



CCAA BOARD MEMO

Agenda Item: H-2

BOARD MEMO 2025-18

Meeting Date: October 15, 2025

Agenda Title: FOR DISCUSSION AND POSSIBLE ACTION: Approve Coffman Associates, Inc. Scope of Services for an Aviation Demand Forecast Update with Runway Length Analysis.

Staff Summary: This task consists of providing the necessary planning services to prepare an Aviation Demand Forecast Update for the Carson City Airport. The objective of the project is to provide the airport and the FAA with support materials for justification of a runway extension. Coffman Associates, Inc. was selected as the airport on call planning consultant in 2023.

Agenda Action: Motion and Approval

Time Requested: 15 Minutes

Proposed Motion

I propose to approve the Coffman Associates, Inc. Scope of Services for an Aviation Demand Forecast Update with Runway Length Analysis.

CCAA'S Strategic Goal

Provide for the safety and security of airport users

Previous Action and Executive Summary

September 20, 2023 (Item G-1) – Coffman Associates was selected as the airport planning consultant.

November 20, 2024 (Item H-4) – The CCAA approved the 2025-2029 Airport Capital Improvement Plan (ACIP) containing this project and the expected expense.

May 21, 2025 (Item H-1) – The CCAA approved the 2025-2026 budget which included this capital project and expense.

Financial Information

Is there a fiscal impact?

No X Yes

If yes, account name/number & amount: \$152,958.00 Total. \$7,647.90 local match
\$145,310.10 federal funding.

General Fund

Is it currently budgeted?

Yes, this is one portion of the original planned project.

Alternatives

Do not approve the scope of services.

Board Action Taken:

Motion: _____

1) _____

2) _____

Aye/Nay

(Vote Recorded)

AUTHORIZATION OF SERVICES #25-01

SCOPE OF SERVICES FOR AN AVIATION DEMAND FORECAST UPDATE WITH RUNWAY LENGTH ANALYSIS

CARSON CITY AIRPORT CARSON CITY, NEVADA

1. **Scope of Services.** The Consultant (Coffman Associates) shall provide the professional airport consulting services described in Exhibit A of this Authorization of Services Amendment to the Airport Planning Services Contract dated November 19, 2023.
2. **Compensation.** It is expressly understood and agreed that the total compensation to be paid to the Consultant shall be a firm fixed lump sum amount of **One Hundred Fifty-Two Thousand Nine Hundred Fifty-Eight Dollars (\$152,958.00)** for the services specified in Exhibit A - Scope of Services and Exhibit, B - Cost Summary. Such sum shall constitute full and complete compensation for the Consultant's services. If additional work is required beyond the scope outlined in Exhibit A, the additional work and associated costs must first be approved in writing by the Sponsor (Carson City Airport Authority).
3. **Method of Payment.** Payments shall be at monthly intervals subject to receipt of requisitions for payments from the Consultant specifying that he has performed the work and is entitled to the amount requisitioned under the terms of this Agreement.
4. **Consultant Responsibilities for Compensation.** The Consultant shall prepare monthly invoices which clearly indicate the progress to date and the amount of compensation due by virtue of that progress. All requisitions for payment shall be for work completed unless otherwise agreed to by the Sponsor.
5. **Sponsor Responsibilities for Compensation.** The Sponsor agrees to pay the Consultant's invoices net upon receipt. At no time will payment of requisitions exceed thirty (30) days from the date of the invoice without notification to the Consultant. It is expressly understood that the Sponsor has the right to withhold payment on any invoice if he feels that the Consultant has not performed the requisitioned work efforts in a satisfactory manner. If the Sponsor does decide to withhold payments to the Consultant for any reason, he must provide written notification and an explanation to the Consultant within ten (10) days of the date of the invoice.
6. **Release.** The Consultant, upon final payment of the amount due under this Agreement, releases the Sponsor, its officers and employees, for all liabilities, claims and obligations

whatsoever, arising from or under this Agreement. The Consultant agrees not to purport to bind the Sponsor to any obligation not assumed herein by the Sponsor unless the Consultant has written authority to do so, and then only within the strict limits of that authority.

