, UNM inventors disclosed 94 technologies to UNM Rainforest Innovations.

The protection of intellectual property rights encourages innovation and makes technology transfer possible. In this second crucial phase of technology transfer, Rainforest Innovations files patent applications and facilitates other forms of I.P. protection, such as copyright and trademark. In 2022, Rainforest Innovations filed 56 patent applications. That year, 45 patents were issued for UNM Rainforest technologies (**Table 13**).

Figure 10 UNM Rainforest Innovations Patents Filed and Issued 1997-2022



Source: UNM Rainforest Innovations

The Statewide Economic Impact of The University of New Mexico

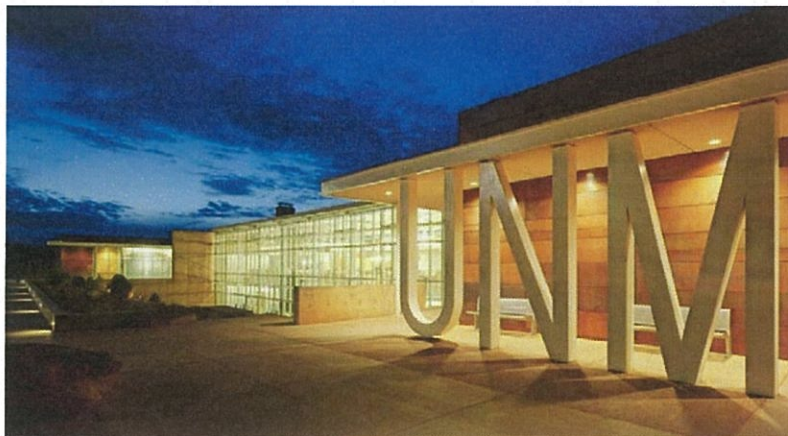
UNM Rainforest Innovations helps inventors market their technologies by preparing the necessary documentation, identifying potential customers, and advertising that the technology is available for licensing. UNM Rainforest Innovations entered into 47 option or licensing agreements in 2022 (Table 13).

Table 13 UNM Rainforest Innovations Key Metrics 2007-2022

Fiscal Year	Disclosures	U.S. Patents Filed	U.S. Issued Patents	Option/License Agreements	Startup Companies	Revenue
2022	94	56	45	41	8	\$6,336,075
2021	81	64	54	43	6	\$55,733,707
2020	127	77	46	47	4	\$53,830,466
2019	125	102	63	53	11	\$1,954,033
2018	107	93	54	52	11	\$2,091,491
2017	114	68	74	58	12	\$2,050,437
2016	102	77	69	54	12	\$2,550,697
2015	125	99	46	50	9	\$2,729,547
2014	119	95	45	56	9	\$1,718,949
2013	138	117	51	63	9	\$2,189,442
2012	124	90	31	46	7	\$2,922,575
2011	110	99	30	36	5	\$3,333,218
2010	122	106	26	36	5	\$3,976,373
2009	113	84	15	38	8	\$1,069,389
2008	112	76	11	21	6	\$834,076
2007	85	69	11	25	8	\$938,308

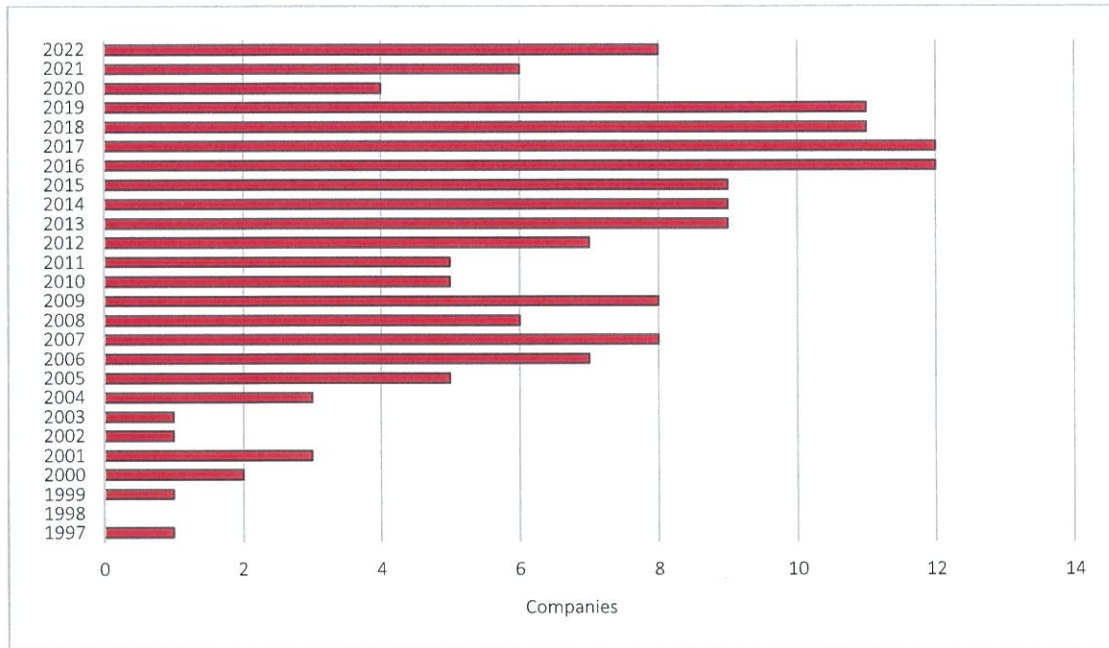
Source: UNM Rainforest Innovations

UNM Rainforest Innovations supports the formation of startup companies by connecting UNM inventors with entrepreneurs, venture capitalists, and other potential investors. The Joseph L. Cecchi Venture Lab (CVL), Rainforest Innovations’ business incubator program, helps New Mexico startups with access to shared office facilities, business services, mentoring, advice, and support in locating specialized facilities and laboratories.¹⁹ The CVL also collaborates with faculty inventors, entrepreneurs, and UNM business students to perform market research and advance business opportunities for technologies developed at UNM. UNM Rainforest Innovations currently has 92 active startup companies, 49 (53%) of which are located in New Mexico. UNM Rainforest Innovations supported the creation of 8 startups in 2022.



