



AGENDA

Greater Asheville Regional Airport Authority Regular Meeting
Friday, October 11, 2019, 8:30 a.m.
Conference Room at Administrative Offices

NOTICE TO THE PUBLIC: The Airport Authority welcomes comments from the public on any agenda item. Comments are received prior to the Board's discussion of the agenda item. Comments are limited to five minutes. If you wish to comment on an agenda item, please deliver a request card (available in the meeting room) to the Clerk to the Board prior to the agenda item being called by the Chair.

- I. CALL TO ORDER
- II. PRESENTATIONS:
 - A. Air Service Development Update – Rhett Morgan ([document](#))
- III. FINANCIAL REPORT ([document](#))
- IV. CONSENT ITEMS:
 - A. Approval of the Greater Asheville Regional Airport Authority September 6, 2019 Regular Meeting Minutes ([document](#))
 - B. Approval of Amendment to the FY 19/20 Budget for Capital Carry-Over ([document](#))
 - C. Approval of the Greater Asheville Regional Airport Authority September 6, 2019 Closed Session Minutes
- V. OLD BUSINESS: None



VI. NEW BUSINESS:

- A. Approval of the Greater Asheville Regional Airport Authority Board 2020 Schedule ([document](#))
- B. Resolution to Impose and Use a Passenger Facility Charge ([document](#))
- C. Approval of Amendment to Airfield Re-development Project Budget ([document](#))
- D. Award Contract for Repair of 60 Inch Reinforced Concrete Pipe ([document](#))
- E. Approval of Work Authorization No. 2R with Parrish and Partners of North Carolina, PLLC for South Terminal Apron Expansion Project Engineering Services ([document](#))
- F. Approval of Scope of Services No. 1R with Avcon Engineers and Planners, Inc. for Parking Lot Project ([document](#))
- G. Approval of Agreement with PASSUR Aerospace for Gate Management Solution ([document](#))

VII. DIRECTOR'S REPORT:

- A. Airport Ranking
- B. Terminal Kick-off Meeting Update

VIII. INFORMATION SECTION:

(Staff presentations will not be made on these items. Staff will be available to address questions from the Board.)

- A. August 2019 Traffic Report ([document](#))
- B. August 2019 Monthly Financial Report ([document](#))
- C. October 2019 Development/Project Status Report ([document](#))
- D. Potential Board Items for the Next Regular Meeting:
 - None identified at this time



IX. PUBLIC AND TENANTS' COMMENTS

X. CALL FOR NEXT MEETING: November 15, 2019

XI. CLOSED SESSION:

Pursuant to Subsections 143-318.11 (a) (3) and (4) of the General Statutes of North Carolina to Consult with Legal Counsel in Order to Preserve the Attorney-Client Privilege and to Discuss Matters Relating to the Location and/or Expansion of Industries or Other Businesses in the Area Served by the Authority, Including Agreement on a Tentative List of Economic Development Incentives that may be Offered by the Authority in Negotiations.

XII. AUTHORITY MEMBER REPORTS:

A. Key Strategic Elements ([document](#))

XIII. ADJOURNMENT

This agenda of the Greater Asheville Regional Airport Authority is provided as a matter of convenience to the public. It is not the official agenda. Although every effort is made to provide complete and accurate information in this agenda, the Greater Asheville Regional Airport Authority does not warrant or guarantee its accuracy or completeness for any purpose. The agenda is subject to change before and/or during the Board meeting.

Asheville Regional Airport Air Service Update

October 2019



2016 Strategic Plan Review

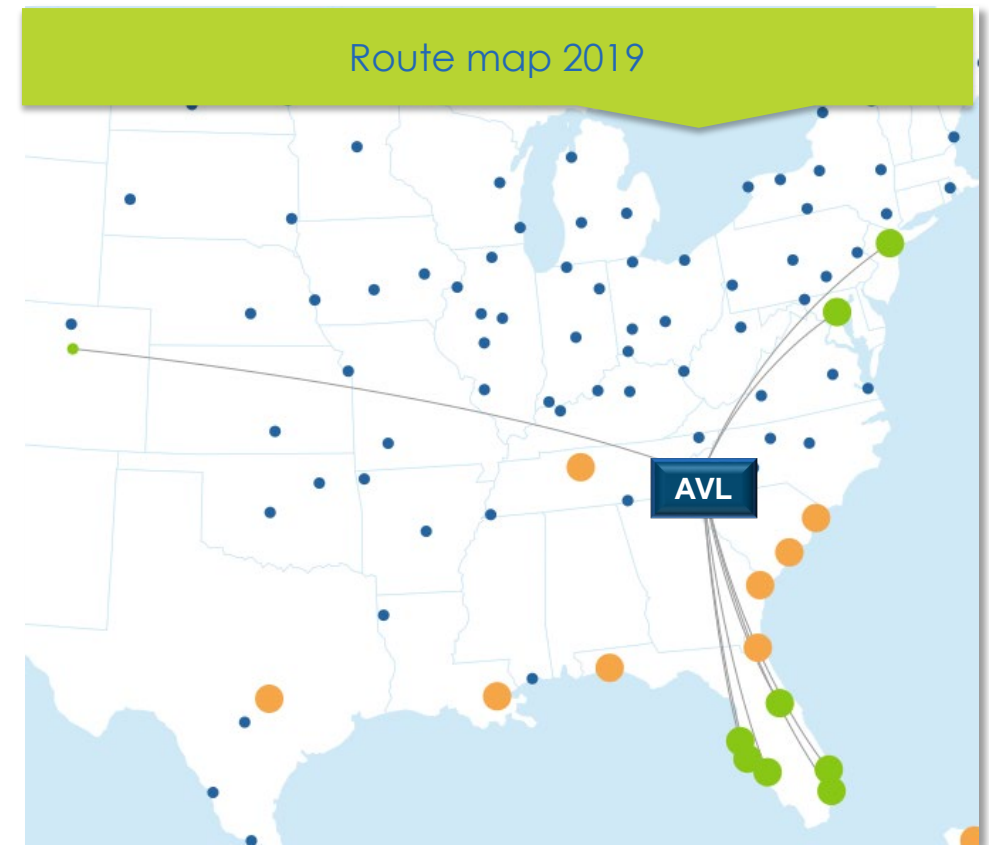
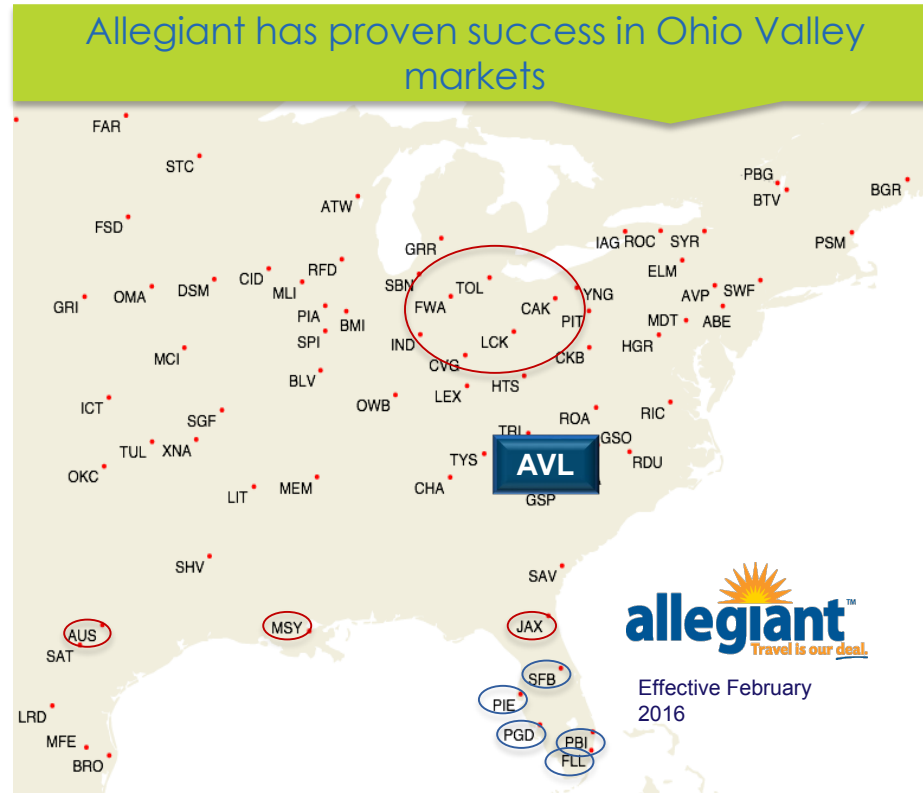
Identified growth opportunity in eight markets

Market	Daily Demand YE 1Q 2015	Daily Demand YE 1Q 2019	Growth	Service Highlights
New York City	65	148	128%	Allegiant – EWR American - LGA
Washington DC Metro	23	69	200%	Allegiant – BWI United - IAD
Dallas-Fort Worth	23	17	(26%)	American – New
Philadelphia	22	16	(27%)	American – New
Denver	22	39	77%	Allegiant – New
Detroit	16	15	(6%)	Delta – New
Boston	15	26	73%	-
Houston	12	12	0%	-

Sources: Cirium schedule data via Diio MI

Allegiant Plan 2016 vs today's footprint

- **Additional flying in current markets**
 - Fort Lauderdale
 - West Palm Beach
 - Punta Gorda
 - Tampa/St. Pete
 - Orlando - Sanford
- **Tier 1 Potential Adds**
 - Baltimore
 - Cincinnati
 - Columbus
 - Indianapolis
 - Jacksonville
 - Pittsburgh
 - New Orleans
 - Austin
 - Las Vegas



How did we get here.... Purposeful, Strategic, Credibility

Network Carrier Strategy

- **Leverage** current legacy carriers to increase capacity
- Legacy carrier opportunities are limited by regional economic environment and business travel demand

Network Carrier Tactics

- Continue to engage with network carriers at conferences such as JumpStart, Routes Americas and Roundtable series
- Schedule HQ visits with **American, Delta, and United** every 12-18 months
- Establish opportunities to **attract Network Planning staff to Asheville** for market visits
- Focus on **increasing capacity** in existing markets

Low-Fare Carrier Strategy

- Increase leisure inbound visitor traffic by recruiting low-fare airline capacity
- **Primary** focus on incumbent carrier but continue to meet with all carriers

Low-Fare Carrier Tactics

- Engage with network carriers
- Build visitor demand to Asheville in target markets
- Work towards developing Asheville as a **destination** brand with the ULCC carriers

Air service development..... A collaborative and on-going effort



- **Touchpoints**

- Develop & build relationships
- Create awareness, tell the narrative

- **Analytics**

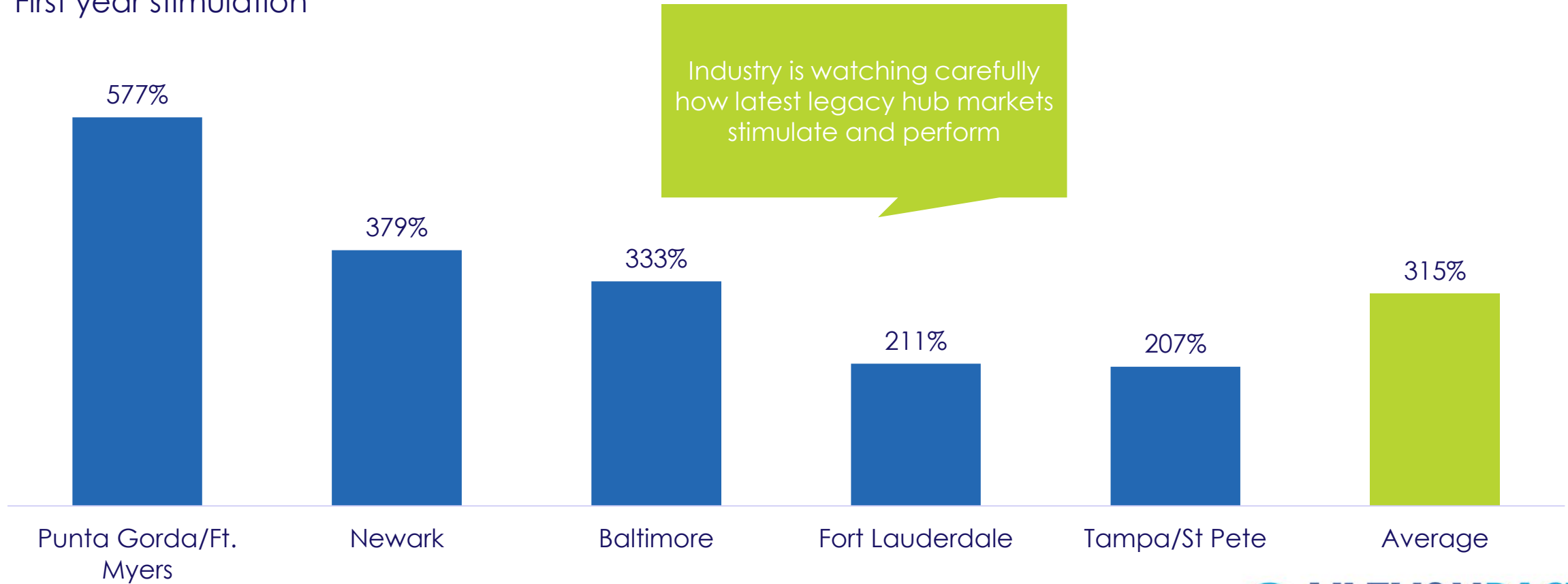
- Updated leakage studies
- DOT and scheduled data
- Migration / 2nd homes

“If you launch it, they will fly”

ASHEVILLE MARKET STIMULATION

First year stimulation

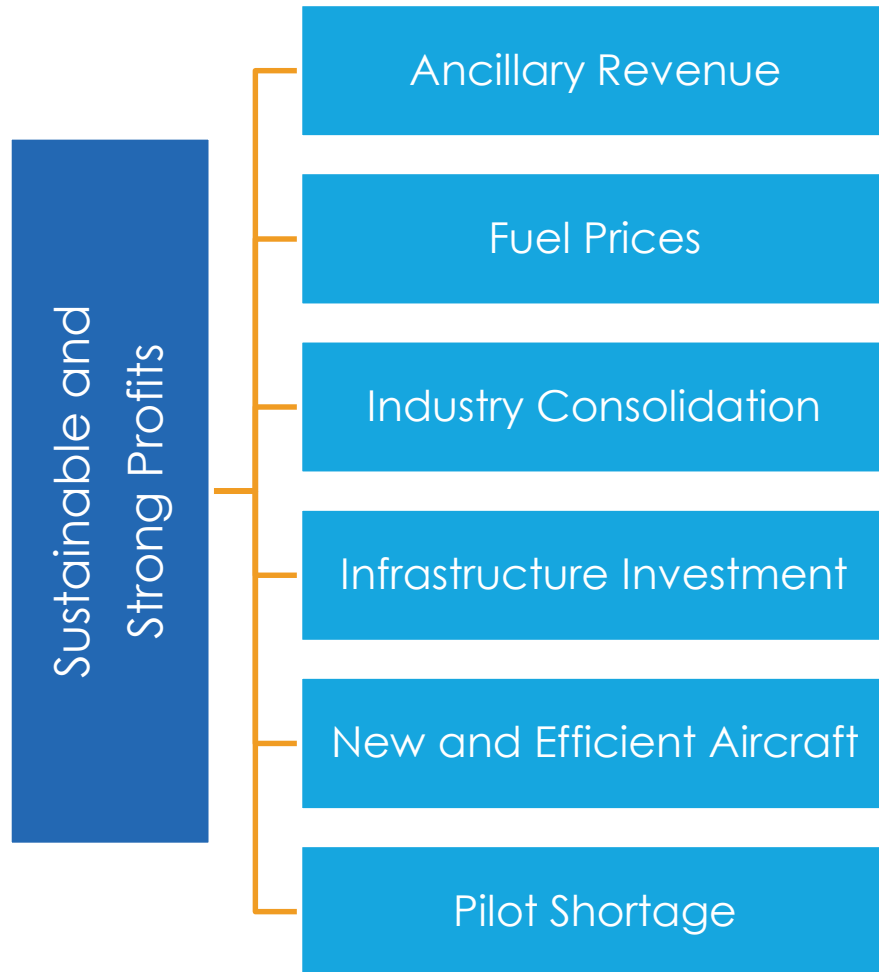
Industry is watching carefully how latest legacy hub markets stimulate and perform



Source: Cirium schedule data via Diio Mi

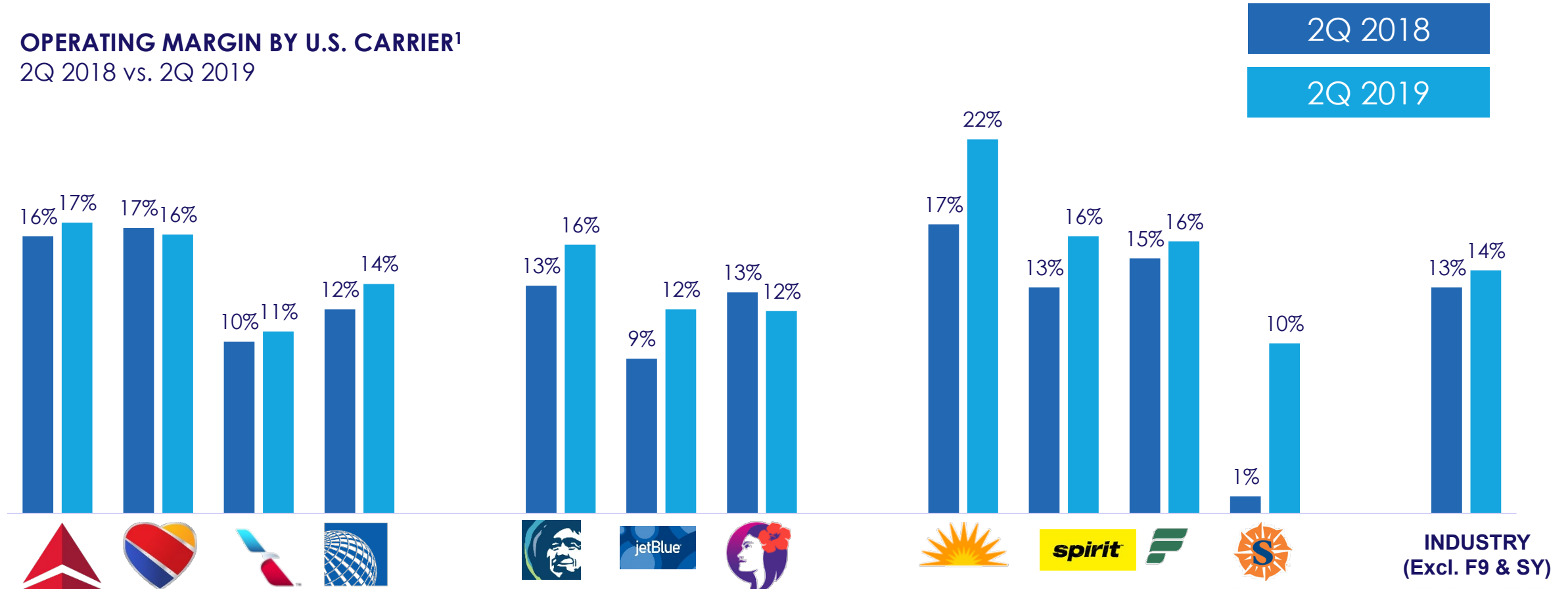
Industry Update

State of the Industry



Majority of airlines saw an increase in operating margin from 2018 to 2019

OPERATING MARGIN BY U.S. CARRIER¹ 2Q 2018 vs. 2Q 2019

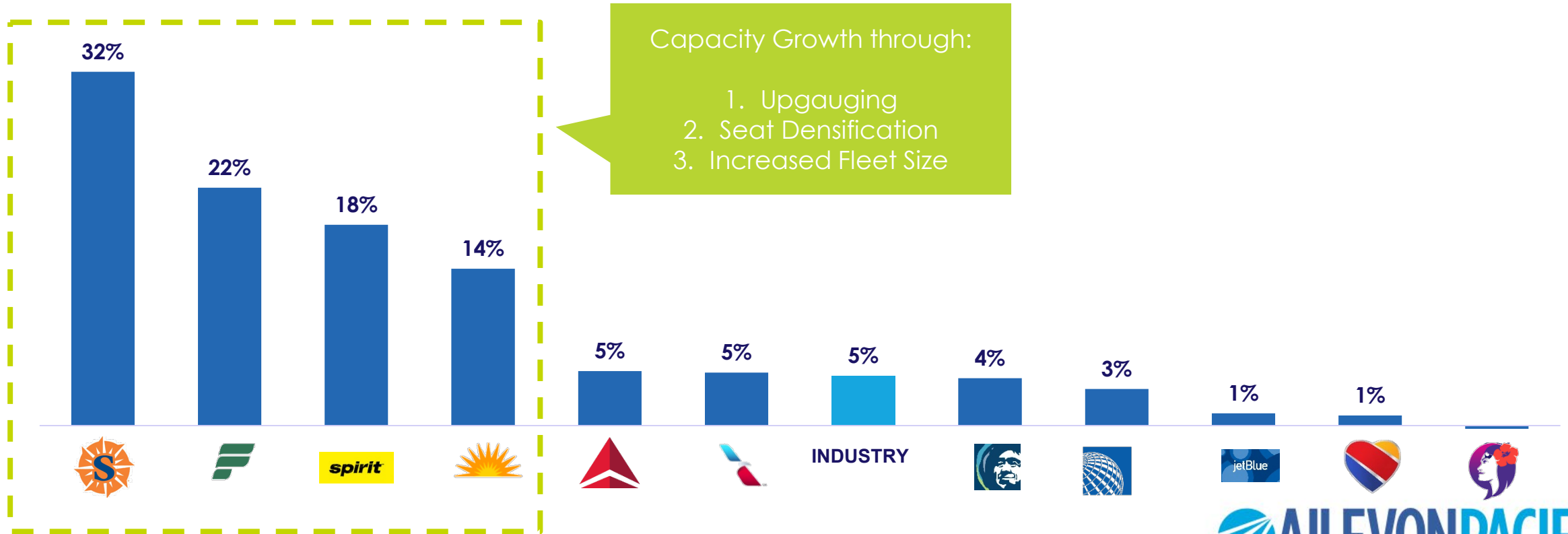


Note 1: Industry margins exclude Frontier and Sun Country
Sources: Airline Weekly issues → July 20, 2018. September 24, 2018. August 5, 2019. September 23, 2019

Ultra Low Cost Carriers (ULCCs) experiencing double digit growth

CAPACITY CHANGE (SEATS) BY CARRIER - YOY % CHANGE¹

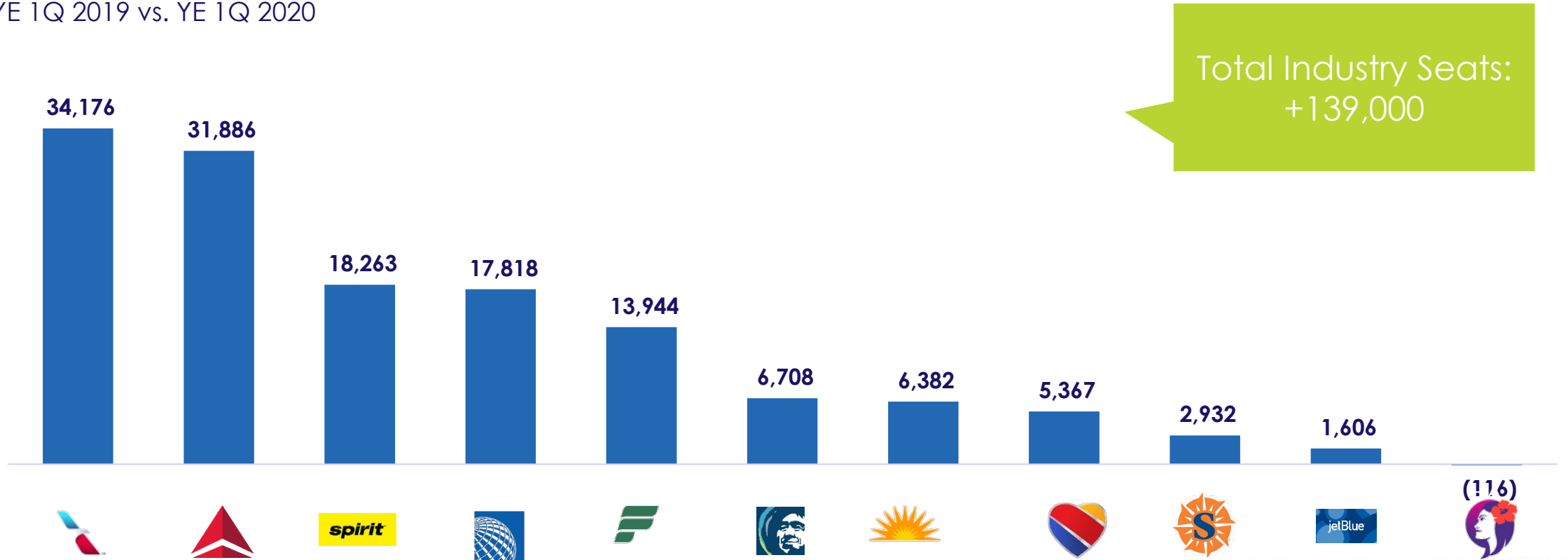
YE 1Q 2019 vs. YE 1Q 2020



Note 1: Alaska (AS) includes Virgin America (VX)
Source: Cirium schedule data via Diio Mi

Legacy carriers comprise 60% of total seat growth, LCC 10%, ULCC 30%¹

CAPACITY CHANGE (DAILY SEATS) BY CARRIER - YOY # CHANGE¹
YE 1Q 2019 vs. YE 1Q 2020



Note 1: Legacy carriers include AA, DL, UA. LCC carriers include AS, B6, HA, WN. ULCC carriers include F9, G4, NK, SY.
 Note 2: Alaska (AS) includes Virgin America (VX)
 Source: Cirium schedule data via Diio Mi

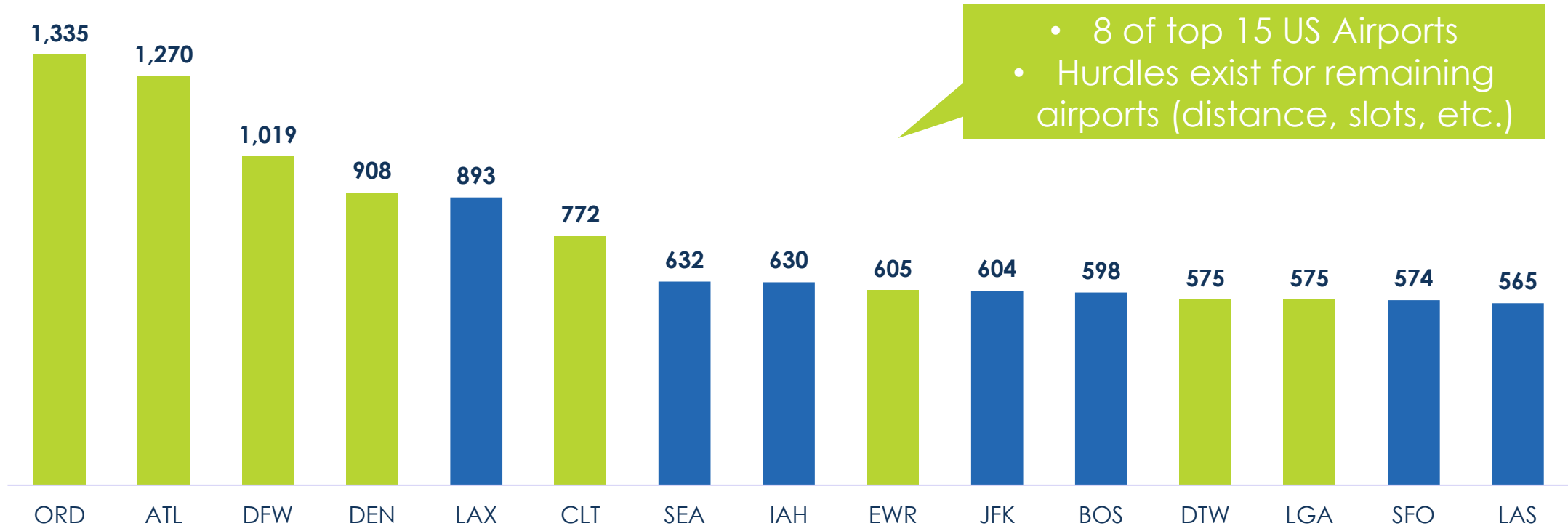


AVL Dynamics

AVL is well connected to the aviation grid

TOP 15 LARGEST U.S. AIRPORTS BY DAILY FLIGHTS

Typical day-of-week (Thursday) September 2019 – Includes domestic and international flights

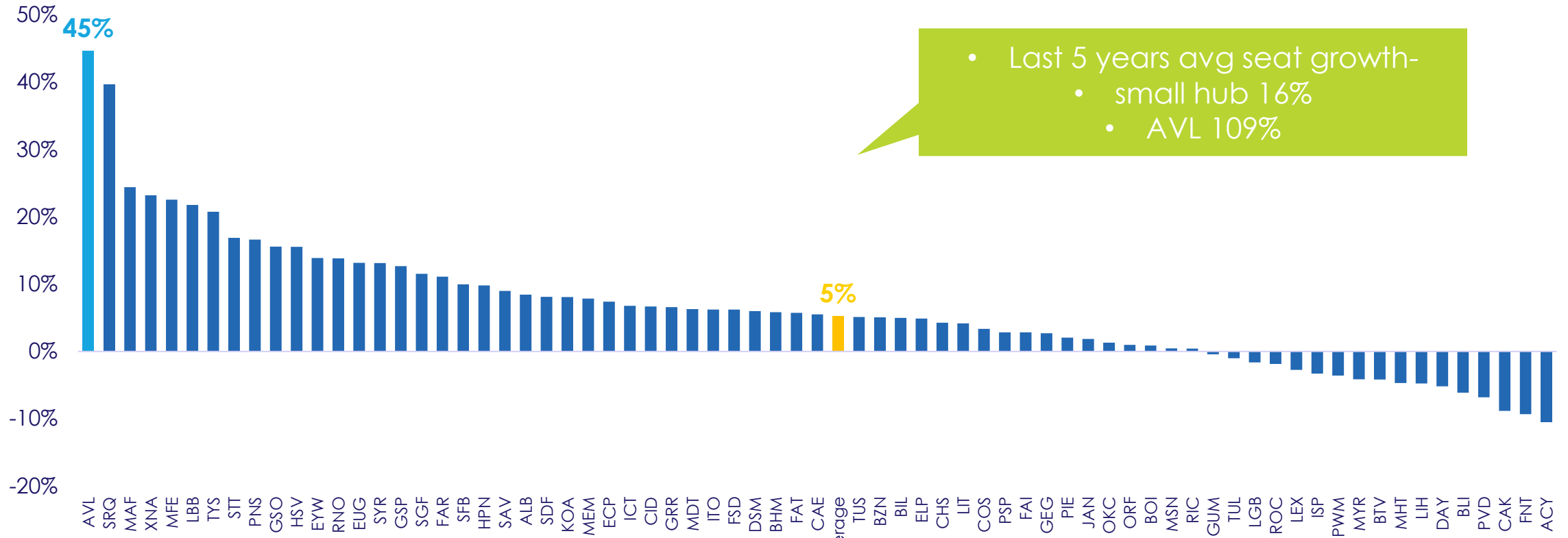


Sources: Cirium schedule data via Diio Mi

Asheville is the fastest growing airport in its peer group

YEAR-OVER-YEAR PERCENT CHANGE IN SEATS

3Q 2018 vs. 3Q 2019

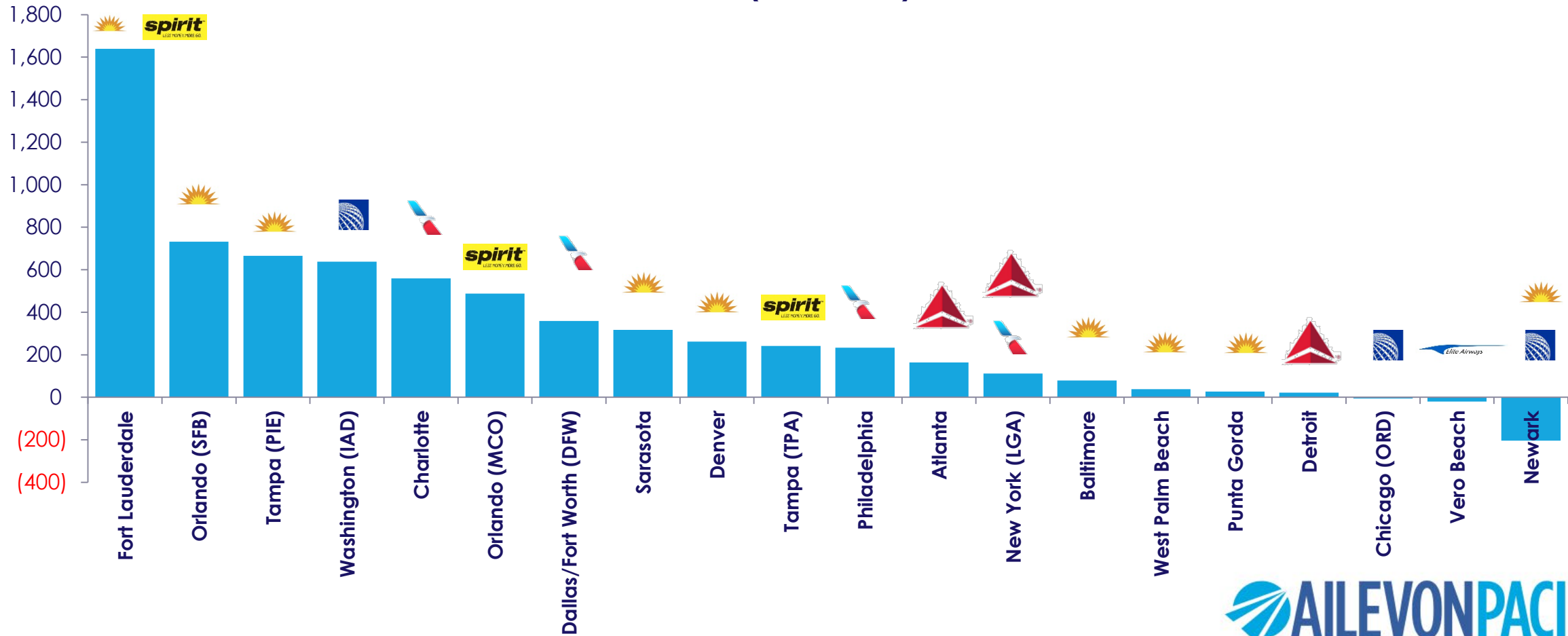


- Last 5 years avg seat growth-
 - small hub 16%
 - AVL 109%



47% increase in annual seats for 2019 versus 2018

YEAR-OVER-YEAR WEEKLY CHANGE IN CAPACITY BY MARKET (2019 v 2018)



Sources: Cirium schedule data via Diio MI

Conclusion

- Asheville has experienced **unprecedented** air service growth in 2018/2019
 - New legacy carrier service to hubs require special attention
 - Maturity curve is short given the current state of the industry
- Delicate balance exists with low cost carriers
 - Working to ensure sustainability and long-term success of all current incumbent carriers
- Remaining top opportunities for growth currently lie just beyond the intersection of demand and operational capabilities
 - Top unserved West Coast markets need mainline equipment that can profitably fly those missions
- Continued industry dynamics including pilot shortage, retirement of regional aircraft, and capacity constraint will also impact potential growth

Thank you!

**Asheville Regional Airport
Executive Summary
August-19**

AIRPORT ACTIVITY

	Month	Variance to Prior Year	Calendar Year to Date	Variance to Prior Year
Passenger Enplanements	75,825	41.0%	518,359	45.3%
Aircraft Operations				
Commercial	2,524	29.1%	15,685	29.1%
Scheduled Flights	1,069	45.6%		
Flight Cancellations	21			
Seats	95,455	53.1%	665,138	57.7%
Load Factor	79.4%	(7.9%)	77.9%	(7.9%)
General Aviation	4,718	29.3%	31,437	12.7%
Military	193	(24.0%)	1,996	(10.0%)

FINANCIAL RESULTS

	Month	Variance to Budget	Fiscal Year to Date	Variance to Budget
Operating Revenues	\$ 1,465,826	38.1%	\$ 3,159,465	48.8%
Operating Expenses	1,077,831	(6.4%)	1,342,808	(33.2%)
Net Operating Revenues before Depreciation	<u>\$ 387,995</u>		<u>\$ 1,816,657</u>	
Net Non-Operating Revenues	<u>\$ (120,668)</u>		<u>\$ (9,243)</u>	
Grants:				
FAA AIP Grants	\$ 1,410,679		\$ 1,410,679	
NC Dept of Transportation Grants	-		-	
Total	<u>\$ 1,410,679</u>		<u>\$ 1,410,679</u>	

CASH

Restricted	\$ 13,345,992
Designated for O&M Reserve	5,201,092
Designated for Emergency Repair	650,000
Unrestricted, Undesignated	17,326,094
Total	<u>\$ 36,523,178</u>

RECEIVABLES PAST DUE

	Total	1-30 Days	31-60 Days	Over 60 Days
Advertising Customers	32,597	7,771	10,976	13,850
Allegiant	13,440	-	631	12,809
American	7,951	-	-	7,951
Avis	5,289	231	231	4,827
Budget	1,123	-	-	1,123
Delta	321,176	151,111	67,552	102,513
Elite	7,089	2,890	3,125	1,074
Enterprise	1,541	194	425	922
TSA	4,762	410	130	4,222
Hertz	786	-	689	97
Paradies	7,688	1,721	2,363	3,604
Signature	4,487	210	-	4,277
Skywest	11,200	-	-	11,200
Spirit	3,756	-	12	3,744
Travelers	2,882	-	-	2,882
United	51,879	18,540	30,304	3,035
Vanguard	16,621	-	-	16,621
Worldwide	6,297	1,028	-	5,269
Miscellaneous	17,463	10,246	404	6,813
Total	<u>\$ 518,027</u>	<u>\$ 194,352</u>	<u>\$ 116,842</u>	<u>\$ 206,833</u>
% of Total Receivables	<u>38.66%</u>			

Note: Excludes balances paid subsequent to month-end.

REVENUE BONDS PAYABLE

	Original Amount	Current Balance
Parking Garage Revenue Bond, Series 2016A	\$ 15,750,000	\$ 15,750,000
Parking Garage Taxable Revenue Bond, Series 2016B	5,250,000	1,835,000
	<u>\$ 21,000,000</u>	<u>\$ 17,585,000</u>

CAPITAL EXPENDITURES

Annual Budget	\$ 62,902,904
Year-to-Date Spending	\$ 1,672,268

**REGULAR MEETING
GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY
September 6, 2019**

The Greater Asheville Regional Airport Authority ("Authority") met on Friday, September 6, 2019 at 8:30 a.m. in the Conference Room at the Authority's Administrative Offices, Asheville Regional Airport ("Airport"), 61 Terminal Drive, Suite 1, Asheville, NC 28732.

MEMBERS PRESENT: Matthew C. Burril, Chair; K. Ray Bailey, Vice-Chair; Stephanie Pace Brown; George H. Erwin, Jr.; Brad Galbraith; and Thomas M. Apodaca

MEMBERS ABSENT: Carl H. Ricker, Jr.