7. **Additional Services.** The fee for any additional services required by the Sponsor will be computed either on a negotiated lump sum basis or upon actual hours and expenses incurred by the Consultant.
8. **Time of Performance.** The total time of performance for the services outlined in Exhibit A shall be approximately eight (8) months from the date of the official Notice-to-Proceed letter issued by the Sponsor and receipt of all required project information. This timeframe is exclusive of governmental reviews and approvals.
9. **Notice to Proceed.** The official notice to proceed will be issued by the Sponsor. The Consultant may proceed with work elements associated with this project prior to the issuance of a Notice to Proceed at his own risk if he so desires.
10. **Subcontracts.** This Scope of Services does not include any subcontracted services at this time. If additional subcontracted work becomes necessary, the Consultant shall notify the Sponsor of the nature of such services and identify the proposed subcontracting firm. The Consultant must receive approval in writing from the Sponsor prior to utilization of additional subcontractors.
11. **Resolution of Differences.** All claims, disputes, and other matters in question between the parties of this Agreement, arising out of or relating to this Agreement or the breach thereof, shall be decided by arbitration in accordance with the rules of the American Arbitration Association unless the parties mutually agree otherwise. It is understood that differences in professional judgment or opinions of the Consultant and the Sponsor do not create a breach in this Agreement and that, at the request of the Sponsor, the Consultant may be asked to complete additional work by the Sponsor according to the terms of this Agreement, to resolve such differences. In no event shall the demand for arbitration be made after the date when initiation of legal proceedings based on such claim, dispute, or other matter in question would be barred by the applicable statute of limitations.
12. **Termination of the Agreement.** The Sponsor may by written notice to the Consultant, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure of the Consultant to fulfill the contract obligations. Upon receipt of such notice, services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in process, delivered to the Sponsor.

If the termination is for the convenience of the Sponsor an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed tasks.

If termination is due to failure to fulfill the Consultant's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the Consultant may be liable to the Sponsor for any additional costs occasioned to the Sponsor thereby.

If after notice of termination for failure to fulfill contract obligations, it is determined that the Consultant had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.


The rights and remedies of the Sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

FOR THE CONSULTANT


FOR THE SPONSOR

Coffman Associates, Inc.

Carson City Airport Authority

By: 
Matt Quick
Principal

By: _____

Attest: 

Date: _____

Attached and Incorporated by Reference:

- Exhibit A - Scope of Services
- Exhibit B - Cost Summary

Exhibit A

Scope of Services Aviation Demand Forecast Update with Runway Length Analysis for Carson City Airport

PROJECT BACKGROUND

Carson City Airport (CXP) is classified as a general aviation airport with a “regional” role in the Federal Aviation Administration’s (FAA) *National Plan of Integrated Airport Systems*. The airport currently provides a single runway (Runway 9-27) that is 6,101 feet long by 75 feet wide. The runway is currently designed to runway design code (RDC) B-II standards as defined by the FAA.

The current master plan, completed in December 2020, considers an extension to Runway 9-27 to better accommodate business jet aircraft operators utilizing the airport, pending further justification and coordination with the FAA. The master plan calls for an 800-foot runway extension that provides an overall length of 6,901 feet. The implementation of declared distances and displaced landing thresholds are also called for in order to satisfy safety design standards associated with proposed runway length.

Since the completion of the master plan, CXP has realized an increase in business jet activity and is in the process of enhancing runway utilization through the implementation of improved approach procedures making the airport more accessible. In addition, aircraft operators have indicated a need to extend the runway in order to enhance the operational capabilities of aircraft utilizing the airport. To better satisfy the needs of airport users, the Carson City Airport Authority (Sponsor) desires to extend Runway 9-27. The FAA Phoenix Airport District Office (ADO) has requested additional information to gain a better understanding of the need to do so.