The Statewide Economic Impact of The University of New Mexico

Figure 11 UNM Rainforest Innovations Startups 1997-2022



Source: UNM Rainforest Innovations.

In 2014, the UNM Bureau of Business and Economic Research (BBER) estimated that the 23 startups that were then affiliated with Rainforest Innovations and headquartered in New Mexico were responsible for creating 83 direct jobs, \$3.5 million in sales, \$5.9 million in labor income, and for drawing \$17 million in venture capital funding into New Mexico.²⁰

Between 2014 and 2023, the number of New Mexico-based startups affiliated with Rainforest Innovations increased by 113 percent, growing from 23 to 49. In June 2021 and July 2023, UNM Rainforest Innovations surveyed their New Mexico-based startups about their revenue, employment, and purchases from New Mexico vendors. The estimate of Rainforest Innovations’ 2022 economic impact presented in **Table 14** draws upon responses to the 2021 and 2023 surveys, augmented by data from the 2014 BBER report. These data were combined and distributed across the IMPLAN® industrial sectors occupied by UNM Rainforest Innovations startups active in 2022. IMPLAN® model results indicate that in 2022 UNM Rainforest-affiliated startups created or stimulated the creation of 431 New Mexico jobs that paid \$29.4 million in wages and salaries and generated \$64.2 million in total output.

Table 14 Economic Impact of UNM Rainforest Innovations Startups (\$ millions)

Impact Type	Employment	Labor Income	Output (\$ millions)
Direct	274	\$21.6	\$39.1
Indirect	61	\$3.2	\$9.0
Induced	97	\$4.6	\$16.1
Total	431	\$29.4	\$64.2

Source: IMPLAN® and author calculations based on Rainforest Innovations survey and estimates from UNM Bureau of Business and Economic Research STC.UNM: The Impact of Startup Companies. June 2014.

The Statewide Economic Impact of The University of New Mexico

Innovate ABQ

Innovate ABQ is a nonprofit, multi-institutional, public-private partnership managed by UNM Rainforest Innovations in partnership with Lobo Development Corporation.²¹ Innovate ABQ was established to develop a 7-acre innovation district in downtown Albuquerque to foster economic development and job creation in New Mexico. The Lobo Rainforest Building, which houses UNM Rainforest Innovations, the Cecchi Venture Lab, Sandia National Laboratory's tech engagement office, and engineering firm General Atomics, is an initiative of Innovate ABQ. CNM's FUSE Makerspace, a facility providing affordable access to design, prototype, and manufacturing tools as well as a collaborative, creative working environment is adjacent to the Rainforest Building and is another Innovate ABQ partner.

Innovation Academy

The Innovation Academy (IA) brings students and other community members from diverse backgrounds together to develop new ideas and craft solutions to real-world problems. The Academy offers students interested in entrepreneurship opportunities for hands-on experiential learning through courses, trainings, and sponsored events such as the Rainforest Pitch Competition in which students pitch to a live audience in a bid to win seed funding for their proposed venture and the UNM Tech Navigator Challenge, which pairs student teams with mentors to create commercialization plans for existing technologies.

UNM was a National Science Foundation (NSF) I-Corps™ site from 2017 through 2022 and is now a member of the I-Corps Hub West.²² The I-Corps™ Hub West seeks to train innovation leaders and commercialize technology by helping academic entrepreneurs bring their technologies to market. UNM's I-Corps™ program, which is administered by the Innovation Academy and UNM Rainforest Innovations, uses experiential education to foster innovation among faculty and students, promote regional coordination and linkages within the innovation ecosystem, and develop a national innovation network. The program offers seed funding to teams consisting of an academic lead (typically a UNM faculty or staff member), an entrepreneurial lead (a UNM student or post-doc), and an external industry mentor provided by the I-Corps program, to explore commercialization and prototyping.

In the summer of 2021, the Innovation Academy became part of UNM's Anderson School of Management. Since Fall of 2021, the Innovation Academy has engaged with over 2,000 students across 88 different majors, more than 400 of whom have received academic credit for the work they have done to start a business. Participating students have also received \$581,200 in seed funding from the Innovation Academy and \$2.8 million from outside investors.²³

Pitch Deck Competition

The Pitch Deck Competition is an early-stage pitch competition that brings together teams of university entrepreneurs from all over New Mexico. To participate, teams must be led by a student at a New Mexico college or university and have an early stage business model. Participants compete for cash prizes and are exposed to potential investors. Since 2019, pitch deck competitors have been awarded over \$60,000 and received investments totaling more than \$4.5 million.

The Statewide Economic Impact of The University of New Mexico

New Mexico Rainforest EDA University Center

The New Mexico Rainforest EDA University Center (UC), a collaborative project of UNM Rainforest Innovations and Innovation Academy, focuses on supporting high-growth entrepreneurs and providing training and technical assistance to communities throughout New Mexico, with a special focus on the five communities that host the UNM main and branch campuses (Albuquerque, Taos, Los Alamos, Gallup, and Valencia County). The UC coordinates monthly seminars, provides mentorship, holds entrepreneur office hours, sponsors an entrepreneurial training and certificate program, offers courses such as the New Mexico Business Recovery Course, and coordinates the UNM Rainforest Forum which provides support to UNM on economic development matters.

Over 50 recorded seminars are available from the Rainforest EDA University Center. Since 2019, over 1000 unique clients statewide have participated in the UC program and 120 participants have received 8 or more hours of technical assistance.

Rainforest Accelerator

The Rainforest Accelerator helps teams of university inventors venture outside of their laboratories and into the marketplace where they can learn first-hand about entrepreneurship as they go through the market discovery process for their innovation. The program offers entrepreneurial training, mentoring and seed funding to selected UNM teams of faculty and students.

UNM Co-Investment Fund

The UNM Co-Investment Fund enables UNM Rainforest Innovations to co-invest with investment firms (such as angel groups and venture capital funds) in UNM startup companies. UNM Rainforest Innovations administers the Fund, which invests only in UNM startups. Investments must be matched 1:1 by a venture capital fund or an angel group. The Co-Investment Fund Committee reviews and approves requests for funding based on extensive criteria for business success. The fund has invested in 19 startup companies to date.