STAFF AND LEGAL COUNSEL PRESENT: Cindy Rice, Authority Legal Counsel; Lew Bleiweis, Executive Director; Michael Reisman, Deputy Executive Director; Kevan Smith, Chief of Public Safety; Tina Kinsey, Director of Marketing and Public Relations; Janet Burnette, Director of Finance and Accounting; Shane Stockman, IT Director; John Coon, Director of Operations and Maintenance; Christina Madsen, Airport Properties and Contracts Manager; Lisa Jump, Director of Administration and Human Resources; Samuel Sales, Public Safety Captain; and Ellen Heywood, Clerk to the Board

ALSO PRESENT: Jon McCalmont, Parrish & Partners; Jason Sandford, Ashvegas.com; Patrick Pettit, Haskell; Nick Loder, RS&H; James Moose, Avcon; Charles Buckland, Signature Flight

CALL TO ORDER: The Chair called the meeting to order at 8:30 a.m.

RECOGNITION OF BOARD MEMBER – WILLIAM L. MOYER: The Chair welcomed Mrs. Dot Moyer and presented her with a plaque honoring William L. Moyer. Several Board Members spoke in remembrance of Mr. Moyer for his commitment and service to the Board and the community.

PRESENTATIONS:

A. ASQ Update: Tina Kinsey gave an overview of the Airport Service Quality program that measures customer satisfaction and compares AVL to a custom group of airports. Mrs. Kinsey highlighted some of the scores received in the second quarter of 2019 and shared with the Board that the goal of the program is to make positive growth and change as well as improve the passenger experience.

B. Terminal Funding: Janet Burnette informed the Board that staff has been working with PFM Financial Advisors to determine the financial feasibility and debt repayment for the terminal project. Mrs. Burnette presented trends in both passenger growth and operating revenue as well as program costs and funding sources for the proposed terminal building. The Board was comfortable with the projected funding with terminal program to continue moving forward.

FINANCIAL REPORT: The Director reported on the airport activity for the month of July which included enplanements, aircraft operations, and general aviation activity. Janet Burnette reported on the financial activity for the month of July.

CONSENT ITEMS: The Chair stated that Consent Item B, Approval of the Greater Asheville Regional Airport Authority August 9, 2019 Closed Session Minutes, would be pulled for review in Closed Session.

A. Approval of the Greater Asheville Regional Airport Authority August 9, 2019 Regular Meeting Minutes:

C. Approval of Position Reclassification and Amended Pay Grade Structure:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

Section 1. To amend the appropriations as follows:

EXPENDITURES:

	<u>Decrease</u>	<u>Increase</u>
Operations Department		<u>\$4,000</u>
Total		<u>\$4,000</u>

This will result in a net increase of \$4,000 in the appropriations. Revenues will be revised as follows:

REVENUES:

	<u>Decrease</u>	<u>Increase</u>
Transfer from GARAA Cash		<u>\$4,000</u>
Total		<u>\$4,000</u>

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 6th day of September 2019.

Matthew C. Burril, Chair

Attested by:

Ellen Heywood, Clerk to the Board

Mr. Erwin moved to approve Consent Items A and C. Mr. Galbraith seconded the motion and it carried unanimously.

OLD BUSINESS: None

NEW BUSINESS:

A. Approval of Agreement with LAZ Parking to Operate Shuttle Buses: John Coon reminded the Board that the purchase of shuttle buses was approved at the May 10th Authority Board meeting. LAZ Parking, the airport's parking system operator, submitted a one-year budget to operate the shuttle buses at a cost of \$385,257.00. The buses will be operated 7 days a week for approximately 20 hours per day depending upon demand as well as contingent upon additional parking areas being necessary. Mr. Coon advised the Board that the agreement contained in the agenda package includes the agreement to lease the shuttle buses to LAZ Parking. Mr. Coon stated that approval of the agreement with LAZ Parking will require the following budget amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

Section 1. To amend the appropriations as follows:

EXPENDITURES:

	<u>Decrease</u>	<u>Increase</u>
Operations Department	_____	\$385,257.00
Total	=====	\$385,257.00

This will result in a net increase of \$385,257.00 in the appropriations. Revenues will be revised as follows:

REVENUES:

	<u>Decrease</u>	<u>Increase</u>
Transfer from GARAA Cash	_____	\$385,257.00
Total	=====	\$385,257.00

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 6th day of September 2019.

Matthew Burrell, Chair

Attested by:

Ellen Heywood, Clerk to the Board

The Chair affirmed that the shuttle operation start date and schedule could be adjusted if the parking lots were not constructed. The Director stated that this was correct. A modified version of the shuttle operations could be implemented during the holiday season utilizing the WNC Ag Center for temporary parking should the need arise.

Mr. Galbraith moved to authorize the execution of shuttle agreement with LAZ Parking in the amount of \$385,257.00; authorize the Executive Director to execute the necessary documents; and amend the FY2019/2020 budget by adopting the budget ordinance amendment as presented by staff. Mr. Apodaca seconded the motion and it carried unanimously.

B. Approval of Contract for South Apron Expansion Project Construction:

Michael Reisman reported that the South Apron Expansion Project was advertised for bid in June with only two bids received in July. The project was re-bid and three bids were received in August. The low bid in the amount of \$9,087,857.00 was received from Zachry Construction Corporation. Mr. Reisman advised the Board that the current fiscal

year budget includes \$10,664,537 for the project from airport funds. However, staff is expecting \$2,937,817 from an airport improvement program grant.

Mr. Erwin moved to approve the South Apron Expansion construction project with Zachry Construction Corporation in the amount of \$9,542,250.00 (\$9,087,857.00 plus \$454,393.00 allowance); and authorize the Executive Director to execute the necessary documents. Mr. Galbraith seconded the motion and it carried unanimously.

C. Approval of Contract for Construction of Parking Lots: The Chair announced that this item would be pulled for discussion in Closed Session.

D. Approval of Letter of Agreement for Airport Safety/Maintenance Projects and Resolution of the Sponsor with North Carolina Department of Transportation Division of Aviation: Michael Reisman stated that the NCDOT Division of Aviation manages a Safety, Preservation and Maintenance (SPAM) grant program which provides direct assistance to airports for projects such as sealcoats, airport markings, light maintenance, etc. Participation in the program requires renewal of a standing agreement that will be effective through December 31, 2023.

Mr. Bailey moved to approve the Letter of Agreement for Airport Safety/Maintenance Projects and Resolution of the Sponsor with the NCDOT; and authorize the Executive Director to execute the necessary documents. Mr. Apodaca seconded the motion and it carried unanimously.

E. Approval of an Agreement Amendment between The Paradies Shops, LLC. and the Greater Asheville Regional Airport Authority: Christina Madsen informed the Board that staff has been working with Paradies to increase services that will enhance the customer experience as well as increase revenue. The vending machines were identified as an amenity that needed improvement. Paradies provided new vending machines through a sublease with Canteen. Mrs. Madsen stated that Paradies will pay half of the revenue received from Canteen to the Authority as outlined in the Agreement Amendment. Staff anticipates approximately \$20,000 per year in additional revenue from this Agreement Amendment.

Mr. Erwin moved to approve the Agreement Amendment with The Paradies Shops, LLC.; and authorize the Executive Director to execute the necessary documents. Mr. Bailey seconded the motion and it carried unanimously.

F. Approval of Revised Agreement for Professional Consulting Services between the Greater Asheville Regional Airport Authority and GS&P, N.C. and Affiliate of Gresham Smith and Partners: The Chair stated that this item would be pulled for discussion in Closed Session.

DIRECTOR'S REPORT: The Director advised the Board that he had a few additional items to include that were not on the agenda.

A. 2020 Authority Board Schedule: The Director called the Board's attention to the draft schedule that was available at their seats. The Director stated that the month of April shows two different dates for the Board to decide which date would be preferred. The schedule for meetings in 2020 will be an agenda item for approval at the October meeting. The Director requested Board Members notify the clerk of any conflicts.

B. PFC Update: The Director stated that the last time the PFC was increased was in 2000 and set at a rate of \$4.50. The industry has been trying to get this raised for many years and some progress is being made in Congress. A bill has been submitted to Congress uncapping the PFC and another is being worked on that will raise the PFC to \$8.50 with indexing. The Director will keep the Board apprised of any news on this issue.

C. NCDOT Grant: The Director was pleased to note that an additional grant in the amount of \$282,000 was received from the NCDOT and will be applied to the south apron project.

D. Dunkin: The new Dunkin adjacent to the Triangle Stop is set to open at the end of September.

E. Terminal Design: The Director informed the Board that a meeting has been scheduled for the following week with GS&P to begin the design process for the new terminal. The Director inquired if one or two Board Members would like to participate in the design process and to let him know if interested in attending any of the meetings that will be scheduled.

F. Terminal Design Press Release: Guidance from the Board was requested as to how they would like to proceed with information disseminated to the public regarding stakeholder input for the design of a new terminal building. Following the meeting with GS&P planned for the following week, Mrs. Kinsey felt a skeleton timeline should be shared with the community. The Board was encouraged to provide staff with feedback.

G. Ground Transportation Lot: The Director provided background information on the process used in the ground transportation lot. While a majority of the ground transportation providers use cash to debit their accounts, this creates a lack of

accountability as well as extensive work for staff. Staff is considering a pay on foot machine which would allow the operator to put money on their account. However, the cash option would be eliminated. Ground transportation providers have not been notified of this proposed system. A discussion took place regarding eliminating cash from the system used for ground transportation providers.

Mr. Erwin moved to eliminate the use of cash by ground transportation providers for debiting their accounts with the Authority. Mr. Galbraith seconded the motion and it carried unanimously.

The Director stated that staff would prepare a policy that eliminates cash handling which will be shared with the Board. If changes are not necessary, it will be considered approved through the motion that was just passed.

H. PFC Process: The Director reported that \$4.50 is collected from each passenger ticket as part of the PFC process. The FAA grants permission for the airport to collect and expend the PFC's. Several years ago when staff was beginning the runway project, an application was submitted to the FAA to collect the PFC but not expend it until more information on the runway was determined. The initial request was under \$3 million. Once the direction of the runway project was finalized, an amendment on that PFC was submitted to the FAA increasing the PFC to almost \$12 million. Since expenses were being incurred, staff also requested to begin to expend the PFC. The FAA gave a payout and collection timeframe of up to 2024. Staff has engaged a consultant to amend the PFC collection because the Authority's portion of that \$12 million was not enough due to the increased scope of the project. FAA stated that the amendment can be no more than 25% of the original PFC amount. Staff was acting under the premise that the original amount was the \$12 million because a full PFC application amendment had been done. The FAA is saying it is on the original amount of the \$2 million which negates the airport's ability to do a short-term increase of 25%. The \$12 million has been collected and the PFC collection will need to stop for a brief period until a new application goes into place. Staff is working with the consultant and the FAA on this process. Staff will bring this item to the Board in the near future.

INFORMATION SECTION: No comments

PUBLIC AND TENANTS COMMENTS: None

CALL FOR NEXT MEETING: The Chair stated that the next regular meeting of the Authority Board will be held on October 11, 2019.

AUTHORITY MEMBER REPORTS: None

CLOSED SESSION: At 10:15 a.m. Mr. Bailey moved to go into Closed Session Pursuant to Subsections 143-318.11 (a)(3), (4) and (6) of the General Statutes of North Carolina to Consult with Legal Counsel in Order to Preserve the Attorney-Client Privilege; to Discuss Matters Relating to the Location and/or Expansion of Industries or Other Businesses in the Area Served by the Greater Asheville Regional Airport Authority, Including Agreement on a Tentative List of Economic Development Incentives that may be Offered by the Greater Asheville Regional Airport Authority in Negotiations; and to Consider Personnel Matters. Mr. Erwin seconded the motion and it carried unanimously.

The Chair indicated they would break for five minutes at which time the Board would resume in closed session.

Open Session resumed at 12:11 p.m.

Mr. Erwin left the meeting during the Closed Session.

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY SEPTEMBER 6, 2019

CLOSED SESSION MINUTES: Mr. Bailey moved to seal the minutes for the Closed Session just completed and to withhold such Closed Session minutes from public inspection so long as public inspection would frustrate the purpose or purposes thereof. Mr. Galbraith seconded the motion and it carried by a 5 to 0 vote.

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY AUGUST 9, 2019

CLOSED SESSION MINUTES: Mr. Bailey moved to approve the minutes for the August 9, 2019 Closed Session and to seal and withhold the minutes for the August 9, 2019 Closed Session from public inspection so long as public inspection would frustrate the purpose or purposes thereof. Mr. Apodaca seconded the motion and it carried by a 5 to 0 vote.

NEW BUSINESS:

C. **Approval of Contract for Construction of Parking Lots:** Ms. Brown moved to establish a budget in the amount of \$1.5 million for construction of surface parking lots. Mr. Apodaca seconded the motion and it carried by a 5 to 0 vote.

F. **Approval of Revised Agreement for Professional Consulting Services between the Greater Asheville Regional Airport Authority and GS&P, N.C. an Affiliate of Gresham Smith and Partners:** Mr. Galbraith moved: (1) To approve Task Order No. 2 with GS&P N.C., an Affiliate of Gresham Smith and Partners, for Phase 1, in the amount of \$3,969,904.50, pending Legal Counsel's revisions of the Scope of Services

for Task Order No. 2, Phase 1; (2) To direct the Executive Director and Deputy Executive Director to work with Legal Counsel regarding revisions to the Scope of Services; (3) Upon completion of Legal Counsel's revisions, to submit the revised Scope of Services to the GS&P for their consideration and approval; and (4) Upon approval by GS&P, to authorize the Executive Director to execute the necessary documents. Mr. Bailey seconded the motion and it carried by a 5 to 0 vote.

EXECUTIVE DIRECTOR EVALUATION: Mr. Galbraith moved to increase the Executive Director's salary by 5% retroactive to July 1, 2019, and to offer as an additional benefit, a three-months' severance clause for compensation in the employment agreement with the language to be provided by legal counsel. Mr. Bailey seconded the motion and it carried by a 5 to 0 vote.

ADJOURNMENT: The Chair moved to adjourn the meeting at 12:18 p.m. Mr. Bailey seconded the motion and it carried by a 5 to 0 vote.

Respectfully submitted,

Ellen Heywood
Clerk to the Board

Approved:

Matthew C. Burrell
Chair



MEMORANDUM

TO: Members of the Airport Authority

FROM: Janet Burnette, Director of Finance and Accounting

DATE: October 11, 2019

ITEM DESCRIPTION – Consent Item B

Approval of Amendment to the FY19/20 Budget for Capital Carry-Over

BACKGROUND

Given that our FY19/20 budget was prepared using estimates available in February 2019, we need to amend our FY19/20 budget to update some of those estimates.

The FY19/20 budget included an estimated amount of capital carry-over for projects not expected to be completed by June 30, 2019. Now that we have determined the actual spending on these projects for FY18/19, we need a budget amendment to increase the authorized capital carry-over and the related revenues by \$4,987,933 to the actual amounts needed for FY19/20. This includes decreasing the capital carry-over for the Airfield Redevelopment-Bid Package 4 project by \$2,986,283, and the Snow Removal Equipment by \$97. It also includes increasing the capital carry-over for the Security System Project by \$2,428,239 and the South Apron Expansion Design by \$584,985 as well as the Terminal Infrastructure Improvements by \$1,936,970 and the Terminal Building Rehab and Expansion Design by \$2,000,000.

This also includes a total of \$1,024,119 for several remaining projects which are underway but unfinished, including the ATC tower siting study, the parking lot design, the pipe repair engineering and purchase of the shuttle buses.

Budgeted AIP Entitlement Funds will be increased by \$296,538, budgeted NC DOT funds will be increased by \$2,521,955 and budgeted Transfer from Authority Cash and Investments will be increased by \$2,169,440.



Also, we budgeted annual salary adjustments in the Administration Department. At the beginning of the fiscal year, we determined the actual amounts of these salary adjustments, by employee, and need to amend the FY19/20 budget to account for these adjustments in the appropriate departments.

We recommend that the Airport Authority Board amend the FY19/20 budget as outlined below.

ISSUES

None.

ALTERNATIVES

None.

FISCAL IMPACT

The budget amendment will increase both FY19/20 budgeted revenues and expenditures by \$4,987,933 to provide for the changes outlined above. The net increase in Transfers from GARAA Cash is \$2,169,440.

RECOMMENDED ACTION

It is respectfully requested that the Airport Authority Board resolve to amend the FY19/20 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

Section 1. To amend the appropriations as follows:



EXPENDITURES:

	<u>Decrease</u>	<u>Increase</u>
Administrative Department	\$213,940	
Planning Department		\$30,311
Executive Department		11,918
Finance Department		\$23,118
Guest Services Department		\$7,885
Information Technology Department		\$17,372
Marketing Department		\$18,082
Operations Department		\$80,597
Properties Department		\$2,342
Public Safety Department		\$22,315
Carry-over Capital Expenditures		\$4,987,933
Totals	\$213,940	\$5,201,873

This will result in a net increase of \$4,987,933 in the appropriations. Revenues will be revised as follows:

REVENUES:

	<u>Decrease</u>	<u>Increase</u>
Federal AIP Funds		\$296,538
NC DOT Funds		\$2,521,955
Transfer from GARAA Cash		\$2,169,440
Totals		\$4,987,933

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 11th day of October, 2019.

 Matthew Burrell, Chair

Attested by:

 Ellen Heywood, Clerk to the Board



MEMORANDUM

TO: Members of the Airport Authority
FROM: Lew Bleiweis, A.A.E., Executive Director
DATE: October 11, 2019

ITEM DESCRIPTION – New Business Item A

Approval of the Greater Asheville Regional Airport Authority Board 2020 Schedule

Below are the proposed dates for the 2020 Board Meetings and Budget Workshop/Budget Approval Meeting to note on your calendars:

January 17	July 10
February 14	August 14
March 13	September 4
Friday, March 27	October 9
April 9	November 20
May 8	December 11
June 12	

Friday, March 27, 2020 – Board Budget Workshop/Budget Approval



MEMORANDUM

TO: Members of the Airport Authority

FROM: Lew Bleiweis, A.A.E., Executive Director

DATE: October 11, 2019

ITEM DESCRIPTION – New Business Item B

Resolution to Impose and Use a Passenger Facility Charge

BACKGROUND

Over the past few months Staff in conjunction with the Authority's consultant McFarland Johnson has pursued a Passenger Facility Charge (PFC) application #7. This item corresponds to the Airfield Redevelopment Project.

The FAA requires the managing entity of the airport to adopt a resolution acknowledging the application and responsibilities of the PFC program. It's been six years since the Board adopted such a resolution. Updating the Authority files with this current PFC resolution would be prudent.

ISSUES

The FAA requires airports to maintain a resolution on file when actively engaged in the PFC program. Adopting this resolution and updating our files will keep the Authority compliant with FAA regulations.

ALTERNATIVES

None

FISCAL IMPACT

None

New Business – Item B



RECOMMENDED ACTION

It is respectfully requested that the Airport Authority Board approve the attached Resolution.

Attachment

RESOLUTION
OF THE
GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY
TO
IMPOSE AND USE A PASSENGER FACILITY CHARGE

WHEREAS, the Greater Asheville Regional Airport Authority ("Authority") is owner and operator of the Asheville Regional Airport ("Airport"); and

WHEREAS, the Authority has approved a program of capital improvements for the Airport ("Capital Improvements") for the purposes of, among other things: preserving or enhancing safety, security or capacity of the Airport and the national air transportation system; reducing and mitigating noise impacts of Airport operations; and furnishing opportunities for enhanced competition between or among air carriers; and

WHEREAS, pursuant to the authority granted by the United States Congress the FAA has promulgated a Federal Aviation Regulation ("Regulation") allowing owners, operators and sponsors, operating commercial airports such as the Airport, to impose a Passenger Facility Charge ("PFC") on passengers enplaning commercial passenger aircraft at the airports and to use the proceeds thereof to fund the Allowable Costs (as defined in the Regulation) of Eligible Projects (as defined in the Regulation) as provided and described in the Regulation; and

WHEREAS, the Authority believes certain costs of the Capital Improvements would be so allowable and eligible; and

WHEREAS, the Authority believes a PFC would be an equitable means to raise revenues to fund some or all of the said Allowable Costs of Eligible Projects of the Capital Improvements.

NOW, THEREFORE, the Authority hereby resolves that:

1) The Executive Director is authorized and directed to apply to the FAA, for and in the name of the Authority, for approval to impose a PFC at the Airport of \$4.50 per enplaning passenger and to use the resulting net revenues to pay the Allowable Costs of the Eligible Projects of the Airport's Capital Improvements; and the Executive Director is authorized and directed to take all such reasonable actions as necessary or desirable to obtain approval of said application.

2) Said PFC shall be collected by the commercial air carriers on behalf of and remitted monthly to the Authority for so long as may be necessary to pay the Allowable Costs of Eligible Projects, or such shorter period as may be required by the Regulation.

3) With respect to that class of air carriers comprising only those air carriers operating under FAR Part 135 and which provide only on-demand non-scheduled service and do not sell tickets to individual passengers enplaning their aircraft at the Airport ("Air Taxis") the Authority finds that:

a) requiring Air Taxis operating at the Airport to collect the PFC would not generate a substantial amount of PFC revenues for the Authority and would be an undue burden to the Air Taxis;

b) said Air Taxis enplane less than one percent (1%) of all passengers enplaned at the Airport; and

c) said Air Taxis, therefore, should be exempted from the requirement of collecting the PFC at the Airport and the Executive Director is hereby directed to include in said application a request that Air Taxis be so exempted.

SO RESOLVED, this the _____ day of _____, 2019.

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

BY: _____
Chair



MEMORANDUM

TO: Members of the Airport Authority

FROM: Janet Burnette
Director of Finance and Accounting

DATE: October 11, 2019

ITEM DESCRIPTION – New Business Item C

Approval of Amendment to Airfield Re-development Project Budget

BACKGROUND

On February 17, 2017, the Authority Board approved an amended overall program budget for the Airfield Re-development Project in the amount of \$79.9M. Due to continuing issues with the runway construction and the need for takeover agreements with the contractor's surety, the total of expenditures to date and outstanding contract commitments exceed the program budget by \$35.1M. We are currently requesting additional funding from the FAA as well as requesting \$27M in our current PFC application to be used toward this project.

ISSUES

None.

ALTERNATIVES

None.

FISCAL IMPACT

The increased project cost will be appropriately included in each fiscal year budget.

RECOMMENDED ACTION

It is respectfully requested that the Authority Board resolve to approve the Airfield Re-development project budget from \$79.9M to \$115M.

New Business Item C



MEMORANDUM

TO: Members of the Airport Authority

FROM: Michael A. Reisman, A.A.E.
Deputy Executive Director

DATE: October 11, 2019

ITEM DESCRIPTION – New Business Item D

Award Contract for Repair of 60 Inch Reinforced Concrete Pipe

BACKGROUND

As previously reported to the Board, the 60-inch reinforced concrete pipe (RCP) installed under the North General Aviation Area in the 2008 timeframe has shown deterioration through annual CCTV inspections, indicating it requires repair. The Authority hired a consulting firm which in addition to verifying the pipe condition, provided design services for the conduct of the required repairs. This project was advertised September 13, 2019, and a pre-bid meeting was conducted on September 18, 2019. The bid documents provided for a base bid for the repair of high priority deficiencies, and an additive alternate bid for the repair of medium priority deficiencies. Bids were received on October 1, 2019. Two bids were received, although one was determined to be non-responsive. As this project was expected to have a cost within the value limits for an informal bid, three bids were not required for this project. The responsive bid was received from Applied Polymerics, Inc. of Mount Airy, NC in the amount of \$155,949.75 for both the base and additive alternate bid items. The engineers estimate was \$285,312.50.

ISSUES

None.

ALTERNATIVES

None. The repair of the pipe is necessary in order to ensure the structures longevity and to satisfy the requirements of the NCDEQ.



FISCAL IMPACT

The total cost of \$155,949.75 will be funded with Airport Funds.

RECOMMENDED ACTION

It is respectfully requested that the Airport Authority Board resolve to (1) approve the contract with Applied Polymeric, Inc. in the amount of \$171,544.73 (\$155,949.75 plus an allowance of \$15,594.98); (2) authorize the Executive Director to execute the necessary documents; and (3) to amend the FY2019/2020 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

Section 1. To amend the appropriations as follows:

EXPENDITURES:

	<u>Decrease</u>	<u>Increase</u>
Capital Improvements	_____	<u>\$171,544.73</u>
Totals	_____	<u>\$171,544.73</u>

This will result in a net increase of \$171,544.73 in the appropriations. Revenues will be revised as follows:

REVENUES:

	<u>Decrease</u>	<u>Increase</u>
Transfer from GARAA Cash	_____	<u>\$171,544.73</u>
Totals	_____	<u>\$171,544.73</u>



Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 11th day of October, 2019.

Matthew Burrell, Chair

Attested by:

Ellen Heywood, Clerk to the Board

Greater Asheville Regional Airport Authority - Bid Tabulation

Project Name: **60" Pipe Rehabilitation**

Date/Time: **October 1, 2019 11:00AM EST**

	Company Name & Address	Acknowledgement of Addendum(s)	Bid Bond	Base Bid	Bid Alt 1	Grand Total:
1	Applied Polymerics Inc. 131 St. James Way Mount Airy, NC 27030	Yes	Yes	\$117,699.75	\$38,250.00	\$155,949.75
2						
3						
4						
5						

The bid summary is certified to be true and correct to the best of my knowledge.

M. A. Reisman

Date:

10-3-19

Michael A. Reisman, Deputy Executive Director, Development & Operations
Greater Asheville Regional Airport Authority



10/03/2019

Michael A. Reisman, A.A.E.
Deputy Executive Director, Development & Operations
Greater Asheville Regional Airport Authority
61 Terminal Drive, Suite 1
Fletcher, NC 28732

Re: **60-Inch Storm System Rehabilitation
Bid Tabulation and Recommendation**

Dear: Mr. Reisman,

The bid opening for the referenced project was held on Tuesday October 1, 2019 at 11:00 AM. One conforming bid was received from Applied Polymerics, Incorporated. The bid contained the required 5% bid bond (completed pages BB-1 and BB-2), acknowledged receipt of all addenda (completed page BF-5), enclosed the properly executed bid forms (pages BF-1 through BF-9), and the completed Bidders Affidavit (pages BA-1 and BA-2). They also included the required work experience and professional qualification forms (Q1 and Q2 with supporting information) that comply with special provision # 14 as defined in the Project Manual. The Certified Bid Tabulation is also attached to this recommendation letter.

Based on our bid analysis and background check of the apparent low bidder, Applied Polymerics, Incorporated is the responsive lowest bidder with a Total Base Bid of \$117,699.75 and an addition of \$38,250.00 for the Alternate Bid. The combined Total Base Bid and Alternate Bid is \$155,949.75.

Applied Polymerics, Incorporated has been doing pipe rehabilitation work in North Carolina for many years and has worked successfully on similar projects of equal size. Their references spoke positively about their construction work capability and practices.

Based on the information provided in the bid package and our evaluation of the apparent low bidder, we recommend the Greater Asheville Regional Airport Authority award the project to Applied Polymerics, Incorporated.

We appreciate the opportunity to provide you with our services and look forward to assisting you with the construction of this project.

Sincerely,

Kimley-Horn

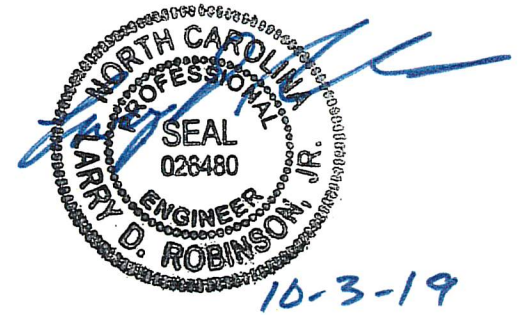
A handwritten signature in blue ink, appearing to read "Dan Robinson".

Dan Robinson, PE, CFM

Attachment

CERTIFIED BID TAB

Project #: 013975001
 Project Name: 60-Inch Storm System Rehabilitation
 Date: 10/3/2019



Base Bid Items

Item No.	Section	Description of Item	Quantity	Unit	Applied Polymerics, Inc	
					Unit Price	Amount
1	800	Mobilization	1	LS	\$ 12,000	\$ 12,000.00
2	SP-02	Grading	1	LS	\$ 22,827	\$ 22,827.00
3	SP-03	Manhole Frame and Cover (including CAM Lock)	1	EA	\$ 5,500	\$ 5,500.00
4	SP-04	Convert Existing Blind Junction Box to Junction Box with Manhole Cover	1	EA	\$ 5,500.00	\$ 5,500.00
5	876	Rip Rap - Class I	400	TN	\$ 51.63	\$ 20,652.00
6	876	Geotextile for Drainage	625	SY	\$ 10.87	\$ 6,793.75
7	SP-05	Erosion Control	1	LS	\$ 22,827.00	\$ 22,827.00
8	SP-13	Joint Repair (High Priority)	9	EA	\$ 650.00	\$ 5,850.00
9	SP-13	Junction Box Pipe Connection Repair (High Priority)	3	EA	\$ 650.00	\$ 1,950.00
10	SP-13	Junction Box Sectional Joint Repair (High Priority)	1	EA	\$ 800.00	\$ 800.00
12	SP-13	Chemical Grout (High Priority)	130	GAL	\$ 100.00	\$ 13,000.00
						\$ -
SUBTOTAL						\$ 117,699.75
TOTAL						\$ 117,699.75

Alternative Bid Items

1	SP-13	Joint Repair (Medium Priority)	19	EA	\$ 650.00	\$ 12,350.00
2	SP-13	Junction Box Pipe Connection Repair (Medium Priority)	2	EA	\$ 650.00	\$ 1,300.00
3	SP-13	Junction Box Sectional Joint Repair (Medium Priority)	2	EA	\$ 800.00	\$ 1,600.00
4	SP-13	Chemical Grout (Medium Priority)	230	GAL	\$ 100.00	\$ 23,000.00
SUBTOTAL						\$ 38,250.00
TOTAL						\$ 38,250.00

I certify that this is a true and correct record of bids received.


 Dan Robinson, PE, CFM

PROJECT TOTAL \$ 155,949.75



AGREEMENT

60-INCH STORM SYSTEM REHABILITATION

FOR THE

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

This Agreement made and entered into this ___ day of _____, 20___, by and between the GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY (the "Authority") and APPLIED POLYMERICS INCORPORATED, 131 St. James Way, Mount Airy, NC 27030 (the "Company").

WITNESSETH:

The Authority desires to allow the Company the right and obligation to engineer, procure, erect, construct, and deliver the Project (pipe system rehabilitation by manned entry injection grouting, storm system junction box improvements, and grading/ditch improvements) to the Airport in the manner and frequency as specified in this Agreement.

The Company is qualified and willing to provide such Project.

NOW, THEREFORE, in consideration of the mutual covenants, terms, conditions, privileges, obligations and agreements herein contained and other valuable consideration, the Authority and the Company hereby mutually undertake, promise and agree, each for themselves, their successors and assigns as follows:

I. EMPLOYMENT OF THE COMPANY

The Company agrees to provide the Project herein described, in accordance with the terms of this Agreement all at the Company's sole expense.

II. SCOPE OF WORK

- 2.1 The Company agrees to engineer, procure, erect, construct, and deliver in accordance with the terms set forth in the Bid Documents and subsequent Agreement Documents, and as the Authority has described in the Specifications. The terms of the Agreement Documents shall supersede any contrary or inconsistent terms set forth on any purchase orders, purchase order acknowledgements, invoices, confirmations and/or other similar documents. No supplemental provisions of any such purchase orders, purchase order confirmations, invoices, confirmations or other similar documents shall be binding upon the Authority unless such document is signed by an authorized representative of the Authority.
- 2.2 The Company agrees to provide all personnel, labor, supplies and equipment required for the project.

III. PROJECT

- 3.1 Pipe system rehabilitation by manned entry injection grouting, storm system junction box improvements, and grading/ditch improvements.
- 3.2 Description: **Per bid specifications.**

IV. WARRANTY

- 4.1 The Company warrants to the Authority that the Project shall be free from defects in materials and workmanship and shall conform to the requirements of the construction plans and project manual. The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement.
- 4.2 In the event the Project is not provided in accordance with the Agreement Documents, notice shall be given to the Company to immediately provide personnel, equipment and supplies necessary to correct any deficiencies. If within five days of such notice, Company has not corrected specified deficiencies to the satisfaction of the Authority, and according to the Specifications, the Authority may, at its option, provide such personnel, equipment and supplies from its own source or by contract as required to correct the deficiencies, and the Company shall pay such costs incurred to effect such remedy. Any such amounts so charged to the Company shall be deducted from any sums due or becoming due from the Authority to the Company.
- 4.3 Until expiration of any stated warranties the Authority shall inspect the Project and immediately notify the Company of any issues. The Company will immediately resolve any issues relating to the Project and will also be responsible for immediately resolving any issues involving third parties without delay to the Authority.

V. TERM

This Agreement shall be binding upon execution by both parties and the term of this Agreement shall be for a term beginning _____, 20____ and ending upon acceptance of the Project, plus any base or extended warranty periods.

VI. COMPENSATION

- 6.1 The Authority shall pay the Company the lump sum amount of \$155,949.75 for completing the Project. The lump sum is subject to actual quantities used as specified.

- 6.2 Except as provided herein, no price changes, additions, or subsequent qualifications will be honored during the course of the contract without prior approval from the Authority.

VII. INSURANCE REQUIREMENTS

- 7.1 The Company agrees to indemnify and save the Authority, its officers, agents and employees harmless from any liabilities, including, but not limited to, claims, judgments, fines, costs and attorneys' fees, to persons or property resulting from or arising out of the conduct of the Agreement or providing of services hereunder by the Company; and further agrees to carry and furnish the Authority a certificate(s) of public liability insurance and automobile liability insurance, in single limit amounts not less than \$1,000,000.00 for damage to property or injury to persons resulting from any one accident, in a company or companies acceptable to the Authority, in which policy the Authority shall be named as an additional insured, and the Company shall furnish satisfactory evidence that such insurance is in effect and shall not be cancelled on less than 30 days prior written notice of such cancellation to the Authority.
- 7.2 The Authority shall not be liable for any damage either to person or property, sustained by the Company or by other persons due to the Airport or any improvements thereon or any part thereof or any appurtenances thereof becoming out of repair, or due to the happening of an accident in or about the airport, or due to any act or neglect of any tenant or occupant of the airport, or of any other person, except to the extent caused by the sole negligence of the Authority. Without limiting the generality of the foregoing, the Authority shall not be liable for damage caused by water, steam, sewerage, gas, bursting or leaking of pipes or plumbing or electrical causes, or the negligence of contractors, employees, agents, or licensees of the Authority, unless the damage is proved to be the result of sole negligence of the Authority.

VIII. SECURITY REQUIREMENTS

- 8.1 The Authority shall maintain through the term of this Agreement the Bid Bond and Performance Bond provided by Company as part of its bid for the Project.
- 8.2 The terms of the Performance Bond and Payment Bond are subject to final Owner approval. The Performance Bond must specifically identify the options available to the Surety upon notice of Contractor's default or notice of Contractor's default and Owner's termination of the contract. The Performance Bond must specifically state that the Surety cannot, under any circumstances, arrange for the completion of the Contract by the defaulting and terminated Contractor, and the Performance Bond must specifically state that if the Surety elects to arranged for another Contractor to perform and complete the Contract or to undertake and perform and complete the Contract itself, the Surety must obtain the Owner's consent as to the completion Contractor or Contractors.

IX. DELIVERY AND INSTALLATION

- 9.1 The Materials for this project shall be delivered FOB to the Greater Asheville Regional Airport Authority, 61 Terminal Drive, Ste 1, Fletcher, NC 28732. Delivery of the Project shall be coordinated with the Deputy Executive Director, or other designated representative.
- 9.2 All pricing shall be based on F.O.B. destination delivery. The materials shall be delivered via transport trailer and shall not be driven to the delivery location from its point of manufacture.

X. INVOICE AND PAYMENT

- 10.1 Payment terms are net 30 days from Company’s invoice date, which shall be no sooner than the delivery to the Asheville Regional Airport, and the acceptance date of the Project by the Authority.

- 10.2 Invoice shall be directed to:

Greater Asheville Regional Airport Authority
ATTN: Accounts Payable
61 Terminal Drive, Suite 1
Fletcher, NC 28732

- 10.3 The Company shall obtain and pay for all permits and licenses and shall give all notices, pay all fees, and comply with all laws, ordinances, rules and regulations, including but not limited to regulations promulgated by the Authority, and all regulations and requirements of the Federal Occupational Health and Safety Act, and any similar state or local laws, ordinances, and regulations, including regulations promulgated by the Authority, and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect the conduct of the Products to be provided (the “Applicable Law”).

XI. TITLE AND RISK OF LOSS

Unless otherwise specified in connection with a particular order placed pursuant to this Agreement, title and risk of loss of or damage to the Product shall pass from the Company to the Authority when delivered to the Authority as specified in the order, except for loss or damage resulting from Company’s fault or negligence or failure to comply with an order. Passing of title upon such delivery shall not constitute acceptance of any Product.

XII. STATUS OF COMPANY

The status of the Company under this Contract shall be that of an independent contractor retained on a contractual basis to engineer, procure, erect, construct, and deliver the

Project for a limited period of time, and it is not intended nor shall it be construed that the Company, or employees of the Company, are employees, officers or agents of the Authority for any purpose whatsoever.

XIII. TERMINATION

13.1 The Authority may terminate this Contract immediately for default by written notice to the Company of such termination if the Company neglects to provide the Product properly, performs in an unsatisfactory manner, or fails to perform any provision of this Contract. In the event of termination for default, the Authority shall have against the Company all remedies provided by law and equity.

13.2 The Authority further, at its sole option and discretion, may terminate or reduce the scope of work at any time, without any default on the part of the Company, by giving a written notice to the Company at least 30 days prior to the effective date of termination or reduction in the scope of work as set forth in the notice.

13.3 In the event of full or partial termination by the Authority, the Company shall terminate all purchase of materials and project services under the Contract, to the extent and on the date specified in the notice of termination and until such date, to the extent stated in the notice of termination, shall provide such

Project services, and be compensated only for such Project services, as may be necessary as determined by the Authority's representative in his sole discretion to preserve the work in progress and to protect materials, buildings and equipment. The Authority may then proceed with provision of the Project to be provided in any lawful manner that it may elect.

13.4 In the event of termination or reduction in the scope of any future purchase of materials and Project services provided by the Authority, the Authority shall pay the Company for all materials and Project services satisfactorily received and constructed up to the effective date of termination or reduction in the scope of any future purchase of materials and Project services to be provided, in accordance with the price for such materials and Project services submitted with the Proposal. The Authority and the Company shall negotiate in good faith to arrive at a revised Contract price schedule.

XIV. NOTICE OF LABOR DISPUTES

In the event that the Company is put on notice or otherwise made aware of an actual or potential labor dispute that delays or threatens to delay the delivery of the Project, the Company shall immediately and without delay, notify the Authority in writing. Such notice shall include all relevant information covering such dispute and its background. In the event a labor dispute delays the delivery of Project to an extent not acceptable to the Authority, the Authority reserves the right to cancel the Agreement, pay for any Project

services provided to that point in time without additional cost or penalty to the Authority. Upon such cancellation, the Authority will proceed to find a replacement to provide the Project services the Company had been awarded through this Contract.