As part of preliminary planning and subsequent environmental studies and tasks related to the proposed extension of Runway 9-27, Coffman Associates (Consultant) has been asked to prepare an update to the airport’s aviation demand forecasts and further analyze runway length needs at CXP. This study is intended to update the estimate of future levels of air traffic by quantity and by characteristics that will identify the demand that is projected at CXP over the next several years. The objective of the study is to prepare an FAA-approved aviation demand forecast and evaluate the length of Runway 9-27 to determine the optimal length needed to support critical aircraft operations. In addition, the airport layout plan (ALP) Drawing will be updated as appropriate based on the analysis associated with the forecast update, applicable design standards, and runway length.

SCOPE OF SERVICES

Task 1 - Study Design

In accordance with FAA guidelines for the preparation of master plans contained in Advisory Circulars 150/5070–6B, *Airport Master Plans*, and 150/5300–13B, *Airport Design*, prepare an outline of the basic elements of the planning work effort. Identify respective individual work tasks which will be necessary to meet both the requirements set by the FAA and the Sponsor for each task work scope. Prepare detailed descriptions of each individual work task which describe the specific work effort involved and identify the result or product of the work effort.

Task 2 - Inventory Air Traffic Activity

Assemble and organize air traffic activity data for the airport from various sources. Relevant data on general aviation (private and corporate), air taxi, and military activity will be collected. Data will be obtained from airport staff, the FAA Phoenix ADO, Nevada Department of Transportation – Aviation Section (NDOT) CXP fixed base operators (FBOs) and specialized aviation service operators (SASOs), FAA’s Air Traffic Operations Network (OPSNET), and Traffic Flow Management System Count (TFMSC) for fleet mix information and data.

The assembled data will include, as available:

- a) Historical operations, including local and itinerant operational splits
- b) Based aircraft by type, as available; and
- c) Critical design aircraft

Task 3 - Inventory Socioeconomic Data

Obtain available statistical data on historical and forecast socioeconomic factors for the airport’s service area. At a minimum, these factors will include employment, income, and population, with emphasis placed upon the identification of specific socioeconomic characteristics of the developed areas of the local environs, as well as trends that have been established for future development.

Task 4 - Review Regional Aviation and Socioeconomic Forecasts

Review and analyze current local and regional socioeconomic forecasts. Similarly, review the forecasts and assumptions of the aviation forecasts prepared by FAA for its Terminal Area Forecasts (TAF). The forecasts prepared for the last master plan, as available, will also be reviewed and analyzed.

Task 5 - Prepare Aviation Demand Forecasts

Develop aviation demand forecasts using both simple and more complex methodologies, taking into consideration forecasts from other sources such as FAA. Historical aviation activity statistics for the airport will be organized to evaluate airport peaking characteristics and fleet mix ratios. The methodology used in this analysis will involve a variety of techniques that will factor in national transportation statistics, local socioeconomic factors, as well as the independent airport data. Correlation analysis techniques will include relatively simple graphical comparison, as well as more complex regression analysis.

The forecasts shall result in estimates of aviation demand for 5, 10, and 20 years including:

- General aviation projections
- Annual volume and mix of aircraft operations
- Air taxi to include Part 135 and fractional ownership operations
- Based aircraft by aggregate and fleet mix
- Aircraft operations by aggregate (itinerant and local); and

Task 6 - Identify Existing and Future Airport Design Critical Aircraft

Utilizing data provided by the airport and that obtained from FAA database resources, identify the current and future critical aircraft for the airport, per FAA AC 150/5000-17, *Critical Aircraft and Regular Use Determination*. The aircraft identified will be the most demanding aircraft, or family of aircraft, conducting a minimum of 500 annual operations. The analysis will include a projection of aircraft operations by RDC/airport reference code (ARC) to determine future planning design standards. This analysis will outline the RDC for general aviation aircraft associated with Runway 9-27.

Task 7 - Submittal of Aviation Demand Forecasts to the FAA for Approval

A report containing the Aviation Demand Forecasts and Existing and Future Critical Aircraft Determination will be submitted to the FAA Phoenix ADO for review and approval. Based on FAA guidance, templates will be prepared that will provide FAA with comparison of the newly developed forecasts to FAA's current TAF prepared for CXP. *This task also includes time required to coordinate, make changes, and/or modify findings in Tasks 5 and/or 6 based on FAA review, comment, and approvals.*

Task 8 - Runway Length Analysis

Determine the runway length requirements for the current and future critical aircraft determined from Task 6. Departure and landing length requirements will be calculated based on several factors including longest trip lengths, maximum temperature, and typical landed weight. As part of this task, the Consultant will work with airport staff to interview aircraft operators utilizing CXP to determine the optimum runway length based on aircraft operational needs.