Tribal Entrepreneurship

The New Mexico Tribal Entrepreneurship Enhancement Program²⁴ builds off of the New Mexico Rainforest EDA University Center Program to expand entrepreneurial training in rural New Mexico, focusing in on tribal and coal-impacted communities throughout the state. It is funded by an \$800,000 Economic Development Administration (EDA) American Rescue Plan Economic Adjustment Assistance grant.²⁵

The Statewide Economic Impact of The University of New Mexico

The New Mexico Tribal Entrepreneurship Enhancement Program aims to:

- ⇒ Expand opportunity, build wealth and drive job growth by supporting entrepreneurship in tribal communities throughout New Mexico, particularly those effected by recent coal mine closures.
- ⇒ Partner with tribal liaisons to provide entrepreneurial training to rural residents and link rural entrepreneurs to the resources available in New Mexico's urban areas.
- ⇒ Determine needs and reduce barriers to entrepreneurship within tribal communities.
- ⇒ Tell the story of the "Entrepreneur's Journey" through videos and podcasts featuring successful Native American entrepreneurs from New Mexico.
- ⇒ Spearhead "Entrepreneurial Connection" events to highlight tribal entrepreneurs and their companies and provide networking opportunities.

UNM Small Business Institute

The UNM Small Business Institute (SBI) is a mentorship program that pairs teams of students from UNM's Anderson School of Management with local businesses to guide strategic planning, financial analyses, and marketing research. More than 700 small businesses of all types have consulted with the SBI since the program's inception.

Study Limitations

This study has addressed four of the major ways in which UNM contributes to the New Mexico economy; but it is far from a comprehensive inventory of UNM's beneficial economic impacts. Some economic effects, both positive and negative, were excluded from the analysis due to a lack of data.

Tourism, for example, has a net positive impact on the New Mexico economy because it draws new money into the state. Attractions such as performances at Popejoy Hall, lectures, art exhibits, academic conferences, and athletic events help attract out-of-state visitors to New Mexico, as do annual events such as homecoming, graduation, and orientation. Unfortunately, this potentially significant source of economic stimulus is extremely difficult to quantify with the data currently available.

Similarly, the community service activities of numerous entities throughout UNM add tremendous value to the New Mexico economy. However, there is currently no centralized inventory of such activities at UNM. In addition, because "community service" encompasses a broad array of initiatives, activities, and partnerships, -- from adult literacy and community health to low cost legal clinics and civic engagement -- there is no uniform or consistent way to estimate its impact.

Furthermore, education enhances human capital in ways that may not directly manifest in higher earnings.²⁶ Education in general has been shown to benefit society by improving health

The Statewide Economic Impact of The University of New Mexico

outcomes,²⁷ enhancing social cohesion, increasing civic engagement, and reducing crime.²⁸ Educated workers can also enhance the productivity of their less educated colleagues.²⁹ The omission of spillover benefits from enhanced human capital created by higher education reduces the estimate of economic impact.

This study also does not fully address counterfactual outcomes. In impact analysis, counterfactuals are what would have happened if the event being analyzed had not occurred.³⁰ By quantifying UNM's contribution to workforce productivity and the revenue it attracts from outside the state, this analysis has, in a broad sense, answered the question, "What would the New Mexico economy be like if UNM did not exist?" However, it does not fully dissect all the possible ramifications of UNM's absence. For example, it is reasonable to assume that if UNM did not exist, some of the UNM alumni currently living and working in New Mexico would have obtained a comparable education at another New Mexico university or would have temporarily left the state to obtain their degree(s). Adjusting for this counterfactual outcome would require not counting the incremental labor income generated by these alumni toward UNM's economic impact. With data currently available, there is no way to estimate the percentage of UNM students who would seek out comparable educational alternatives if UNM did not exist. Thus, this adjustment is not made.

A similar adjustment could be made on the opposite side of the ledger to account for the UNM tuition and fees currently paid by New Mexico residents, that, in the absence of UNM, would be lost to New Mexico because these students attended out-of-state schools.

Finally, results are not adjusted for the importation of skilled labor that would likely occur if UNM did not exist and was consequently unable to supply New Mexico employers with qualified workers. Faced with a deficit of skilled labor, New Mexico businesses would likely recruit some workers from outside the state. There are no statistics upon which to base an estimate of this effect.

Conclusion

UNM is one of New Mexico's most valuable economic assets. UNM's contribution to the New Mexico economy takes a variety of forms including direct expenditures on goods, services, and payroll, enhanced workforce productivity, and technology transfer. In all, the state's flagship university is responsible for roughly \$5.2 billion in economic output and over 47,000 New Mexico jobs each year.