XV. NOTICES

Notices to either party provided for herein shall be in writing and shall be sufficient if hand-delivered, sent by courier, or sent by certified or registered mail, postage prepaid, addressed as follows:

To Authority: Greater Asheville Regional Airport Authority
 Attn: Executive Director
 61 Terminal Drive, Suite 1
 Fletcher, NC 28732

To Company:
 Applied Polymerics Incorporated
 Attn: President
 131 St. James Way
 Mount Airy, NC 27030

or to such other respective address as the parties may designate to each other in writing from time to time.

XVI. COMPLIANCE WITH LAWS

Both parties agree that in performing under this Agreement, they will in all respects follow and comply with all applicable governmental laws, regulations, orders and other rules of duly constituted Authority.

XVII. NO ASSIGNMENT

The Company shall not assign, subcontract or transfer this Agreement or any part thereof, by operation of law or otherwise, or any Project services to be rendered by the Company hereunder, without the prior express written consent of the Authority.

XVIII. CUMULATIVE REMEDIES, WAIVER

The parties agree that any and all remedies that are provided for in this Agreement shall be cumulative and in addition to any other remedies which are provided for in law or equity. No waiver or failure to act on the part of any party to this Agreement shall prevent such party from later exercising their rights under this Agreement.

XIX. COMPLETE UNDERSTANDING

This Agreement sets forth the entire Agreement between the parties. This Agreement may

not be changed, altered or amended except by a writing signed by both parties.

XX. NON-DISCRIMINATION

20.1 During the performance of this Agreement, the Company, for itself, its assignees and successor interest, agrees as follows:

- A. Compliance with Regulations. The Company shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereafter, the "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of this Agreement.
- B. Non-discrimination. The Company, with regard to the work performed by it during this Agreement, shall not discriminate on the grounds of race, color, national origin, sex or creed in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Company shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the Agreement covers a program set forth in Appendix B of the Regulations.
- C. Solicitations for Subcontractors, including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the Company for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor supplier shall be notified by the Company of the Company's obligations under this Agreement and the regulations relative to nondiscrimination on the grounds of race, color, national origin, sex or creed.
- D. Information and Reports. The Company shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Authority or the Federal Aviation Administration (the "FAA") to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of the Company is in the exclusive possession of another who fails or refuses to furnish this information, the Company shall so certify to the Authority or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.
- E. Sanctions for Noncompliance. In the event of the Company noncompliance with the nondiscrimination provisions of this Agreement, the Authority shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

- (1) Withholding of payments to the Company under the Agreement until the Company complies; and /or
- (2) Cancellation, termination, or suspension of the Agreement, in whole or in part.

F. Incorporation of Provisions. The Company shall include the provisions of paragraphs A through E in every subcontract, including procurements or materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Company shall take such action with respect to any subcontract or procurement as the Authority or the FAA may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, however, that in the event the Company becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Company may request the Authority to enter into such litigation to protect the interests of the Authority and, in addition, the Company may request the United States to enter into such litigation to protect the interests of the United States.

20.2 The Company assures that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age or handicap be excluded from participating in any activity that benefit from Federal assistance. This Section obligates the Company for the period during which Federal assistance is extended to the airport program, except where Federal assistance is to provide, or is in the form of, personal property or real property or interest therein or structures or improvements thereon. In these cases, this Section obligates the Company for the longer of the following periods: (a) the period during which the property for which Federal assistance is extended, or for another purpose involving the provision of similar Project services or benefits; or (b) the period during which the Authority or any transferee retains ownership or possession of the property. In the case of contractors this Section binds the contractors from the Proposal solicitation period through the completion of the contract. The Company shall include the provisions of this Section in every subcontract, including procurements of materials and lease of equipment, under this Agreement.

XXI. INDEMNIFICATION

The Company shall, and shall cause any subcontractor to, assume responsibility for loss or damage to property or injury to persons resulting from, arising out of or associated with such subcontractor's Project services rendered pursuant to this Agreement, as well as for any claims made by or on behalf of such subcontractor's agents, servants and employees arising out of their employment or work pertaining to the Project rendered pursuant to this Agreement. The Company shall, and shall cause any subcontractor at all times to indemnify and hold the Authority and its officers, agents and employees harmless from

and against any and all liabilities, demands, claims, suits, losses, damages, cause of action, fines or judgments, including those reasonable and necessary costs, attorney and witness fees and expenses incidental thereto, arising out of, or in connection with the Project rendered under the terms of this Agreement, except for acts arising out of the sole negligence of the Authority. The parties hereto shall promptly report to the other any such claim or suit against either of them.

XXII. INDEPENDENT CONTRACTOR

- 22.1 It is agreed and understood that in performing its Project hereunder, the Company acts as an independent contractor in every respect and that the Company shall not hold itself out as, nor shall it be deemed, an agent, servant, or employee of the Authority. The selection, retention, assignment, direction and payment of the Company's employees and associates shall be the sole responsibility of the Company. The Authority shall not attempt to exercise any control over the daily performance of duties by the Company's employees.
- 22.2 The Company agrees that its employees shall have no right to participate in any group, life, and accident or health plan maintained by the Authority for its employees. The Company shall maintain all tax records for its employees who perform Project services pursuant to this Agreement, and the Company shall withhold and remit income taxes, federal insurance contribution act taxes and unemployment insurance taxes to the appropriate governmental agencies with respect to amounts paid by the Company to its employees for their Project services.

XXIII. SURRENDER OF POSSESSION

Upon the expiration or other termination of this Agreement, the rights of the Company to use the premises, facilities, rights, licenses, Product and privileges herein granted shall cease and the Company shall forthwith, upon such expiration or termination, surrender the same.

XXIV. HEADINGS

The paragraph headings contained herein are solely for convenience and shall have no bearing upon the construction of any of the provisions hereof.

XXV. GOVERNING LAW

This Agreement shall be governed by the laws of the State of North Carolina.

XXVI. INCORPORATION OF DOCUMENTS

This Agreement, together with the following documents, constitutes the Agreement Documents and are attached hereto and made a part hereof:

- A. Cover Page
- B. Invitation to Submit Bid
- C. Definition of Terms
- D. Instructions to Bidders
- E. General Conditions
- F. Bid Form
- G. Bidder's Experience and Qualifications Questionnaire
- H. Agreement
- I. Project Special Provisions
- J. Construction Plans
- K. Exhibits
- L. Insurance Certificates
- M. Appendix Items
 - o 60 – inch Pipe Condition Assessment (1-10-2019)
 - o Vault Condition Assessment (7-12-2019)
 - o Environmental Field Visit Memorandum (7-12-2019)

The above documents are to be considered as one and whatever is called for by any one of the documents shall be as binding as if called for by all.

IN TESTIMONY WHEREOF, each of the parties has caused its duly authorized representative to execute and deliver this Agreement, effective as of the date first above written.

Authority:

Greater Asheville Regional Airport Authority

By: _____
 Title: Executive Director

Date: _____

Company:

Applied Polymerics Incorporated

By: _____
 Title: President

Date: _____

This instrument has been pre-audited in the manner required by local government and fiscal control.

 Finance Officer

 Date



MEMORANDUM

TO: Members of the Airport Authority

FROM: Michael A. Reisman, A.A.E.
Deputy Executive Director, Development and Operations

DATE: October 11, 2019

ITEM DESCRIPTION – New Business Item E

Approval of Work Authorization No. 2R (Revised) with Parrish and Partners of North Carolina, PLLC for South Terminal Apron Expansion Project Engineering Services

BACKGROUND

The Authority entered into an Agreement for Professional Consulting Services with Parrish and Partners of North Carolina, PLLC on August 10, 2018. The scope of services included design and engineering services associated with the South Terminal Apron Expansion Project. On November 9, 2018, the Airport Board approved Work Authorization No. 2 for design and construction services associated with the south apron expansion project in the amount of \$821,196.00. As the consultant undertook work associated with this Work Authorization, it became apparent that some changes to the scope of work were necessary. These changes generally included the following items:

- a. Additional storm water permitting requirements with the State not previously required.
- b. Design for an additional 2,500 square yards of concrete apron above what was anticipated in the original scope.
- c. Additional bidding phase services (re-bid of project a second time).
- d. Increase in Quality Assurance testing during construction based on extension of project timeline.

ISSUES

None.



ALTERNATIVES

None.

FISCAL IMPACT

The additional fee for this work over the original contract price is \$158,253.00. The original contract price of \$821,196.00 is therefore revised to \$979,449.00. Separately, since the number of scheduled construction days to complete this project has also increased, staff expects to request an additional revision to this Work Authorization at a later date once a better estimate of this additional requirement is clear.

RECOMMENDED ACTION

It is respectfully requested that the Airport Authority Board resolve to (1) approve Work Authorization No. 2R with Parrish and Partners of North Carolina, PLLC in the amount of \$979,449.00; (2) to authorize the Executive Director to sign the necessary documents; and (3) to amend the FY2019/2020 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

Section 1. To amend the appropriations as follows:

EXPENDITURES:

	<u>Decrease</u>	<u>Increase</u>
Capital Improvements	_____	<u>\$158,253.00</u>
Totals	_____	<u>\$158,253.00</u>

This will result in a net increase of \$158,253.00 in the appropriations. Revenues will be revised as follows:



REVENUES:

	<u>Decrease</u>	<u>Increase</u>
Transfer from GARAA Cash	_____	<u>\$158,253.00</u>
Totals	_____	<u>\$158,253.00</u>

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 11th day of October, 2019.

Matthew Burrell, Chair

Attested by:

Ellen Heywood, Clerk to the Board

WORK AUTHORIZATION NO. 2R
CONSULTANT SCOPE OF SERVICES

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

Scope of Services for Professional Consulting Services, as referenced in the Professional Consulting Agreement between the GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY and PARRISH AND PARTNERS OF NORTH CAROLINA, PLLC, dated August 13, 2018.

PROJECT: Expand Terminal Apron – South (Approx. 13,500 SY)

SCOPE OF SERVICES: See Attachment A revised

CONSULTANT TEAM: Parrish & Partners of North Carolina, PLLC
 Terracon (Design Geotechnical) | Clearwater Enviro (Permitting)
 Blue Ridge Land Surveying (Surveying)
 S&ME (QA Testing Services, on-call)

SCHEDULE: Design: **135 working days** | Construction: **210 calendar days**

PROJECT BUDGET: **\$10.7M** (Estimated)

FEES:

Preliminary Design Phase	\$ 51,731.00
Design Development Phase	\$ 131,177.00
Design and Permitting Phase	\$ 105,329.00
Additional Scope Items (Design & Bidding)	\$ 55,680.00
Bidding and Contract Preparation Phase	\$ 22,699.00
Construction and Close-Out Phase	\$ 137,778.00
Special/Additional Services	\$ 475,055.00
Total Lump Sum	\$ 979,449.00

Authority:

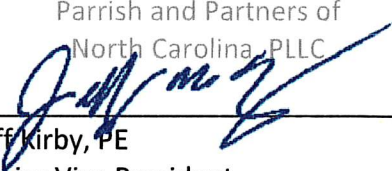
Greater Asheville Regional
Airport Authority

By: _____
 Lew Bleiweis, AAE
 Executive Director

Date: _____

Consultant:

Parrish and Partners of
North Carolina, PLLC

By:  _____
 Jeff Kirby, PE
 Senior Vice President

Date: 9.20.19

This instrument has been pre-audited in the manner required by local government and fiscal control.

 Finance Director

 Date

Attachments: Attachment A revised – Work Authorization No. 2R Detail (Scope of Work)
 Attachment B revised – Fee Spreadsheet(s)
 Attachment C revised – Subconsultant Proposals

ATTACHMENT A revised

Work Authorization No. 2R Detail
(Scope of Work)
17 Pages

WORK AUTHORIZATION NO. 2R

For:

**EXPAND TERMINAL APRON – SOUTH
(APPROX. 13,500 SY)**

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

OCTOBER 30, 2018

Revised: SEPTEMBER 20, 2019

Throughout the course of the design phase of the referenced project, the scope of work changed to accommodate additional project requirements. In an effort to maintain progress and meet the desired project completion schedule, the **CONSULTANT** agreed to complete the additional scope tasks and submit an amendment to revise original agreement upon completion of the design and bidding phase. This Work Authorization Number Two revised (2R) is prepared to document and summarize the additional scope tasks and scope revisions.

The original Scope of Work remains generally unchanged other than updating the reference to the size of the apron expansion and referencing the revised attachments. It is hereby noted, that although the Construction Contract Time is 420 Calendar Days, the scope of work for the Construction Phase Services and RPR Services has not yet been revised. Upon reaching 75% of the contract amount for those services, the **CONSULTANT** will submit an amendment for the **OWNER** to consider extending the services to cover the remaining construction time.

The Additional Scope of Work tasks are detailed and described as follows:

ADDITIONAL SCOPE OF SERVICES:

The following is a summary of the additional design, bidding, and construction phase tasks:

1. Design Employee Parking Lot – The original scope did not include design of the employee parking lot, rather a minor reconfiguration to maintain the existing configuration layout by eliminating the impacted parking spots.
 - a. Evaluate the remaining area and provide three layout options for the reconfiguration of the Employee Parking Lot, in order to obtain up to 150 useable parking spots.
 - b. Once the desired layout was determined, design the final geometrics, grading, and drainage associated with the reconfigured employee parking lot.
2. “Fill in” the low area at the east side of the project area, between the airport loop road and the proposed apron, at the invert of the 72” concrete pipe. This area was originally to be used as an open area to drain the project site and be used as the area for temporary sediment basin. In order to eliminate the pre-existing maintenance concern and improve the area, the **CONSULTANT** was requested to design the project to fill in this area.

- a. This scope item was not clarified during the initial development of the original scope of work. Clarification was provided and discussed during the 30% Review meeting. The **CONSULTANT** and **OWNER** both agree this item requires additional effort, however the **OWNER's** understanding was that it should have been included in the original agreement. With that and the understanding that the original agreement would have been increased to account for this item, the **CONSULTANT** accepts the **OWNER's** understanding, but requests consideration for partial compensation of the required effort. Included with this revised agreement is a portion, approximately 1/4 of the previously proposed hours to complete the following general scope tasks:
 - i. This required a full evaluation of the existing project area drainage as well as all of the contributing drainage areas upstream of the project area.
 - ii. The new drainage plan would require design of multiple additional stormwater conveyances, structures, pipes, etc. and thereby created a generally closed drainage system.
 - iii. The revisions to the drainage design and filling in of the area necessitated the design of additional specialized Erosion & Sediment Control (E&SC) measures to accommodate the lack of ability to construct a standard Sediment Basin at the outfall area of the project site.
3. Ground Service Equipment (GSE) parking area –
 - a. In order to maximize the usability of the space impacted by the construction of the expanded apron, the **CONSULTANT** was requested to design the area between the proposed apron expansion and the adjacent upper parking lot (currently used for staging of taxis) as a paved parking area for GSE vehicles, to include a charging rack, electrical rack, for the equipment.
 - b. This additional design included grading and drainage revisions to accommodate the area as well as evaluation of preliminary items needed to accommodate the charging of the GSE vehicles.
4. Expand the proposed apron area from 11k SY to 13,500 SY –
 - a. Following the 60% design review coordination, the total size of the apron was re-evaluated, and the **CONSULTANT** was asked to expand the apron size to accommodate not only the immediate RON positions, but also a future configuration necessary for the ultimate Terminal Building expansion.
 - b. Since the project was at the 60% completion level, to accommodate the increased size of the apron additional effort was required to redesign critical project elements, including but not limited to:
 - i. Grading plan,
 - ii. Drainage plan,
 - iii. E&SC plan,
 - iv. Retaining wall layout,
 - v. Concrete joint layout,
 - vi. Employee parking lot layout, etc.

5. Stormwater Treatment Design and Submittal –

During the preparation of the original agreement the **CONSULTANT** included some coordination associated with obtaining agency reviews and applicable permits. According to requirements imposed on recent projects at the airport, a separate Stormwater review, submittal, and associated Permit was not required. This was noted to be due to the establishment of the Greater Asheville Regional Airport Authority (GARAA), whereby the stormwater review was the responsibility of the **OWNER**. This fact was confirmed following phone conversations the **CONSULTANT** had with both Buncombe County and NCDEMLR Stormwater Program, where the **CONSULTANT** was informed that neither agency would require a review of the project design, as it was the airport's responsibility. Near the final stages of the design process and at the direct request of NCDEQ E&SC, we contacted both agencies again. Following this inquiry and speaking with several representatives from NCDEMLR, we were notified that they would require a full submittal for a Post-Construction Stormwater Permit. Therefore, the **CONSULTANT** was required to prepare and coordinate a submittal to include all necessary documents and backup calculations.

- a. In order to confirm the original understanding that an agency stormwater review was not required, the **CONSULTANT** contacted NCDEMLR and Buncombe County in February 2019, prior to submittal of the 60% plans; at which time received agreement that neither agency would review the design; therefore 60% plans were submitted in March 2019. Following submittal of the Final plans in May 2019, at the request of NCDEQ, the **CONSULTANT** contacted the agencies again and received written concurrence from Buncombe County. However, NCDEMLR provided a notification in June 2019 that they were going to require a post-construction stormwater permit application to be submitted.
 - b. Following the initial submittal of the Post-Construction Stormwater Permit application package, the **CONSULTANT** received a response from NCDEMLR that the application form used, and previously accepted, was no longer acceptable; and the alternate application form would be required. This repackaging of the design documents required additional preparation of documentation and calculations associated with the supplemental forms included as a part of the alternate application form.
6. Revise the Construction sequencing to accommodate construction of the employee parking lot as a first order of business (first phase of construction).
- a. This item is not included with this revised agreement.
7. Re-Bid Services – Due to only receiving two bids during first bidding cycle, with the first bidding phase, a second bidding phase was required, which thereby required additional bidding phase coordination, pre-bid meeting, addenda, bid opening, etc. The **CONSULTANT** was able to combine travel with other activities and therefore was able to minimize the additional trips necessary for the re-bid phase to 1 additional visit, rather than 2 additional trips.

8. Construction Phase Services –

The **CONSULTANT** understands it is the **OWNER's** desire to not change the scope of construction phase services *at this time*. The current construction phase services scope provides for a construction contract time of 210 calendar days, however the current construction contract time provided to the contractor is 420 calendar days. This increase was realized based on the change in scope of work throughout the course of the design. A significant factor was the determination that the on-site source of material was not adequate to produce enough material to complete the increased project size, therefore the project became an “off-site borrow” project. Due to the limitations and restrictions associated with hauling material on public roadways, versus in off road equipment, the time required was significantly increased. Similarly, due to the various design elements that changed during the design phase (as generally described previously) additional contract time was added to the estimated construction contract time. The estimated contract time for construction is 420 calendar days or approximately 15 months.

- a. Even with the increase in total contract time, many standard Construction Phase Services tasks remain unimpacted by the increase, however the following tasks are directly associated with the project duration:
 - i. Daily Project Administration
 - ii. Construction Progress Meetings (biweekly)
 - iii. Supplemental Site Visits
 - iv. Processing and Reviewing Contractor's Pay Request (generally monthly)
- b. As requested by the **OWNER**, the **CONSULTANT** will proceed with the Construction Phase Services under the agreement of upon reaching approximately 75% of the contract amount for Construction Phase Services, the **CONSULTANT** will present an amendment request for additional compensation necessary to cover the anticipated additional services to see the construction contract (project) through completion.

9. Special / Additional Services revisions –

- a. The **CONSULTANT'S** original agreement included an estimated total of \$25,000 for ClearWater Environmental, as the proposal was not available. Subsequent to the original agreement, they submitted a proposal for Wetland/Stream Permitting with a reduced total fee of \$20,000. This is reflected in this revised agreement and their proposal is included in the Attachment C revised.
- b. The subcontracted fee for QA Testing Services by S&ME was increased to accommodate the additional project testing requirements. Their revised proposal is included in the Attachment C revised.
- c. Similar to that discussed in Item 8 above, the RPR's project inspection time and associated expenses provide for services associated with a 210 calendar day project. Upon reaching approximately 75% of the contract amount for RPR Services, the **CONSULTANT** will present an amendment request for additional compensation necessary to cover the anticipated additional services to see the construction contract (project) through completion.

EXPAND TERMINAL APRON – SOUTH

ORIGINAL SCOPE OF SERVICES

The following pages provide the original Scope of Work included with P&P Work Authorization No. 2, dated October 30, 2018, with changes highlighted with **gray background and bold text** to identify the scope revisions. The original scope text remains with ~~strikethrough~~ font.

In addition, and in order to comply with request from NCDOA, the revised fee spreadsheets (Attachment B revised) reflect a breakdown of the billing rates to provide the basic hourly rates without multiplier, then separately show the Audited Overhead Rate, the Profit, and the Cost of Capital. These breakdowns were required such that the Labor portion of the contract could be considered for reimbursement through an NCDOA grant. It is understood the Reimbursable Expenses are not to be included as a part of an NCDOA grant.

I. PROJECT DESCRIPTION:

This project consists of the design services associated with a project to expand the existing terminal apron to the south. It is anticipated that the size of the expanded portion of apron pavement will be approximately ~~11,000~~ **13,500** square yards and will include impacts to the existing employee parking lot and other existing airfield facilities. Design efforts will involve subcontracted services for geotechnical investigation as well as ground survey.

II. SCOPE OF SERVICES:

The scope of work for this Work Authorization includes:

1. Preliminary Design Phase – Prepare Preliminary Plans (30%)
2. Design Development Phase – Prepare Design Review Plans (60%)
3. Design and Permitting Phase – Prepare Final Plans (90%, 100%, & As-Bid)
 - a. Prepare Erosion Control Plans and Coordinate with Agencies
4. Bidding and Contract Preparation Phase
5. Construction and Close-Out Phase Services
6. Special / Additional Services
 - a. Pre-Design Ground Surveying, including Utility Location Services
 - b. Pre-Design Geotechnical Investigation Services
 - c. Wetland/Stream Mitigation & Permitting Services
 - d. Resident Project Representative Services
 - e. Quality Assurance Testing Services
 - f. Preparation of Construction Management Plan
 - g. Prepare Record Drawings (As-Builts)

A. DESIGN CRITERIA AND REQUIREMENTS

The following are the primary FAA Advisory Circulars and other design standards to be utilized during the design effort. All design will be performed according to the current edition at the time of execution of this work authorization

- FAA AC 150/5300-13; Airport Design
- FAA AC 150/5340-1; Standards for Airport Markings
- FAA AC 150/5370-2; Operational Safety on Airports During Construction
- FAA AC 150/5320-6; Airport Pavement Design and Evaluation
- FAA AC 150/5340-30; Design and Installation Details for Airport Visual Aids
- FAA AC 150/5370-10; Standards for Specifying Construction of Airports
- Federal Aviation Regulation Part 77 Surfaces

B. WORK TASKS DESCRIPTIONS

i) BASIC SERVICES: The **CONSULTANT** shall perform the following Basic Services for the project as outlined in Exhibit C of the above referenced Master Agreement and further described below:

(1) Preliminary Design Phase: The **CONSULTANT** shall:

- (a) General Project Coordination with **OWNER** on matters affecting the Project and general correspondence preparation, as needed with this phase;
- (b) Coordinating with **OWNER** and funding agencies on project formulation, including cost estimated project justification;
- (c) Prepare project scoping, fee preparation, project justification, finances, and schedules;
- (d) Provide ground surveys, soil borings, and laboratory soil testing utilizing subcontracted services;
- (e) Prepare preliminary plans and documents (approximately 30% completion level) for agency review and comment. An estimated list of sheets to be included in this submission is as follows:

- Cover Sheet
- General Notes and Safety Notes (CSPP-1 and CSPP-2)
- Project Phasing Layout (CSPP-3)
- Existing Conditions
- Typical Sections
- Geometric Layout and Demolition Plans
- Drainage Layout
- Technical Specifications Outline

(f) Perform quality review and revisions prior to submission.

(g) Deliverables:

Three (3) half-size printed copies of preliminary review documents as outlined above for **OWNER** review and coordination with other agencies.

(2) Design Development Phase: The **CONSULTANT** shall:

- (a) Perform General Project Coordination with **OWNER** on matters affecting the Project and general correspondence preparation, as needed with this phase;
- (b) Coordinate with **OWNER** and funding agencies as necessary with this phase;
- (c) Prepare Erosion Control Plans and Coordinate with Agencies. **CONSULTANT** will prepare the necessary erosion control plans and coordinate necessary permits with the agencies;
- (d) Evaluate Storm Water Management requirements and coordinate with agencies as necessary for the project;
- (e) Prepare design documents of the project and prepare detailed plans, technical specifications, at approximately the 60% completion level.

An estimated list of sheets are as follows;

- Cover Sheet
- Summary of Quantities
- General Notes and Safety Notes (CSPP-1 and CSPP-2)
- Project Phasing Layout (CSPP-3)
- Construction Safety and Phasing Plans (CSPP-4 and CSPP-5)
- Existing Conditions
- Typical Sections
- Geometric Layout and Demolition Plans
- Grading and Drainage Plans
- Concrete Joint Layout Plans
- Drainage Layout Plans
- Erosion Control Plans and Details
- Marking Plans and Details
- Lighting Plans and Details
- Technical Specifications – Draft

(f) Perform quality review and revisions prior to submission.

(g) Deliverables:

Three (3) half-size printed copy of review documents, as well as electronic versions of preliminary design report and draft specifications as outlined above for **OWNER** review and coordination with other agencies.

(3) Design and Permitting Phase: The **CONSULTANT** shall:

- (a) Perform General Project Coordination with **OWNER** on matters affecting the Project and general correspondence preparation, as needed with this phase;
- (b) Coordinate with **OWNER** and funding agencies as necessary with this phase, including but not limited to coordination with airport users on potential construction schedules and submission of FAA Airspace (Form 7460);
- (c) Prepare Storm Water Management Plan for the project area;
- (d) Prepare review design documents of the project and prepare detailed plans, technical specifications, incorporating comments from previous submittal (90% completion level).

An estimated list of sheets are as follows;

- Cover Sheet
 - Summary of Quantities
 - General Notes and Safety Notes (CSPP-1 and CSPP-2)
 - Project Phasing Layout (CSPP-3)
 - Construction Safety and Phasing Plans (CSPP-4 and CSPP-5)
 - Existing Conditions
 - Typical Sections
 - Geometric Layout and Demolition Plans
 - Grading and Drainage Plans
 - Concrete Joint Layout Plans
 - Drainage Layout Plans
 - Erosion Control Plans and Details
 - Miscellaneous Details
 - Marking Plans and Details
 - Lighting Plans and Details
 - Cross Sections
 - Technical Specifications
- (e) Prepare for review and approval by **OWNER**, its legal counsel and other advisors, necessary Bidding information, bidding forms, the Conditions of the Contract, and the form of Agreement between the **OWNER** and Contractor (otherwise referred to as the Front-End Contract Documents including FAA General Provisions);
 - (f) Prepare final design documents of the project, incorporating comments from previous review (100% completion level);
 - (g) Prepare Final Design Report, including adjustments to the preliminary estimate of probable construction costs caused by changes in general scope, extent or character or design requirements of the **PROJECT**, or market conditions;
 - (h) Prepare and coordinate applicable documents to obtain Erosion & Sediment Control permit with Buncombe County, DEQ, or other applicable agencies;

- (i) Perform quality review and revisions prior to submissions of documents;
 - (j) Incorporate **OWNER** comments from review submittals of the design documents;
 - (k) Print and provide necessary copies for in-house production of engineering drawings and contract specifications;
 - (l) Deliverables:
Three (3) half-size printed copies of final design documents, as well as electronic versions of final design report and specifications as outlined above for **OWNER** review and coordination with other agencies.
- (4) Bidding and Contract Formulation Phase: The **CONSULTANT** shall:
- (a) Assist the **OWNER** in advertising for and obtaining bids for the **PROJECT**, and, maintain a record of prospective bidders to whom Bidding Documents have been issued, and receive and process payments for Bidding Documents;
 - (b) Receive and respond to contractors inquires related to the **PROJECT**;
 - (c) Assist the **OWNER** in conducting a pre-bid conference to share pertinent bidding and technical information and requirements with prospective bidders;
 - (d) Issue addenda as appropriate to interpret, clarify or expand the Bidding Documents;
 - (e) Distribute sets of Bidding Documents to Prospective Bidders and plan offices (Dodge and AGC) during the Bidding Phase; and,
 - (f) Attend bid opening, prepare bid tabulation sheets, assist **OWNER** in evaluating bids, and provide a formal recommendation to award.
 - (g) Deliverables:
 - Summary of bids received and a unit cost analysis
 - Recommendation of award

- (5) Construction and Close-Out Phase: After notice to proceed with the Construction Phase, **CONSULTANT** shall:
- (a) The construction project duration is anticipated to be 8 months, which includes 30 days provided to the Contractor for completion of punch list items;
 - (b) The **CONSULTANT's** responsibility to provide Basic Services for the Construction Phase under this Agreement commences with the award of a Contract for Construction and terminates upon completion of final payment to the Contractor and issuance of close-out documents to the **OWNER**;
 - (c) The **CONSULTANT** will prepare the applicable grant application documentation, as well as other items related to project setup, and provide to the **OWNER** for further coordination;
 - (d) The **CONSULTANT** will coordinate the project startup items necessary with the **OWNER** and Contractor to schedule the construction start and other pre-construction startup items;
 - (e) The **CONSULTANT** will provide basic daily project administration throughout the duration of the referenced construction period. These tasks include items such as coordination with the RPR regarding project updates, assistance with scheduling of QA testing and coordination of on-call testing, provide regular updates to the **OWNER** regarding project status, and other general construction coordination items;
 - (f) **CONSULTANT** shall attend and administer the preconstruction conference;
 - (g) **CONSULTANT** shall attend and administer the pre-paving conference and review document provided prior to meeting;
 - (h) Visits to Site and Observation of Construction: In connection with observations of the work of Contractor(s) while it is in progress:
 - i. **CONSULTANT** shall make visits to the site at intervals appropriate to the various stages of construction as **CONSULTANT** deems necessary in order to observe as an experienced and qualified design professional the progress of the various aspects of Contractor(s)' work. Based on information obtained during such visits and on such observations, **CONSULTANT** shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and **CONSULTANT** shall keep **OWNER** informed of the progress of the work;
 - ii. **CONSULTANT** shall not during such visits or as a result of such observations of Contractor(s)' work in progress, supervise, direct or have control over Contractor(s)'s work nor shall **CONSULTANT** have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by Contractor(s), for safety precautions and programs incident to the work of Contractor(s) or for any failure of Contractor(s) to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor(s)

furnishing and performing their work. Accordingly, **CONSULTANT** can neither guarantee the performance of the construction contracts by Contractor(s) nor assume responsibility for Contractor(s)' failure to furnish and perform their work in accordance with the Contract Documents;

- (i) Defective Work: During such visits and on the basis of such observations, **CONSULTANT** may disapprove of or reject Contractor(s)' work while it is in progress if **CONSULTANT** believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will diminish the integrity of the design concept of the Project as reflected in the Contract Documents;
- (j) Interpretations and Clarifications: **CONSULTANT** shall issue necessary interpretations and clarifications of the Contract Documents and in connection therewith prepare work directive changes and change orders as required;
- (k) Shop Drawings: **CONSULTANT** shall review and approve (or take other appropriate action in respect of) Shop Drawings (as that term is defined in the aforesaid Standard General Conditions), samples and other data which Contractor(s) are required to submit, but only for conformance with the design concept of the Project. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto;
- (l) Substitutes: **CONSULTANT** shall evaluate and determine the acceptability of substitute materials and equipment proposed by Contractor(s), but subject to the provision the Master Agreement for Professional Services;
- (m) Inspections and Tests: **CONSULTANT** shall have authority, as **OWNER's** representative, to require special inspection or testing of the work, and shall receive and review certificates of inspections, tests, and approvals required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents (but only to determine generally that their content complies with the requirements of, and the results certified indicate compliance with, the Contract Documents);
- (n) Disputes between **OWNER** and Contractor: **CONSULTANT** shall act as initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder and make decisions on all claims of **OWNER** and Contractor(s) relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work. **CONSULTANT** shall not be liable for the results of any such interpretations or decisions rendered in good faith;

- (o) Applications for Payment: Based on **CONSULTANT's** on-site observations as an experienced and qualified design professional, on information provided by the Resident Project Representative and on review of applications for payment and the accompanying data and schedules:
- i. **CONSULTANT** shall determine the amounts owing to Contractor(s) and recommend in writing payments to Contractor(s) in such amounts. Such recommendations of payment will constitute a representation to **OWNER**, based on such observations and review, that the work has progressed to the point indicated, and that, to the best of **CONSULTANT's** knowledge, information and belief, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation). In the case of unit price work, **CONSULTANT's** recommendations of payment will include determinations of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents);
 - ii. By recommending any payment, **CONSULTANT** will not thereby be deemed to have represented that exhaustive, continuous or detailed reviews or examinations have been made by **CONSULTANT** to check the quality or quantity of Contractor(s)'s work as it is furnished and performed beyond the responsibilities specifically assigned to **CONSULTANT** in this Agreement and the Contract Documents. **CONSULTANT's** review of Contractor(s)' work for the purposes of recommending payments will not impose on **CONSULTANT** responsibility to supervise, direct or control such work or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto or Contractor(s) compliance with laws, rules, regulations, ordinances, codes or orders applicable to their furnishing and performing the work. It will also not impose responsibility on **CONSULTANT** to make any examination to ascertain how or for what purposes any Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any of the work, materials or equipment has passed to **OWNER** free and clear of any lien, claims, security interests or encumbrances, or that there may not be other matters at issue between **OWNER** and Contractor that might affect the amount that should be paid.

- (p) **CONSULTANT** shall assist with FAA AIP Grant application package and associated funding requests. This includes coordination associated with potential negotiations with the low bid contractor, budget adjustments, determination of project inclusions of additive work, sponsor certification forms, and other coordination necessary to request FAA grant;
- (q) Contractor(s)' Completion Documents: **CONSULTANT** shall receive and review maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals which are to be assembled by Contractor(s) in accordance with the Contract Documents (but such review will only be to determine that their content complies with the requirements of, and in the case of certificates of inspection, tests and approvals the results certified indicate compliance with, the Contract Documents); and shall transmit them to **OWNER** with written comments;
- (r) **CONSULTANT** shall prepare a Final Project Report to accompany the submittal of Record Drawings. The Final Project Report will include a summary of construction project information, financial, schedule, etc. This report shall also include the appropriate documentation of the testing summary for the QA tests completed throughout the project for compliance with FAA specifications;
- (s) Inspections: **CONSULTANT** shall conduct an inspection to determine if the work is substantially complete and a final inspection to determine if the completed work is acceptable to **OWNER, FAA** and other governing agencies so that **CONSULTANT** may recommend, in writing, final payment to Contractor(s) and may give written notice to **OWNER** and the Contractor(s) that the work is acceptable (subject to any conditions therein expressed), but any such recommendation and notice will be subject to the limitations expressed in the Master Agreement for Professional Services; and,
- (t) Limitation of Responsibilities: **CONSULTANT** shall not be responsible for the act or omissions of any Contractor, or of any subcontractor or supplier, or any of the Contractor(s)' or subcontractor's or supplier's agents or employees or any other persons (except **CONSULTANT's** own employees and agents) at the site or otherwise furnishing or performing any of the Contractor(s)' work; however, nothing contained in paragraphs a through m inclusive, shall be construed to release **CONSULTANT** from liability for failure to properly perform duties and responsibilities assumed by **CONSULTANT** in the Contract Documents.

- (6) **SPECIAL AND ADDITIONAL SERVICES:** The **CONSULTANT** shall perform the following Special Services as outlined in Exhibit A of the Master Agreement:
- (a) **Pre-Design Surveying Services:** Existing available mapping will be used to the greatest extent possible to develop base drawings used in the project formulation and pre-design of this project. Additional, detailed ground surveys will be performed to supplement existing data. Survey data collected will not be uploaded into AGIS. Design grade topographic survey will be based on NAVD 88 vertical datum. Surveying Services will also include Utility Locations of pre-marked utilities within the project area.
 - (b) **Pre-Design Geotechnical Investigation Services:** Pre-Design Geotechnical Investigation Services will be performed to provide design data and recommendations for ultimate design of project elements. Specific tasks include but are not limited to, soil identification, obtain subgrade properties for pavement design, and other geotechnical studies necessary to complete the project.
 - (c) **Wetland/Stream Permitting Services:** **CONSULTANT** will work jointly with a subconsultant to prepare the necessary wetland/stream permitting applications to the appropriate agencies. Includes Two (2) on-site meetings to be held with permitting agencies attended by subconsultant and **CONSULTANT**.
 - (d) **Resident Project Representative Services:** Provide full time resident project representative (RPR) services during construction. The representative is anticipated to be on the site an average as follows:
 - a. 50 hours per week for duration of project
 - i. 10 hours per week anticipated as overtime
 - b. The RPR will attend the Pre-Construction Conference.
 - c. Approximately 40 hours are anticipated for project closeout assistance.
 - d. Additional time is provided to the RPR for project initiation to become familiar with the project requirements and to mobilize to the project site.
 - e. Additional time, beyond standard contract time is provided to the RPR for project closeout tasks including demobilization from the project site.
 - f. Due to the nature of the project, the **CONSULTANT** will provide four (4) supplemental site visits, outside the regularly scheduled visits, in order to review and observe special site conditions.

- (e) **Quality Assurance Testing Services:** Provide subcontracted quality assurance testing services as necessary during construction in accordance with Construction Documents. These services include necessary testing coordination for QA as described in the following Technical Specification Sections: P-152, P-154, P-209, P-304, P-401, and P-501. This work will require a QA technician to be on-call (available within 4 hours' notice) during the majority of the earthwork operations and full-time during the pavement construction phase of the construction project.
- (f) **Prepare Construction Management Plan:** As per FAA guidelines, this project will require the submittal of a Construction Management Plan. The CONSULTANT will prepare the required document and submit to **FAA** and **OWNER**.
- (g) **Prepare Record Drawings:** Upon completion of construction and using documents provided by the contractor and a marked up set of plans by the RPR, the CONSULTANT will prepare a set of record drawings to reflect the final as-built condition. Plans will be prepared in AutoCAD format and electronic (PDF) copies and two (2) hard copies will be submitted to **FAA** and **OWNER**.

C. GENERAL ASSUMPTIONS

- i. Preliminary Design Phase
 - a. One (1) site visit is included in this Phase: Site visit upon completion of the survey and pre-design geotechnical investigation.
 - b. Preparation of preliminary documents (approx. 30%)
- ii. Design Development Phase
 - a. Construction Safety and Phasing Plans (CSPP) will be prepared and coordinated with FAA as appropriate.
 - b. Alternate bid schedules are not anticipated.
 - c. One (1) site visit is included in this Phase.
 - d. Preparation of design review documents (approx. 90%)
- iii. Design and Permitting Phase
 - a. Incorporate review comments for the preparation of final design documents.
 - b. Plan review meetings will be held via on-site meetings and conference calls.
 - c. The Design Phase ends upon submittal of "As-bid" Plans.

