



FUNDING INFRASTRUCTURE IMPROVEMENTS FOR N.C.'S COMMERCIAL SERVICE AIRPORTS

A Funding Needs Assessment and Recommended Allocation Formula
for the N.C. General Assembly | April 15, 2018

EXECUTIVE SUMMARY

In Session Law 2017-57, the N.C. General Assembly appropriated \$115 million for infrastructure improvements at North Carolina's 10 commercial service airports for state fiscal years 2017-2019 recognizing their critical infrastructure needs, the limited federal funding for such improvements, and the significant return on investment commercial service airports generate for the state's economy.

Within the same Session Law, the General Assembly called for the N.C. Department of Transportation's Division of Aviation (DoA) to:

- Assess the funding needs of the state's 10 commercial service airports.
- Identify what projects would be funded with state funding.
- Develop a formula for allocating future state funds to each airport.

DoA in this report outlines the following information, as requested by the General Assembly:

- **Needs Assessment** – The state's 10 commercial service airports have identified 454 projects estimated to cost \$11.7 billion. Projects are split nearly evenly between capital projects (52%) and operations and maintenance (O&M) projects (48%). Of the 454 projects, 281 projects were identified in the near term (through 2024) that are estimated to cost \$5.4 billion, or an average of \$770 million a year for the seven state fiscal years through 2024.
- **Funding Gap** – Based on historical funding from all sources, the 10 commercial service airports face a projected funding gap of \$250 million a year to meet their near-term project needs.
- **Recommended Projects for State Funding** – DoA recommends that both capital and O&M projects, as well as debt service, be eligible for state funding.
- **Proposed Funding Formula** – DoA, with support of the 10 commercial service airports, recommends that future state funds be allocated using a formula based essentially on economic impact, as reported in DoA's biennial economic impact study, but with leveling mechanisms recommended by Charlotte Douglas and Raleigh-Durham international airports to ensure an equitable distribution to the other eight airports, which have lesser capacities to generate revenue for infrastructure improvements. DoA also recommends taking any funds that airports cannot spend in a timely way and creating a grant fund DoA can distribute to other airports for priority projects.

BACKGROUND

The DoA is the state agency that assists the state's 72 public airports (10 commercial service and 62 general aviation airports) with planning for infrastructure improvements, and it manages and administers state and federal grant funding for those airport improvements.

In Session Law 2017-57, the N.C. General Assembly appropriated \$115 million for infrastructure improvements at North Carolina's 10 commercial service airports for state fiscal years 2017-2019 recognizing their critical infrastructure needs, the limited federal funding for such improvements, and the significant return on investment commercial service airports generate for the state's economy. (See *Appendix I for a copy of the Session Law.*)

Within the same Session Law, the General Assembly called for the N.C. Department of Transportation's Division of Aviation (DoA) to:

- Assess the funding needs of the state's 10 commercial service airports.
- Identify what projects would be funded with state funding.
- Develop a formula for allocating future state funds to each airport.

This report outlines the state's 10 commercial service airport's funding needs, the projects state funds would support, and DoA's recommendation for a proposed funding formula.

These recommendations have been developed after extensive discussion and close collaboration with the 10 commercial service airports beginning in July 2017. NCDOT leadership began meeting with leadership of the state's 10 commercial service airports at that time to identify their needs and discuss how state funding could best help fill the funding gap they face. That included a series of site visits to each airport in November-December 2017, during which senior NCDOT leadership met with airport leadership, toured their facilities and discussed their development needs in detail. Numerous meetings have taken place since between NCDOT and the airports, and among the airports themselves, to develop data and recommendations regarding state funding.

NEEDS ASSESSMENT

Airport Infrastructure Project Needs

The DoA asked the state's 10 commercial service airports to identify projects and estimate funding needed to develop and maintain critical infrastructure that ensures a safe, integrated, compliant and connected statewide aviation system that will serve the needs of passengers and businesses, and promote aviation-related economic development.

As of March 22, 2018, the 10 airports identified 454 needed infrastructure projects valued at \$11.7 billion.

Table 1 shows the number of projects and estimated costs of the 10 airports' anticipated future projects and funding needs.

TABLE 1: NUMBER AND ESTIMATED COST OF ALL PLANNED PROJECTS BY AIRPORT (\$11.7 BILLION)

Airport	Planned Projects		
	Thru Project Year	Number of Projects	Estimated Project Costs
Albert J. Ellis Airport (OAJ)	2032	39	\$155,317,000
Asheville Regional Airport (AVL)	2032	25	\$181,808,916
Charlotte Douglas International Airport (CLT)	2031	64	\$5,400,879,323
Coastal Carolina Regional Airport (EWN)	2028	41	\$76,921,254
Concord Regional Airport (JQF)	2038	21	\$138,063,000
Fayetteville Regional Airport (FAY)	2038	49	\$148,902,141
Piedmont-Triad International Airport (GSO)	2040	53	\$1,171,534,000
Pitt-Greenville Airport (PGV)	2024	40	\$67,282,205
Raleigh-Durham International Airport (RDU)	2042	81	\$4,224,276,000
Wilmington International Airport (ILM)	2036	41	\$148,590,000
TOTAL		454	\$11,713,573,839

Project Categories

Airports seek funding for projects in two broad categories:

- **Capital Projects** – generally, projects that will increase an airport’s capacity to serve customers and meet demand (e.g., new or expanded terminals, runways, taxiways, aprons; land acquisition; and professional services required for this work) or generate revenues that create economic impact and promote airport self-sufficiency (e.g., parking lot and toll plaza improvements, hangars, garage facilities, fuel farms and cargo operations).
- **Operations and Maintenance (O&M) Projects** – generally, projects related to passenger safety and infrastructure health (e.g. pavement rehabilitation, obstruction removal, electronic landing systems, approach and airfield lighting, security, fencing, terminal renovations, boarding bridge replacements, and equipment upgrades/replacements).