The Statewide Economic Impact of The University of New Mexico

End Notes

- ¹IMPLAN® model 2021 Data, using inputs provided by the user and IMPLAN Group LLC, IMPLAN System (data and software), 16905 Northcross Dr., Suite 120, Huntersville, NC 28078 www.IMPLAN.com.
- ² Wall Street Journal Interactive. Where Do College Graduates Move To After College? (2018, 18 May). Retrieved from: <https://www.wsj.com/graphics/where-graduates-move-after-college/>
- ³ Card, D. (1999). The Causal Effect of Education on Earnings. *Handbook of Labor Economics*. 3. 1801-1863. 10.1016/S1573-4463(99)03011-4.
- ⁴ Rothwell, J. (2015) What colleges do for local economies: A direct measure based on consumption. November 17, 2015. Retrieved from: <https://www.brookings.edu/research/what-colleges-do-for-local-economies-a-direct-measure-based-on-consumption/>
- ⁵ Rothwell, J. (2015)
- ⁶ University of New Mexico Alumni Relations Office, June, 2023
- ⁷ U.S. Census Bureau. American Community Survey 2021 5-yr New Mexico Public Use Micro-Sample
- ⁸ Assumes a 3 percent annual discount rate.
- ⁹ Brundage, V. (2017) Profile Of The Labor Force By Educational Attainment. U.S. Bureau of Labor Statistics. Retrieved from: <https://www.bls.gov/spotlight/2017/educational-attainment-of-the-labor-force/pdf/educational-attainment-of-the-labor-force.pdf>
- ¹⁰ U.S. Bureau of Labor Statistics. Consumer Expenditure Survey. 2016 Annual Tables <https://www.bls.gov/cex/tables.htm>
- ¹¹ This approach follows the methodology in Rothwell, J. What colleges do for local economies: A direct measure based on consumption. Brookings Institution. November 17, 2015
- ¹² This simplifying assumption likely produces an underestimate of local spending and thus a more conservative economic impact estimate because many goods and services assumed to be produced entirely outside New Mexico have a small local component.
- ¹³ Romer, P.M., 1990. Endogenous technological change. *Journal of Political Economy* 98 (5), 71–102. Retrieved from: <https://www.jstor.org/stable/2937632>
- ¹⁴ The Carnegie Classification® is the leading framework for classifying U.S. institutions of higher education. The framework was first published by the Carnegie Commission on Higher Education in 1973 and is now updated every 3 years to reflect changes among colleges and universities. See: Carnegie Classifications of Institutions of Higher Education. Retrieved from: <https://carnegieclassifications.acenet.edu>
- ¹⁵ <https://research.unm.edu/ovpr>
- ¹⁶ <https://hsc.unm.edu/research/about/>
- ¹⁷ <https://research.unm.edu/#block-factoid>
- ¹⁸ <https://grandchallenges.unm.edu/>
- ¹⁹ <https://innovations.unm.edu/cvl>
- ²⁰ UNM Bureau of Business And Economic Research. STC.UNM: The Impact of Startup Companies. June 2014.
- ²¹ Lobo Development Corporation is A UNM Regent-owned, nonprofit corporation created under the University Research Park and Economic Development Act, for the purpose of facilitating non-traditional real estate development by way of collaborative and innovative approaches, which advance the goals of University of New Mexico. See: <https://www.lobodevelopmentcorp.com/overview>
- ²² <https://www.icorpshubwest.org/about>
- ²³ University of New Mexico Innovation Academy. Impact Report Fall 2021-2023. Retrieved from: <https://online.pubhtml5.com/rtnq/ombz/#p=1>
- ²⁴ <https://innovations.unm.edu/tribal-entrepreneurship/>
- ²⁵ <https://innovations.unm.edu/2022/04/08/unm-rainforest-innovations-receives-800k-eda-american-rescue-plan-grant-to-support-training-programs-for-new-mexico-tribal-entrepreneurship-project/>
- ²⁶ Blackwell, M., Cobb, S. and Weinberg, D. (2002). The Economic Impact of Educational Institutions: Issues and Methodology. *Economic Development Quarterly*. 16:1, pp. 88-95.
- ²⁷ Grossman, M.(2006) Chapter 10 Education and Nonmarket Outcomes, *Handbook of the Economics of Education*, Editor(s): E. Hanushek, F. Welch, Elsevier, Volume 1, 2006, Pages 577-633,
- ²⁸ Lochner, L. and Moretti, E. (2004). "The Effect of Education on Criminal Activity: Evidence from Prison Inmates, Arrests and Self-Reports." *American Economic Review*. 94:1, pp. 155-189
- ²⁹ Siegfried, J., Sanderson, A. & McHenry, P. (2006). "The Economic Impact of Colleges and Universities," Vanderbilt University Department of Economics Working Papers 0612, Vanderbilt University Department of Economics.
- ³⁰ Siegfried, J., Sanderson, A. & McHenry, P. (2006).

**ATTACHMENT 6
LETTERS OF REFERENCE**



DENVER INTERNATIONAL AIRPORT
8500 Peña Blvd. | Denver, Colorado 80249-6340 | 720-730-IFLY (4359)

June 28, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for WJ Advisors LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for WJ Advisors LLC who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

On-going services identified in the ABQ RFP (or elements thereof) provided over the last three to five years:

- Provided financial services related to the Denver International Airport's capital programs, including analyzing, planning, forecasting, and establishing the capital program.
- Conducted financial services, feasibility studies, in-depth analysis, and participated in rating agency meetings as they related to airport bond sales and debt service for the Denver International Airport's capital projects.
- Participated in the selection and negotiation processes for leases and agreements, providing financial services and analysis of concession activities and programs as required.
- Planned, developed, and presented airport finance and related issues to Denver International Airport personnel, including City staff.
- Collaborated in the planning and development of capital projects with other Denver International Airport consultants, including those providing master plan, engineering, architectural, and environmental services.
- Prepared various cost-benefit analyses related to potential FAA grants for eligible project costs and programs. Additionally, prepared Passenger Facility Charge (PFC) applications, assisted with the FAA approval process, prepared the competition plan as per AIR-21 requirements, and submitted it to the Federal Aviation Administration for approval. Conducted forecasting analyses and studies on passenger activity, parking rates, and airline revenue projections.
- Prepared business and marketing plans, in-depth analyses, and studies for the expansion of passenger commercial air service at Denver International Airport.
- Analyzed non-aeronautical commercial real estate development programs for the Denver International Airport and other revenue-generating opportunities, considering future airport plans and needs.
- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for the preparation and execution of airline leases and lease modifications at Denver International Airport. This service included financial studies of facility needs, financial negotiations, and marketing forecasts.

Please feel free to contact if you have any questions.

Sincerely,

Mike Nakornkhet
Chief Financial Officer
Denver International Airport
Mobile (720) 882-7991 | Mike.Nakornkhet@flydenver.com



July 11, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for WJ Advisors LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for WJ Advisors LLC, who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

Services provided:

- Provided financial services related to the LaGuardia Airport's capital programs, including analyzing, planning, forecasting, and establishing the capital program.

Year Completed: 2024 (on-going)

- Planned, developed, and presented airport finance and related issues to LaGuardia Airport executive management and other personnel.