- iv. Bidding and Contract Formulation Phase
 - a. The cost of publishing the advertisement for bids in local publications is not included in this Work Authorization.
 - b. The cost of reproducing bid documents is not included. These costs will be passed onto potential bidders.
 - c. The Bidding Phase ends upon submission of the recommendation to award letter to the **OWNER**.
 - d. Three site visits are included in this Phase: Pre-bid conference and two (2) Bid Openings.
- v. Construction and Close-Out Services
 - a. Progress Meetings will be schedule on a bi-weekly basis.
 - b. Five (5) Supplemental Site visits will be scheduled.
- vi. Special and Additional Services
 - a. Pre-Design Geotechnical Investigation Services

Work will be performed in such a manner that the AOA will remain open to the fullest extent practical.
- vii. The following tasks are not included with this work authorization, but can be provided under a separate agreement as required or requested. This scope does not include:
 - a. Land acquisition professional services
 - b. Environmental Assessment Services
 - c. Grant Submittal: It is assumed the **OWNER** will coordinate submittal of the grants application documents and project funding requirements
 - d. Permitting Fees
 - e. Advertisement Costs: The **CONSULTANT** will distribute the electronic bid documents to Plan Rooms and it is assumed the **OWNER** will coordinate with the local newspaper and cover those publishing expenses associated with advertising the project for bids
 - f. The **CONSULTANT** will coordinate applicable permits and fees associated with obtaining applicable permits and it is assumed the **OWNER** will cover the permit fees
 - g. Preparation and establishment of the project MBE/WBE goals is not included with this scope, however participation with the established MBE/WBE goals will be incorporated into the bid documents

III. **CONSULTANT TEAM:**

Parrish and Partners of North Carolina, PLLC with assistance from:

- Terracon for Design level Geotechnical Investigation
- S&ME for on-call QA Testing services during construction
- Blue Ridge Land Surveying for Ground Survey
- Clearwater for Environmental Mitigation & Permit Packages

IV. SCHEDULE:

The following is the proposed project schedule after Notice to Proceed (NTP):

30% Design Complete	60 days (after geotech & survey)
Client/Agency Review (prelim review)	5 days
60% Design Complete	30 days
Client/Agency Review (60% review)	5 days
90% Design Complete	20 days (after E&S and SWM coordination)
Client/Agency Review (final review)	5 days
100% (As-Bid) Plans Complete	10 days
Total:	135 days
	*the reference to days for design assumes "working days"
Bidding Period (TBD)	21 days
Construction Contract Time	7 months (Pending Prelim Design)

V. PROJECT BUDGET:

The estimated overall project budget is ~~\$8.5 M~~ **\$10.7 M**. This includes associated professional services, subcontracted services, permitting/mitigation fees, construction costs, etc.

The **OWNER** agrees to compensate the **CONSULTANT** for services performed for the work described herein as summarized on the Work Authorization No. **2R** cover sheet and detailed in the attached Fee Spreadsheets as Attachment B **revised**.

VI. FEES:

Project Budget based on EXHIBIT C "Schedule of Fees" included as part of the original Agreement for Professional Services.

*This document is an attachment to be considered the detailed Scope of Services for Work Authorization No. **2R**, including the following attachments.*

- Attachments: Attachment B **revised** – Fee Spreadsheet(s)
 Attachment C **revised** – Subconsultant Proposals

ATTACHMENT B revised

Fee Spreadsheet(s)
8 Pages

PROJECT DESCRIPTION: AVL - Expand Terminal Apron - South (Approx. 13,500k SY)	DATE PREPARED: September 20, 2019
PREPARED BY: Parrish and Partners of North Carolina, PLLC	P&P PROJ NO: 1217 (WA#2R)

Professional Services Fee Summary			
	Original	Revised	Difference

Preliminary Design Phase			
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Labor	\$51,036.00	\$51,034.44	
Reimbursable Expenses	\$695.40	\$697.40	
SubTotal:	\$51,731.40	\$51,731.84	0%
USE -->	\$51,731.00	\$51,731.00	\$0.00

Design Development Phase			
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Labor	\$130,680.00	\$130,674.02	
Reimbursable Expenses	\$497.70	\$503.70	
SubTotal:	\$131,177.70	\$131,177.72	0%
USE -->	\$131,177.00	\$131,177.00	\$0.00

Design and Permitting Phase			
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Labor	\$104,832.00	\$104,827.63	
Reimbursable Expenses	\$497.70	\$501.70	
SubTotal:	\$105,329.70	\$105,329.33	0%
USE -->	\$105,329.00	\$105,329.00	\$0.00

Additional Scope Items (Design)			
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Labor	-	\$55,126.57	
Reimbursable Expenses	-	\$553.70	
SubTotal:	-	\$55,680.27	-
USE -->	-	\$55,680.00	\$55,680.00

Bidding Phase (w/Re-Bid)			
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Labor	\$14,129.00	\$21,806.43	
Reimbursable Expenses	\$695.40	\$893.10	
SubTotal:	\$14,824.40	\$22,699.53	53%
USE -->	\$14,824.00	\$22,699.00	\$7,875.00

Construction Phase Services (210 CD proj)			
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Labor	\$132,834.00	\$132,828.73	
Reimbursable Expenses	\$4,944.80	\$4,949.80	
SubTotal:	\$137,778.80	\$137,778.53	0%
USE -->	\$137,778.00	\$137,778.00	\$0.00

Special / Additional Services (210 CD for RPR)			
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Labor	\$174,640.00	\$174,646.33	
Subconsultant Costs	\$166,424.50	\$249,199.50	
Reimbursable Expenses	\$39,293.40	\$51,209.40	
SubTotal:	\$380,357.90	\$475,055.23	25%
USE -->	\$380,357.00	\$475,055.00	\$94,698.00

Total: \$821,199.90 \$979,452.46

Total WA No. 2 Amount (Original):	\$821,196.00
Total WA No. 2R Amount:	\$979,449.00

19%
\$158,253.00



PROJECT DESCRIPTION: AVL - Expand Terminal Apron - South (Approx. 13,500k SY)	DATE PREPARED: September 20, 2019
PREPARED BY: Parrish and Partners of North Carolina, PLLC	P&P PROJ NO: 1217 (WA#2R)

TASK NUMBER	BASIC SERVICES ENGINEERING SERVICES TASK DESCRIPTION	Employee Classifications						SUBTOTAL
		Principal	Proj. Manager/ Sr. Engineer	Engineer	Civil Associate	Technician	Technical Assistant	
TASKS								
Preliminary Design Phase								
1	General Project Coordination	4	8		10	4	10	36
2	Project Formulation & Scoping/Fee Preparation	2	4		2		4	12
3	Prepare and Coordinate Project Schedule		2		2			4
4	Coordinate Subconsultants		6		6		4	16
5	Site Visit / Owner Meeting (1 Trip, 2 staff)		8		8	2	2	20
6	Review Geotechnical Data		2		2	4		8
7	Review Owner Provided Survey Files		2		4	8		14
8	Prepare & Coord. Geometric Layout Alternatives		6		8	16		30
9	Prelim Coord w/ Drainage and E&SC Review Agency		4		6	8	2	20
10	Prepare 30% Plans							0
10a	Cover Sheet		2		2	6		10
10b	General and Safety Notes		2		6	8	2	18
10c	Construction Phasing Layout		6		10	12		28
10d	General Project Layout		4		8	16		28
10e	Geometric Layout		6		8	12		26
10f	Grading and Drainage Plan		6		16	12		34
10e	Typical Sections		2		8	8		18
11	Prepare Technical Specifications Outline		2		4		2	8
12	Prepare Preliminary Design Engineer's Report		4		8	4	6	22
13	Prepare Preliminary Engineer's Opinion of Costs	2	4		6	4	6	22
14	Follow-up / Verification Site Visit (1 Trip, 2 staff)		8		8	2	2	20
14	Quality Review and Revisions	2	4		4	8	2	20
15	Prepare and Submit Preliminary Review Documents		2		4		2	8
SUBTOTAL HOURS/CLASSIFICATION:		10	94	0	140	134	44	
BASIC HOURLY RATE		\$72.18	\$64.01	\$50.62	\$35.60	\$29.72	\$21.88	
TOTAL PER CLASSIFICATION		\$721.80	\$6,016.94	\$0.00	\$4,984.00	\$3,982.48	\$962.90	
Total Labor Cost (Without Multiplier)			\$16,668.12					

Audited Overhead Rate	180%	\$30,002.61	
Subtotal		\$46,670.72	(1)
Profit	9%	\$4,200.37	(2)
Cost of Capital	0.35%	163.35	(3)
TOTAL (1) + (2) + (3)		\$51,034.44	

NON-SALARY COSTS

A. Reimbursable Expense	Quantity	Unit	Rate	Subtotal
Mileage	520	Mile	\$0.545	\$283.40
Per Diem	2	Trip	\$56.00	\$112.00
Reproduction/Shipping	1	LS	\$302.00	\$302.00
TOTAL DIRECT NON-SALARY COST:				\$697.40

(2 Trips @ 260 mi./trip)

Prelim Design Services:	\$51,731.84
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Lump Sum Amount	\$51,731.00
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PROJECT DESCRIPTION: AVL - Expand Terminal Apron - South (Approx. 13,500k SY)	DATE PREPARED: September 20, 2019
PREPARED BY: Parrish and Partners of North Carolina, PLLC	P&P PROJ NO: 1217 (WA#2R)

TASK NUMBER	BASIC SERVICES ENGINEERING SERVICES TASK DESCRIPTION	Employee Classifications						SUBTOTAL
		Principal	Proj. Manager/ Sr. Engineer	Engineer	Civil Associate	Technician	Technical Assistant	
TASKS								
Design Development Phase								
1	Project Coordination	4	8	6		6	6	30
2	Site Visit / Site Walkover (1 Trip, 2 staff)		8	8		2	2	20
3	Initial Pavement Design	2	2	6	4		2	16
4	Drainage System Review / Design		4	6	4	4		18
5	Prepare 60% Review Documents							0
5a	Cover Sheet		4	4	2	6	2	18
5b	Summary of Quantities		6	12	6	12	2	38
5c	General Notes		2	4		8	2	16
5d	Project Layout		2	2	4	10		18
5e	Construction Safety and Phasing Plan	4	10	16	12	30	4	76
5f	Existing Conditions		4	6	8	16		34
5g	Typical Sections		4	4	4	12		24
5h	Geometric Layout and Demolition Plan		8	10	8	16		42
5i	Grading and Drainage Plan	2	16	24	16	40		98
5j	Concrete Joint Layout	2	6	8	6	20		42
5k	Drainage Layout Plan		4	10	6	12		32
5l	Erosion Control Plans & Details	2	6	10	6	14		38
5m	Miscellaneous Details		4	8	8	12		32
5n	Marking Plans and Details		4	10	6	12		32
5o	Lighting Plans and Details		8	12	10	16		46
5p	MSE Retaining Wall Plans and Details		6	8	8	12		34
6	Incorporate Review Comments		4	10	6	16	4	40
7	Draft General Project Specifications	2	6	8	6		16	38
8	Draft Special Provisions		4	10			12	26
9	Draft Technical Specifications	2	6	16	6		24	54
10	Stormwater Management Design	2	6	20	8	6	2	44
11	Prepare Design Engineer's Report	2	8	16	4	6	10	46
12	Prepare Construction Quantities (60% level)		2	8	6	8	2	26
13	Prepare Engineer's Opinion of Const. Costs (60% level)	2	2	8		6	2	20
14	Quality Control Review	2	2	6	4		4	18
SUBTOTAL HOURS/CLASSIFICATION:		28	156	276	158	302	96	
BASIC HOURLY RATE		\$72.18	\$64.01	\$50.62	\$35.60	\$29.72	\$21.88	
TOTAL PER CLASSIFICATION		\$2,021.04	\$9,985.56	\$13,971.12	\$5,624.80	\$8,975.44	\$2,100.86	
TOTAL LABOR COSTS			\$42,678.82					

Audited Overhead Rate	180%	\$76,821.88		
Subtotal		\$119,500.71	(1)	
Profit	9%	\$10,755.06	(2)	
Cost of Capital	0.35%	418.25	(3)	
TOTAL (1) + (2) + (3)		\$130,674.02		

NON-SALARY COSTS

A. Reimbursable Expense	Quantity	Unit	Rate	Subtotal
Mileage	260	Mile	\$0.545	\$141.70
Per Diem	1	Trip	\$56.00	\$56.00
Reproduction/Shipping	1	LS	\$306.00	\$306.00
TOTAL DIRECT NON-SALARY COST:				\$503.70

(1 Trip @ 260 mi./trip)

Design Development Services:	\$131,177.72
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Lump Sum Amount	\$131,177.00
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PROJECT DESCRIPTION: AVL - Expand Terminal Apron - South (Approx. 13,500k SY)	DATE PREPARED: September 20, 2019
PREPARED BY: Parrish and Partners of North Carolina, PLLC	P&P PROJ NO: 1217 (WA#2R)

TASK NUMBER	BASIC SERVICES ENGINEERING SERVICES TASK DESCRIPTION	Employee Classifications						SUBTOTAL
		Principal	Proj. Manager/ Sr. Engineer	Engineer	Civil Associate	Technician	Technical Assistant	
TASKS								

Design and Permitting Phase								
1	Project Coordination	4	8	6		6	6	30
2	Prepare and Coordinate E&SC Plans for Permit/Approval		4	4	16	12	4	40
3	Prepare and Coordinate SWM Plan for Permit/Approval		6	4	18	12	6	46
4	Final Pavement Design		2	4	2		2	10
5	Prepare 90% Review Documents							
5a	Cover Sheet				2	4	2	8
5b	Summary of Quantities		2	2	4	8	2	18
5c	General Notes			2		6	2	10
5d	Project Layout		2	2	2	12		18
5e	Construction Safety and Phasing Plan	2	4	6	6	12	2	32
5f	Existing Conditions			2	2	6		10
5g	Typical Sections		2	2	2	6		12
5h	Geometric Layout and Demolition Plan		4	8	6	16		34
5i	Grading and Drainage Plan	2	8	10	12	16		48
5j	Concrete Joint Layout		4	6	6	8		24
5k	Drainage Layout Plan		2	6	4	8		20
5l	Erosion Control Plans & Details		4	6	4	8		22
5m	Miscellaneous Details		2	2	2	6		12
5n	Marking Plans and Details		2	2	2	6		12
5o	Lighting Plans and Details		2	4	4	6		16
5p	MSE Retaining Wall Plans and Details		4	6	4	8		22
5q	Cross Sections		4	8	6	8		26
6	Site Visit / Site Walkover (1 Trip, 2 staff)		8	8		2	2	20
7	Incorporate Review Comments		6	8	12	16	4	46
8	Prepare 100% (As-Bid) Documents	4	8	16	16	20	6	70
9	General Specifications & Contract Documents	2	4	8	4		12	30
10	Special Provisions	2	4	6	2		6	20
11	Technical Specifications	2	6	12	6		12	38
12	Final Design Engineer's Report	2	8	16	4	6	10	46
13	Airspace Coordination (7460) via OE/AAA		4	8	4	4	6	26
14	Prepare Construction Quantities		2	8	6	8	2	26
15	Prepare Engineer's Opinion of Construction Costs		4	6		8	2	20
16	Quality Control Review	2	4	4		8	6	24

SUBTOTAL HOURS/CLASSIFICATION:	22	124	192	158	246	94
BASIC HOURLY RATE	\$72.18	\$64.01	\$50.62	\$35.60	\$29.72	\$21.88
TOTAL PER CLASSIFICATION	\$1,587.96	\$7,937.24	\$9,719.04	\$5,624.80	\$7,311.12	\$2,057.10
TOTAL LABOR COSTS		\$34,237.26				

Audited Overhead Rate	180%	\$61,627.06	
Subtotal		\$95,864.32	(1)
Profit	9%	\$8,627.79	(2)
Cost of Capital	0.35%	335.53	(3)
TOTAL (1) + (2) + (3)		\$104,827.63	

NON-SALARY COSTS

A. Reimbursable Expense	Quantity	Unit	Rate	Subtotal
Mileage	260	Mile	\$0.545	\$141.70
Per Diem	1	Trip	\$56.00	\$56.00
Reproduction/Shipping	1	LS	\$304.00	\$304.00
TOTAL DIRECT NON-SALARY COST:				\$501.70

(1 Trip @ 260 mi./trip)

Design & Permitting Services:	\$105,329.33
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Lump Sum Amount	\$105,329.00
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PROJECT DESCRIPTION: AVL - Expand Terminal Apron - South (Approx. 13,500k SY)	DATE PREPARED: September 20, 2019
PREPARED BY: Parrish and Partners of North Carolina, PLLC	P&P PROJ NO: 1217 (WA#2R)

TASK NUMBER	SPECIAL SERVICES ENGINEERING SERVICES TASK DESCRIPTION	Employee Classifications								SUBTOTAL
		Principal	Proj. Manager/ Sr. Engineer	Engineer	Civil Associate	Technician	Technical Assistant	Resident Project Representative Regular Time	Resident Project Representative Over Time	
TASKS										
Special / Additional Services (210 CD for RPR)										
RPR Services										
1	Attend Pre Construction Conference (1)							12		12
2	Project Initiation and Mobilize to Project Site							24		24
3	Project Inspection - Contract time 210 Days => 30 Weeks (@ 50 hrs / Week)							1200	300	1500
4	Project Closeout (1 Week)							40		40
5	Demobilize from Project Site							12		12

SUBTOTAL HOURS/CLASSIFICATION:	0	0	0	0	0	0	1288	300	
BASIC HOURLY RATE							\$39.02	\$47.15	
TOTAL PER CLASSIFICATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50,257.76	\$14,145.00	
TOTAL LABOR COSTS		\$64,402.76							
Audited Overhead Rate	125%	\$80,503.45							
Subtotal		\$144,906.21	(1)						
Profit	9%	\$13,041.56	(2)						
Cost of Capital	0.35%	507.17	(3)						
TOTAL (1) + (2) + (3)		\$158,454.94							

NON-SALARY COSTS

A. Reimbursable Expense	Quantity	Unit	Rate	Subtotal
Gas Reimb; 4WD Truck (20 mi/day @ 216 days)	4,320	Mile	\$0.20	\$864.00
Gas Reimb; 4WD Truck (mob/de-mob)	260	Mile	\$0.20	\$52.00
CEI - 4WD Truck (210 + 3 pre + 3 post)	216	Days	\$50.00	\$10,800.00
GSA Per Diem (210 + 3 pre + 3 post)	216	Days	\$178.00	\$38,448.00
Printing/Reproduction	1	LS	\$150.00	\$150.00
Supplies	1	LS	\$300.00	\$300.00
TOTAL DIRECT NON-SALARY COST:				\$50,614.00

RPR Services:	\$209,068.94
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Subconsultant and Additional Services											
1	Coordinate Pre-Design Surveying Sub									Included with Basic Services	0
2	Coordinate Pre-Design Geotechnical Sub									Included with Basic Services	0
3	Coordinate Wetland/Stream Permitting Sub									Included with Basic Services	0
3a	Attend On-Site Mtgs w/ Permit Agency & Sub (2 Trips)		16		16						32
4	Prepare Construction Management Plan		6	2	16	6					30
5	Prepare Record Drawings (As-Builts)		6	8	12	36	8				70

SUBTOTAL HOURS/CLASSIFICATION:	0	28	10	44	42	8	0	0	
BASIC HOURLY RATE	\$72.18	\$64.01	\$50.62	\$35.60	\$29.72	\$21.88			
TOTAL PER CLASSIFICATION	\$0.00	\$1,792.28	\$506.20	\$1,566.40	\$1,248.24	\$175.07	\$0.00	\$0.00	
TOTAL LABOR COSTS		\$5,288.19							
Audited Overhead Rate	180%	\$9,518.75							
Subtotal		\$14,806.94	(1)						
Profit	9%	\$1,332.62	(2)						
Cost of Capital	0.35%	51.82	(3)						
TOTAL (1) + (2) + (3)		\$16,191.39							

NON-SALARY COSTS

A. Reimbursable Expense	Quantity	Unit	Rate	Subtotal
Mileage	520	Mile	\$0.545	\$283.40
Per Diem	2	Trip	\$56.00	\$112.00
Reproduction/Shipping	1	LS	\$200.00	\$200.00
B. Subconsultant Fees				
Pre-Design Surveying - Blue Ridge Land Surveying	1	LS	\$8,570.00	\$8,570.00
Pre-Design Geotech - Terracon	1	LS	\$36,995.00	\$36,995.00
Wetland/Stream Permitting - ClearWater Enviro	1	LS	\$20,000.00	\$20,000.00
As-Built Survey - Blue Ridge Land Surveying	1	LS	\$5,730.00	\$5,730.00
QA Testing Services - S&ME	1	LS	\$155,250.00	\$155,250.00
Subconsultant Fixed Fee	1	LS	\$22,654.50	\$22,654.50
TOTAL DIRECT NON-SALARY COST:				\$249,794.90

(2 Trips @ 260 mi./trip)

Subconsultant / Additional Services:	\$265,986.29
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Lump Sum Amount	\$475,055.00
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ATTACHMENT C revised

Subconsultant Proposals:

Terracon

Blue Ridge Land surveying

ClearWater Environmental

S&ME

23 Pages

October 9, 2018



Parrish and Partners, LLC
11325 N. Community House Road, Suite 260
Charlotte, NC 28277

Attn: Mr. Jon M. McCalmont, P.E. – Senior Project Manager
P: (980) 819 0440
E: jmccalmont@parrishandpartners.com

Re: Proposal for Geotechnical Engineering Services
Asheville Airport Apron Expansion
61 Terminal Drive
Fletcher, North Carolina
Terracon Proposal No. P71185182

Dear Mr. McCalmont:

We appreciate the opportunity to submit this proposal to Parrish and Partners, LLC (Parrish) to provide Geotechnical Engineering services for the above referenced project. The following are exhibits to the attached Agreement for Services.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location
Exhibit E	Anticipated Exploration Plan

Our base fee to perform the Scope of Services described in this proposal is \$36,995. See Exhibit C for more details of our fees and consideration of additional services.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by signing and returning a copy of the attached Agreement for Services to our office.

Sincerely,
Terracon Consultants, Inc.


Preston D. McCloud, P.E.
Project Engineer


David J. Corley, P.E.
Regional Services Manager

Terracon Consultants, Inc. 2701 Westport Road Charlotte, NC 28208
P (704) 509-1777 F (704) 509-1888 terracon.com

Environmental

Facilities

Geotechnical

Materials

EXHIBIT A - PROJECT UNDERSTANDING

Our Scope of Services is based on our understanding of the project as described by Parrish and the expected subsurface conditions as described below. We have not visited the project site to confirm the information provided. Aspects of the project, undefined or assumed, are highlighted as shown below. We request the design team verify all information prior to our initiation of field exploration activities.

Site Location and Anticipated Conditions

Item	Description
Parcel Information	The project is located at 61 Terminal Drive in Fletcher, North Carolina. (See Exhibit D)
Existing Improvements	Parking and drive areas, taxiways, and aprons
Current Ground Cover	Asphalt paving and grass
Site Access	We expect the site, and all exploration locations, are accessible with our ATV-mounted drilling equipment.
Expected Subsurface Conditions	Our experience near the vicinity of the proposed development indicates subsurface conditions consist of residual soils typical of the Blue Ridge Physiographic Province of North Carolina.

Planned Construction

Item	Description
Information Provided	Site layout provided via email on October 3, 2018.
Project Description	The proposed project consists of the extension of the existing apron to the south and the construction of a retaining wall.
Grading/Slopes	We anticipate the apron expansion will be at the same grade as the existing apron, approximately 2,140 feet MSL. Up to approximately 30 feet of fill will be required to develop final grade.
Free-Standing Retaining Walls	Retaining walls are expected to be constructed as part of site development to achieve final grades. Wall heights of up to 30 feet are anticipated. Final heights and locations were not available at the time of this proposal. We anticipate the wall will consist of a mechanically stabilized earth wall.

EXHIBIT B - SCOPE OF SERVICES

Our proposed Scope of Services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

Parrish prescribed the following number of borings. Terracon proposes the following locations and depths:

Number of Borings	Planned Boring Depth (feet) ¹	Planned Location
10	10 to 60 or auger refusal	Proposed apron expansion area
4	60 or auger refusal	Proposed retaining wall area

1. Below ground surface.

Boring Layout and Elevations: We will use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-20 feet. Field measurements from existing site features may be utilized. If available, approximate elevations will be obtained by interpolation from a site specific, surveyed topographic map.

Subsurface Exploration Procedures: We will advance soil borings with an ATV-mounted drill rig using continuous flight augers. Four samples will be obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is typically performed using split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). The samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a Geotechnical Engineer. In addition, we will observe and record groundwater levels during drilling and sampling.

Our field engineer will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials encountered during drilling, and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the Geotechnical Engineer's interpretation, and include modifications based on observations and laboratory tests.

Property Disturbance: We will backfill borings with auger cuttings upon completion. Pavements will be patched with cold-mix asphalt. Our services do not include repair of the site beyond backfilling our boreholes, and cold patching existing pavements. Excess auger cuttings will be dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary. For additional fees, we can provide this service, or grout the boreholes, at your request.

Safety

Terracon is not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our Scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our Scope of Services does not include environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings into the subsurface, therefore Terracon will comply with local regulations to request a utility location service through NC811's One-Call service. We will consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we will consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

Private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities that are not made aware to us. Terracon will contract with a private utility locator to assist with the location of private utilities on site. Fees associated with the additional services are included in our proposed scope of services. The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

Site Access: Terracon must be granted access to the site by the property owner. By acceptance of this proposal, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the Scope of Services.

Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. Exact types and number of tests cannot be defined until completion of field work. The anticipated laboratory testing may include the following:

- Water content
- Atterberg limits
- CU triaxial testing
- Grain size analysis
- Standard proctor
- California bearing ratio (CBR)

Our laboratory testing program often includes examination of soil samples by an engineer. Based on the material's texture and plasticity, we will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations necessary to evaluate foundation alternatives, and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our **GeoReport®** system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When utilized, our collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.

When services are complete, we upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during and after the completion of drilling
- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Estimated settlement of fills
- Recommendations for design and construction of pavements
- Subgrade preparation/earthwork recommendations
- Lateral earth pressure recommendations
- Recommendations for design and construction of retaining walls

Additional Services

In addition to the services noted above, the following are often associated with geotechnical engineering services. Fees for services noted above do not include the following:

Observation and Testing of Pertinent Construction Materials: Development of our geotechnical engineering recommendations and report relies on an interpretation of soil conditions. This is based on widely spaced exploration locations, and assuming construction methods will be performed in a manner sufficient to meet our expectations, and is consistent with recommendations made at the time the geotechnical engineering report is issued. We should be retained to conduct construction observations, and perform/document associated materials testing, for site preparation, foundation, and pavement construction. This allows a more comprehensive understanding of subsurface conditions and necessary documentation of construction, to confirm and/or modify (when necessary) the assumptions and recommendations made by our engineers.

EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

Compensation

Based upon our understanding of the site, the project as summarized in Exhibit A, and our planned Scope of Services outlined in Exhibit B, our base fee is shown in the following table:

Task	Lump Sum Fee
Subsurface Exploration, Utility locate, Laboratory Testing, Geotechnical Consulting & Reporting	\$36,995

Additional services not part of the base fee include the following:

Additional Services	Estimated Fee
Construction Materials Testing Services ¹	\$200k – 300k

1. This fee estimate is based on the provided 7-month work schedule. If the construction schedule is anticipated to be different, we should be notified in order to re-evaluate the estimated fee.

Our Scope of Services does not include services associated with site clearing, wet ground conditions, tree or shrub clearing, or repair of/damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our Scope of Services.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require Scope of Services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified Scope of Services as well as its effect on our fee will be prepared. We will not proceed without your authorization.

Project Schedule

We developed a schedule to complete the Scope of Services based upon our existing availability and understanding of your project schedule. However, this does not account for delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

GeoReport® Delivery	Posting Date from Notice to Proceed^{1, 2}
Project Planning	2 working days
Site Characterization	20-25 working days
Geotechnical Engineering	25-30 working days

1. Upon receipt of your notice to proceed we will activate the schedule component of our **GeoReport®** website with specific, anticipated calendar days for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.
2. We will maintain a current calendar of activities within our **GeoReport®** website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.

EXHIBIT D – SITE LOCATION

Asheville Airport Apron Expansion ■ Fletcher, North Carolina
October 9, 2018 ■ Terracon Proposal No. P71185182



DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

EXHIBIT E – ANTICIPATED EXPLORATION PLAN

Asheville Airport Apron Expansion ■ Fletcher, North Carolina

October 9, 2018 ■ Terracon Proposal No. P71185182

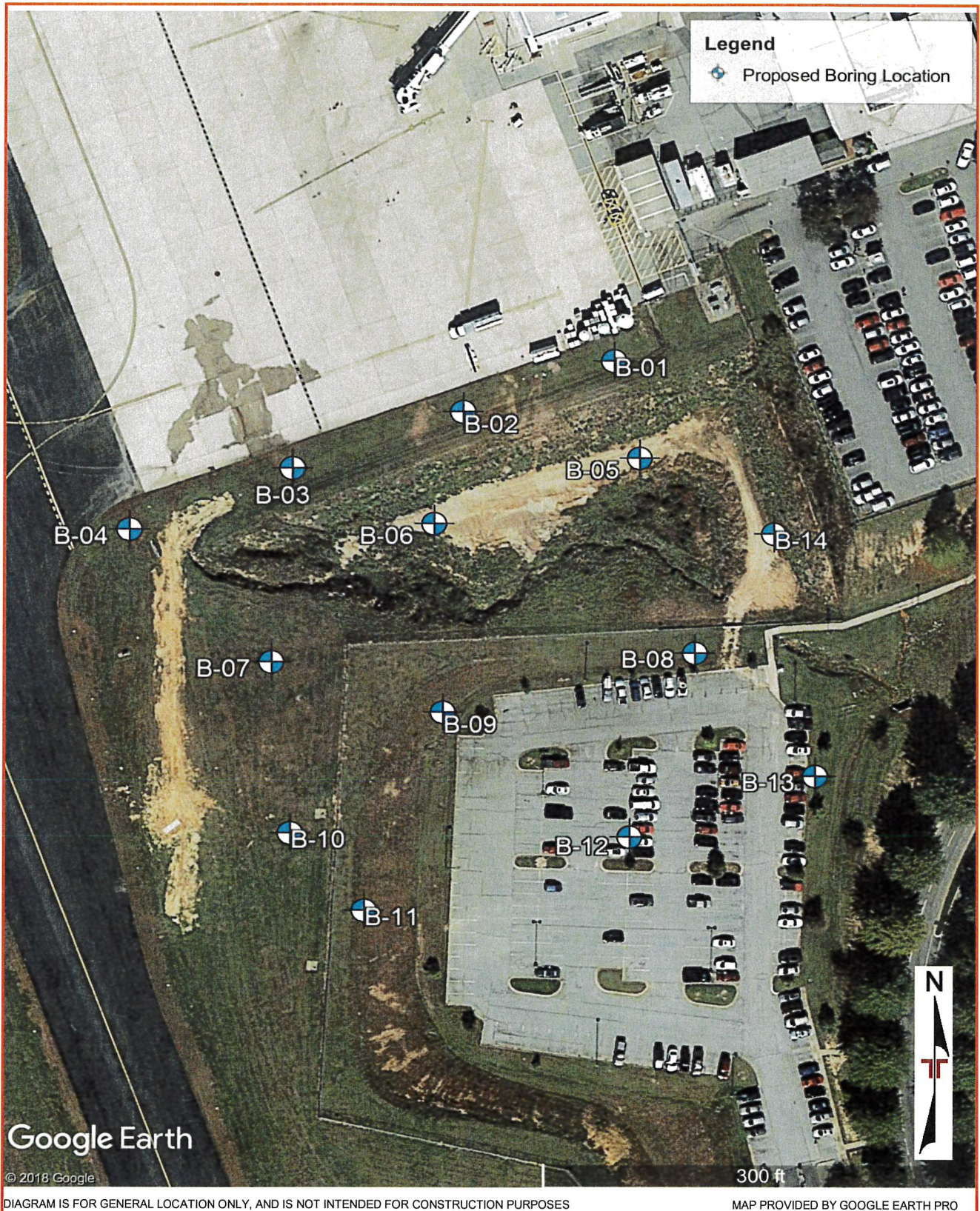
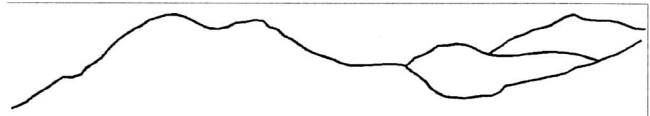


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY GOOGLE EARTH PRO



BLUE RIDGE LAND SURVEYING, inc.

P.O. Box 3091, Asheville, North Carolina, 28802
Phone: 828-252-6092

October 12, 2018

Jon McCalmont
Parrish & Partners
Asheville Regional Airport

Jon,

I just finished researching the area at the Asheville Regional Airport for a topographic survey. We will be doing the following:

- Tie the topographic survey to the state plan coordinate system for northern and easting coordinates and mean sea level elevations.
- Take elevations as requested over the project area as outlines on both maps we received by e-mail.
- Locate all improvements such as pavement edges, concrete, fences, drainage features with inverts and sizes, trees, curb & gutter and other above ground features.
- Calculate the contours on 2 foot intervals.
- Show spot elevations over the flatter areas and along the 25' strip as shown at 5 foot intervals on the map we received by e-mail.
- Establish three bench marks outside the project area.
- Provide two AutoCAD files:
 - AVL_South_Apron-model.dwg – This will be for the topographic data.
 - AVL_South_Apron-Planimetrics.dwg – This will contain the 2d planimetric data.
- Deliver 3 bond copies of the maps, a PDF digital file and the AutoCAD .dwg files.

The above will cost \$ 8,570.00. We accept all credit cards by phone or a check by mail. Currently, our next opening is during the first week in November. We can hold a number of days open during the middle of November for this project. This will be invoiced when the maps are delivered.

- During construction, be available for on-call grade verification.

This will cost \$ 2,340.00. This will be invoiced at the completion of construction.

- Provide an as-built survey of the site at the completion of the construction.

This will cost \$ 3,390.00. This will be invoiced when the maps are delivered.

The North Carolina Utility Locator Service (811) will not locate underground utilities on the airport property. I would think the airport would have as-built maps showing the underground utilities. We do not have the equipment or experience to do any underground locating. All above ground visible utilities will be located.

Sanitary sewer manholes, pipes and inverts will be located. All storm water structures will be located with pipe material, sizes and inverts.

We have not worked on the Asheville Regional Airport property, this will be the first. We will need an escort while inside the airport fence

We look forward to assisting you in this project.

Sincerely,

Kenneth T. Mills, PLS
L-2411



ClearWater Environmental Consultants, Inc.
www.cwenv.com

October 10, 2018

Jon McCalmont
Senior Project Manager
Parrish and Partners of North Carolina, PLLC
11325 N. Community House Rd., Suite 260
Charlotte, NC 28277

**Re: Proposal for Environmental Permitting Services
Apron Expansion
Buncombe County, North Carolina**

Dear Mr. McCalmont,

ClearWater Environmental Consultants, Inc. (CEC) appreciates the opportunity to submit this proposal regarding environmental consulting services associated with the proposed airfield redevelopment program. CEC believes that the following tasks will be required for this project.

Task 1 Permitting

ClearWater Environmental Consultants, Inc. will assist the client and other project team members in preparation and submittal of necessary state and federal permit applications for the proposed impacts to streams and wetlands for this project. Specifically, ClearWater Environmental Consultants, Inc., proposes the following:

- Submitting a 404/401 permit application for the Apron Expansion.
- Attendance at preliminary meetings with the project team to discuss plans and environmental concerns.
- Coordination with project planners and engineers in preparation of a preliminary impact plan.
- Coordination of and attendance at a pre-application on-site agency meeting with the commenting state and federal agencies.
- Preparation and submittal of the necessary permit application to the US Army Corps of Engineers (USACE) and NC Division of Water Resources (DWR).
- Calculation and identification of appropriate conceptual mitigation plan based upon final impacts. (It is our understanding that final mitigation plans will be done as a separate project).

- Coordination with the various state and federal agencies throughout the permit process to an initial conclusion by NCDWR and the USACE.

As you are aware, projects that require an Individual Permit rather than a Nationwide Permit may require additional time and effort to successfully complete and it is almost impossible to determine at this time what the total jurisdictional impact will be or the number of meetings that will be required to successfully complete the permitting process. CEC proposes to complete this permitting task on a Time and Expense basis estimated at twenty thousand (\$20,000.00) dollars at our standard rates of charge, listed below. If it appears that additional effort may be required because of special circumstances or agency requests, CEC will coordinate with you regarding any additional costs.

Principal	- \$130.00 per hour
Project Manager	- \$100.00 per hour
Project Biologist	- \$85.00 per hour
Administrative	- \$25.00 per hour

Task 2 Cultural Resources

As part of the Section 404 permitting process, the N.C. Department of Cultural Resources may require that a survey be conducted to determine the presence of significant cultural and/or historical resources. CEC will assist you in obtaining estimates for this work if requested.

Task 3 Meetings and Additional Services

CEC personnel will attend meetings as required by you to discuss this project and matters related to environmental permitting. This task includes additional services outside the scope of the above-detailed tasks as requested by you or your authorized representatives. Services provided by CEC under Task 3 will be billed on a time and expense basis as per the above-mentioned Fee Schedule.

The N.C. Division of Water Resources (DWR) adopted fees for the 401 Water Resources certification program. Fees for "Major Water Quality Certification" (defined as those with more than one acre of wetland and/or more than 150 feet of stream impact) will have a fee of \$570.00. Your check should be made to the N.C. Division of Water Resources. Please forward this check, so that it may be included with the application.

All other expenses, surveying costs, communications, printing and travel in connection with this project will be billed to the client at cost. **Please be aware that this price *does not* include costs incurred for any engineering, mitigation, archeology, permit fees, mailing/printing costs or registered land surveyor services.**

Jon McCalmont
October 10, 2018
Page 3 of 3

CEC will execute the work for this project in a professional and timely manner. In turn, CEC expects payment to be made as follows:

Payment will be considered overdue after thirty (30) days from the date of the invoice and 1.5% interest per month is automatically added. If this payment arrangement is not adhered to, all work will cease until payment is received.

Either the client or CEC may terminate this Agreement at any time with or without cause upon giving the other party three (3) calendar days prior written notice. The client shall within fifteen (15) calendar days of termination pay CEC for all services rendered and all costs incurred up to the date of termination, in accordance with the compensation provisions of this contract. This proposal is valid until December 31, 2018.

CEC does not guarantee the issuance of any permit or approval. Please sign this original agreement and return to CEC as an act of acceptance and notification for us to begin work.

Please do not hesitate to contact me at (828) 698-9800 if you have any questions or comments regarding the proposed scope of services.

Sincerely,



R. Clement Riddle, P.W.S.
Principal

The prices, specifications, and conditions of this proposal are satisfactory and are hereby accepted. The undersigned is the owner or has permission from the owner to authorize ClearWater Environmental Consultants, Inc, to complete the work specified in this proposal and has the necessary authority to grant ClearWater Environmental Consultants, Inc, access to the subject property to complete any and all studies or investigations and make any necessary submittals or applications to complete this work. Please sign this original agreement and return to ClearWater Environmental Consultants, Inc., as an act of acceptance and notification for ClearWater Environmental Consultants, Inc. to begin work. Payment will be made as outlined above.

DATE:

ACCEPTED BY:

PRINTED NAME:

BILLING ADDRESS:



August 16, 2019

Parrish and Partners, LLC
11325 N. Community House Rd., Suite 260
Charlotte, North Carolina 28277

Attention: Mr. Jon M. McCalmont, PE

Reference: **Proposal for Quality Assurance Testing (Revision)**
Terminal Apron Expansion - South
Asheville Regional Airport
S&ME Proposal No. 33-1800316r1

Dear Mr. McCalmont:

S&ME, Inc. (S&ME) appreciates the opportunity to submit this proposal for the above referenced project. This proposal describes our understanding of the project, discusses the intended scope of our services, and presents the associated compensation for our services. Our Agreement for Services (Form AS-071) is attached to this proposal and is incorporated as part of the proposal by reference. This revised proposal replaces the previous version dated June 26, 2019.