Task 9 - Runway Facility Requirements

Determine available capacities of Runway 9-27 at CXP and its conformance or non-conformance with FAA standards based on the runway length analysis. Identify physical facility planning criteria for use in assessing the adequacy of the runway to meet forecast demands. These criteria shall include dimensional standards for safety including runway length and runway separation, In addition, these criteria shall include requirements to maintain approach and runway protection zones, safety areas, and other general physical area requirements.

Task 10 - Runway Extension Alternatives

Evaluate runway extension alternatives that can accommodate the proposed runway length based on the forecasts, runway length analysis, and runway facility requirements developed in earlier tasks. This analysis will consider all reasonable solutions understanding that the do-nothing option could be selected.

Task 11 - Runway Development Concept

Based on the information developed previously, a recommended concept for development of Runway 9-27 including justification for a proposed extension will be prepared. The recommendation will become the basis for the development of the ALP update.

Task 12 - Runway Capital Improvement Program

Prepare a recommended capital improvement program (CIP) that identifies projects needed to satisfy the development concept associated with a proposed extension to Runway 9-27. The CIP will include planning-level cost estimates and the amount of funds available from federal and state grant-in-aid programs to determine the net amount of capital funds required by the Sponsor to accomplish the proposed runway improvements for CXP.

Task 13 - Airport Layout Plans (ALP Drawing and Airport Data Sheet)

Following the preparation of the recommended runway development concept developed under the preceding tasks, the ALP Drawing, Land Use Drawing, and Exhibit "A" Airport Property Map will be updated for CXP. The ALP Drawing will reflect updated features associated with the future disposition of Runway 9-27, to include runway length, taxiways, navigational aids, runway protection zone boundaries, and property. Guidelines for the preparation of the ALP drawing as defined by the FAA Airports ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans (October 1, 2013)* will be followed. The Airport Data Sheet will also be updated that calls out ultimate conditions associated with Runway 9-27. Two (2) hard copies of the final ALP Drawing will be provided, one (1) to the Sponsor and one (1) to the FAA.

The ALP Drawing will be updated digitally using the data collected from the previous master plan and subsequent ALP set and any additional data the Sponsor may have. The digital plans and PDF files will be a deliverable item to the Sponsor at the completion of this project in CAD or GIS format at the Sponsor's discretion. *Note: This task does not include updating the full ALP set, but rather just the ALP Drawing (and associated Airport Data Sheet).*

Task 14 - Optional Task: Exhibit "A" Airport Property Map

In the event that a proposed runway extension would necessitate the need for future land acquisition, the Exhibit "A" Airport Property Map will be updated. The primary intent of the drawing is to identify and/or delineate all designated airport property owned or to be acquired by the airport owner. The drawing will provide an inventory all of the parcels which currently make up the airport or are proposed for acquisition by the airport. Per the standard, the previously approved airport property map will be used. Tracts/parcels will be numbered according to the previously approved airport property map. Details will be limited to the depiction of existing and future facilities (i.e., runways, taxiways, and runway protection zones) which would indicate aeronautical need for airport property. This work effort will utilize information obtained from the current property map as well as other sources. The Exhibit "A" Airport Property Map will be updated in conformance with the guidelines outlined in FAA Airports ARP SOP 3.00 *Standard Operating Procedure (SOP) for FAA Review of Exhibit 'A' Airport Property Inventory Maps (October 1, 2013)*. Two (2) hard copies of the final Exhibit "A" Airport Property Map will be provided, one (1) to the Sponsor and one (1) to the FAA. ***The Sponsor will provide historical information, recorded documents, and FAA grant information regarding the acquisition of existing airport property, easements, and releases, as well as boundary surveys, as needed. In the event a boundary survey and/or title search is needed to gather more information for the preparation of the Exhibit "A" Airport Property Map, the associated expenses will be covered by the Sponsor. These costs and expenses are not included in this Scope of Services.***

The Exhibit "A" Airport Property Map will be updated digitally using the data collected from the previous master plan and subsequent ALP set and any additional data the Sponsor may have. The digital plans and PDF files of each sheet will be a deliverable item to the Sponsor at the completion of this project in CAD or GIS format at the Sponsor's discretion.