Year Completed: 2024 (on-going)

LaGuardia Gateway Partners
LaGuardia Airport, Terminal B Arrivals & Departures Hall
Level 3M
Flushing, NY 11371

www.laguardiab.com



- Collaborated in the planning and development of capital projects with other LaGuardia Airport consultants, including those providing master plan, engineering, architectural, and environmental services.

Year Completed: 2022

- Created non-aeronautical commercial real estate development programs for the LaGuardia Airport and other revenue-generating opportunities, considering future airport plans and needs.

Year Completed: 2024

- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for the preparation and execution of airline leases and lease modifications at LaGuardia Airport. This service included financial studies of facility needs, financial negotiations, and marketing forecasts.

Year Completed: 2024 (on-going)

Sincerely,



Mercedes Rendon

Chief Financial Officer

LaGuardia Gateway Partners

Mobile: (917) 327-4934

Office: (718) 554-9233

LaGuardia Gateway Partners

LaGuardia Airport, Terminal B Arrivals & Departures Hall
Level 3M
Flushing, NY 11371

www.laguardiab.com



July 1, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for WJ Advisors LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for WJ Advisors LLC who have delivered comprehensive financial and strategic planning services to Los Angeles World Airports (LAWA). Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

Services provided:

Scope of services items in the ABQ RFP (or elements thereof) that were completed by WJ Advisors are listed below.

- Provided financial services related to the LAWA's capital programs, including analyzing, planning, forecasting, and establishing the capital program.

Years Completed: 2019-2024

- Conducted financial services, feasibility studies, in-depth analysis, and participated in rating agency meetings as they related to airport bond sales and debt service for LAWA's capital projects.

Years Completed: 2019-2024

- Developed leases and agreements, requests for proposals, and procurement related to subjects requiring financial services, including the rental car concession program, Customer Facility Charge (CFC), advertising concession program, retail concession program, and food and beverage concession program.

Years Completed: 2019 and 2023

- Planned, developed, and presented airport finance and related issues to LAWA personnel, including City Council and the Airport Advisory Board.

Years Completed: 2019-2024

LAX
Van Nuys
City of Los Angeles

Karen Bass
Mayor

Board of Airport
Commissioners

Karim Webb
President

Matthew M. Johnson
Vice President

Vanessa Aramayo
Courtney La Bau
Victor Narro
Nicholas P. Roxborough
Valeria C. Velasco

John Ackerman
Chief Executive Officer



- Collaborated in the planning and development of capital projects with other LAWA consultants, including those providing master plan, engineering, architectural, and environmental services.

Years Completed: 2019-2024

- Prepared various cost-benefit analyses to secure FAA grants-in-aid for eligible project costs and sustainability efforts/programs. Additionally, prepared Passenger Facility Charge (PFC) applications, assisted with the FAA approval process, prepared the competition plan as per AIR-21 requirements, and submitted it to the Federal Aviation Administration for approval. Conducted forecasting analyses and studies on passenger activity, parking rates, and airline revenue projections.

Years Completed: 2019-2024

- Created non-aeronautical commercial real estate development programs for LAWA and other revenue-generating opportunities, considering future airport plans and needs.

Years Completed: 2019-2024

- Prepared and assisted with the development of the Common Use and Lease Agreement for LAX.

Years Completed: 2019 and 2023

- Planned, developed, and presented airport finance and related issues to LAWA personnel, including City Council and the Airport Advisory Board.

Years Completed: 2019-2024

- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for the preparation and execution of airline leases and lease modifications for LAWA. This service included financial studies of facility needs, financial negotiations, and marketing forecasts.

Year Completed: 2019-2024

Sincerely,



Tatiana Starostina
Chief Financial Officer
Los Angeles World Airports
Email: TSTAROSTINA@lawa.org
Phone: (424) 626-5251



P.O. Box 68727
Seattle, WA 98168
Tel: 206-787-3000

www.portseattle.org

July 2, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for WJ Advisors LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for WJ Advisors LLC who have been partners in delivering comprehensive financial and strategic planning services to the Port of Seattle (the Port). Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

Services provided:

Scope of services items in the ABQ RFP (or elements thereof) that were completed by WJ Advisors are listed below.

- Provided financial services related to the Port's capital programs, including analyzing, planning, forecasting, and establishing the capital program.

Years Completed: 2019-2024

- Conducted financial services, feasibility studies, in-depth analysis, and participated in rating agency meetings as they related to airport bond sales and debt service for the Port's capital projects.

Years Completed: 2021, 2022, and 2024

- Planned, developed, and presented airport finance and related issues to Port personnel, including the Port Commission.

Years Completed: 2019-2024

July 2, 2024
Project Reference for WJ Advisors
Page 2

- Collaborated in the planning and development of capital projects with other Port consultants, including those providing master plan, engineering, architectural, and environmental services.

Years Completed: 2019-2024

- Prepared and assisted with the development of the Common Use and Lease Agreement for the Port.

Years Completed: 2022-2024


- Planned, developed, and presented airport finance and related issues to Port personnel, including the Port Commission.

Years Completed: 2019-2024

- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for the preparation and execution of airline leases and lease modifications for the Port. This service included financial studies of facility needs, financial negotiations, and marketing forecasts.

Years Completed: 2021, 2022, and 2024

Sincerely,



Hiedi Popochock (Jul 2, 2024 11:54 PDT)

Hiedi Popochock
Director, Aviation Finance & Budget
Port of Seattle
Email: Popochock.H@portseattle.org
Phone: (206) 735-6565



SARASOTA
BRADENTON
INTERNATIONAL

Sarasota Manatee Airport Authority
6000 Airport Circle
Sarasota, FL 34243

July 2, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for WJ Advisors LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for WJ Advisors LLC who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

Services provided:

- Provided financial services related to the Sarasota Bradenton International Airport's capital programs, including analyzing, planning, forecasting, and establishing the capital program.

Year Completed: 2024

- Developed leases and agreements, requests for proposals, and procurement related to subjects requiring financial services, including airline leases, rental car concession programs, Customer Facility Charge (CFC), advertising concession program, retail concession program, and food and beverage concession program.

Year Completed: 2024

- Planned, developed, and presented airport finance and related issues to Sarasota Bradenton International Airport executive management.