◆ Project Information

Project information was originally provided to Mr. John Weavil, P.E. of S&ME, through several emails and phone calls from Mr. Hunter Boniface of Parrish and Partners, LLC, between October 22, 2018 and May 30, 2019. Attached to one of those emails was an aerial photograph detailing the proposed location of the expansion, prepared by Parrish and Partners and provided on October 22, 2018. As indicated in the email from Mr. Boniface on October 22, 2018, we understood the project duration was originally expected to be approximately 7 months; however, based on recent correspondence, we understand the project duration has been revised to 15 months. Based on the project summary of quantities provided, unclassified embankment is planned to require 150,000 cubic yards of material (including a two-tiered modular retaining wall), requiring testing according to the FAA specifications for P-152 and/or P-154. Aggregate base course is planned to require nearly 3,500 cubic yards of material, and require FAA specifications for P-209. Cement treated base, and concrete pavements areas are anticipated to cover approximately 14,100 square yards and require FAA specifications for P-501 and P-304. As a bid alternate, we understand that per FAA specifications, 14,100 square yards of Lean Concrete Base Course (P-306) and 4,900 tons Asphalt Mix Pavement Base Course (P-403) is also being considered.

Between August 1 to August 12, 2019, we received several emails from Mr. Boniface containing links to the project drawings and addendums 1 through 4. Based on our conversations and the information provided, we have prepared this proposal for Part-Time Quality Assurance (QA) testing during construction.



◆ Scope of Services

Based on the information provided, we anticipate the following services may be required. Testing will be performed in general accordance with the applicable ASTM and/or FAA standards, unless noted otherwise. We understand the Contractor will be required to provide Quality Control testing as part of their work. Our Acceptance Testing will be generally more of a random sampling, and in some instances may result in fewer tests than the Contractor's Quality Control testing, and as instructed for this proposal.

Subgrade Evaluations and Engineered Fill Testing (Item P-152)

Our personnel can visually evaluate subgrade soil conditions prior to proceeding with the placement of fill and/or P-209 aggregate base course for the new apron. These services can be performed to aid in identifying possible unsuitable near-surface soil conditions requiring repair prior to continued construction. The evaluations may consist of proofrolling, test pit observations, probing, and/or hand auger borings with Dynamic Cone Penetrometer testing. Recommendations for subgrade repair can also be made, if necessary. These services also include monitoring undercutting of the subgrade soils where required.

Our services during fill placement can consist of observations and the performance of field density testing in conjunction with the Quality Control testing firm to measure the degree of compaction for material placed in the following locations for compliance with the project plans and specifications:

- ◆ Proposed permanent apron;
- ◆ Utility line trenches;
- ◆ Embankments;
- ◆ Retaining wall backfill; and
- ◆ Safety Areas.

Density testing can be performed by sand cone (ASTM D1556), and/or nuclear gauge (ASTM D6938) methods. Laboratory testing can include modified Proctor (ASTM D1557) moisture-density relationships, grain size distribution, and Atterberg limits tests on the different materials used as fill as necessary.

Subbase Course (P-154)

Material Properties

- Determine the laboratory compaction characteristics of the soil in accordance with ASTM D1557.

Fill Placement and Testing for In-Place Density

- Perform density testing on soil fill in accordance with ASTM D 1556, ASTM D 2167, or ASTM D 6938.

Crushed Aggregate Base Course (Item P-209)

- Our services for the crushed aggregate base course can include in-place density testing in accordance with the nuclear method (ASTM D6938).



- Laboratory testing can include modified Proctor testing (ASTM D1557).

Cement-Treated Base Course (P-304)

Material Properties

- Determine the laboratory compaction characteristics of the soil in accordance with ASTM D558.

Sampling and Testing for In-Place Density

- Perform in-place density testing in accordance with ASTM D 1556 and/or ASTM D 6938.

Lean Concrete Base Course Testing (Item P-306):

Sampling and Testing for Compressive Strength

- Sample fresh concrete for slump, air content, temperature and unit weight tests, and preparing compressive strength test specimens for each sample.
- After initial curing on-site, the specimens will be transported to our facility for additional laboratory curing and compressive strength testing.

Thickness Checks

- Measure thickness of concrete cores at two locations for each 1200 square yards of concrete placed. Per project specifications, the contractor is responsible for coring the concrete.

Asphalt Base Course Testing Services (Item P-403):

Our personnel can perform laboratory acceptance sampling and testing of hot mix asphalt (HMA) during paving operations. Laboratory testing can consist of the following:

- Random sampling of the plant-produced HMA in accordance with ASTM D979;
- Determination of air voids in accordance with ASTM D3203;
- Bulk specific gravity testing of air void specimens in accordance with ASTM D2726;
- Thickness measurements of mat cores and joint cores; and
- Bulk specific gravity testing of mat cores and joint cores in accordance with ASMT D2726.

The contractor shall obtain the cores for bulk specific gravity testing in accordance with the project specifications. Asphalt testing will be performed in accordance with Item P-403 of the project specifications.



Portland Cement Concrete Pavement (P-501)

Sampling and Testing for Flexural Strength

- One sample of fresh concrete will be obtained for each subplot of the concrete delivered to the site and tested for slump, air content, temperature and unit weight tests, and preparing two (2) flexural strength beams per sample.
- The cured concrete specimens will be weighed and measured for determination of the sample unit weight and tested for flexural strength at 28 days.

Thickness Checks

- Measure thickness of concrete cores for each lot. Per project specifications, the contractor is responsible for coring the concrete.

Mix Design Review

As requested in the Request for Proposal email, our services will also include the review of the contractor's mix designs for Cement Treated Aggregate Base Course, Lean Concrete Base Course, Asphalt Mix Pavement Base Course, and/or Cement Concrete Pavement, depending on the approval of alternates. Please note that our services will only include the review and approval in general accordance with the project specifications for each type of material and does not include the performance of any laboratory or field testing of the material or its components required for submittal with each type of mix design.

Retaining Wall Construction Shop Drawing Review

As requested in the Request for Proposal email, our services will also include the review of the contractor's retaining wall submittal, containing the retaining wall design engineer's construction shop drawings. Please note that our services will only include the review of the shop drawings in general accordance with the industry standards and project specifications and does not include the performance of any laboratory testing, field exploration, or design calculations including global stability.

◆ Excluded Services

Without attempting to provide a complete list of all services or potential services that will be excluded from this proposal and not performed by S&ME, the following services are specifically excluded from this proposal. Some of these services can be performed by S&ME if desired; however, a separate or revised proposal for these services would be required.

- Directing of any contractor's or subcontractor's work;
- Any aspect of site safety other than safety of S&ME employees;
- Observation of erosion control measures;
- Coring of asphalt or concrete;
- Retaining wall inspections;
- Environmental assessments;



- Quality Control Testing;
- Surveying.

◆ Client Responsibilities & Proposal Use

We request that our Client be responsible for the following:

- Providing S&ME with a complete set of project plans and specifications prior to the performance of our services for this project;
- Providing S&ME with revised project plan sheets and/or specifications, Requests for Information (RFIs), or other items relevant to our scope of work throughout the duration of this project;
- Providing S&ME with the names and contact information for report distribution; and
- Providing the Contractor's onsite superintendent and the RPR with a copy of our scope of services, so that our services can be properly coordinated. It is the responsibility of our Client or his/her representative to schedule S&ME when our services are required, and the performance of the above-outlined services is dependent upon proper scheduling.

This proposal is solely intended for the basic services as described in the Scope of Services. The Scope of Services may not be modified or amended, unless the changes are first agreed to in writing by the Client and S&ME. Use of this proposal and resulting documents is limited to above-referenced project and Client. No other use is authorized by S&ME.

◆ Assumptions

The following assumptions have been made during the preparation of this proposal:

- The contractor will provide a curing environment for the initial 24 to 48 hours for concrete test specimens.

◆ Project Scheduling

We anticipate that our services will be required on a part-time (on-call) basis for the services outlined above. Scheduling should be made through the S&ME project manager assigned to this project who will assign the appropriate, qualified personnel to perform the requested work. We will rely on your designated project contact to let us know when an item requiring testing is upcoming, as described in the Scope of Services section included herein. It is the responsibility of your designated project contact to schedule S&ME when our services are desired.

Part-time testing means S&ME will schedule a representative to be at the site to perform specific tests only at the specific times when requested by your designated project contact. Full-time testing means that an S&ME representative will be on-site during contractor's operations to make a reasonable effort to conduct tests and observe contractor's work. We respectfully request that a minimum 24-hour notification be provided whenever our services are needed, so that we may coordinate our field personnel to meet your specific needs. We request that a minimum three-day notification be provided whenever our initial services are needed so that we may coordinate staff to meet your specific needs. If our services will be needed during off-hours (between 8:00 pm



and 5:00 am) and/or on holidays (Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksgiving, Christmas Eve, Christmas Day, and New Year's Day), we require a minimum 72-hour notification.

◆ **Compensation**

Costs for testing services will be based on actual quantities of work performed and the attached unit rates. Based on the information provided, a 15-month project schedule, our services being performed on a part-time basis only, and our experience with similar projects, we have estimated a recommended budget of **\$155,250**. These costs are broken down on the attached Cost Estimate Worksheet, which also includes the alternate costs for P-306 (Lean Concrete Base Course) and P-403 (Hot Mixed Asphalt Base Course), as requested. Please note that the total costs are dependent on many factors and are significantly influenced by the actual construction schedule. If the actual construction schedule varies from that assumed, the total cost for testing services will also vary. We have also not been provided a detailed construction schedule at the time of this proposal preparation. Should the schedule be modified beyond the project information and scope provided and stated herein, we request the opportunity to modify our cost estimate accordingly.

◆ **Authorization**

Our Agreement for Services (Form Number AS-071) is attached and is incorporated as a part of this proposal. Please indicate your acceptance of our proposal by signing the form and returning it to our office. Upon receipt of the signed agreement, we will proceed with the performance of our services. If you elect to accept our proposal by issuing a purchase order, then please specifically reference this proposal number and date in the purchase order as authorization to proceed with the performance of our services. The terms and conditions included in any purchase order shall not apply, and are hereby specifically rejected, as our agreement is for services which are not compatible with purchase order agreements. If this proposal is transmitted to you via email, and if you choose to accept this proposal by email, your reply email acceptance will serve as your representation to S&ME that you have reviewed the proposal and the associated Agreement for Services (Form Number AS-071) and hereby accept both as written.

◆ **Closure**

S&ME appreciates the opportunity to submit this proposal to provide testing services during this project. If you should have any questions relative to the services we have outlined above, please do not hesitate to contact us at (828) 687-9080.

Sincerely,

Handwritten signature of Joseph D. Laps in blue ink.

Joseph D. Laps, P.E.
Construction Services Group Leader

Handwritten signature of Gant Taylor in blue ink.

Gant Taylor, P.E. (SC)
Senior Engineer

Attachments: Fee Schedule / Cost Estimate / Agreement for Services (Form AS-071)

FEE SCHEDULE - CONSTRUCTION SERVICES
S&ME, Inc.
Asheville, North Carolina

TECHNICIAN SERVICES

1	Engineering Technician (T1-T2), regular time, per hour.....	\$50.00
2	Senior Engineering Technician (T-3), regular time, per hour.....	\$55.00
3	Asphalt Laboratory Technician, regular time, per hour.....	\$75.00
4	Mileage, per mile.....	No Charge

PROFESSIONAL SERVICES

1	Staff Professional-Engineer or Geologist (Level I), regular time, per hour.....	\$95.00
2	Staff Professional-Engineer or Geologist (Level II), regular time, per hour.....	\$105.00
3	Project Professional-Engineer or Geologist, regular time, per hour.....	\$125.00
4	Senior Professional, Special Inspector, regular time, per hour.....	\$155.00
5	Secretarial Services, regular time, per hour.....	\$50.00
6	Mileage, per mile.....	No Charge

MATERIAL TESTING SERVICES

1	Standard Proctor Compaction Test (ASTM D698), each.....	\$150.00
2	Modified Proctor Compaction Test (ASTM D1557), each.....	\$250.00
3	ABC Stone Proctor Compaction Test, each.....	\$250.00
4	ABC Stone Gradation, each.....	\$250.00
5	Grain Size Tests (Wash 200 Sieve), each.....	\$85.00
6	Grain Size Tests (With Hydrometer), each.....	\$105.00
7	Atterberg Limits Test, each.....	\$85.00
8	Natural Moisture Content Test, each.....	\$15.00
9	Compressive Strength of concrete cylinders, each.....	\$15.00
10	Compressive Strength of Grout Prisms (ASTM C1019), each.....	\$30.00
11	Compressive Strength of 2" cube samples (ASTM C109), each.....	\$20.00

Note:

- A. Overtime rates will be 1.5 times the regular rate indicated for labor for engineering technicians
- B. Overtime includes all time in excess of 8 hours per day, Saturdays, Sundays & Holidays

COST ESTIMATE WORKSHEET (REVISED)

Quality Assurance Testing

AVL Southern Apron Expansion

S&ME Proposal No. 33-1800316r1

Estimate below is based on information provided by Mr. Hunter Boniface and Mr. Jon McCalmont of Parrish & Partners in email correspondence and phone conversations between October 22, 2018 and August 2, 2019. It was indicated that S&ME assume all testing will be performed on a part-time basis, including testing for the retaining wall. Please note, if the retaining wall requires special inspections, S&ME will only issue a final, sealed letter, if our personnel is onsite full-time during wall construction.

AVL Southern Apron Expansion - QA Testing

<< assume 15 month construction duration

1.0 P-152 Excavation, Subgrade, and Embankment	<i>Qty</i>	<i>Unit</i>	<i>Rate</i>	<i>Extended Cost</i>
<< assume one senior lead technician onsite part time for 180 days (30 weeks, 6 days/week, 5 hours per day)				
<< assume Senior Registered Professional to make 10 visits				
<< assume one soil Modified Proctor test per every 10,000 Cubic Yards of fill.				
a Lead Engineering Technician (Regular Time)	750	Hours	\$55.00	\$41,250.00
b Lead Engineering Technician (Overtime)	150	Hours	\$82.50	\$12,375.00
c Senior Registered Professional Engineer	80	Hours	\$155.00	\$12,400.00
d Soil Modified Proctor Test	18	Each	\$250.00	\$4,500.00
e Vehicle Mileage	1100	Trips	\$0.00	\$0.00
Subtotal				\$70,525.00

2.0 P-209 Aggregate Base Course	<i>Qty</i>	<i>Unit</i>	<i>Rate</i>	<i>Extended Cost</i>
<< assume one senior lead technician onsite part time for 30 days (5 weeks, 5 days/week, 5 hours per day)				
a Lead Engineering Technician (Regular Time)	125	Hours	\$55.00	\$6,875.00
b ABC Stone Modified Proctor Test	2	Each	\$250.00	\$500.00
c Vehicle Mileage	150	Trips	\$0.00	\$0.00
Subtotal				\$7,375.00

3.0 P-304 Cement Treated Aggregate Base Course (CTB)	<i>Qty</i>	<i>Unit</i>	<i>Rate</i>	<i>Extended Cost</i>
<< assume one senior lead technician onsite part time for 40 days (8 weeks, 5 days/week, 8 hours per day)				
a Lead Engineering Technician (Regular Time)	320	Hours	\$55.00	\$17,600.00
b CTB Modified Proctor Test	2	Each	\$250.00	\$500.00
c Mix Design Review and Approval	1	Each	\$600.00	\$600.00
d Vehicle Mileage	300	Trips	\$0.00	\$0.00
Subtotal				\$18,700.00

4.0 P-501 Cement Concrete Pavement	<i>Qty</i>	<i>Unit</i>	<i>Rate</i>	<i>Extended Cost</i>
<< assume one senior lead technician onsite part time for 50 days (10 weeks, 5 days/week, 8 hours per day)				
a Lead Engineering Technician (Regular Time)	400	Hours	\$55.00	\$22,000.00
b Flexural Strength of Concrete Beams (assume sets of 8)	224	Each	\$50.00	\$11,200.00
c Mix Design Review and Approval	1	Each	\$600.00	\$600.00
d Vehicle Mileage	600	Trips	\$0.00	\$0.00
Subtotal				\$33,800.00

7.0 Project Management	<i>Qty</i>	<i>Unit</i>	<i>Rate</i>	<i>Extended Cost</i>
a Assistant Project Manager (Project Professional, Level II)	95	Hours	\$105.00	\$9,975.00
b Project Manager (Senior Registered Professional)	75	Hours	\$145.00	\$10,875.00
c Retaining Wall Submittal Review (by Senior Reg. Professional)	1	Each	\$1,500.00	\$1,500.00
d Administrator	50	Hours	\$50.00	\$2,500.00
Subtotal				\$24,850.00

TOTAL COST ESTIMATE: \$155,250.00

RECOMMENDED BUDGET: \$155,250.00

P-306 Lean Concrete Base Course (Alternate)	<i>Qty</i>	<i>Unit</i>	<i>Rate</i>	<i>Extended Cost</i>
<< assume one senior lead technician onsite part time for 40 days (8 weeks, 5 days/week, 6 hours per day)				
a Lead Engineering Technician (Regular Time)	240	Hours	\$55.00	\$13,200.00
c Compressive Strength Concrete Cylinders (assume sets of 5 samples)	60	Each	\$15.00	\$900.00
Mix Design Review and Approval	1	Each	\$600.00	\$600.00
d Vehicle Mileage	200	Trips	\$0.00	\$0.00
Subtotal				\$14,700.00

P-403 Hot Mix Asphalt Base Course (Alternate)	<i>Qty</i>	<i>Unit</i>	<i>Rate</i>	<i>Extended Cost</i>
<< assume one senior lead technician onsite part time for 24 days (4 weeks, 6 days/week, 8 hours per day)				
a Asphalt Laboratory Technician	160	Hours	\$75.00	\$12,000.00
b Asphalt Laboratory Technician (Overtime)	32	Hours	\$112.50	\$3,600.00
c Mix Design Review and Approval	1	Each	\$600.00	\$600.00
d Vehicle Mileage	2880	Trips	\$0.00	\$0.00
Subtotal				\$16,200.00

Revision Date: 8/16/19





MEMORANDUM

TO: Members of the Airport Authority

FROM: Michael A. Reisman, A.A.E.
Deputy Executive Director, Development and Operations

DATE: October 11, 2019

ITEM DESCRIPTION – New Business Item F

Approval of Scope of Services No. 1R (Revised) with Avcon Engineers and Planners, Inc. for Parking Lot Project.

BACKGROUND

The Authority entered into an Agreement for Professional Consulting Services with Avcon Engineers and Planners, Inc. (Avcon) on August 13, 2018. On May 10, 2019 the Airport Board approved Scope of Services No. 1 for design and construction services associated with the parking lots project in the amount of \$189,962.00. Design of the project was completed and publicly bid, which resulted in less than three bids. The project was re-bid, and again only received one bid, which was higher than the engineer's estimate. At its September 6, 2019 meeting, the Airport Board elected not to award the contract for construction, for the project to be re-bid a third time on a different time schedule.

As a result of additional efforts required for re-packaging and re-bidding the project, and for additional design outside of the original scope, additional cost must be added to the amount of Scope of Services No. 1 with Avcon. This additional work generally includes the following items:

- a. Additional permitting process with Buncombe County and the State of North Carolina for storm water and E&S measures.
- b. Second and third rounds of services associated with re-bidding the project.
- c. Design of Lot D not included in the original scope of services.
- d. An increase in construction phase services given the addition of Lot D.



ISSUES

None.

ALTERNATIVES

None.

FISCAL IMPACT

The additional fee for this work over the original contract price is \$103,796.00.00. The original contract price of \$189,962.00 is therefore revised to \$293,758.00.

RECOMMENDED ACTION

It is respectfully requested that the Airport Authority Board resolve to (1) approve Scope of Services No. 1R with Avcon Engineers and Planners, Inc. in the amount of \$293,758.00; (2) to authorize the Executive Director to sign the necessary documents; and (3) to amend the FY2019/2020 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

Section 1. To amend the appropriations as follows:

EXPENDITURES:

	<u>Decrease</u>	<u>Increase</u>
Capital Improvements	_____	_____ \$103,796.00
Totals	_____	_____ \$103,796.00

This will result in a net increase of \$103,796.00 in the appropriations. Revenues will be revised as follows:



REVENUES:

	<u>Decrease</u>	<u>Increase</u>
Transfer from GARAA Cash	_____	<u>\$103,796.00</u>
Totals	_____	<u>\$103,796.00</u>

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 11th day of October, 2019.

Matthew Burrell, Chair

Attested by:

Ellen Heywood, Clerk to the Board

Consultant Scope of Services

Greater Asheville Regional Airport Authority

Scope of Services Number **1R, (revised)** for Professional Consulting Services, as referenced in the Professional Consulting Agreement between the Asheville Regional Airport Authority and **AVCON Engineers & Planners, Inc.**, dated **August 13, 2018**.

Project: **Airport Parking Alteration and Expansion, Design, Bidding, And Construction Phase Services**

The Airport Parking Alteration and Expansion Project at Asheville Regional Airport (AVL) consists of alterations of four (4) separate parking areas, Lots A, B, C and D as shown on the attached Exhibit C. Each parking area will be modified to either add parking spaces or to make the parking areas function more efficiently. Overall improvements will include construction of entire parking lots with access controls, expansion and asphalt paving of existing gravel parking lots, reconfiguration of existing parking lots by constructing additional concrete curbing, and relocating existing access control equipment.

Schedule for this project is such that design will start May 2019 with Anticipated Construction Completion by May 2020.

The project was originally bid and rebid with only one bid submitted for consideration by AVL. That bid was later rejected by AVL and the Parking Lots Project was repackaged for rebid. The repackaging of the Parking Lots Project included additional bidding services and implementation of value engineering items for the project. The time frame for construction was also reevaluated to consist of a May 15, 2020 completion date.

During design, the original Lot D was removed from the scope of the project. A new Lot D, located north of Lot A, was developed on existing and soon to be AVL property. The development of this lot includes layout, grading, drainage, sediment and erosion control, storm water, permitting, and change order coordination.

Construction administration services and schedule were revised to accommodate the new construction schedule.

The scope and fee for this scope of work is attached as Exhibit A and B.

Consultant Team: AVCON, Inc.

Schedule: May 10, 2019 through May 30, 2020 (estimated)

Fees: The Lump Sum (LS) Fee for this work is \$293,758.00.

Authority:

Greater Asheville Regional Airport Authority

By: _____
Executive Director

Date: _____

Consultant:

AVCON Engineers & Planners, Inc.

By: _____
President

Date: _____

This instrument has been pre-audited in the manner required by local government and fiscal control.

Finance Manager

- Attachment: Exhibit A – Original Scope of Services
- Exhibit B – Revised Scope of Services
- Exhibit C – Fee Spreadsheets
- Exhibit D – Exhibit of Parking Lots

Greater Asheville Regional Airport Authority

EXHIBIT A

for

DESIGN, BIDDING, and CONSTRUCTION PHASE SERVICES

Airport Parking Alteration and Expansion

Consultant Scope of Services and Fee

Overall Project Description – Airport Parking Alteration and Expansion Project

The Airport Parking Alteration and Expansion Project at Asheville Regional Airport (AVL) consists of alterations of four (4) separate parking areas, Lots A, B, C and D as shown on the attached Exhibit C. Each parking area will be modified to either add parking spaces or to make the parking areas function more efficiently. Overall improvements will include construction of entire parking lots with access controls, expansion and asphalt paving of existing gravel parking lots, reconfiguration of existing parking lots by constructing additional concrete curbing, and relocating existing access control equipment.

Lot A is a proposed lot across NC280/Airport Road from the commercial service terminal. It will consist of approximately 400 new parking spaces. This area has been disturbed by previous projects but has been revegetated and is currently an open field. It will be paved and include curb and gutter (as needed for drainage), lighting, landscaping, fencing, access controls, signage, and a shuttle stop. Detention facilities for stormwater quality and quantity will be needed to treat and detain runoff from the increased impervious areas. Lot A is intended to only have a life span of 5 years.

Lot B is an existing gravel lot that is currently used as a commuter lot and for GA parking. This lot will be expanded to add approximately 40 more spaces to provide 100 total spaces by clearing additional area. The final lot will be paved. Detention for water quality and quantity may be necessary for increase in impervious area. Additional lighting will be installed to match the existing lighting in the parking area. This lot currently is uncontrolled and no changes to the access controls are included with this project.

Lot C is an existing paved parking area that is being used for ground transportation companies. Removal and installation of bollards (by AVL) and markings will be incorporated into this lot to provide more efficient and customer friendly use of the space.

Lot D is an existing paved parking area consisting of 209 parking spaces that is used for employee parking and cell phone lot. The lot size will ultimately be reduced to approximately 768 parking spaces due to a future ramp expansion project (by others) and the combination of the employee and cell phone lot. For Lot D, additional parking or reconfiguration of existing parking may be required. Installation of an island and turning radius evaluation for car haulers will be completed

at the entrance from Terminal Drive. Gate arm access controls will be relocated and markings will be redesigned to better control the use of this lot.

Background:

The airport continues to see passenger and aeronautic growth which is driving the need for additional parking. A new parking structure was completed in 2018, but the need for parking has already surpassed the additional spaces that the structure provided. Allegiant Airlines also continues to expand their maintenance operations at the airport which is driving demand for additional employee parking.

CONSULTANT has been asked by AVL to provide related Design, Bidding, and Construction Phase Services for the completion of the project. The services to be provided include:

1.0 Design Phase Services

Construction plans will be prepared for the bidding and construction of the parking lot alterations and expansions. Each lot, as identified above, has different elements that will be required for completion of the design phase services. This scope is for the development of one set of construction documents that incorporate the design of all four parking lots.

1.1 Preliminary Design Phase Services (30%)

- 1.1.1 Project Management and Coordination with AVL and Sub-consultants;
- 1.1.2 Data Collection and Record Documents Review;
- 1.1.3 Attend Kick-off Meeting with AVL; (held during scoping meeting)
- 1.1.4 Research Buncombe County and AVL parking requirements (geometry, dimensions, required spaces, landscaping, etc.). Determine ADA parking requirements for Lots A, B, C, and D, and how additional ADA parking can be implemented along with existing ADA parking in the short-term parking lot and parking deck.
- 1.1.5 Coordination with power and utility companies;
- 1.1.6 Topographic Survey (Performed by sub-consultant to AVCON);
- 1.1.7 Geotechnical Investigation and Pavement Design (Performed by Sub-consultant to AVCON);
- 1.1.8 Subcontractor Review and Implementation by AVCON
- 1.1.9 Prepare conceptual parking lot expansion layouts.
- 1.1.10 Prepare conceptual stormwater improvements and permitting analysis;
- 1.1.11 Meet and review concept plans with AVL and refine the parking concepts accordingly;

1.2 Final Design Phase Services (95%/100% design)

- 1.2.1 Project Management and Monthly Project Reporting;
- 1.2.2 Interim Design Meetings and Coordination. The design meetings will be coordinated with construction meetings onsite in order to better utilize time across multiple projects.
- 1.2.3 Develop Construction Phasing Plan and Refine in Consultation with AVL;

1.2.4 Prepare Construction Drawings (95%)

1.2.4.1 Lot A

- 1.2.4.1.1 Geometry Plans
- 1.2.4.1.2 Phasing Plans
- 1.2.4.1.3 Paving and Grading Plans
- 1.2.4.1.4 Drainage and Stormwater Plans
- 1.2.4.1.5 Signing and Marking Plans (Wayfinding and street signage is excluded)
- 1.2.4.1.6 Utility Adjustment Plans
- 1.2.4.1.7 Electrical, Access Controls, and Lighting Plans
- 1.2.4.1.8 Fencing and Gate Plans
- 1.2.4.1.9 Landscaping and Irrigation Plans (AVCON Sub-consultant TBD)
- 1.2.4.1.10 Shuttle Shelter Plan and Details

1.2.4.2 Lot B

- 1.2.4.2.1 Geometry Plans
- 1.2.4.2.2 Phasing Plans
- 1.2.4.2.3 Paving and Grading Plans
- 1.2.4.2.4 Drainage and Stormwater Plans
- 1.2.4.2.5 Signing and Marking Plans
- 1.2.4.2.6 Utility Adjustment Plans
- 1.2.4.2.7 Electrical and Lighting Plans
- 1.2.4.2.8 Landscaping and Irrigation Plans (AVCON Sub-consultant TBD)

1.2.4.3 Lot C

- 1.2.4.3.1 Bollard Plans
- 1.2.4.3.2 Phasing Plans
- 1.2.4.3.3 Signing and Marking Plans

1.2.4.4 Lot D

- 1.2.4.4.1 Geometry Plans
- 1.2.4.4.2 Phasing Plans
- 1.2.4.4.3 Paving, Grading, and Drainage Plans
- 1.2.4.4.4 Signing and Marking Plans
- 1.2.4.4.5 Electrical and Access Controls Plans

1.2.4.5 General Details and Notes

- 1.2.4.5.1 Overall Project Notes
- 1.2.4.5.2 Civil and Drainage Details
- 1.2.4.5.3 Pavement Structure Details
- 1.2.4.5.4 Electrical and Access Control Details
- 1.2.4.5.5 Electrical and Lighting Details

1.2.5 Prepare Development Technical Specifications (95%) – North Carolina Department of Transportation 2012 Standard Specifications and Provisions and the Asheville Regional Airport Development Guidelines, March 9, 2018, supplemented with Electrical, Lighting, Access Controls, Landscaping, and Irrigation, as appropriate;

- 1.2.6 Prepare Engineer's Report (95%);
 - 1.2.5.1 Drainage Analysis
 - 1.2.5.2 Stormwater and Detention Analysis
 - 1.2.5.3 Pavement Design
- 1.2.6 Prepare Stormwater Management Plan documents for submittal to Buncombe County;
- 1.2.7 Prepare Quantities and Estimates of Probable Construction Costs, (Construction Document Level Estimate);
- 1.2.8 Quality Assurance Review (95%);
- 1.2.9 95% Construction Document Submittal to AVL, Review Meeting, and Reconciliation of Comments;
- 1.2.10 Finalize Construction Documents into Bid Documents (100%);
- 1.2.11 Submit to Buncombe County for Permit.

The Design Phase will be considered complete upon delivery of Bid Documents and approval of Permit Set from Buncombe County.

2.0 Bidding Phase Services

Upon authorization by AVL to proceed, CONSULTANT will support AVL in bidding of the project. It is anticipated that the project only be bid one time and that it will be awarded to the lowest responsible bidder. Since the project does not contain State or Federal money it is not anticipated that any DBE goal setting, outreach, or evaluation will be needed during the bidding process.

2.1 Assist AVL in advertising for and obtaining bids for the work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued. Contractors will obtain Bidding Documents electronically on-line.

2.2 Issue addenda as appropriate to answer questions presented to the CONSULTANT, clarify, correct, or change the Bidding Documents.

2.3 Attend and conduct one (1) Pre-Bid Conference at AVL to present the project to perspective bidders. Prepare conference agenda and conference notes including a list of conference attendees for circulation to all attendees. The Pre-Bid Conference will be coordinated with construction meetings onsite in order to better utilize time across multiple projects.

2.4 Attend and conduct one (1) Bid Opening at AVL and prepare Bid Tabulation. The Bid Opening meetings will be coordinated with construction meetings onsite in order to better utilize time across multiple projects.

2.5 Consult with AVL as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bidding Documents.

2.6 Assist AVL in evaluating Bids and in assembling and awarding a construction contract for the Work.

The Bidding Phase will be considered complete upon the CLIENT's award of a construction contract.

3.0 Construction Phase Services

CONSULTANT will provide construction phase services for the duration of project construction. It is anticipated that all projects will be constructed in an approved phased manner, by one contractor, over a 60 calendar day period of time with 45 days for start up, punch list, and close out for a total of 105 days.

3.1 Released for Construction Documents. Upon award of the construction contract, released for construction (RFC) documents, plans, specifications, permits, and other construction documents will be developed.

3.2 Pre-Construction Conference. Prepare for and develop meeting agenda, attend and conduct a Pre-Construction Conference prior to the start of project construction, and develop meeting notes and sign in sheet for distribution.

3.3 Visits to Site and Observation of Construction. Provide on-site construction observation services during the construction phase of the project. Observations will vary depending on the type of work being performed by the contractor, the location, and the contractors' schedules. Based on the project schedule, phasing and bid alternates, it is anticipated there will be bi-weekly construction meetings and provisions for additional planned/unplanned site visits, as needed, and as outlined below:

- Four (4) bi-weekly meetings and approximately 2 additional visits

Bi-Weekly meetings include site visits, development of meeting agenda and meeting notes and sign in sheet. The bi-weekly meetings will be coordinated with other construction meetings onsite in order to better utilize time across multiple projects.

Site visits and observations by CONSULTANT are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress. Observations are to be limited to spot checking, selective measurement, and similar methods of general observation of the Work based on CONSULTANT's exercise of professional judgment. Based on information obtained during such visits and such observations, CONSULTANT will determine if Contractor's work is generally proceeding in accordance with the Contract Documents, and CONSULTANT shall keep AVL informed of the general progress of the Work.

The purpose of CONSULTANT's visits to the site will be to enable CONSULTANT to better carry out the duties and responsibilities assigned in this Agreement to CONSULTANT during the construction phase by the AVL, and, in addition, by the exercise of CONSULTANT's efforts, to provide the AVL a greater degree of confidence that the completed Work will conform in general to the Contract Documents and that the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents has been implemented and preserved by Contractor. CONSULTANT shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's

work, nor shall CONSULTANT have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, nor for any failure of Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the Work. Accordingly, CONSULTANT neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

3.4 Recommendations with Respect to Defective Work. Recommend to AVL that Contractor's work be disapproved and rejected while it is in progress if, on the basis of such observations, CONSULTANT believes that such work will not produce a completed Project that conforms generally to Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.

3.5 Clarifications and Interpretations. Issue necessary clarifications and interpretations of the Contract Documents to AVL as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of the Contract Documents following CONSULTANT's discussions with the design engineering firm of record. Field Orders authorizing variations from the requirements of the Contract Documents will be made by AVL.

3.6 Change Orders. Recommend Change Orders to AVL, as appropriate. Review and make recommendations related to Change Orders submitted or proposed by the Contractor.

3.7 Shop Drawings and Samples. Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.

3.8 Substitutes and "or-equal." Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.

3.9 Inspections and Tests. Require such special inspections or tests of Contractor's work as CONSULTANT deems appropriate and receive and review certificates of inspections within CONSULTANT's area of responsibility or of tests and approvals required by laws and regulations or the Contract Documents. CONSULTANT's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. CONSULTANT shall be entitled to rely on the results of such tests and the facts being certified.

3.10 Disagreements between AVL and Contractor. As necessary, render written decision on all claims of the AVL and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the progress of Contractor's work. In rendering such decisions, CONSULTANT shall be fair and not show partiality to the AVL or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.

3.11 Applications for Payment. Based on CONSULTANT's observations and on review of applications for payment and accompanying supporting documentation:

Determine the amounts that CONSULTANT recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute CONSULTANT's representation to the AVL, based on such observations and review, that, to the best of CONSULTANT's knowledge, information and belief, Contractor's work has progressed to the point indicated, such work-in-progress is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled insofar as it is CONSULTANT's responsibility to so determine. In the case of unit price work, CONSULTANT's recommendations of payment will include final determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests.

By recommending any payment, CONSULTANT shall not thereby be deemed to have represented that observations made by CONSULTANT to check Contractor's work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to CONSULTANT in this Agreement. Neither CONSULTANT's review of Contractor's work for the purposes of recommending payments nor CONSULTANT's recommendation of any payment including final payment will impose on CONSULTANT responsibility to supervise, direct, or control Contractor's work in progress or for the means, methods, techniques, equipment choice and usage, sequences, or procedures of construction of safety precautions or programs incident thereto, nor Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on CONSULTANT to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, nor to determine that title to any portion of the work in progress, materials, or equipment has passed to AVL free and clear of any liens, claims, security interests, or encumbrances, nor that there may not be other matters at issue between AVL and Contractor that might affect the amount that should be paid.

3.12 Substantial Completion. Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with AVL and Contractor, conduct a site visit to determine if the Work is substantially complete. Work will be considered substantially complete following satisfactory completion of all items with the exception of those identified on a final punch list. If after considering any objections of AVL, CONSULTANT considers the Work substantially complete, CONSULTANT shall notify AVL and Contractor.

3.13 Final Notice of Acceptability of the Work. Conduct a final site visit to determine if the completed Work of Contractor is generally in accordance with the Contract Documents and the final punch list so that CONSULTANT may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, CONSULTANT shall also provide a notice that the Work is generally in accordance with the Contract Documents to the best of CONSULTANT's knowledge, information, and belief and based on the extent of the services provided by CONSULTANT under this Agreement and based upon information provided to CONSULTANT upon which it is entitled to rely.

3.14 Limitation of Responsibilities. CONSULTANT shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing the Work. CONSULTANT shall not have the authority or responsibility to stop the work of any Contractor.

3.15 Construction Quality Assurance (CQA) Testing Services During Construction. CONSULTANT has been tasked with providing a geotechnical and materials testing firm to provide CQA testing services for the Work at the Site on an as needed basis. AVL and CONSULTANT will mostly rely on the contractor's quality control during construction to determine compliance.

3.16 Construction Quality Assurance (CQA) Surveying. AVL and CONSULTANT have budgeted CQA survey checks during construction but will mostly rely on the contractor's surveys during construction and final survey to determine compliance.

3.17 Project Coordination. CONSULTANT will coordinate project related work and issues with the AVL as applicable.

3.18 Deliverables. CONSULTANT will provide "record" drawings of the project to AVL. Information gathered by CONSULTANT and "as constructed" information provided by the Contractor will be used for this task. CONSULTANT will provide final abbreviated engineers/construction report for the project. The report will be signed by a licensed North Carolina Professional Engineer.

Assumptions

The following assumptions have been made in the development of this Scope of Services:

- AVL will provide access to Airport property to AVCON and our subconsultants
- Topographic survey (if required) will be provided by AVL for use in the design of Lots C and D.
- No stormwater quality or quantity design will be required for Lots C and D improvements
- No water or sanitary sewer improvements will be provided for any of the lots
- AVL will assist in determining appropriate access controls equipment
- AVL to provide a copy of previous parking studies and analysis of ADA parking space allocations, if available.
- Project drawings will be prepared in AutoCAD 2018 format.

Deliverables

- 2 Sets of 11" x 17" Construction Plans for design review.
- 3 Sets of 11" x 17" Final Construction Plans
- 1 Set of 24" x 36" Final Construction Plans
- 3 Sets of Construction Specifications
- 2 Hard Copies of Engineer's Report
- PDF copy of all documents

Services Not Included In This Task Order

- Full Time RPR and inspection
- Permitting fees are to be paid by AVL
- Wayfinding signage
- Improvements to Airport Road
- Traffic signal evaluation or design
- Extension of utilities across Airport Road
- Design of retain walls or any other structures
- DBE goal setting or evaluation
- Security camera design
- Boundary surveys
- ALP or other planning document updates

Schedule

Final Construction Documents Completed by July 15, 2019. Advertisement, Bidding, and Award Completed by August 9, 2019. Anticipated Construction Completion by November 2019.