Task 15 - Draft and Final Reports

Prepare a report that incorporates the information and analysis prepared in the preceding tasks. The product will contain the following:

- A new set of aviation demand forecasts
- Critical aircraft determination
- Runway length needs to accommodate the most demanding aircraft utilizing the runway

system

- Recommended direction for future runway development
- CIP associated with a proposed runway extension
- Updated ALP Drawing (and associated Airport Data Sheet), Land Use Drawing, and Exhibit “A” Airport Property Map with focus on the future disposition of Runway 9-27

A draft report (electronic copy) will be prepared for review by the Sponsor. Upon review and comment, a final report will be prepared. Up to five (5) hard copies and an electronic copy of the final report will be made available.

Task 16 - Project Coordination

Project coordination has been budgeted for this study. This time can be used to gather information from airport staff and airport operators for use in preparing the forecast update and runway length analysis. Additional project coordination is anticipated with the Sponsor and the FAA. It is anticipated that two (2) in-person meetings will be conducted with the Sponsor and the FAA at the FAA’s Phoenix ADO office at key milestones during the study process, to include the preparation of the aviation demand forecasts and the recommended runway development concept. It is anticipated that two (2) members from Coffman Associates will attend the coordination meetings.

EXHIBIT B
COST SUMMARY
AVIATION DEMAND FORECAST UPDATE WITH RUNWAY LENGTH ANALYSIS
CARSON CITY AIRPORT
PREPARED BY: COFFMAN ASSOCIATES
DATE: April 25, 2025

	(Hourly Rates)										Total
	Principal \$	Senior Professional		Professional \$	Technical/ Support	Total Labor	Expenses		Total		
		\$					\$				
Task 1 - Study Design	4	2	0	2	172	122			\$2,088	\$0	\$2,088
Task 2 - Inventory Air Traffic Activity	0	4	8	8		8			\$3,504	\$0	\$3,504
Task 3 - Inventory Socioeconomic Data	0	4	8	0		8			\$2,528	\$0	\$2,528
Task 4 - Review Regional Aviation and Socioeconomic Forecasts	0	8	8	8		8			\$4,656	\$0	\$4,656
Task 5 - Prepare Aviation Demand Forecasts	16	56	40	32		32			\$31,984	\$0	\$31,984
Task 6 - Identify Existing and Future Airport Design Critical Aircraft	2	12	8	8		8			\$6,442	\$0	\$6,442
Task 7 - Submittal of Aviation Demand Forecasts to the FAA for Approval	0	8	4	4		4			\$3,480	\$0	\$3,480
Task 8 - Runway Length Analysis	2	8	16	16		16			\$7,642	\$0	\$7,642
Task 9 - Runway Facility Requirements	2	8	16	12		12			\$7,154	\$0	\$7,154
Task 10 - Runway Extension Alternatives	4	16	16	16		16			\$10,580	\$0	\$10,580
Task 11 - Runway Development Concept	2	8	16	8		8			\$6,666	\$0	\$6,666
Task 12 - Runway Capital Improvement Program	2	8	16	8		8			\$6,666	\$0	\$6,666
Task 13 - Airport Layout Plans (ALP Drawing and Airport Data Sheet)	4	16	24	48		48			\$15,860	\$0	\$15,860
Task 14 - Exhibit "A" Airport Property Map (Optional Task)	2	8	16	24		24			\$8,618	\$0	\$8,618
Task 15 - Draft and Final Reports (Up to 5 Hard Copies)	8	24	32	40		40			\$19,832	\$750	\$20,582
Task 16 - Project Coordination (Includes 2 In-Person Meetings)	16	16	8	16		16			\$13,008	\$1,500	\$14,508
Project Total	64	206	236	250		250			\$150,708	\$2,250	\$152,958