Year Completed: 2024

- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for the preparation and execution of airline leases and lease modifications at Sarasota Bradenton International Airport. This service included financial studies of facility needs, financial negotiations, and marketing forecasts.

Year Completed: 2024

Should you have any questions or would like to discuss WJ Advisors consultation, please feel free to reach out to me.

Sincerely,

Pamela Kantor, CPA
EVP/CFO
Sarasota Manatee Airport Authority
941.359.2770 x4213
pamela.kantor@flysrq.com



June 28, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for WJ Advisors LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for WJ Advisors LLC who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

On-going services provided since 2020:

- Provided financial services related to the McKinney National Airport's capital programs, including analyzing, planning and forecasting the capital program.
- Conducted financial services, feasibility studies, in-depth analysis, and participated in meetings as they related to potential bond sales and debt service for the McKinney National Airport's capital projects.
- Planned, developed, and presented airport finance and related issues to McKinney National Airport personnel, including the Mayor, City Council, and general public.
- Collaborated in the planning and development of capital projects with other McKinney National Airport consultants, including those providing master plan, engineering, architectural, and environmental services.
- Prepared various cost-benefit analyses related to potential FAA grants for eligible project costs and programs. Conducted forecasting analyses and studies on passenger activity, parking rates, and airline revenue projections.
- Prepared business and marketing plans, in-depth analyses, and studies for the expansion of passenger commercial air service at McKinney National Airport including developing a website.
- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for the preparation and execution of airline leases and lease modifications at McKinney National Airport. This service included financial studies of facility needs, financial negotiations, understanding the Air Carrier Incentive Program and marketing forecasts.

Sincerely,

A handwritten signature in blue ink, appearing to read "K. Carley", is written over a blue circular stamp or seal.

Kenneth Carley, A.A.E.
Airport Director
McKinney National Airport
kcarley@flytki.com
972.562.4053

Letters of Reference
ASM Global Route Development



**Alaska International Airport System
Fairbanks International Airport**

6450 Airport Way, Suite 1
Fairbanks, Alaska 99709
Main: 907.474.2500
Fax: 907.474.2513
Website: www.fai.alaska.gov

July 2, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for ASM Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for ASM, who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG. ASM has performed the scope of services listed below or a portion of these services over the past 3-5 years.

Services provided:

- Prepared business and marketing plans, in-depth analyses, and studies for the expansion of passenger commercial air service at Fairbanks International Airport (FAI).

Year Completed: ongoing

- Planned, developed, and presented airport finance and related air service issues to Fairbanks International Airport personnel, including City Officials, Relevant Community Partners, and the Airport Advisory Boards.

Year Completed: latest in 2024

- Prepared and assisted with the development of the Air Carrier Incentive Program in accordance with the Federal Aviation Administration guidelines.

Year Completed: 2023

“Keep Alaska Flying and Thriving.”

Alaska International Airport System Fairbanks International Airport

6450 Airport Way, Suite 1

Fairbanks, Alaska 99709

Main: 907.474.2500

Fax: 907.474.2513

Website: www.fai.alaska.gov

- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for the preparation and execution of air service development, and airline leases and lease modifications at Fairbanks International Airport. This service included financial studies of facility needs, financial negotiations, and marketing forecasts.

Year Completed: ongoing

Sincerely,



Angela Spear

Airport Director

Fairbanks International Airport

angie.spear@alaska.gov



July 10, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for ASM Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas:

I am writing to provide a reference for ASM, who has been a partner in delivering comprehensive air service development services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG. ASM has performed the scope of services listed below, or a portion of these services, over the past 3-5 years.

Services provided:

- Prepared business and marketing plans, in-depth analyses and studies for the expansion of passenger commercial air service at St. Louis Lambert International Airport.

Year Completed: [2021 to present]

- Planned, developed and presented air service related reports and updates to St. Louis Lambert International Airport staff, City Officials, Relevant Community Partners and the Airport's Advisory Boards.

Year Completed: [2021 - present]

- Prepared and assisted with the development of the Air Carrier Incentive Program in accordance with the Federal Aviation Administration guidelines.

Year Completed: [2021 to present]

- Prepared feasibility studies and reports, in-depth analyses, and negotiation strategies required for air service development at St. Louis Lambert International Airport. This service covered all aspects of air service development at St. Louis Lambert International Airport.

Year Completed: [2021 to present]

Sincerely,



Brain Kinsey
Assistant Director - Marketing and Business Development
St. Louis Lambert International Airport
bdkinsey@flystl.com

Letters of Reference
Kutchins & Groh, LLC



**BATON ROUGE
METROPOLITAN AIRPORT**
9430 Jackie Cochran Drive
Suite 300, Terminal Building
Baton Rouge, LA 70807
PHONE (225) 355-0333
FAX (225) 355-2334

Mike Edwards
Director of Aviation

July 9, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for Kutchins & Groh, LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for Kutchins & Groh, LLC, who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

Services provided:

- Prepared various cost-benefit analyses to secure FAA grants-in-aid for eligible project costs and sustainability efforts/programs. Additionally, prepared Passenger Facility Charge (PFC) applications, assisted with the FAA approval process, and submitted it to the Federal Aviation Administration for approval. Conducted forecasting analyses and studies on passenger activity, parking rates, and airline revenue projections.

Benefit Cost Analysis for Runway 13/31 Runway Safety Area and Runway Protection Zone Improvement – April 2018

Passenger Facility Charge applications and amendments – 2003 - 2024

Sincerely,

A handwritten signature in black ink that reads 'Mike Edwards'.

Mike Edwards



July 1, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for Kutchins & Groh, LLC Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am pleased to provide a reference for Kutchins & Groh, LLC, who have been partners in delivering comprehensive financial and strategic planning services at Abilene Regional Airport. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

My staff, Board, City Management and I have developed trust and relied upon the work by and consultations with the Principals and Partners at Kutchins & Groh for several years. We appreciate their dedication to their clients and the experience and insight they bring to helping us find solutions and develop financial strategies.