**PROFESSIONAL FEE SUMMARY
DESIGN, BIDDING, AND CPS
FOR THE
AIRPORT PARKING ALTERATION & EXPANSION
ASHEVILLE REGIONAL AIRPORT**

AVCON Project No. 2019.0157.01

DATE: 5/7/2019

<u>Item Description</u>	<u>Fees</u>	<u>Method</u>
TASK 1.1 Preliminary Design		
Direct Labor Costs	\$13,840.00	
Direct Expenses	\$460.00	
Subs	\$18,000.00	
Preliminary Design Subtotal	\$32,300.00	
	USE: \$32,300.00	LS
TASK 1.2 Final Design		
Direct Labor Costs	\$79,166.00	
Direct Expenses	\$640.00	
Subs	\$39,160.00	
Final Design Subtotal	\$118,966.00	
	USE: \$118,966.00	LS
TASK 2 Bidding		
Direct Labor Costs	\$6,168.00	
Direct Expenses	\$460.00	
Subs	\$2,700.00	
Bidding Subtotal	\$9,328.00	
	USE: \$9,328.00	LS
TASK 3 Construction Phase Services		
Direct Labor Costs	\$20,658.00	
Direct Expenses	\$2,510.00	
Subs	\$6,200.00	
CPS Subtotal	\$29,368.00	
	USE: \$29,368.00	LS
TOTAL	USE: \$189,962.00	LS

Scope	POSITION	PRINCIPAL		SR. PROJECT MANAGER		SR. ENGINEER / SR. PLANNER		PROJECT ENGINEER		SENIOR CADD DESIGNER		CADD TECH		ADMINISTRATIVE		TOTAL		
	Rate (\$/Hour):	\$237		\$216		\$144		\$113		\$103		\$82		\$67		labor hours	Cost	Avg. Hourly Rate
Task No.		labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	Rate
	Final Design Phase Subcontractors	<i>Subtotal Final Design Phase Direct Expenses:</i>														\$640		
	Stormwater/Retention Design - Lot A - Aulick Engineering															\$25,760		
	Stormwater/Retention Design - Lot B - Aulick Engineering															\$3,400		
	Landscaping - TBD															\$10,000		
		<i>Subtotal Final Design Phase Subcontractors:</i>														\$39,160		
		Subtotal Final Design Phase:														\$118,966		

POSITION		PRINCIPAL		SR. PROJECT MANAGER		SR. ENGINEER / SR. PLANNER		PROJECT ENGINEER		SENIOR CADD DESIGNER		CADD TECH		ADMINISTRATIVE		TOTAL				
Scope	Rate (\$/Hour):	\$237		\$216		\$144		\$113		\$103		\$82		\$57		labor hours	Cost	Avg. Hourly Rate		
Task No.		labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost					
BIDDING PHASE SERVICES																				
2.1	Assist AVL in advertising for and obtaining bids		\$0	4	\$864		\$0		\$0		\$0		\$0	4	\$268	8	\$1,132	\$142		
2.2	Issue addenda		\$0	2	\$432		\$0	4	\$452		\$0	8	\$656		\$0	14	\$1,540	\$110		
2.3	Attend and Conduct Pre-bid Conference		\$0	4	\$864		\$0		\$0		\$0		\$0		\$0	4	\$864	\$216		
2.4	Attend and Conduct Bid Opening		\$0	4	\$864		\$0		\$0		\$0		\$0		\$0	4	\$864	\$216		
2.5	Acceptability of Contractors and their Sub-contractors		\$0	2	\$432		\$0	4	\$452		\$0		\$0		\$0	6	\$864	\$147		
2.6	Bid Evaluation		\$0	2	\$432		\$0	4	\$452		\$0		\$0		\$0	6	\$864	\$147		
		<i>Subtotal Bidding Phase Services Labor:</i>		0	\$0	18	\$3,688	0	\$0	12	\$1,356	0	\$0	8	\$656	4	\$268	42	\$8,168	\$197
Bidding Phase Direct Expenses																				
Printing																			\$100	
Mileage																			\$290	
Per Diem																			\$70	
																			<i>Subtotal Bidding Phase Direct Expenses:</i>	\$460
Bidding Phase Subcontractors																				
Stormwater/Retention Bidding - Aulick Engineering																			\$2,700	
																			<i>Subtotal Bidding Phase Subcontractors:</i>	\$2,700
																			Subtotal Bidding Phase:	\$9,328

Scope Task No.	POSITION	PRINCIPAL		SR. PROJECT MANAGER		SR. ENGINEER / SR. PLANNER		PROJECT ENGINEER		SENIOR CADD DESIGNER		CADD TECH		ADMINISTRATIVE		TOTAL			
	AVCON, INC.	\$237		\$216		\$144		\$113		\$103		\$82		\$67		labor hours	Cost	Avg. Hourly Rate	
	Rate (\$/Hour):	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost				
CONSTRUCTION PHASE SERVICES																			
3.1	Released for Construction Documents		\$0	2	\$432	2	\$288	4	\$452	8	\$824	\$0	\$0	\$0	\$0	16	\$1,996	\$125	
3.2	Pre-Construction Conference		\$0	4	\$664		\$0		\$0		\$0	\$0	\$0	\$0	\$0	4	\$664	\$216	
3.3	Visits to Site and Observation of Construction (6 Scheduled)		\$0	12	\$2,592		\$0	12	\$1,356		\$0	\$0	\$0	\$0	\$0	24	\$3,948	\$165	
3.4	Recommendations with Respect to Defective Work		\$0	2	\$432		\$0	2	\$226		\$0	\$0	\$0	\$0	\$0	4	\$658	\$165	
3.5	Clarifications and Interpretations		\$0	2	\$432		\$0	4	\$452	4	\$412	\$0	\$0	\$0	\$0	10	\$1,296	\$130	
3.6	Change Orders		\$0	2	\$432		\$0	4	\$452	4	\$412	\$0	\$0	\$0	\$0	10	\$1,296	\$130	
3.7	Shop Drawings and Samples		\$0	2	\$432		\$0	16	\$1,808		\$0	\$0	\$0	\$0	\$0	18	\$2,240	\$124	
3.8	Substitutes and "or-equal"		\$0	2	\$432		\$0	4	\$452		\$0	\$0	\$0	\$0	\$0	6	\$884	\$147	
3.9	Inspections and Tests		\$0	0	\$0		\$0	4	\$452		\$0	\$0	\$0	\$0	\$0	4	\$452	\$113	
3.10	Disagreements between AVL and Contractor		\$0	2	\$432		\$0	2	\$226		\$0	\$0	\$0	\$0	\$0	4	\$658	\$165	
3.11	Applications for Payment		\$0	4	\$664		\$0	12	\$1,356		\$0	\$0	\$0	\$0	\$0	16	\$2,220	\$139	
3.12	Substantial Completion		\$0	4	\$564		\$0	8	\$904		\$0	\$0	\$0	\$0	\$0	12	\$1,768	\$147	
3.13	Final Notice of Acceptability of the Work		\$0	2	\$432		\$0		\$0		\$0	\$0	\$0	\$0	\$0	2	\$432	\$216	
3.14	Limitation of Responsibilities																		
3.15	Construction Quality Assurance Testing Services During Construction																		
3.16	Construction Quality Assurance Surveying																		
3.17	Project Coordination		\$0	4	\$664		\$0	4	\$452		\$0	\$0	\$0	\$0	\$0	8	\$1,316	\$165	
3.18	Deliverables - Record Drawings		\$0	2	\$432		\$0	2	\$226		\$0	24	\$1,968	\$0	\$0	28	\$2,626	\$94	
			\$0	\$0	44	\$3,504	0	\$0	74	\$8,162	8	\$824	24	\$1,968	0	\$0	150	\$20,658	\$138
Construction Phase Direct Expenses																			
Printing																			\$1,000
Mileage																			\$1,150
Per Diem																			\$350
																			\$2,500
Construction Phase Subcontractors																			
Stormwater/Retention CPS - Aulick Engineering																			\$1,200
CQA Topographic Survey																			\$2,500
CQA Construction Materials Testing																			\$2,500
																			\$6,200
Subtotal Construction Phase:																			\$29,368

Greater Asheville Regional Airport Authority

EXHIBIT B

for

DESIGN, BIDDING, and CONSTRUCTION PHASE SERVICES

Airport Parking Alteration and Expansion – Lot D Scope of Services 1R (Revised)

Consultant Scope of Services and Fee

Overall Project Description – Airport Parking Alteration and Expansion Project, Lot D

The Airport Parking Alteration and Expansion Project at Asheville Regional Airport (AVL) consisted of alterations of four (4) separate parking areas, Lots A, B, C and D. During the course of design it was determined that the original Lot D configuration needed to be reevaluated to accommodate additional parking due to the expansion of the aircraft apron in the area. A new location has been identified at the northeast corner of Airport Road and Airport Park Road as shown on the attached Exhibit C. This new location for Lot D is proposed to be constructed on two adjacent parcels, one currently owned by the Airport and the second owned by NCDOT. It is the intention of the Airport to receive the NCDOT parcel into Airport ownership prior to construction.

Overall improvements will include constructing a new Parking Lot D with approximately 50 spaces to be use as the Airport's cell phone waiting lot. A portion of this area has been disturbed by other non-airport projects but has been revegetated and is currently an open field. The remainder of the area has been cleared in the past and remains as an open field. It will be paved and include curb and gutter (as needed for drainage), lighting, landscaping, and signage. Detention facilities for stormwater quality and quantity will likely be needed to treat and detain runoff from the increased impervious areas.

During the course of bidding of Lots A, B, and C, only one bidder submitted a bid. The Airport decided that the project should be rebid in attempts to get more competition for the project. It was also decided by the Airport that Lot B will not be constructed at this time. As a part of this scope of work, the design for Lots A, C and D along with the schematic layout of Lot D and its associated quantities will be repackaged and put out to bid.

Background:

The airport continues to see passenger and aeronautic growth which is driving the need for additional parking. A new parking structure was completed in 2018, but the need for parking has already surpassed the additional spaces that the structure provided. Allegiant Airlines also continues to expand their maintenance operations at the airport which is driving demand for additional employee parking.

CONSULTANT has been asked by AVL to provide related Design, Change Order Documents, and Construction Phase Services for the completion of the project. The services to be provided include:

1.0 Design Phase Services

Construction plans will be prepared for a change order to the previously bid Airport Parking Project for the construction of the parking Lot D.

1.1 Preliminary Design Phase Services (30%)

- 1.1.1 Project Management and Coordination with AVL and Sub-consultants;
- 1.1.2 Data Collection and Record Documents Review;
- ~~1.1.3 Attend Kick-off Meeting with AVL;~~
- ~~1.1.4 Determine ADA parking requirements for Lot D and provide information to Airport for incorporation into ADA stall banks located closer to the Airport terminal.~~
- 1.1.5 Coordination with power and utility companies;
- 1.1.6 Topographic Survey (Performed by sub-consultant to AVCON);
- 1.1.7 Subcontractor Review and Implementation by AVCON;
- 1.1.8 Prepare conceptual parking lot layouts;
- ~~1.1.9 Prepare conceptual stormwater improvements and permitting analysis;~~
- 1.1.10 Meet and review concept plans with AVL and refine the parking concepts accordingly;

1.2 Final Design Phase Services (95%/100% design)

- 1.2.1 Project Management and Monthly Project Reporting;
- 1.2.2 Interim Design Meetings and Coordination. The design meetings will be coordinated with construction meetings onsite in order to better utilize time across multiple projects.
- 1.2.3 Develop Construction Phasing Plan and Refine in Consultation with AVL;
- 1.2.4 Prepare Construction Drawings (95%)
 - 1.2.4.1 Geometry Plans
 - 1.2.4.2 Phasing Plans
 - 1.2.4.3 Paving and Grading Plans
 - 1.2.4.4 Drainage and Stormwater Plans (AVCON Sub-consultant Aulick Engineering)
 - 1.2.4.5 Signing and Marking Plans (Wayfinding and street signage is excluded)
 - 1.2.4.6 Utility Adjustment Plans
 - 1.2.4.7 Electrical and Lighting Plans (Coordination with Duke Energy)
 - 1.2.4.8 Landscaping and Irrigation Plans (AVCON Sub-consultant LandArt)
 - 1.2.4.9 General Details and Notes
 - 1.2.4.9.1 Overall Project Notes
 - 1.2.4.9.2 Civil and Drainage Details
 - 1.2.4.9.3 Pavement Structure Details
- 1.2.5 Update Development Technical Specifications (95%) – North Carolina Department of Transportation 2012 Standard Specifications and Provisions and the Asheville Regional Airport Development Guidelines, March 9, 2018, supplemented with Electrical, Landscaping, and Irrigation, as appropriate;

- 1.2.6 Update Engineer's Report (95%);
 - 1.2.6.1 Drainage Analysis
 - 1.2.6.2 Stormwater and Detention Analysis
 - 1.2.6.3 Pavement Design
- 1.2.7 Prepare Stormwater Management Plan documents for submittal to Buncombe County;
- 1.2.8 Prepare Quantities and Estimates of Probable Construction Costs;
- 1.2.9 Quality Assurance Review (95%);
- 1.2.10 95% Construction Document Submittal to AVL, Review Meeting, and Reconciliation of Comments;
- 1.2.11 Finalize Construction Documents into Change Order Documents (100%);
- 1.2.12 Submit to Buncombe County for Permit.
- 1.2.13 Negotiate Change Order – Review any change order unit prices not previously established in the project bidding for reasonability based on recent project history in the region. Review back-up information provided by Contractor is necessary.

The Design Phase will be considered complete upon delivery of Change Order Documents and approval of Permit Set from Buncombe County.

2.0 Bidding Phase Services

Upon authorization by AVL to proceed, CONSULTANT will support AVL in bidding of the project. Bid documents will include information necessary to obtain bids for Lots A, Lot C, and Lot D (schematic). At the direction of AVL Lot B will not be included for bidding. It is anticipated that the project will be bid three times and based on previous experience with bidding project in the Asheville area and that it will be awarded to the lowest responsible bidder. Since the project does not contain State or Federal money it is not anticipated that any DBE goal setting, outreach, or evaluation will be needed during the bidding process.

2.1 Repackaged bid documents from previously bid "Parking Lots Project" will be repackaged to only include information pertaining to Lots A, C, and D. Changes to the plans and specs will be made to incorporate the following changes:

1. No shrubs being used for landscaping
2. Airport supplying topsoil for use on the project
3. Airport supplying/installing the bus shelters on a contractor constructed foundation
4. No mow strips along the fence for Lot A
5. Parking Lot B completely removed from the plans
6. No sand blasting for the bollards
7. AVL supplied and installed gate arm systems, no assistance from the contractor
8. Revised schedule for construction with completion being May 15 of all work, project will not be specific to a contract time.

2.2 Assist AVL in advertising for and obtaining bids for the work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued. Contractors will obtain Bidding Documents electronically on-line.

2.3 Issue addenda as appropriate to answer questions presented to the CONSULTANT, clarify, correct, or change the Bidding Documents.

2.4 Attend and conduct three (3) Pre-Bid Conference at AVL to present the project to perspective bidders. Prepare conference agenda and conference notes including a list of conference attendees for circulation to all attendees. The Pre-Bid Conference will be coordinated with construction meetings onsite in order to better utilize time across multiple projects.

2.5 Attend and conduct three (3) Bid Opening at AVL and prepare Bid Tabulation. The Bid Opening meetings will be coordinated with construction meetings onsite in order to better utilize time across multiple projects.

2.6 Consult with AVL as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bidding Documents.

2.7 Assist AVL in evaluating Bids and in assembling and awarding a construction contract for the Work.

The Bidding Phase will be considered complete upon the CLIENT's award of a construction contract.

3.0 Construction Phase Services

CONSULTANT will provide additional construction phase services for the duration of project based on the new completion date of May 15, 2020. All other construction phase services are covered under original scope of services.

Assumptions

The following assumptions have been made in the development of this Scope of Services:

- AVL will provide access to Airport property to AVCON and our subconsultants
- AVL will coordinate with NCDOT to obtain access to NCDOT property as necessary to AVCON and our subconsultants
- No land acquisition services will be provided by AVCON during the course of this project
- All properties that will be impacted by this project are a part of Buncombe County
- No water or sanitary sewer improvements will be provided for Lot D
- No access controls or FIDS will be implemented as part of this project
- Project drawings will be prepared in AutoCAD 2018 format
- No redesign of Lots A, B, or C is required

Deliverables

- 2 Sets of 11" x 17" Construction Plans for design review
- 3 Sets of 11" x 17" Final Construction Plans

- 1 Set of 24" x 36" Final Construction Plans
- 3 Sets of Construction Specifications
- 2 Hard Copies of Engineer's Report
- PDF copy of all documents

Services Not Included In This Task Order

- Full Time RPR and inspection
- Permitting fees are to be paid by AVL
- Wayfinding signage
- Improvements to Airport Road or Airport Park Road
- Traffic signal evaluation or design
- Extension of utilities
- Design of retain walls or any other structures
- DBE goal setting or evaluation
- Security camera design
- Boundary surveys
- ALP or other planning document updates
- Geotechnical evaluations (at the direction of AVL)

Schedule

Design, change order, and permitting are expected to be completed before February 2020.

**PROFESSIONAL FEE SUMMARY
DESIGN AND CPS
FOR THE
AIRPORT PARKING ALTERATION & EXPANSION
ASHEVILLE REGIONAL AIRPORT**

AVCON Project No. 2019.0157.01

DATE: 9/24/2019

<u>Item Description</u>	<u>Original Fees</u>	<u>Revised Fees</u>
TASK 1.1 <u>Preliminary Design</u>	\$32,300.00	\$32,300.00
TASK 1.2 <u>Final Design</u>	\$118,966.00	\$118,966.00
TASK 1.3 <u>Preliminary Design - Lot D</u>	\$0.00	\$20,820.00
TASK 1.4 <u>Final Design - Lot D</u>	\$0.00	\$49,446.00
TASK 2.1 <u>Bidding - 1st Bid</u>	\$9,328.00	\$9,328.00
TASK 2.2 <u>Bidding - 2nd Bid</u>	\$0.00	\$10,384.00
TASK 2.3 <u>Bidding - Repackage</u>	\$0.00	\$13,914.00
TASK 3 <u>Construction Phase Services</u>	\$29,368.00	\$38,600.00
TOTAL	\$189,962.00	\$293,758.00

**PROFESSIONAL FEE SUMMARY
DESIGN AND CPS
FOR THE
AIRPORT PARKING ALTERATION & EXPANSION - LOT D
ASHEVILLE REGIONAL AIRPORT**

AVCON Project No. 2019.0157.01

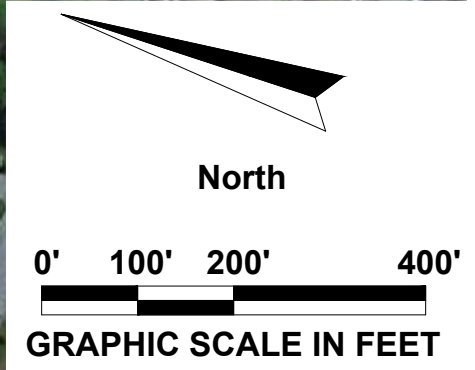
DATE: 9/24/2019

<u>Item Description</u>	<u>Fees</u>	<u>Method</u>
TASK 1.3 <u>Preliminary Design</u>		
Direct Labor Costs	\$6,520.00	
Direct Expenses	\$50.00	
Subs	\$14,250.00	
Preliminary Design Subtotal	\$20,820.00	
	USE: \$20,820.00	LS
TASK 1.4 <u>Final Design</u>		
Direct Labor Costs	\$23,906.00	
Direct Expenses	\$640.00	
Subs	\$24,900.00	
Final Design Subtotal	\$49,446.00	
	USE: \$49,446.00	LS
TASK 2.2 <u>Bidding</u>		
Repackaging	\$13,914.00	
Direct Labor Costs	\$9,574.00	
Direct Expenses	\$810.00	
Bidding Subtotal	\$24,298.00	
	USE: \$24,298.00	LS
TASK 3 <u>Construction Phase Services</u>		
Direct Labor Costs	\$29,890.00	
Direct Expenses	\$2,510.00	
Subs	\$6,200.00	
CPS Subtotal	\$38,600.00	
	USE: \$38,600.00	LS
TOTAL	USE: \$133,164.00	LS

Scope	POSITION	PRINCIPAL		SR. PROJECT MANAGER		SR. ENGINEER / SR. PLANNER		PROJECT ENGINEER		SENIOR CADD DESIGNER		CADD TECH		ADMINISTRATIVE		TOTAL		
	AVCON, INC.	\$237		\$216		\$144		\$113		\$103		\$82		\$67		labor hours	Cost	Avg. Hourly Rate
Task No.	Rate (\$/Hour):	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	Rate
1.1	Preliminary Design Phase Services (30%)																	
1.1.1	Project Management and Coordination with Sub-consultants		\$0	4	\$864		\$0		\$0		\$0		\$0		\$0	4	\$864	\$216
1.1.2	Data Collection and Record Documents Review		\$0	4	\$864		\$0		\$0		\$0		\$0		\$0	4	\$864	\$216
1.1.3	Attend Kick-off Meeting with AVL		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0	#DIV/0!
1.1.4	Determine ADA Parking Requirement for Lot D		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0.0	\$0	#DIV/0!
1.1.5	Coordination with power and utility companies		\$0	2	\$432		\$0		\$0		\$0		\$0		\$0	2	\$432	\$216
1.1.6	Topographic Survey		\$0	2	\$432		\$0		\$0		\$0		\$0		\$0	2	\$432	\$216
1.1.7	Subcontractor Review and Implementation		\$0	4	\$864		\$0		\$0		\$0		\$0		\$0	4	\$864	\$216
1.1.8	Prepare conceptual paking lot layouts		\$0	4	\$864		\$0	8	\$904		\$0		\$0		\$0	12	\$1,768	\$147
1.1.9	Prepare conceptual stormwater improvements and permitting analysis (Aulick Engineering Primary)		\$0	2	\$432		\$0		\$0		\$0		\$0		\$0	2	\$432	\$216
1.1.10	Review concept plans with AVL and refine the parking concepts accordingly		\$0	4	\$864		\$0		\$0		\$0		\$0		\$0	4	\$864	\$216
Subtotal Preliminary Design Phase Services Labor:		0	\$0	26	\$5,616	0	\$0	8	\$904	0	\$0	0	\$0	0	\$0	34	\$6,520	\$192
Preliminary Design Direct Expenses																		
Printing																	\$50	
Mileage																	\$0	
Per Diem																	\$0	
Subtotal Direct Expenses:																	\$50	
Preliminary Design Phase Subcontractors																		
1.1.6	Topographic Survey - Ed Holmes & Associates																\$4,700	
1.1.9	Prepare conceptual stormwater improvements and permitting analysis - Aulick Engineering																\$8,550	
AVCON Subconsultant Administration Fee (10%)																	\$1,000	
Subtotal Preliminary Design Phase Subcontractors:																	\$14,250	
Subtotal Preliminary Design Phase:																	\$20,820	

Scope	POSITION	PRINCIPAL		SR. PROJECT MANAGER		SR. ENGINEER / SR. PLANNER		PROJECT ENGINEER		SENIOR CADD DESIGNER		CADD TECH		ADMINISTRATIVE		TOTAL		
	AVCON, INC.	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	Avg. Hourly Rate
Task No.	Rate (\$/Hour):	\$237		\$216		\$144		\$113		\$103		\$82		\$67				
BIDDING PHASE SERVICES																		
2.1	Repackage bid documents		\$0	8	\$1,728		\$0	8	\$904		\$0	40	\$3,280	6	\$402	62	\$6,314	\$102
2.2	Assist AVL in advertising for and obtaining bids		\$0	2	\$432		\$0		\$0		\$0		\$0	2	\$134	4	\$566	\$142
2.3	Issue addenda		\$0	2	\$432		\$0	4	\$452		\$0	4	\$328		\$0	10	\$1,212	\$121
2.4	Attend and Conduct Pre-bid Conference		\$0	8	\$1,728		\$0		\$0		\$0		\$0		\$0	8	\$1,728	\$216
2.5	Attend and Conduct Bid Opening (3)		\$0	18	\$3,888		\$0		\$0		\$0		\$0		\$0	18	\$3,888	\$216
2.6	Acceptability of Contractors and their Sub-contractors		\$0	4	\$864		\$0		\$0		\$0		\$0		\$0	4	\$864	\$216
2.7	Bid Evaluation		\$0	4	\$864		\$0	4	\$452		\$0		\$0		\$0	8	\$1,316	\$165
Subtotal Bidding Phase Services Labor:		0	\$0	46	\$9,936	0	\$0	16	\$1,808	0	\$0	44	\$3,608	8	\$536	114	\$15,888	\$139
Bidding Phase Direct Expenses																		
Printing																\$150		
Mileage																\$580		
Per Diem																\$80		
Subtotal Bidding Phase Direct Expenses:																\$810		
Bidding Phase Subcontractors																		
Repackage (Subs)																\$7,600		
Subtotal Bidding Phase Subcontractors:																\$7,600		
Subtotal Bidding Phase:																\$24,298		

Scope Task No.	POSITION	PRINCIPAL		SR. PROJECT MANAGER		SR. ENGINEER / SR. PLANNER		PROJECT ENGINEER		SENIOR CADD DESIGNER		CADD TECH		ADMINISTRATIVE		TOTAL		
	AVCON, INC.	\$237		\$216		\$144		\$113		\$103		\$82		\$67		labor hours	Cost	Avg. Hourly Rate
Rate (\$/Hour):		labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	labor hours	Cost	Rate
CONSTRUCTION PHASE SERVICES																		
3.1	Released for Construction Documents		\$0	2	\$432	2	\$288	4	\$452	8	\$824		\$0		\$0	16	\$1,996	\$125
3.2	Pre-Construction Conference		\$0	6	\$1,296		\$0		\$0		\$0		\$0		\$0	6	\$1,296	\$216
3.3	Visits to Site and Observation of Construction (12 Scheduled)		\$0	36	\$7,776		\$0	36	\$4,068		\$0		\$0		\$0	72	\$11,844	\$165
3.4	Recommendations with Respect to Defective Work		\$0	2	\$432		\$0	2	\$226		\$0		\$0		\$0	4	\$658	\$165
3.5	Clarifications and Interpretations		\$0	2	\$432		\$0	4	\$452	4	\$412		\$0		\$0	10	\$1,296	\$130
3.6	Change Orders		\$0	2	\$432		\$0	4	\$452	4	\$412		\$0		\$0	10	\$1,296	\$130
3.7	Shop Drawings and Samples		\$0	2	\$432		\$0	16	\$1,808		\$0		\$0		\$0	18	\$2,240	\$124
3.8	Substitutes and "or-equal"		\$0	2	\$432		\$0	4	\$452		\$0		\$0		\$0	6	\$884	\$147
3.9	Inspections and Tests		\$0	0	\$0		\$0	4	\$452		\$0		\$0		\$0	4	\$452	\$113
3.10	Disagreements between AVL and Contractor		\$0	2	\$432		\$0	2	\$226		\$0		\$0		\$0	4	\$658	\$165
3.11	Applications for Payment		\$0	4	\$864		\$0	20	\$2,260		\$0		\$0		\$0	24	\$3,124	\$130
3.12	Substantial Completion		\$0	4	\$864		\$0	8	\$904		\$0		\$0		\$0	12	\$1,768	\$147
3.13	Final Notice of Accetability of the Work		\$0	2	\$432		\$0		\$0		\$0		\$0		\$0	2	\$432	\$216
3.14	Limitation of Responsibilities		\$0	2	\$432		\$0		\$0		\$0		\$0		\$0	2		
3.15	Construction Quality Assurance Testing Services During Construction		\$0	2	\$432		\$0		\$0		\$0		\$0		\$0	2		
3.16	Construction Quality Assurance Surveying		\$0	2	\$432		\$0		\$0		\$0		\$0		\$0	2		
3.17	Project Coordination		\$0	4	\$864		\$0	4	\$452		\$0		\$0		\$0	8	\$1,316	\$165
3.18	Deliverables - Record Drawings		\$0	2	\$432		\$0	2	\$226		\$0	24	\$1,968		\$0	28	\$2,626	\$94
Subtotal Construction Phase Services Labor:		0	\$0	76	\$16,416	0	\$0	106	\$11,978	8	\$824	24	\$1,968	0	\$0	214	\$29,890	\$140
Construction Phase Direct Expenses																		
Printing																		\$1,000
Mileage																		\$1,160
Per Diem																		\$350
Construction Phase Direct Expenses:																		\$2,510
Construction Phase Subcontractors																		
Stormwater/Detention CPS - Aulick Engineering																		\$1,200
CQA Topographic Survey																		\$2,500
CQA Construction Materials Testing																		\$2,500
Construction Phase Subcontractors:																		\$6,200
Subtotal Construction Phase:																		\$38,600



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AVCON, INC.
 ENGINEERS & PLANNERS
 13801 REESE BLVD., SUITE 160
 HUNTERVILLE, NC 28078
 OFFICE: (704) 954-9008
 www.avconinc.com



PARKING LOTS PROJECT
 AERIAL EXHIBIT

EX. 1



MEMORANDUM

TO: Members of the Airport Authority

FROM: Shane Stockman
Director of Information Technology

DATE: October 11, 2019

ITEM DESCRIPTION – New Business Item G

Approval of Agreement with PASSUR Aerospace for Gate Management Solution

BACKGROUND

The rapid growth of the Airport has created several challenges surrounding aircraft operations at our boarding gates. Currently, aircraft gate assignments, aircraft parking and RONs require manual coordination among the Airline Station Managers. With approximately 35-40 daily flights and only seven gates, this method is no longer efficient or reliable.

To help alleviate these operational issues, staff is recommending a gate management software solution from PASSUR Aerospace headquartered in Stamford, CT. The PASSUR gate sequencing software can significantly streamline gate assignments and provide the situational awareness needed to identify potential conflicts or delays before they occur. Powered by real time flight feeds, this cloud-based solution also contains built-in intelligence to automatically adjust gate assignments based on aircraft type, size, delays, cancelations or mechanical issues.

ISSUES

None.

ALTERNATIVES

The Board could decide not to take any action, or the alternative exists to postpone the project for a later date.

New Business – Item G



FISCAL IMPACT

This PASSUR Gate Sequencing solution is subscription based and consist of a one-time setup fee of \$15,000.00. The hosting fees, support and ongoing development costs are \$5,000 per month for a contract term of 24 months. If approved, the gate management system would be funded with Airport fund balance and programmed into the airline rates and charges for fiscal year 2021.

RECOMMENDED ACTION

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to (1) approve an agreement with PASSUR Aerospace for a Gate Management Solution; (2) authorize the Executive Director to execute the necessary documents; and (3) amend the FY2019/2020 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

Section 1. To amend the appropriations as follows:

EXPENDITURES:

	<u>Decrease</u>	<u>Increase</u>
Capital Improvements		\$55,000.00
Totals		\$55,000.00

This will result in a net increase of \$55,000.00 in the appropriations. Revenues will be revised as follows:

REVENUES:

	<u>Decrease</u>	<u>Increase</u>
Transfer from GARAA Cash		\$55,000.00
Totals		\$55,000.00



Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 11th day of October, 2019.

Matthew Burrell, Chair

Attested by:

Ellen Heywood, Clerk to the Board



Executive Offices
One Landmark Square
Suite 1900
Stamford, CT 06901
203.622.4086: tel
203.629.2970: fax

Research & Production
35-1 Orville Drive
Bohemia, NY 11716
631.589.6800: tel
631.589.6858: fax

September 23rd, 2019

Lew Bleiweis A.A.E.
Executive Director
Greater Asheville Regional Airport Authority

Dear Lew,

We are excited to support Asheville's continued growth by enhancing gate utilization and operational situational awareness at AVL through the implementation of our gate sequencing and airport collaboration solution. This solution will improve communication, maximize operational efficiencies, capture any unused gate capacity and enhances the overall passenger experience.

The airport ops department and respective commercial airlines will benefit from better gate arrival/departure performance (as a result of improved sequencing and gate conflict coordination).

Our solution leverages successes and lessons learned at various North American Airports but will be specifically adapted and tailored for Asheville's unique operational and business challenges. Our sequencing collaborative platform specifically mitigates operational constraints and gate utilization impediments that negatively drive unused capacity and misaligned gate availability.

Implementing our collaborative platform (firmly grounded in ACDM principles) which features real time situational awareness and the shared display of reliable decision-making data, will maximize the proper use of all available gate capacity, airport infrastructure and limited ground resources.

Our proposed solution, which is essentially an automated common data exchange will aggregate and re-distribute real time information for gates (assignments and status), flights (predicted and actual milestones for arrival/departure), passenger loads and airline sequencing/assignment priorities.

This proposal is based on specific feedback we received from (1) the Asheville Operations & IT Team, (2) our on-site visits and (3) research done by our internal subject matter experts. The collaborative gate sequencing program will allow all AVL stakeholders to see gate assignments and gate changes, empower airlines to communicate changing priorities and requests for gate arrival and pushback sequences and will also give the AVL Operations Staff the ability to reassign gates or reorder sequencing based on operational needs.

Our platform is designed to enable airlines to assign company priorities for arrival and departure sequencing and will be particularly effective at mitigating gate conflicts in advance, extended gate holdouts and/or related issues.

The main elements of the proposed solution are:

- Daily schedule for all carriers is pre-populated in advance, along with gate assignments (as soon as available).
- Details about each flight (scheduled time of departure, origin/destination, aircraft type).
- Real time flight status is updated – Estimated Off Block Time, Estimated Wheels Up Time, Actual Off Block Time, Actual Wheels Up Time.
- Sequencing assignments are viewable to all users.
- Changed assignments are viewable to all users.
- Separate areas are designated to manage departure sequences, arrival sequences and tows.
- The software is web-based, displayable on an Internet connected Computer or tablet.
- A live community chat feature and chat archive is always operational.
- Database to retrieve operational reports from (day-week-month) and export.

We look forward to partnering with the Asheville leadership team and supporting your specific operational, financial and customer advocacy goals!

Douglas Hofsass

A handwritten signature in black ink, appearing to read 'Doug Hofsass', written in a cursive style.

Senior Vice President
Global Airports & Business Aviation
PASSUR Aerospace
Email: dhofsass@passur.com
Direct: 203.989.9873

PASSUR Gate Sequencing & Airport Collaboration Pricing Module:

Solution	Monthly Subscription Price	One Time Fee
PASSUR Gate Sequencing & Collaboration Solution for AVL Airport (ACDM Platform) <ul style="list-style-type: none">• Two Year Subscription Term• Two (One Year) Extension Options	\$5,000/month	\$15,000

Terms and Conditions:

1. The term of the agreement begins on the date PASSUR delivers the Gate Sequencing Solution at AVL through the following (24) twenty-four months at the pricing listed above. There will be two (one-year extension options for AVL to exercise as well).
2. One-time pricing is based on the required set-up and configuration work required by PASSUR to customize the solution for Asheville.
3. This pricing is for an airport-wide license for AVL airport, AVL airlines and other AVL airport stakeholders authorized by AVL airport.
4. Pricing is valid until November 15th, 2019.
5. There will be an annual 3% price increase for years 3 and 4.
6. Monthly subscription fees are due quarterly in advance of the quarter covered, after delivery of the software. The one-time fee is due upon signing of the agreement.
7. AVL Airport will coordinate with PASSUR to make their OAG data feed and direct airline data feeds available to PASSUR for integration.
8. PASSUR Training & Facilitation. PASSUR will provide the following support as part of the solution implementation:
 - 1 full week for formal classroom training (40 Hours).
 - 1 full week of mentoring and OJT during the initial implementation phase (40 Hours).
 - After initial implementation (for the following 6 months): 1 full week of OJT with corresponding follow-up visits once a month, 40 Hours each, up to 6 months (240 Hours).
 - Customer support calls, training materials and instructional webinars are all included as part of PASSUR's monthly subscription.

Appendix A:

PASSUR Solution Description:

This solution is designed to share up-to-the-minute data with all the airport stakeholders to improve gate sequencing & allocation and to reduce arrival/departure delays. This single platform allows all AVL stakeholders to see gate assignments and gate changes; allows airlines to communicate changing priorities and requests for gate arrival and pushback sequences as well as the airport authority to reallocate gates and reorder sequencing on the same transparent platform.

This platform is designed to enable all airlines at AVL to manage their revised priorities for arrival and departure sequencing and will be a key mitigation tool to address holds, reduce taxi in times, and proactively address other related issues. It has been designed so that any key stakeholder can function as the manager of their specific request(s) that are processed on the application, using properly assigned administrative rights (determined by AVL airport).

Platform Key Features:

- Collaborative Gate Sequencing Program:** A single platform that allows all airport stakeholders to see gate assignments and gate changes; allows airlines to communicate changing priorities and requests for gate arrival and pushback sequences, and Airport Operational Control Center and/or airlines to reallocate gates/reorder sequence on the same platform; and allows the terminal Airline Representative to update status of passenger processing and release of flights post-security sweep.
- Common Situational Awareness:** A single platform to communicate key elements of the status of the airport operation, including surface delays, diversions, tarmac delays, airport updates, etc.
- Automated Common Data Exchange:** A single platform that aggregates and re-distributes real time information for: gates, flights, passenger nationality mix, US Customs and Border Patrol (CBP) capacity/status, and airline sequencing company priorities.

Home FLL Terminal 3+4 Gate Allocation and Sequencing 0951L 1451Z															AODB OK		PASSUR																			
Arr Sched															Legend: Selected		Unloads at Hardstand		Assigned Arr In-Air (ETA)		Assigned Arr On-Ground (ATA)		Plane at Gate (AIBT)		Next Plane for Gate (ATA)		Tow w/EOBT		Departure at Gate (EOBT)		Departure w/AOBT		Flight Cancelled		Gate Closed	
Arrival Schedule															Gates																					
AID	A/C Type	Tail	Gate/HS	RWY	STA	ETA	ATA	AIBT	PAX Load Total / US	Origin	Carousel	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	F1	F2	F3	F4	F5	F6									
JBU1894	190	N184JB	F10	10R	0958	0934	0934	0936		NAS		AAL525 1216	JBU502 1030			AAL1302 1140		N509NK 0927	JBU1572 1102	NKS180 1136	JBU506 1016	JBU701 1046	NKS301 1045		NKS524 1109		JBU913 1033									
JBU386	320	N618JB	G1	10L	1012	0936	0936	0944	147/85	BGI																										
JBU657	E90	N587JB	F3	10L	0950	0939	0939	0944		CLE		AAL2265 1049	JBU269 1145	AAL1133 1206	JBU2289 0926		JBU2465 1024	AAL2528 1230				JBU1701 1042				JBU657 0939										
JBU2465	320	N703JB	E6		1038	1024				BUF																										
JBU959	320	N706JB	F3		1107	1031				BDL																										
JBU563	320	N524JB	F9		1120	1040				ORD																										
JBU1701	321	N905JB	E10		1106	1042				JFK																										
JBU913	E90	N265JB	F6		1033	1045				HPN																										
AAL2265	738	N942NN	E1		1125	1049				ORD		JBU1394 1243	JBU2327 1003	JBU173 1047	N618JB 0944	N183JB 0917	BWA39 0945	NKS5237 1050	NKS3521 1035	NKS755 1045		NKS145 1040	NKS807 1025				SWG24 0926									
JBU6	320	N893JB	F8		1068	1088				EWB		JBU1394 1243	JBU1454 1329	JBU563 1040	JBU1054 1507	JBU1510 1104	JBU1676 1131	NKS103 0922	JBK4954 1224	AVA36 1222	NKS952 1203				NKS374 0559	NKS877 1149										
JBU1510	320	N582JB	G1		1104	1104			119/39	PAP		JBU2901 1433	JBU512 1515	JBU971 1313		JBU848 1258	AAL1158 1224	TSC508 1252	OMP265 1431		NKS809 1358				NKS305 1305											
JBU1676	320	N568JB	G2		1131	1131			145/44	KIN					JBU848 1258	JBU2518 1430	BWA39 1435																			
JBU269	E90	N640JB	E2		1210	1145				BOS																										
NKS877	319	N535NK	G12		1208	1149				ATL																										
NKS952	320	N645NK	G6		1220	1203			183/0	PAP																										
AAL1133	738	N944AN	E3		1212	1206				CLT																										
AVA36	320	N477AV	G5		1244	1222				BOG																										
JBU205	320	N658JB	E4		1223	1223				EWB																										
JBK4954	737	E1FJU	G4		1225	1224				PDF																										
AAL1158	738	N828AN	G2		1230	1224				PAP																										
AAL2528	738	N808NN	E7		1236	1230				DFW																										

Gate Status		T1 Ramp Status		T2 Ramp Status		T3 Ramp Status		T4 Ramp Status	
G1	Open	Southwest	Open	Air	Open	American	Open	Jet Blue	Open
G2	Open	Silver	Open	Canada	Open	Jet Blue	Open	Avianca	Open
G3	Open	Allegiant	Open	Delta	Open	Air	Open	Copa	Open
G4	Open		Open	Transat	Open	Transat	Open	BritishAir	Open

0627 JBU-	F954/799 will go to fox 9
0628 RAMP1TWR-	Ok. thx.
0628 RAMP1TWR-	On their way in.
0918 JBU-	F601/502 will reposition to E2 as E6 JB is inop

Figure 1: Sample image from a Gate Allocation and Sequencing Screen showing the arrival schedule, gate table, terminal ramp status and collaborative chat room window for all stakeholders to share information.

Gates															
A1	A2	A3	A4	A5	A6	A7	B2	B4	B5	B6	B7	B8	B9	C1	C2
SWA303 1100	SWA1734 1025			SWA1562 1020		SWA629 1105				SWA2011 1035	SWA412 1205			UAL2346 1105	
SWA330 0728	SWA2047 1050				JBU2032 1014		SWA1983 1012	SWA2184 0941	SWA981 1129	SWA1801 1037				UAL1785 1051	UAL538 1213
							SWA1497 1023								
C3	C4	C5	C6	C6B	C7	C8	C8B	C8C	C9	D1	D2	D3	D4	D5	D6
	UAL2334 1104		AAY2791 1040				N348AG 1005	SIL93 1050		DAL2593 1133		ROU1623 1055	ROU1600 1006		DAL1102 1049
UAL832 1217			WJA1232 1302			SIL117 1055				DAL2282 1156	DAL2802 1021	ROU1602 1129			DAL1482 1041
						SIL123 1138									DAL1482 N368NB A/C:319 From:LGA ETA:1041 Note:POSSIBLE 5-10 MIN GATE HOLD FOR DAL 1482 FOR D6. DAL 1102 PUSHING OFF D6 AT 1049. Dep Fit: DAL1599 STD:1209
D7	D8	D8A	D9	D9A	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	
						JBU2015 1042		JBU1423 1215	N529NK 0853		AAL2064 1022	JBU1411 1021	NKS783 1037		
DAL2619 1222	DAL1088 1110		DAL1127 1036		AAL1897 1042					JBU959 1102		TSC132 1008	TSC954 1100	JBU1701 1057	

Figure 2: Detail of a Gate Table from with specific color coding.

Example Legend: The Gate Table above provides a collaborative view of the Airport’s current Gate Status. In the yellow mouse-over, Delta ops provides the Ramp Tower a heads up on a Gate Hold Out. A salmon background indicates that TSC132 will have to hold out for E8. Ramp Tower will hold flight out of the ramp area reducing any possibility of ramp congestion.

Arrival Schedule											
AID	A/C Type	Tail	Gate/ HS	RWY	STA	ETA	ATA	AIBT	PAX Load Total / US	Origin	Carousel
NKS408	320	N628NK	G6		1058	1015	1015	1041	61/40	CLO	Edit
JBU1676	320	N523JB	G1	10R	1034	1017	1017	1023	141/67	KIN	Edit
SWA3921	737	N8315C	A4		1045	1027			85/35	HAV	Edit
SIL117	SF3	N417XJ	C8	10L	1110	1046	1047	1050		FPO	Edit
IBK4906	737	E1FJO	G4		1110	1055			85/33	PTP	Edit
JBU1510	32S	N612JB	G1		1115	1056			135/77	PAP	Edit
BHS201	737	C6-BFC	C7		1110	1113				NAS	Edit
JBU800	E90	N190JB	A6		1116	1121			47/19	HAV	Edit
JBU2328	E90	N648JB	A6		1140	1124			72/13	CMW	Edit
AVA36	320	N632AV	G3		1244	1154			101/12	BOG	Edit
NKS952	32A	N653NK	G5		1217	1201			124/72	PAP	Edit
WJA1232	737	CGWSA	C6		1314	1249				YYZ	Edit
SWA3925	737	N8321D	A1		1310	1252			160/65	HAV	Edit
JBU848	320	N592JB	G2		1305	1252			99/54	SDQ	Edit
NKS1058	319	N536NK	G5		1318	1302			66/0	CAP	Edit
JBU1398	E90	N324JB	G2		1403	1348				GCM	Edit
JBU1796	32F	N807JB	A6		1411	1349				CUN	Edit
JBU40	32F	N554JB	G1		1356	1356			151/110	MDE	Edit

Figure 3: Detail of an Arrival Schedule showing passenger counts for arrivals.

Note: The total number of passengers on board each international flight, including US citizens, is provided through PASSUR to allow for preplanning of the custom’s screening process.

[Appendix B:](#)

What Makes PASSUR Unique:

1. With the most deployments in the most diverse number of configurations in North America, PASSUR leads the industry in the development of departure metering and sequencing solutions designed to optimize commercial operational and business priorities.
2. PASSUR Sequencing & Surface Management solutions are viewed on the same platform that enables optimization of airport arrival and departure capacity in the terminal airspace, and en-route efficiencies, for a single air traffic optimization view.
3. PASSUR's Aviation Intelligence Center of Excellence ("CoE") is a team of subject matter experts with extensive experience in airline, airport and business aviation operations, finance, air traffic management, systems automation, and data visualization, with specific expertise in the operational and business needs, requirements, objectives, and constraints of the aviation industry. These experts from the PASSUR CoE understand the National Airspace System ("NAS") and are able to translate these internal requirements and external conditions into information solutions that target specific, measurable problems with defined operational and financial performance metrics. These subject matter experts are complemented by a technical team of software engineers, data scientists, radar engineers, database architects, physicists, and statisticians who have years of expertise in managing complex surveillance networks (hardware and software), as well as interpreting and converting complex, live aviation data feeds into robust decision support software solutions.
4. PASSUR operates the largest and most extensive private aircraft and airspace passive surveillance network in the world. The PASSUR Network integrates additional key surveillance sources, to include ADS-B, ASDE-X, Mode S, En Route Radar, Airline OOOI data, ACARS, fleet databases, as well as other sources. The PASSUR Network creates a direct data feed of critical flight and airspace behavior and conditions, an essential precursor resource for predictive analytics, real-time decision support, and performance analysis tools.
5. One of the key advantages of PASSUR solutions is the breadth and depth of our data (detail and volume of historical data stored; accuracy and detail of live data; and multiplicity of data sources). Without quality data, decision support and business analytics solutions are not as effective and reliable.
6. All the surveillance data acquired by the PASSUR Network is integrated and correlated into specialized databases to support predictive, real-time, and post operational requirements. PASSUR databases consolidate multiple overlapping data sets to ensure completeness, accuracy, fulfillment of specific operational requirements, and the normalization of data for a single-source authoritative record of operational performance. The data processed in these master data repositories supports the key capabilities and attributes of the PASSUR software.
7. PASSUR provides Decision Support Dashboards, KPIs, and Management by Exception. Most PASSUR solutions are delivered in "dashboard" format, simplifying and condensing extensive amounts of information into the most relevant operational and business metrics, presenting them in a manner that supports immediate performance assessment and actionable decisions. PASSUR solutions are designed so that users are alerted in real time to specific conditions and recommended action only when operations reach certain user-defined thresholds, thereby preventing information overload.

8. PASSUR introduced the first commercial program for traffic flow optimization to airlines in the US. The program enables airlines to more effectively coordinate with FAA to achieve the optimal arrival and departure rates, runway configuration, and delay restrictions, based on weather predictions and data mining algorithms (determines the most accurate and optimal departure rate by matching today's predicted weather with the best historical performance under similar weather and runway conditions).
9. PASSUR provides aircraft surface management software for three major airlines at all their key hub locations. In addition, it is used by other airlines at major locations as well as by several major US airports. This program increases predictability and operational efficiency by addressing one of the key sources of delays and disruptions – airport surface operations. The program provides airlines and airports the ability to visualize and analyze airborne and surface traffic status and performance, along with alerts for delays, and replay and analytical tools for performance improvement.

PASSUR is uniquely able to address the needs of the airport-airline community in the area of coordinated surface traffic management, based on the following key attributes:

Integrated Surveillance Network and Integrated Aviation Database

PASSUR owns and operates one of the world's largest and most extensive private commercial aviation surveillance networks (more than 180 sites). The PASSUR Network integrates and fuses additional key surveillance sources, to include ADS-B, ASDE-X, Mode S, En Route Radar, Airline OOOI data, ACARS, fleet databases, as well as other sources. The PASSUR Network creates a direct data feed of critical flight and airspace behavior and conditions, an essential underlying resource for the predictive analytics, real-time decision support, and performance analysis tools that are part of the PASSUR surface optimization solution, including many of the patented processes listed below. *There is no other comparable commercial surveillance and data resource in the industry.*

Predictive Analytics

PASSUR decision support solutions are supported by predictive analytics algorithms, which use extensive historical data mining and pattern recognition to predict specific and detailed operating conditions, as well as dynamic predictions based on the extrapolations of real-time surveillance data. *PASSUR has more than 10 years of flight, airport, and airspace historical data stored – there is no comparable commercial source of historical data, or of independent live surveillance data.*

The PASSUR Collaborative Network

The PASSUR platform, which includes sequencing and surface management, also includes a collaborative layer that allows for instant information sharing and coordination across a wide range of users in the aviation community, which provides access to more than 100 airports and 125 worldwide airlines – *a resource unavailable from any other provider.*

Intellectual Property

PASSUR has made extensive investments in developing its surveillance, data, and software architecture, resulting in capabilities exclusively available to our customers.



MEMORANDUM

TO: Members of the Airport Authority
FROM: Lew Bleiweis, A.A.E., Executive Director
DATE: October 11, 2019

ITEM DESCRIPTION – Information Section Item A

August, 2019 Traffic Report – Asheville Regional Airport

SUMMARY

August, 2019 overall passenger traffic numbers were up 41.8% compared to the same period last year. Passenger traffic numbers reflect a 41.0% increase in passenger enplanements from August, 2018.

AIRLINE PERFORMANCE

Allegiant Airlines: Year over Year passenger enplanements for Allegiant in August 2019 were up by 50.6%. There were no flight cancellations for the month.

American Airlines: American's August 2019 passenger enplanements represent a 40.9% increase over the same period last year. There were sixteen (16) flight cancellations for the month.

Delta Airlines: Delta's August 2019 enplanements increased by 7.8% compared to August 2018. There were no flight cancellations for the month.

Elite Airways: Year over Year passenger enplanements for Elite in August 2019 were flat. There were no flight cancellations for the month.

United Airlines: In August 2019, United Airlines saw an increase in enplanements by 22.7% over the same period last year. There was one (1) flight cancellation for the month.

Monthly Traffic Report

Asheville Regional Airport

August 2019



Category	Aug 2019	Aug 2018	Percentage Change	*CYTD-2019	*CYTD-2018	Percentage Change	*MOV12-2019	*MOV12-2018	Percentage Change
Passenger Traffic									
Enplaned	75,825	53,775	41.0%	518,359	356,857	45.3%	729,678	531,523	37.3%
Deplaned	<u>76,231</u>	<u>53,443</u>	42.6%	<u>515,525</u>	<u>356,086</u>	44.8%	<u>725,831</u>	<u>533,375</u>	36.1%
Total	152,056	107,218	41.8%	1,033,884	712,943	45.0%	1,455,509	1,064,898	36.7%
Aircraft Operations									
Airlines	1,148	775	48.1%	8,161	5,685	43.6%	11,706	8,402	39.3%
Commuter/ Air Taxi	<u>1,376</u>	<u>1,180</u>	16.6%	7,524	6,464	16.4%	11,200	10,661	5.1%
Subtotal	<u>2,524</u>	<u>1,955</u>	29.1%	<u>15,685</u>	<u>12,149</u>	29.1%	<u>22,906</u>	<u>19,063</u>	20.2%
General Aviation	4,718	3,648	29.3%	31,437	27,900	12.7%	42,268	43,285	-2.3%
Military	<u>193</u>	<u>254</u>	-24.0%	<u>1,996</u>	<u>2,218</u>	-10.0%	<u>2,975</u>	<u>3,948</u>	-24.6%
Subtotal	<u>4,911</u>	<u>3,902</u>	25.9%	<u>33,433</u>	<u>30,118</u>	11.0%	<u>45,243</u>	<u>47,233</u>	-4.2%
Total	7,435	5,857	26.9%	49,118	42,267	16.2%	68,149	66,296	2.8%
Fuel Gallons									
100LL	15,776	16,259	-3.0%	114,200	106,171	7.6%	171,476	164,214	4.4%
Jet A (GA)	154,563	154,470	0.1%	880,918	931,560	-5.4%	1,407,305	1,452,034	-3.1%
Subtotal	<u>170,339</u>	<u>170,729</u>	-0.2%	<u>995,118</u>	<u>1,037,731</u>	-4.1%	<u>1,578,781</u>	<u>1,616,248</u>	-2.3%
Jet A (A/L)	<u>681,273</u>	<u>419,492</u>	62.4%	<u>4,274,708</u>	<u>2,780,945</u>	53.7%	<u>5,851,712</u>	<u>4,117,752</u>	42.1%
Total	851,612	590,221	44.3%	5,269,826	3,818,676	38.0%	7,430,493	5,734,000	29.6%

*CYTD = Calendar Year to Date and *Mov12 = Moving Twelve Months.

Thursday, September 26, 2019

Airline Enplanements, Seats, and Load Factors

Asheville Regional Airport

August 2019



	Aug 2019	Aug 2018	Percentage Change	*CYTD-2019	*CYTD-2018	Percentage Change
Allegiant Air						
Enplanements	31,152	20,692	50.6%	217,801	132,567	64.3%
Seats	40,641	23,367	73.9%	283,290	155,598	82.1%
Load Factor	76.7%	88.6%	-13.4%	76.9%	85.2%	-9.8%
American Airlines						
Enplanements	16,213	11,509	40.9%	108,839	75,518	44.1%
Seats	19,948	14,000	42.5%	130,866	92,220	41.9%
Load Factor	81.3%	82.2%	-1.1%	83.2%	81.9%	1.6%
Delta Air Lines						
Enplanements	14,692	13,628	7.8%	103,244	96,899	6.5%
Seats	16,802	15,537	8.1%	117,562	110,600	6.3%
Load Factor	87.4%	87.7%	-0.3%	87.8%	87.6%	0.2%
Elite Airways						
Enplanements	264	261	1.1%	801	1,034	-22.5%
Seats	510	450	13.3%	1,590	2,020	-21.3%
Load Factor	51.8%	58.0%	-10.8%	50.4%	51.2%	-1.6%
Spirit Airlines						
Enplanements	4,077	0	#Div/0!	34,405	0	#Div/0!
Seats	6,554	0	#Div/0!	64,976	0	#Div/0!
Load Factor	62.2%	#Num!	#Type!	53.0%	#Num!	#Type!
United Airlines						
Enplanements	9,427	7,685	22.7%	53,269	50,839	4.8%
Seats	11,000	9,012	22.1%	66,854	61,245	9.2%
Load Factor	85.7%	85.3%	0.5%	79.7%	83.0%	-4.0%

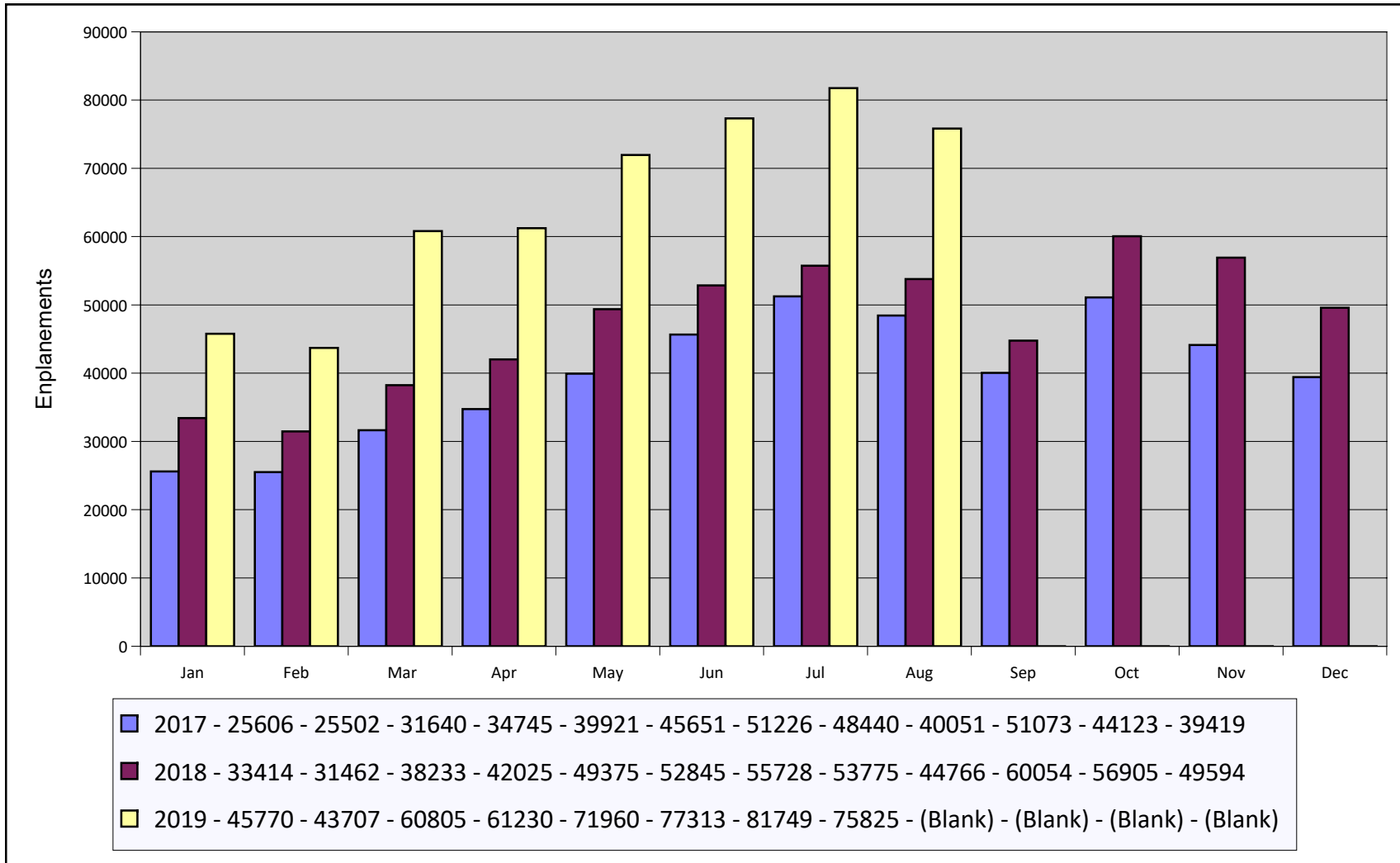
	Aug 2019	Aug 2018	Percentage Change	*CYTD-2019	*CYTD-2018	Percentage Change
Totals						
Enplanements	75,825	53,775	41.0%	518,359	356,857	45.3%
Seats	95,455	62,366	53.1%	665,138	421,683	57.7%
Load Factor	79.4%	86.2%	-7.9%	77.9%	84.6%	-7.9%

Airline Flight Completions Asheville Regional Airport August 2019

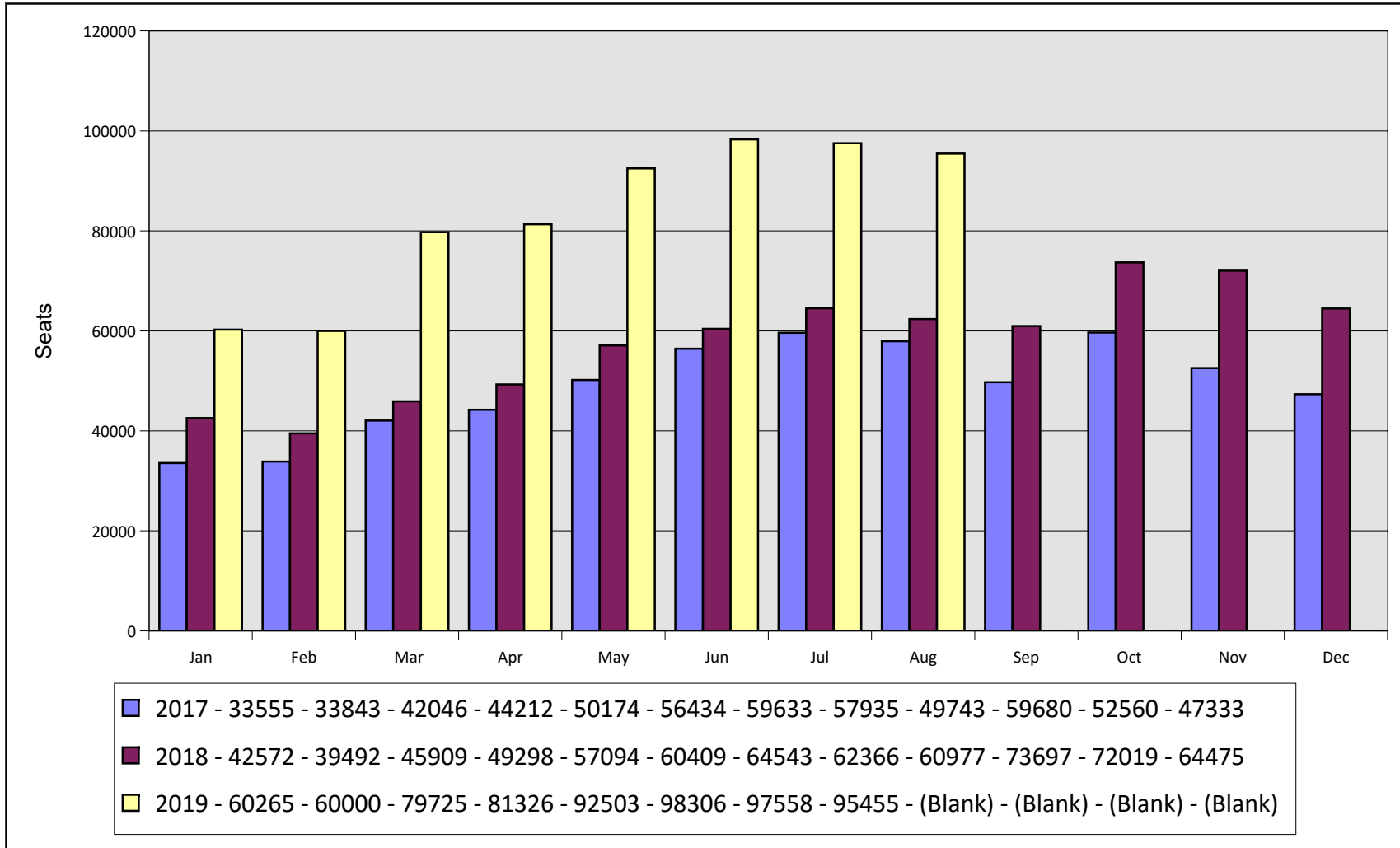


Airline	Scheduled Flights	Field	Cancellations Due To			Total Cancellations	Percentage of Completed Flights
			Mechanical	Weather	Other		
Allegiant Air	225	0	0	0	0	0	100.0%
American Airlines	315	0	0	16	0	16	92.1%
Delta Air Lines	249	0	0	0	0	0	100.0%
Elite Airways	9	0	0	0	0	0	100.0%
Spirit Airlines	49	0	1	3	0	4	91.8%
United Airlines	222	1	0	0	0	1	99.5%
Total	1,069	1	1	19	0	21	98.0%

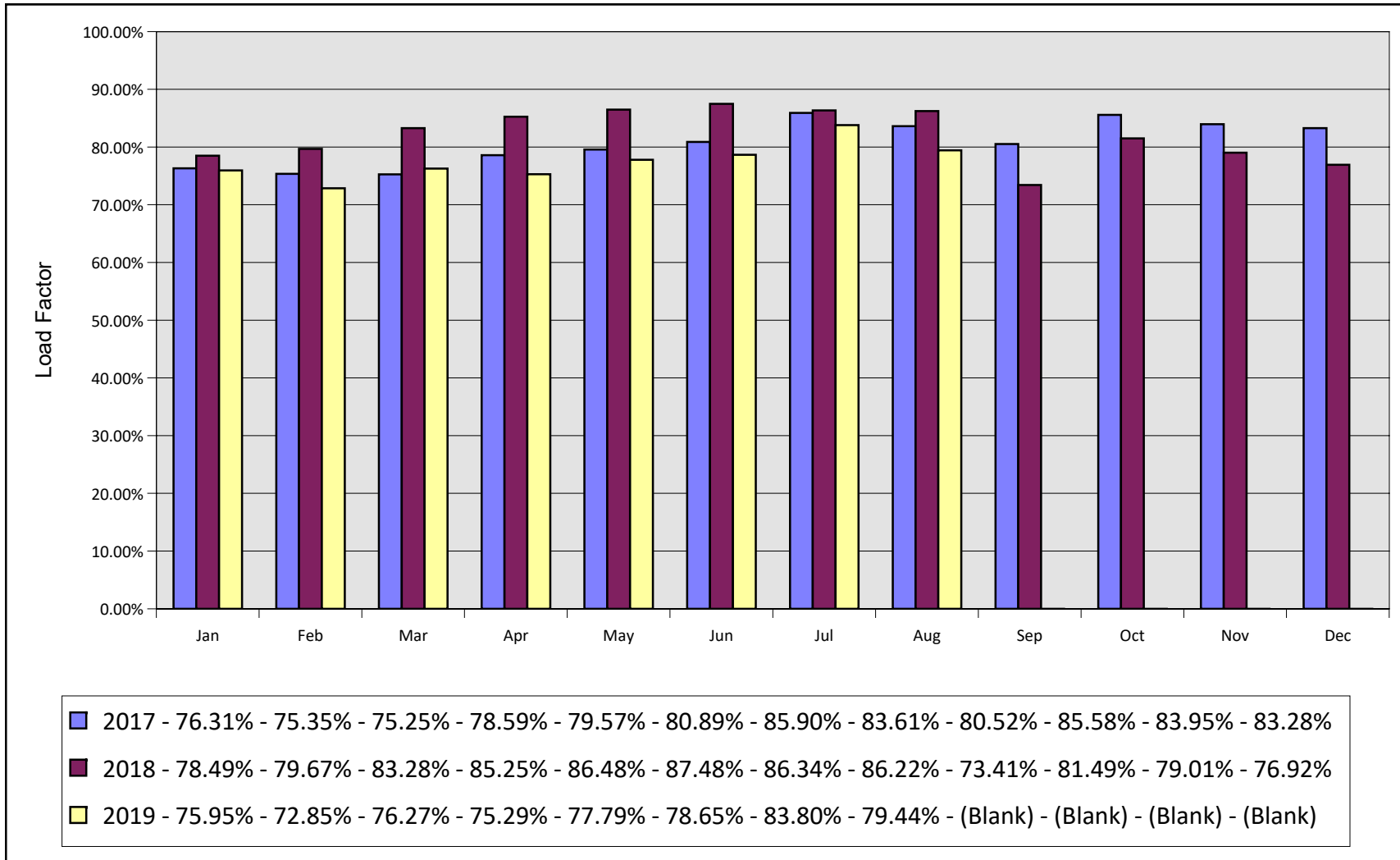
Monthly Enplanements By Year Asheville Regional Airport



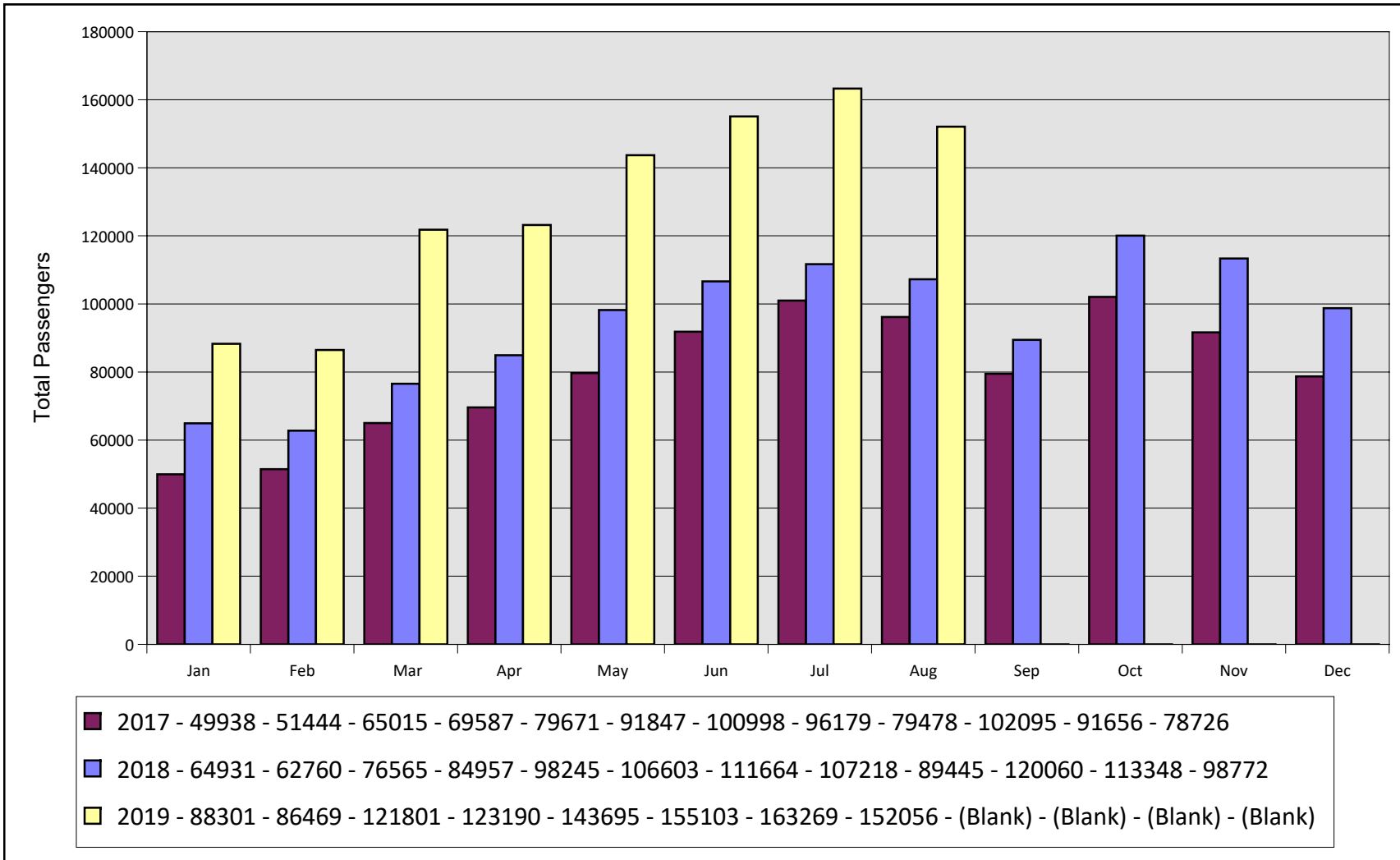
Monthly Seats By Year Asheville Regional Airport



Monthly Load Factors By Year Asheville Regional Airport

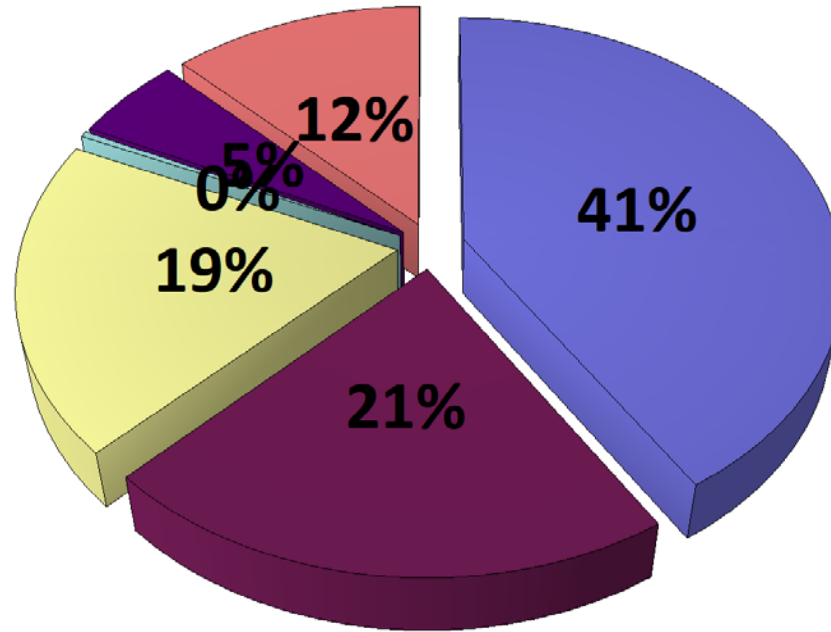


Total Monthly Passengers By Year Asheville Regional Airport



Airline Market Share Analysis (Enplanements) Asheville Regional Airport

Report Period From August 2019 Through August 2019



Allegiant Air	American Airlines
Delta Air Lines	Elite Airways
Spirit Airlines	United Airlines

November 2019 vs. November 2018

Travel Period			Nov-19		Nov-18		Diff		Percent Diff	
Mkt AI	Orig	Dest	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats
AA	AVL	CLT	55	3,855	53	3,639	2	216	3.8%	5.9%
AA	CLT	AVL	55	3,855	53	3,639	2	216	3.8%	5.9%
AA	AVL	DFW	7	532	0	0	7	532		
AA	DFW	AVL	7	532	0	0	7	532		
AA	AVL	LGA	2	152	0	0	2	152		
AA	LGA	AVL	2	152	0	0	2	152		
AA	AVL	PHL	7	350	0	0	7	350		
AA	PHL	AVL	7	350	0	0	7	350		
DL	ATL	AVL	48	3,572	45	3,442	3	130	6.7%	3.8%
DL	AVL	ATL	48	3,572	45	3,442	3	130	6.7%	3.8%
G4	AVL	BWI	2	372	2	354	0	18	0.0%	5.1%
G4	BWI	AVL	2	372	2	354	0	18	0.0%	5.1%
G4	AVL	DEN	2	372	0	0	2	372		
G4	DEN	AVL	2	372	0	0	2	372		
G4	AVL	EWR	5	930	2	354	3	576	150.0%	162.7%
G4	EWR	AVL	5	930	2	354	3	576	150.0%	162.7%
G4	AVL	FLL	14	2,550	14	2,467	0	83	0.0%	3.4%
G4	FLL	AVL	14	2,550	14	2,467	0	83	0.0%	3.4%
G4	AVL	PGD	4	726	4	708	0	18	0.0%	2.5%
G4	PGD	AVL	4	726	4	708	0	18	0.0%	2.5%
G4	AVL	PIE	10	1,833	6	1,041	4	792	66.7%	76.1%
G4	PIE	AVL	10	1,833	6	1,041	4	792	66.7%	76.1%
G4	AVL	SFB	12	2,133	7	1,228	5	905	71.4%	73.7%
G4	SFB	AVL	12	2,133	7	1,228	5	905	71.4%	73.7%
G4	AVL	SRQ	2	372	0	0	2	372		
G4	SRQ	AVL	2	372	0	0	2	372		
NK	AVL	FLL	3	435	4	728	(1)	(293)	(25.0%)	(40.2%)
NK	FLL	AVL	3	435	4	728	(1)	(293)	(25.0%)	(40.2%)
NK	AVL	MCO	5	873	4	728	1	145	25.0%	19.9%
NK	MCO	AVL	5	873	4	728	1	145	25.0%	19.9%
NK	AVL	TPA	0	0	3	546	(3)	(546)	(100.0%)	(100.0%)
NK	TPA	AVL	0	0	3	546	(3)	(546)	(100.0%)	(100.0%)
UA	AVL	EWR	0	0	7	740	(7)	(740)	(100.0%)	(100.0%)
UA	EWR	AVL	0	0	7	740	(7)	(740)	(100.0%)	(100.0%)
UA	AVL	IAD	14	700	0	0	14	700		
UA	IAD	AVL	14	700	0	0	14	700		
UA	AVL	ORD	21	1,050	21	1,050	0	0	0.0%	0.0%
UA	ORD	AVL	21	1,050	21	1,050	0	0	0.0%	0.0%
Total			426	41,614	344	34,050	82	7,564	23.8%	22.2%

December 2019 vs. December 2018

Travel Period			Dec-19		Dec-18		Diff		Percent Diff	
Mkt AI	Orig	Dest	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats
AA	AVL	CLT	49	3,155	48	3,303	1	(148)	2.1%	(4.5%)
AA	CLT	AVL	49	3,155	48	3,303	1	(148)	2.1%	4.5%
AA	AVL	DFW	7	532	0	0	7	532		
AA	DFW	AVL	7	532	0	0	7	532		
AA	AVL	LGA	2	152	0	0	2	152		
AA	LGA	AVL	2	152	0	0	2	152		
AA	AVL	PHL	7	350	0	0	7	350		
AA	PHL	AVL	7	350	0	0	7	350		
DL	ATL	AVL	46	3,482	46	3,140	0	342	0.0%	10.9%
DL	AVL	ATL	46	3,482	46	3,140	0	342	0.0%	10.9%
G4	AVL	BWI	2	354	2	354	0	0	0.0%	0.0%
G4	BWI	AVL	2	354	2	354	0	0	0.0%	0.0%
G4	AVL	DEN	1	177	0	0	1	177		
G4	DEN	AVL	1	177	0	0	1	177		
G4	AVL	EWR	2	354	2	354	0	0	0.0%	0.0%
G4	EWR	AVL	2	354	2	354	0	0	0.0%	0.0%
G4	AVL	FLL	14	2,478	13	2,301	1	177	7.7%	7.7%
G4	FLL	AVL	14	2,478	13	2,301	1	177	7.7%	7.7%
G4	AVL	PBI	2	354	0	0	2	354		
G4	PBI	AVL	2	354	0	0	2	354		
G4	AVL	PGD	2	354	2	354	0	0	0.0%	0.0%
G4	PGD	AVL	2	354	2	354	0	0	0.0%	0.0%
G4	AVL	PIE	11	1,947	6	1,062	5	885	83.3%	83.3%
G4	PIE	AVL	11	1,947	6	1,062	5	885	83.3%	83.3%
G4	AVL	SFB	11	1,947	7	1,218	4	729	57.1%	59.9%
G4	SFB	AVL	11	1,947	7	1,218	4	729	57.1%	59.9%
G4	AVL	SRQ	2	354	0	0	2	354		
G4	SRQ	AVL	2	354	0	0	2	354		
NK	AVL	FLL	0	0	3	546	(3)	(546)	(100.0%)	(100.0%)
NK	FLL	AVL	0	0	3	546	(3)	(546)	(100.0%)	(100.0%)
NK	AVL	MCO	7	1,274	3	546	4	728	133.3%	133.3%
NK	MCO	AVL	7	1,274	3	546	4	728	133.3%	133.3%
NK	AVL	TPA	0	0	2	364	(2)	(364)	(100.0%)	(100.0%)
NK	TPA	AVL	0	0	2	364	(2)	(364)	(100.0%)	(100.0%)
UA	AVL	EWR	0	0	7	350	(7)	(350)	(100.0%)	(100.0%)
UA	EWR	AVL	0	0	7	350	(7)	(350)	(100.0%)	(100.0%)
UA	AVL	IAD	14	700	0	0	14	700		
UA	IAD	AVL	14	700	0	0	14	700		
UA	AVL	ORD	21	1,050	21	1,050	0	0	0.0%	0.0%
UA	ORD	AVL	21	1,050	21	1,050	0	0	0.0%	0.0%
Total			400	38,028	324	29,884	76	8,144	23.5%	27.3%

January 2020 vs. January 2020										
Travel Period			Jan-20		Jan-19		Diff		Percent Diff	
Mkt AI	Orig	Dest	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats
AA	AVL	CLT	49	3,155	42	2,883	7	272	16.7%	9.4%
AA	CLT	AVL	49	3,155	42	2,883	7	272	16.7%	9.4%
AA	AVL	DFW	7	532	0	0	7	532		
AA	DFW	AVL	7	532	0	0	7	532		
AA	AVL	LGA	2	152	0	0	2	152		
AA	LGA	AVL	2	152	0	0	2	152		
AA	AVL	PHL	7	350	0	0	7	350		
AA	PHL	AVL	7	350	0	0	7	350		
DL	ATL	AVL	46	2,842	46	2,834	0	8	0.0%	0.3%
DL	AVL	ATL	46	2,842	46	2,834	0	8	0.0%	0.3%
G4	AVL	BWI	1	177	0	0	1	177		
G4	BWI	AVL	1	177	0	0	1	177		
G4	AVL	EWR	2	354	2	354	0	0	0.0%	0.0%
G4	EWR	AVL	2	354	2	354	0	0	0.0%	0.0%
G4	AVL	FLL	13	2,301	14	2,478	(1)	(177)	(7.1%)	(7.1%)
G4	FLL	AVL	13	2,301	14	2,478	(1)	(177)	(7.1%)	(7.1%)
G4	AVL	PBI	2	354	0	0	2	354		
G4	PBI	AVL	2	354	0	0	2	354		
G4	AVL	PGD	2	354	2	354	0	0	0.0%	0.0%
G4	PGD	AVL	2	354	2	354	0	0	0.0%	0.0%
G4	AVL	PIE	11	1,947	6	1,062	5	885	83.3%	83.3%
G4	PIE	AVL	11	1,947	6	1,062	5	885	83.3%	83.3%
G4	AVL	SFB	11	1,947	7	1,239	4	708	57.1%	57.1%
G4	SFB	AVL	11	1,947	7	1,239	4	708	57.1%	57.1%
G4	AVL	SRQ	2	354	0	0	2	354		
G4	SRQ	AVL	2	354	0	0	2	354		
NK	AVL	FLL	0	0	4	728	(4)	(728)	(100.0%)	(100.0%)
NK	FLL	AVL	0	0	4	728	(4)	(728)	(100.0%)	(100.0%)
NK	AVL	MCO	7	1,274	4	728	3	546	75.0%	75.0%
NK	MCO	AVL	7	1,274	4	728	3	546	75.0%	75.0%
NK	AVL	TPA	0	0	3	546	(3)	(546)	(100.0%)	(100.0%)
NK	TPA	AVL	0	0	3	546	(3)	(546)	(100.0%)	(100.0%)
UA	AVL	EWR	0	0	6	300	(6)	(300)	(100.0%)	(100.0%)
UA	EWR	AVL	0	0	6	300	(6)	(300)	(100.0%)	(100.0%)
UA	AVL	IAD	14	700	0	0	14	700		
UA	IAD	AVL	14	700	0	0	14	700		
UA	AVL	ORD	14	700	14	700	0	0	0.0%	0.0%
UA	ORD	AVL	14	700	14	700	0	0	0.0%	0.0%
Total			380	34,986	300	28,412	80	6,574	26.7%	23.1%



MEMORANDUM

TO: Members of the Airport Authority
FROM: Janet Burnette, Director of Finance & Accounting
DATE: October 11, 2019

ITEM DESCRIPTION – Information Section Item B

Greater Asheville Regional Airport – Explanation of Extraordinary Variances
Month of August 2019

SUMMARY

Operating Revenues for the month of August were \$1,465,826, 38.1% over budget. Operating Expenses for the month were \$1,077,831, 6.4% under budget. As a result, Net Operating Revenues before Depreciation were \$387,995. Net Non-Operating Revenues were (\$120,668), due to recording of FAA Reimbursable expenses.