Services provided:

- Prepared various cost-benefit analyses to secure FAA grants-in-aid for eligible project costs and sustainability efforts/programs. Additionally, prepared Passenger Facility Charge (PFC) applications, assisted with the FAA approval process, and submitted it to the Federal Aviation Administration for approval. Conducted forecasting analyses and studies on passenger activity, parking rates, and airline revenue projections.
- **Passenger Facility Charge applications and amendments – 2023 – 2024**
- **Airport Planning Services – 2023 - 2024**

Sincerely,

A handwritten signature in black ink, appearing to read "Don Green", is written over a horizontal line.

Don Green, A.A.E.
Director of Transportation Services
City of Abilene
325-676-6061

Abilene Regional Airport
2933 Airport Boulevard, Suite 200
Abilene, Texas 79602
325.676.6367
IFLYABI.COM





July 1, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

**RE: Project Reference for Kutchins & Groh, LLC Financial Services and Strategic Planning
Consultant Proposal**

Dear Mr. Vargas,

I am writing to provide a reference for Kutchins & Groh, LLC, who have been invaluable partners in delivering comprehensive financial and strategic planning services to the Lake Charles Regional Airport. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

Services provided:

- Prepared various cost-benefit analyses to secure FAA grants-in-aid for eligible project costs and sustainability efforts/programs. Additionally, prepared Passenger Facility Charge (PFC) applications, assisted with the FAA approval process, and submitted it to the Federal Aviation Administration for approval. Conducted forecasting analyses and studies on passenger activity, parking rates, and airline revenue projections.
- **Passenger Facility Charge applications and amendments – 2003 – 2024**
- **Airport Planning Services – 2003 - 2024**

Should you have any questions or require further clarification, please don't hesitate to contact me at (337) 477-6051 Ext. 204 or via email at hallen@flylakecharles.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Heath Allen".

Heath Allen
Executive Director

LAKE CHARLES REGIONAL AIRPORT

Letters of Reference
Vantage Group



July 1, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for Vantage Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for Vantage Group (Vantage), who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

- Developed leases and agreements, requests for proposals, and procurement related to subjects requiring financial services, including the rental car concession program, Customer Facility Charge (CFC), advertising concession program, retail concession program, and food and beverage concession program
Year Completed: 2023
- Participated in the selection and negotiation processes for leases and agreements, providing financial services and analysis of concession activities and programs as required.
Year Completed: 2023
- Planned, developed, and presented airport finance and related issues to Nassau Airport Development personnel and relevant stakeholders
Year Completed: 2023

- Provided feasibility studies and reports, business and marketing plans, and in-depth analyses of existing and future concession programs at Lynden Pindling International Airport. Participated in the development and establishment of these concession programs, including financial studies of facility needs, financial negotiations, and marketing forecasts.

Year Completed: 2023

Sincerely,



Vernice Walkine (Ms.)
President and CEO
Nassau Airport Development Company
vernice.walkine@nas.bs
Office 242-702-1015



July 1, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for Vantage Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for Vantage Group (Vantage), who have been partners in delivering comprehensive financial and strategic planning services. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

- Developed leases and agreements, requests for proposals, and procurement related to subjects requiring financial services, including the retail concession program, and food and beverage concession program.
Year Completed: 2022
- Participated in the selection and negotiation processes for leases and agreements, providing financial services and analysis of concession activities and programs as required.
Year Completed: 2022
- Planned, developed, and presented airport finance and related issues to LaGuardia Terminal B Board of Directors, executives, personnel and relevant stakeholders.
Year Completed: 2022
- Provided feasibility studies and reports, business and marketing plans, and in-depth analyses of existing and future concession programs at LaGuardia International Airport Terminal B. Participated in the development and establishment of the concession

LaGuardia Gateway Partners
LaGuardia Airport Terminal B
Level 3M, Flushing, NY 11371

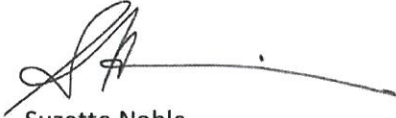
www.laguardiab.com



program, including financial studies of facility needs, financial negotiations, and marketing forecasts.

Year Completed: 2021

Sincerely,



Suzette Noble
Chief Executive Officer
LaGuardia Gateway Partners
suzette.noble@laguardiab.com
Office (718) 554-9206



Kansas City International Airport
601 Brasilia Avenue
Kansas City, Missouri 64153-2054

P.O. Box 20047
Kansas City, Missouri 64195-0047

	(816)	FAX
Director	243-3100	243-3170
Deputy Director	243-3180	243-3170
Accounting	243-3120	243-3172
Commercial Development	243-3020	243-3070
Engineering	243-3030	243-3071
Human Resources	243-3010	243-3072
Information Services	243-3151	243-3222
Marketing	243-3160	243-3171

June 27, 2024

Estevan Vargas, Assistant Procurement Officer
City of Albuquerque
Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293, Albuquerque, NM 87103

RE: Project Reference for Vantage Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for Vantage Group (Vantage), who have been partners in delivering comprehensive financial and strategic planning services as part of their contract to develop and manage the concessions program at Kansas City International Airport. Below are the details of their performance on key projects relevant to the scope of services requested in RFP-2024-581-AVI-CG.

- Developed leases and agreements, requests for proposals, and procurement related to subjects requiring related financial services, including the retail concession program, and food and beverage concession program.
Year Completed: 2023
- Participated in the selection and negotiation processes for leases and agreements, providing financial services and analysis of concession activities and programs as required.
Year Completed: 2023
- Planned, developed, and presented concessions performance and related issues to Kansas City Aviation Department personnel and other related stakeholders
Year Completed: 2022-2024
- Provided feasibility studies and reports, business and marketing plans, and in-depth analyses of existing and future concession programs at Kansas City International Airport.

Mr Estevan Vargas

Page 2

June 27, 2024

Participated in the development of and establishment of these concession programs, including financial studies of facility needs, financial negotiations, and marketing forecasts.

Year Completed: 2023

Sincerely,

A handwritten signature in black ink that reads "Melissa Cooper". The signature is written in a cursive style with a large initial "M".

Melissa Cooper, Director of Aviation

Kansas City Aviation Department

Melissa.Cooper@kcmo.org

(816) 243-3107

Letters of Reference
Webber Air Cargo, Inc.