Year-to-date Operating Revenues were \$3,159,465, 48.8% over budget. Year-to-date Operating Expenses were \$1,342,808, 33.2% under budget. Year-to-date Net Operating Revenues before Depreciation were \$1,816,657. Net Non-Operating Revenues for the year were (\$9,243), due to recording of FAA Reimbursable expenses.

REVENUES

Significant variations to budget for August were:

Terminal rentals-airline	\$32,028	15.96%	Enplanements over budget
Landing fees	\$33,489	38.97%	Enplanements over budget
Rental car	\$153,605	107.71%	Enplanements over budget and new brands on site
Auto Parking	\$191,478	51.06%	Enplanements over budget



EXPENSES

Significant variations to budget for August were:

Professional Services	(\$21,757)	(67.82%)	Low professional service and legal cost invoicing for the month
Contractual Services	(\$28,814)	(35.33%)	Timing of contractual services
Utility Services	(\$11,651)	(25.90%)	Electricity use remains low and no water invoicing
Operating Supplies	(\$22,712)	(58.66%)	Timing of supply purchases

STATEMENT OF NET ASSETS

Significant variations to prior month were:

Cash and Cash Equivalents – Cash and Cash Equivalents increased by \$6,315k mainly due to receipt of FAA funding.

Grants Receivable – Grants Receivable increased by \$1,410k due to the Airfield Redevelopment project.

Construction in Progress – Construction in Progress increased by \$1,644k mainly due to the Airfield Redevelopment project.

Property and Equipment, Net – Property and Equipment, Net decreased by \$438k due to depreciation.

**ASHEVILLE REGIONAL AIRPORT
INVESTMENT AND INTEREST INCOME SUMMARY
As of August 31, 2019**

<u>Institution:</u>	<u>Interest Rate</u>	<u>Investment Amount</u>	<u>Monthly Interest</u>
Bank of America - Operating Account	0.80%	\$ 13,401,321	9,060
First Citizens - Money Market Account	0.35%	404,068	0
NC Capital Management Trust - Cash Portfolio		17,929	31
NC Capital Management Trust - Term Portfolio		9,353,668	17,315
Petty Cash		200	
 <u>Restricted Cash:</u>			
BNY Mellon		284,001	
Bank of America - PFC Revenue Account	0.80%	2,852,977	1,923
NC Capital Management Trust - Term Port - PFC		10,209,013	18,899
Total		<u>\$ 36,523,177</u>	<u>\$ 47,228</u>

Investment Diversification:

Banks	46%
NC Capital Management Trust	54%
Commercial Paper	0%
Federal Agencies	0%
US Treasuries	0%
	<u>100%</u>

**ASHEVILLE REGIONAL AIRPORT
STATEMENT OF CHANGES IN FINANCIAL POSITION
For the Month Ended August 31, 2019**

	Current Month	Prior Period
Cash and Investments Beginning of Period	\$ 30,207,454	\$ 32,202,756
Net Income/(Loss) Before Capital Contributions	(171,487)	1,100,768
Depreciation	438,813	438,813
Decrease/(Increase) in Receivables	(805,405)	890,138
Increase/(Decrease) in Payables	(39,594)	(3,153,864)
Decrease/(Increase) in Prepaid Expenses	127,656	939
Decrease/(Increase) in Fixed Assets	(1,644,666)	(27,096)
Principal Payments of Bond Maturities	-	(1,245,000)
Capital Contributions	8,410,406	-
Increase(Decrease) in Cash	6,315,723	(1,995,302)
Cash and Investments End of Period	\$ 36,523,177	\$ 30,207,454

**ASHEVILLE REGIONAL AIRPORT
STATEMENT OF FINANCIAL POSITION
As of August 31, 2019**

	Current Month	Last Month
<u>ASSETS</u>		
Current Assets:		
Unrestricted Net Assets:		
Cash and Cash Equivalents	\$23,177,186	\$17,048,831
Investments	0	0
Accounts Receivable	1,155,994	1,822,820
Passenger Facility Charges Receivable	550,000	280,000
Refundable Sales Tax Receivable	12,939	221,387
Grants Receivable	11,397,475	9,986,796
Prepaid Expenses	150	127,806
Total Unrestricted Assets	36,293,744	29,487,640
Restricted Assets:		
Cash and Cash Equivalents	13,345,992	13,158,623
Total Restricted Assets	13,345,992	13,158,623
Total Current Assets	49,639,736	42,646,263
Noncurrent Assets:		
Construction in Progress	64,232,774	62,588,108
Net Pension Asset - LGERS	(760,162)	(760,162)
Benefit Payment - OPEB	25,682	25,682
Contributions in Current Year	617,323	617,323
Property and Equipment - Net	73,666,795	74,105,608
Total Noncurrent Assets	137,782,412	136,576,559
	\$187,422,148	\$179,222,822
<u>LIABILITIES AND NET ASSETS</u>		
Current Liabilities:		
Payable from Unrestricted Assets:		
Accounts Payable & Accrued Liabilities	(\$9,522)	\$65,401
Customer Deposits	12,785	12,785
Unearned Revenue	46,966	46,966
Unearned Revenue - Constr	3,508,467	3,508,467
Construction Contracts Payable	0	0
Construction Contract Retainages	574,507	574,507
Revenue Bond Payable - Current	1,280,000	1,280,000
Interest Payable	70,658	35,329
Total Payable from Unrestricted Assets	5,483,861	5,523,455
Total Current Liabilities	5,483,861	5,523,455
Noncurrent Liabilities:		
Pension Deferrals - OPEB	56,737	56,737
Other Postemployment Benefits	1,248,463	1,248,463
Compensated Absences	346,617	346,617
Net Pension Obligation-LEO Special Separation Allowance	474,558	474,558
Revenue Bond Payable - Noncurrent	16,305,000	16,305,000
Total Noncurrent Liabilities	18,431,375	18,431,375
Total Liabilities	23,915,236	23,954,830
Net Assets:		
Invested in Capital Assets	120,314,569	119,108,716
Restricted	13,345,992	13,158,623
Unrestricted	29,846,351	23,000,653
Total Net Assets	163,506,912	155,267,992
	\$187,422,148	\$179,222,822



Income Statement

Through 08/31/19
Summary Listing

Classification	Annual Budget Amount	MTD Actual Amount	YTD Actual Amount	Budget Less YTD Actual	% of Budget	Prior Year Total Actual
Fund Category Governmental Funds						
Fund Type General Fund						
Fund 10 - General Fund						
<i>Operating revenues</i>						
Terminal space rentals - non airline	252,866.00	20,780.13	41,560.26	211,305.74	16	239,292.43
Terminal space rentals - airline	2,408,240.00	232,714.94	479,774.73	1,928,465.27	20	2,362,337.76
Landing fees	1,031,246.00	119,426.04	236,557.52	794,688.48	23	1,159,610.44
Concessions	559,020.00	54,274.85	139,273.42	419,746.58	25	722,027.06
Auto parking	4,500,000.00	566,478.35	1,208,380.89	3,291,619.11	27	5,900,212.88
Rental car - car rentals	1,711,283.00	296,211.24	615,768.23	1,095,514.77	36	2,404,392.34
Rental car - facility rent	652,161.00	46,748.00	99,838.01	552,322.99	15	663,178.67
Commerce ground transportation	188,500.00	10,050.00	35,803.00	152,697.00	19	308,678.83
FBO's	1,056,304.00	90,903.58	183,586.28	872,717.72	17	1,072,689.31
Building leases	95,486.00	9,567.16	19,057.36	76,428.64	20	84,910.51
Land leases	82,833.00	4,322.77	10,121.91	72,711.09	12	55,587.61
Other leases and fees	196,800.00	14,348.69	89,743.05	107,056.95	46	193,011.95
<i>Operating revenues Totals</i>	\$12,734,739.00	\$1,465,825.75	\$3,159,464.66	\$9,575,274.34	25%	\$15,165,929.79
<i>Non-operating revenue and expense</i>						
Customer facility charges	1,600,000.00	223,146.25	455,999.50	1,144,000.50	28	1,827,347.50
Passenger facility charges	2,250,000.00	294,206.24	615,148.71	1,634,851.29	27	3,034,176.93
Interest revenue	250,000.00	47,228.56	93,435.45	156,564.55	37	510,562.20
Interest expense	.00	(35,329.29)	(70,658.58)	70,658.58	+++	(456,197.04)
Reimbursable cost expenses	.00	(649,919.93)	(1,103,168.12)	1,103,168.12	+++	.00
Gain or loss on disposal of assets	.00	.00	.00	.00	+++	61,044.85
P-card rebate	.00	.00	.00	.00	+++	2,472.15
<i>Non-operating revenue and expense Totals</i>	\$4,100,000.00	(\$120,668.17)	(\$9,243.04)	\$4,109,243.04	0%	\$4,979,406.59
Capital contributions	.00	8,410,406.00	8,410,406.00	(8,410,406.00)	+++	10,627,765.06
<i>Operating expenses</i>						
Personnel services	6,437,644.00	610,760.74	822,972.94	5,614,671.06	13	4,951,230.80
Professional services	384,950.00	10,322.73	10,903.98	374,046.02	3	297,973.72
Other contractual services	978,646.00	52,739.82	74,385.87	904,260.13	8	762,669.54
Travel and training	260,850.00	12,478.36	12,777.06	248,072.94	5	194,353.75
Communiations	65,590.00	6,211.37	9,463.48	56,126.52	14	81,901.61
Utility services	539,867.00	33,338.01	33,338.01	506,528.99	6	452,834.01
Rentals and leases	14,100.00	1,098.53	2,135.88	11,964.12	15	13,639.09
Insurance	290,600.00	284,724.09	284,724.09	5,875.91	98	259,926.91
Advertising, printing and binding	19,200.00	306.95	306.95	18,893.05	2	9,893.66
Promotional activities	303,800.00	18,429.08	19,651.02	284,148.98	6	307,862.03
Other current charges and obligations	85,100.00	3,879.29	6,991.37	78,108.63	8	60,526.52
Operating supplies	464,610.00	16,005.62	30,818.29	433,791.71	7	436,073.68

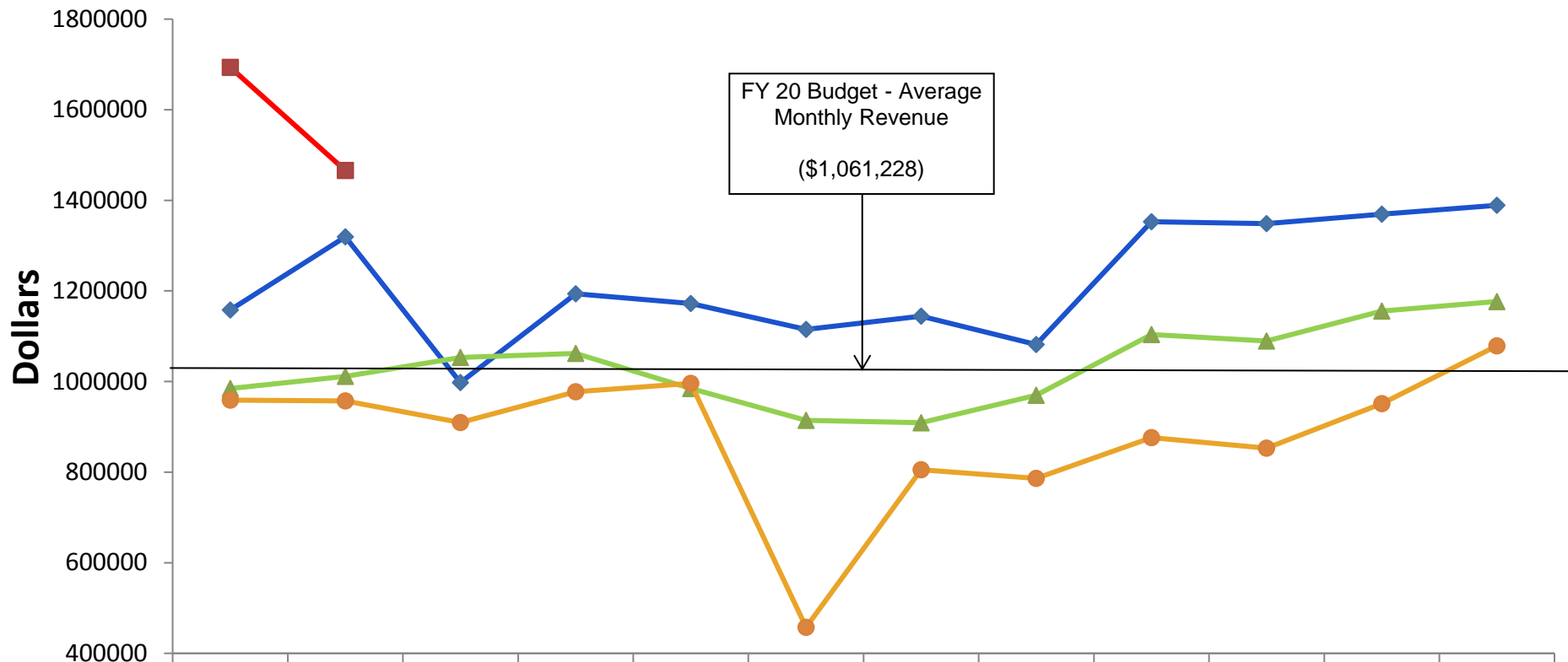


Income Statement

Through 08/31/19
Summary Listing

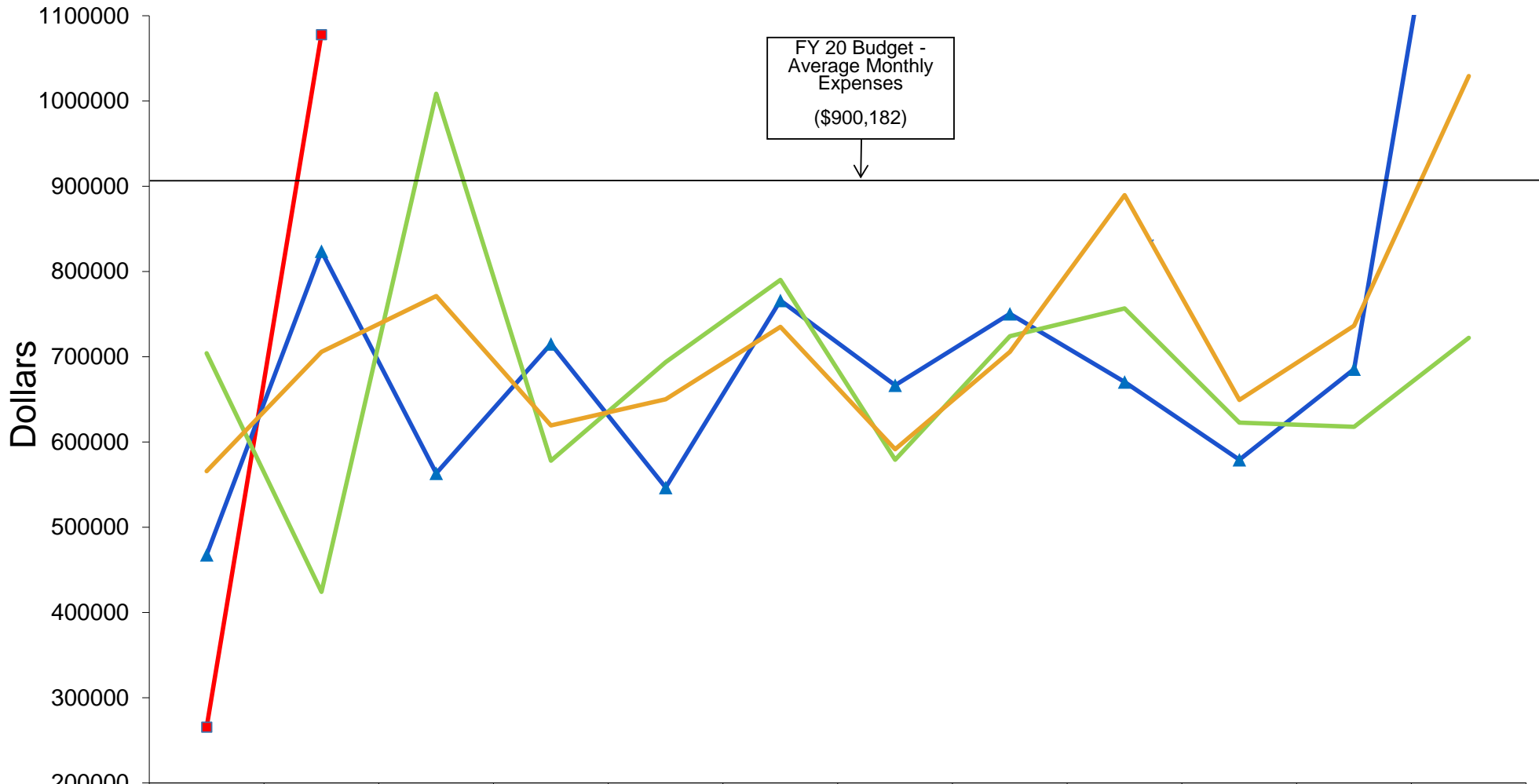
Classification	Annual Budget Amount	MTD Actual Amount	YTD Actual Amount	Budget Less YTD Actual	% of Budget	Prior Year Total Actual
Fund Category Governmental Funds						
Fund Type General Fund						
Fund 10 - General Fund						
<i>Operating expenses</i>						
Publications, subscriptions, memberships, etc.	61,900.00	964.91	1,124.91	60,775.09	2	50,868.12
Repairs and maintenance	174,700.00	13,683.01	17,413.71	157,286.29	10	192,009.86
Small equipment	80,500.00	12,888.23	15,800.90	64,699.10	20	280,193.14
Contingency	100,000.00	.00	.00	100,000.00	0	.00
Emergency repairs	50,000.00	.00	.00	50,000.00	0	24,014.58
Business development	300,000.00	.00	.00	300,000.00	0	309,205.11
<i>Operating expenses Totals</i>	<u>\$10,612,057.00</u>	<u>\$1,077,830.74</u>	<u>\$1,342,808.46</u>	<u>\$9,269,248.54</u>	13%	<u>\$8,685,176.13</u>
<i>Depreciation</i>						
Depreciation	.00	438,813.58	877,627.16	(877,627.16)	+++	5,033,403.13
<i>Depreciation Totals</i>	<u>\$0.00</u>	<u>\$438,813.58</u>	<u>\$877,627.16</u>	<u>(\$877,627.16)</u>	+++	<u>\$5,033,403.13</u>
Fund 10 - General Fund Totals						
REVENUE TOTALS	16,834,739.00	9,755,563.58	11,560,627.62	5,274,111.38	69%	30,773,101.44
EXPENSE TOTALS	10,612,057.00	1,516,644.32	2,220,435.62	8,391,621.38	21%	13,718,579.26
Fund 10 - General Fund Net Gain (Loss)	<u>\$6,222,682.00</u>	<u>\$8,238,919.26</u>	<u>\$9,340,192.00</u>	<u>\$3,117,510.00</u>	150%	<u>\$17,054,522.18</u>
Fund Type General Fund Totals						
REVENUE TOTALS	16,834,739.00	9,755,563.58	11,560,627.62	5,274,111.38	69%	30,773,101.44
EXPENSE TOTALS	10,612,057.00	1,516,644.32	2,220,435.62	8,391,621.38	21%	13,718,579.26
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Fund Category Governmental Funds Totals						
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EXPENSE TOTALS	10,612,057.00	1,516,644.32	2,220,435.62	8,391,621.38	21%	13,718,579.26
Fund Category Governmental Funds Net Gain (Loss)	<u>\$6,222,682.00</u>	<u>\$8,238,919.26</u>	<u>\$9,340,192.00</u>	<u>\$3,117,510.00</u>	150%	<u>\$17,054,522.18</u>
Grand Totals						
REVENUE TOTALS	16,834,739.00	9,755,563.58	11,560,627.62	5,274,111.38	69%	30,773,101.44
EXPENSE TOTALS	10,612,057.00	1,516,644.32	2,220,435.62	8,391,621.38	21%	13,718,579.26
Grand Total Net Gain (Loss)	<u>\$6,222,682.00</u>	<u>\$8,238,919.26</u>	<u>\$9,340,192.00</u>	<u>\$3,117,510.00</u>	150%	<u>\$17,054,522.18</u>

ASHEVILLE REGIONAL AIRPORT Annual Operating Revenue by Month August 2019



	1	2	3	4	5	6	7	8	9	10	11	12
2020	1693639	1465826										
2019	1157880	1319448	997702	1193707	1171956	1114742	1144401	1081933	1352795	1348310	1369108	1388974
2018	984749	1011431	1052878	1062064	984291	914297	909078	969671	1103476	1089449	1155693	1176670
2017	958743	957359	909258	977579	996133	457472	805436	786217	876033	852930	950921	1078756

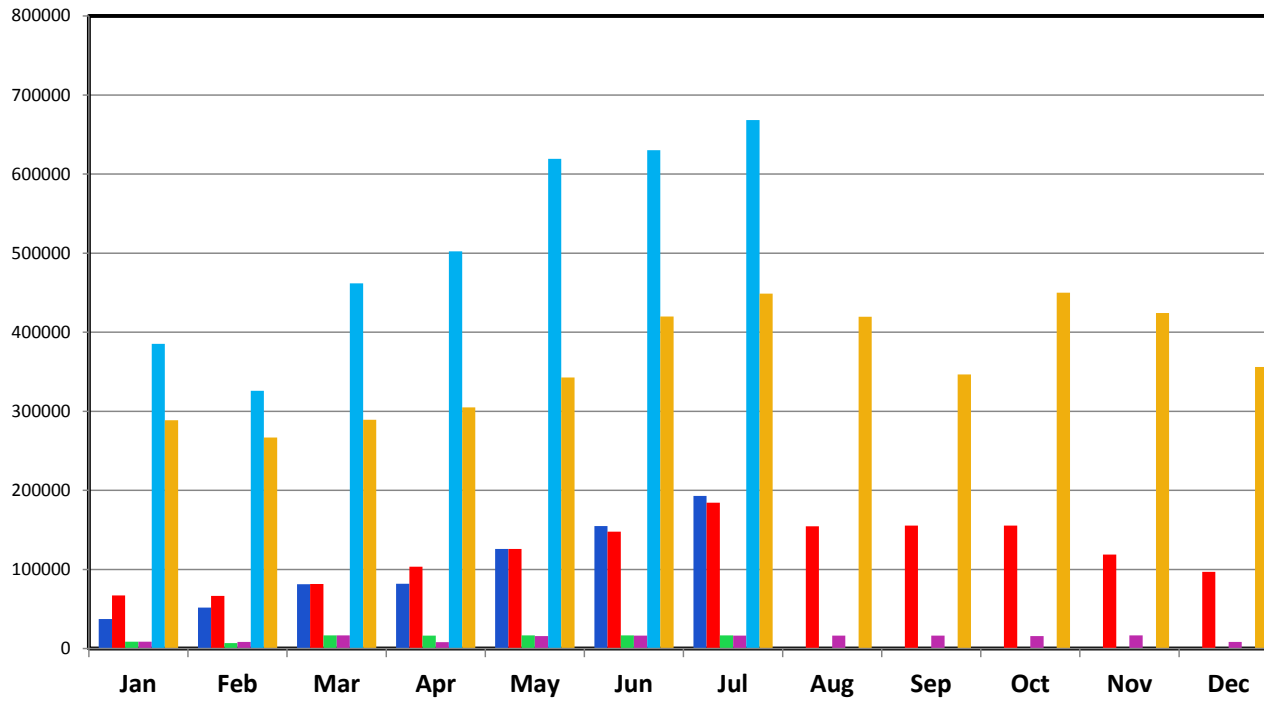
ASHEVILLE REGIONAL AIRPORT Annual Operating Expenses by Month August 2019



	1	2	3	4	5	6	7	8	9	10	11	12
2020	265483	1077831										
2019	467701	823824	563350	714938	546502	766012	666544	750376	670406	579071	685414	1480804
2018	704085	424161	1008520	578153	693612	790093	579052	724027	756743	622562	617623	722128
2017	565737	705715	771249	619423	649959	734910	591499	705568	889485	649186	736270	1029219

**ASHEVILLE REGIONAL AIRPORT
FUEL SALES - GALLONS
August 2019**

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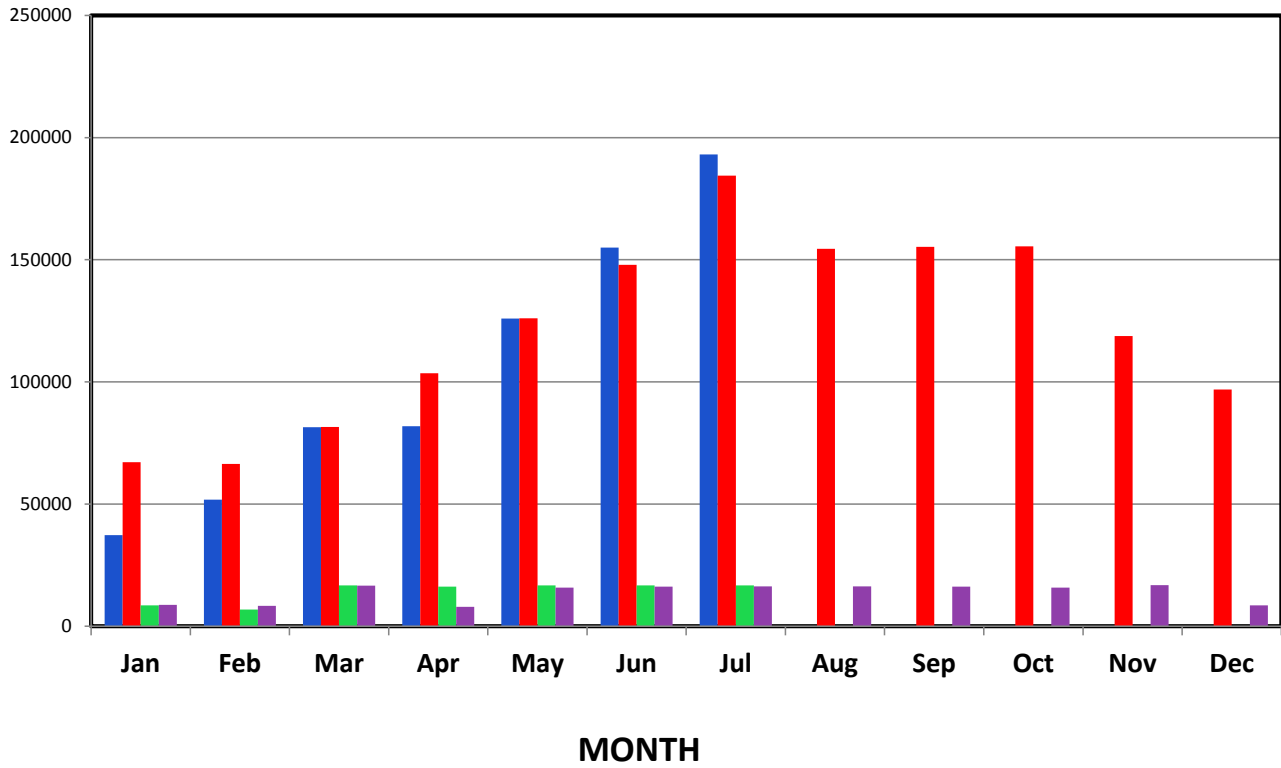
- Jet A 2019
- Jet A - 2018
- 100LL - 2019
- 100LL - 2018
- Airline 2019
- Airline - 2018

Jet A -154,563 Gallons
100LL -15,776 Gallons
Airline -681,273 Gallons

MONTH

**ASHEVILLE REGIONAL AIRPORT
GENERAL AVIATION FUEL SALES - GALLONS
August 2019**

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■ Jet A - 2019
■ Jet A - 2018
■ 100LL - 2019
■ 100LL - 2018

 Jet A - 154,563 Gallons
 100LL - 15,776 Gallons

Design Phase														
Project Number	Project Name	Project Description	Professional Services Consultant	Professional Services Contract	General Contractor	Original Construction Contract	Change Orders (thru 10/01/2019)	Percent of Original Contract	Board Approved Project Cost	Percent Complete	Expensed to Date (thru 10/01/2019)	Start Date	End Date	Current Project Status (as of 10/01/2019)
1	Airfield Re-Development Project	Budget for the complete project				\$64,100,000.00	\$15,900,000.00		\$80,000,000.00	89.0%	\$71,273,409.70			All Engineer contracts, completed construction contracts and expenses will be inclusive of budget.
1A	Airfield Re-Development Project	Phase I - Design Services This portion of project is completed.	RS&H											COMPLETED.
1B	Airfield Re-Development Project	Phase II - Design Services and Project Management.	RS&H	\$1,842,318.00	N/A	N/A	\$0.00	0.00%	<i>(Overall total included in above number)</i>	95%	\$1,748,887	Jun-13	Dec-16	Project Management work continues, pending Contractor resolution.
1C	Airfield Re-Development Project	Phase III and IV - Design Services and Project Management.	RS&H	\$2,399,826.00	N/A	N/A	\$4,417,146.00	65.90%	<i>(Overall total included in above number)</i>	34%	\$2,311,996	Dec-14	Dec-19	Phase IV Project Management continues.
1D	Airfield Re-Development Project	Phase III and IV - Design Services and Project Management. Vol 2	RS&H	\$1,460,329.00	N/A	N/A	\$0.00	0.00%	<i>(Overall total included in above number)</i>	23%	\$340,987	Aug-19	Dec-20	Phase IV Project Management continues.
1E	Airfield Re-Development Project	Phase III and IV - Design Services and Project Management. Vol 3	RS&H	\$1,487,205.00	N/A	N/A	\$0.00	0.00%	<i>(Overall total included in above number)</i>	0%	\$0	Aug-19	Dec-20	Phase IV Project Management continues.
1F	Airfield Re-Development Project	New Runway Design Vol2	AVCON	\$1,967,476.00	N/A	N/A	\$185,924.00	4.40%	<i>(Overall total included in above number)</i>	89.7%	\$1,932,146	Mar-13	Dec-19	Phase IV Project Management continues.
1G	Airfield Re-Development Project	New Runway Design Vol3	AVCON	\$99,271.00	N/A	N/A	\$0.00	0.00%	<i>(Overall total included in above number)</i>	0.0%	\$0	Aug-19	Dec-20	Phase IV Project Management continues.
1H	Airfield Re-Development Project	Miscellaneous and Administrative Expenses			N/A	N/A	\$0.00	0.0%	<i>(Overall total included in above number)</i>	0.0%	\$4,042,174	Jan-13	Dec-19	Miscellaneous Administrative Expenses, Reimbursable Agreement and Land Acquisition
2	Airport Security and Identity Management	Security system, ID badging and CCTV camera equipment	Faith Group LLC	\$327,486.27	N/A	N/A	\$0.00	0.0%	\$327,486.27	52.3%	\$171,453.00	Aug-18	Jan-20	Project Management continues.
3	Apron Expansion South	Terminal apron to be expanded and added for aircraft use.	Parrish and Partners	\$821,196.00	N/A	N/A	\$0.00	0.0%	\$0.00	45.7%	\$375,658.00	Nov-18	Nov-19	Contract in process with NTP to be issued mid-October.
4	Terminal Building Renovations	Phase 1 - Utility Modernization of Water and Sewer	Gresham Smith	\$168,820.00	N/A	N/A	\$0.00	0.0%	\$168,820.00	30.7%	\$51,930.44	Jan-19	Oct-19	Bid opening in late October.
5	Pipe Repairs	60" Stormwater Pipe repairs in North area of property	Kimley Horn	\$152,700.40	N/A	N/A	\$0.00	0.0%	\$170,840.40	40.2%	\$61,386.36	Apr-19	Aug-19	Bid opening Oct 1st with Responsible and Responsive bid recommended.

Construction Phase														
Project Number	Project Name	Project Description	Professional Services Consultant	Professional Services Contract	General Contractor	Original Construction Contract	Change Orders (thru 10/01/2019)	Percent of Original Contract	Board Approved Project Cost	Percent Complete	Expensed to Date (thru 10/01/2019)	Start Date	End Date	Current Project Status (as of 10/01/2019)
1	Permanent Runway 17-35 Construction, NAVAIDS and Taxiway Conversion	Construct new runway and convert temporary runway to a taxiway	RS&H and AVCON Inc.	Amount Included in Phase 3 Design Fees	Travelers	\$42,171,424.11	\$0.00	0.0%	\$42,171,424.11	20.3%	\$8,569,816.65	Mar-17	Dec-20	Electrical work, sign pad placement, runway lighting cans and paving continue.
2	Airport Security & Identity Management System	Replace, Upgrade and Install new Security System	Faith Group	Amount in Design Fees	Johnson Control, Inc.	\$2,197,707.00	\$0.00	0.0%	\$2,605,672.28	0%	\$0.00	May-19	Feb-20	Cable in process of being pulled throughout Facilities, equipment on order.
3	Apron Expansion South	Terminal apron to be expanded and added for aircraft use.	Parrish and Partners	Amount in Design Fees	N/A	N/A	\$0.00	0.0%	\$9,087,857.00	0.0%	\$0.00	Sep-19	Oct-20	Contract executed with start in early Nov.

Key strategic priorities

Governance vs. Management : Focus on setting governing direction (“guard rails”) for the organizational and holding management accountable for the execution of operational tactics. Pursue continuous educational opportunities for Authority Member development.

1. **Organizational Relevance**: Remaining relevant in an era of airport consolidation
2. **Financial Stewardship**: Sustainability/Operating Performance/Audit & Compliance
3. **Municipal Relations**: Positive relationships with all municipalities surrounding the airport
4. **Stakeholder Relations**: Positive relationships with neighbors and other community organizations
5. **Community Image**: Public Perception/Public Relations/Customer Service/Legal Entity
6. **Facilities Stewardship**: Future Master Facilities Plan
7. **Environmental Stewardship**: Accountability/Awareness of Environmental Issues
8. **Economic Development**: Engage Community Partners/Airline Service Development
9. **Vendor-Partner Relations**: General Aviation/Rental Car Agencies/Vendors
10. **Public Safety**: Airport Emergency Safety/TSA Relations/Municipal Partners
11. **Organizational Accountability**: Executive Director Supervision