July 1, 2024

Estevan Vargas
Assistant Procurement Officer
City of Albuquerque, Department of Finance and Administrative Services
Purchasing Division
P.O. Box 1293
Albuquerque, NM 87103

RE: Project Reference for Webber Air Cargo, Inc. Financial Services and Strategic Planning Consultant Proposal

Dear Mr. Vargas,

I am writing to provide a reference for Webber Air Cargo, Inc, who completed an air cargo market assessment of Milwaukee Mitchell International Airport (MKE) in 2022. Below are details of his performance relevant to the scope of services requested in RFP-2024-581-AVI-CG.

Services provided by Michael Webber

- Moderated a group workshop and conducted individual interviews with MKE's staff and on-airport cargo tenants, as well as off-airport allied interests.
- Completed assessment of MKE's existing cargo facilities and services
- Reviewed MKE's recent cargo forecasts for applicability to current demand
- Completed a competitive assessment of MKE and regional alternatives, as well as network operations of MKE's existing cargo tenants and Amazon
- Provided a summary report with strategic recommendations for new facilities development

Year Completed: 2022

Sincerely,

Matthew J. Hoffman, A.A.E.
Digitally signed by
Matthew J. Hoffman, A.A.E.
Date: 2024.07.01 17:19:51
-05'00'

Matthew J. Hoffman, A.A.E.
Director, Business & Commercial Development
Milwaukee Mitchell International Airport
(414) 747-5750
mhoffman@mitchellairport.com



W J A D V I S O R S
AVIATION MANAGEMENT
CONSULTANTS

RESPONSE TO REQUEST FOR PROPOSALS

COST PROPOSAL

**FINANCIAL SERVICES AND
STRATEGIC PLANNING CONSULTANT
SOLICITATION NUMBER: RFP-2024-581-AVI-CG
July 12, 2024**

**PREPARED FOR
The City of Albuquerque and its Department of Aviation**

**PREPARED BY THE WJA TEAM
WJ Advisors LLC
ASM Global Route Development
Kutchins & Groh, LLC
O'Donnell Economics & Strategy, LLC
Sycamore Associates, LLC
Vantage Group
Webber Air Cargo, Inc.**



APPENDIX A - PAGE 1
 Cost Proposal - Hourly Rates

Position	Hourly Rate (\$)*
WJ Advisors LLC**	
Managing Partner	\$405.88
Director	\$395.00
Associate Director	\$315.00-\$390.11
Senior Consultant	\$284.10-\$291.35
Consultant	\$185.82-\$230.54
ASM Global Route Development	
VP/Director	\$275.00
Analyst	\$175.00
Kutchins & Groh, LLC	
Managing Principal	\$300.00
Sr. Project Manager	\$250.00
Project Manager	\$200.00
Planning Associate	\$175.00
Planner	\$160.00
Associate	\$150.00
Associate 2	\$140.00
Clerical Associate	\$100.00
O'Donnell Economics & Strategy	
Economist	\$250.00
Sycamore Associates, LLC	
Managing Member	\$175.00
Broker	\$125.00
Vantage Group	
Vice President	\$450.00
Senior Director	\$385.00
Director	\$255.00
Commercial Performance Analyst	\$255.00
Webber Air Cargo, Inc.	
Air Cargo Specialist	\$230.00

See next sheet for yearly costs and total cost.

* Rates shall be fully loaded and inclusive of all overhead, tax, insurance, etc.

**WJ Advisors LLC rates would be fixed for the initial term of the contract. Thereafter, rates would be subject to either (1) a 3% adjustment each January 1st after notification to the City of such adjusted rates or (2) fixed rates in coordination with and approval by the City.

Appendix A - PAGE 2
 Cost Proposal - Yearly Costs by Scope of Service

	Ref.	Initial 2-year term**		Total
		Year 1	Year 2	
Financial services labor*				
3.1	Rates and charges	\$45,000	\$45,000	\$90,000
3.1.1	Capital programs	50,000	50,000	100,000
3.1.2	Feasibility for bond sales	185,000	-	185,000
3.1.3	Develop leases / RFPs for RACs, Advertising, F&B, Retail	24,000	-	24,000
3.1.4	Lease negotiations for concessions	24,000	-	24,000
3.1.5	Airport presentation to Management / City Council / Advisory Board	15,000	15,000	30,000
3.1.6	Work with other consultants on planning for capital projects	-	25,000	25,000
3.1.7	Cost Benefit analysis, Grants, PFCs, Competition Plans	-	75,000	75,000
3.1.8	Develop a management plan and a staffing plan to carry out SOW	10,000	10,000	20,000
3.1.9	Other related services	20,000	20,000	40,000
Total	[A]	\$373,000	\$240,000	\$613,000
Strategic services labor*				
3.2.1	Expansion of passenger air service	\$ -	\$37,000	\$37,000
3.2.2	Air Cargo Facilities and service	34,000	-	34,000
3.2.3	Commercial development plans	50,000	50,000	100,000
3.2.4	Air carrier incentive program	12,000	12,000	24,000
3.2.5	Common use agreements	75,000	75,000	150,000
3.2.6	Airport presentation to Management / City Council / Advisory Board	15,000	15,000	30,000
3.2.7	Concessions plans	-	69,000	69,000
3.2.8	Airline negotiations	146,000	-	146,000
3.2.9	Develop a management plan and a staffing plan to carry out SOW	10,000	10,000	20,000
3.2.10	Other related services	20,000	20,000	40,000
Total	[B]	\$362,000	\$288,000	\$650,000
Non-labor expenses				
	Travel expenses	\$10,000	\$10,000	\$20,000
	Cost of reproduction and postage	1,000	1,000	2,000
Total	[C]	\$11,000	\$11,000	\$22,000
Total	[=A+B+C]	\$746,000	\$539,000	\$1,285,000

*Amounts are estimates only and would be subject to a detailed scope of work and budget to be reviewed by the Department prior to commencing work.

**Labor amounts based on rates that are fully loaded and inclusive of all overhead, tax, insurance, etc.