Table 2 shows the percent and number of projects by category (Capital and O&M).

TABLE 2: FUTURE PROJECT FUNDING NEEDS BY CATEGORY

Category	Percent of Projects	Number of Projects	Estimated Project Cost
Capital	52%	235	\$8,816,963,308
Operations & Maintenance	48%	219	\$2,896,610,531
TOTAL		454	\$11,713,573,839

From the total list of projects, **airports identified 281 near-term projects (needed now through SFY 2024) with an estimated cost of \$5.4 billion (an average of \$770 million a year for the seven-year period).** (See Appendix II for the list of near-term projects for each airport and Appendix III for a diagram of each airport depicting its key near-term projects.)

Table 3 shows the number of projects and estimated cost of near-term projects by airport.

TABLE 3: NEAR-TERM (THROUGH 2024) PROJECTS AND FUNDING NEEDS (\$5.4 BILLION) BY AIRPORT

Airport	Near-Term Projects	
	Number of Projects	Estimated Project Costs
Albert J. Ellis Airport (OAJ)	18	\$58,817,000
Asheville Regional Airport (AVL)	18	\$129,508,916
Charlotte Douglas International Airport (CLT)	59	\$2,904,379,323
Coastal Carolina Regional Airport (EWN)	29	\$56,516,254
Concord Regional Airport (JQF)	15	\$91,063,000
Fayetteville Regional Airport (FAY)	9	\$59,638,141
Piedmont-Triad International Airport (GSO)	46	\$947,534,000
Pitt-Greenville Airport (PGV)	39	\$67,182,205
Raleigh-Durham International Airport (RDU)	27	\$988,546,875
Wilmington International Airport (ILM)	21	\$86,340,000
TOTAL	281	\$5,389,525,714

Funding Airport Projects

Commercial service airports utilize funding for infrastructure improvements from five sources:

- Airport-generated net income
- Federal Airport Improvement Program (AIP) grants
- Passenger Facility Charges (PFC)
- Airport owner contributions
- State grants

Table 4 shows the historic average annual funding to N.C.'s 10 commercial service airports from four of those five sources (all but airport-generated net income).

TABLE 4: AVERAGE ANNUAL HISTORIC FUNDING SOURCES OF N.C. COMMERCIAL SERVICE AIRPORTS (EXCEPT AIRPORT-GENERATED NET INCOME)

Federal Airport Improvement Program (AIP) Grants Entitlement (\$36 million) Discretionary (\$26 million)	\$62 million
Passenger Facility Charges	\$100 million
Airport Owner Contributions	\$15 million
State Grants Division of Aviation Airport Funds – O&M (\$6.5 million) State Transportation Improvement Program (STIP) – Capital (\$1.5 million)	\$8 million
Total	\$185 million

Estimating Airport-generated Net Income

While historical data for the four funding sources listed in Table 4 is readily available, data is not readily available on the percentage of airport-generated funds airports historically applied toward infrastructure projects. That figure is needed to project the funding gap N.C. airports face and seek state grant funding to help fill.

To project anticipated airport-generated net income amounts for N.C.'s commercial service airports, DoA turned to a May 20, 2015 report by the U.S. Government Accountability Office (GAO), "Information on Funding Sources and Planned Capital Development, GAO-15-306," which provides a detailed analysis of funding for infrastructure projects at all U.S. system airports. The GAO report showed the percentage of funding U.S. airports received on average during fiscal years 2009-2013 (annualized to 2013 dollars) from each of the five sources, based on their type (large hub, medium hub, small hub or non-hub). (See *Appendix IV for FAA definitions of airport categories.*)

Table 5 summarizes U.S. airport funding by source and airport type.

Table 5: AVERAGE ANNUAL FUNDING BY SOURCE FOR U.S. AIRPORTS BY TYPE – FY 2009-2013

Dollars in millions

Airport Type	Large		Medium		Small		Non-Hub	
	\$	%	\$	%	\$	%	\$	%
Airport-generated net income	\$2,878	56.2%	\$756	44.4%	\$323	29.5%	(\$16)	-0.7%
AIP grants	\$615	12.0%	\$379	22.3%	\$498	45.4%	\$1,927	79.7%
PFC	\$1,309	25.6%	\$317	18.6%	\$140	12.8%	\$50	2.1%
Airport owner	\$231	4.5%	\$201	11.8%	\$99	9.0%	\$135	5.6%
State grants	\$86	1.7%	\$50	2.9%	\$36	3.3%	\$321	13.3%
Total	\$5,119	100.0%	\$1,703	100.0%	\$1,096	100.0%	\$2,417	100.0%

Source: GAO-15-306, Information on Funding Sources and Planned Capital Development, Appendix III: Comparison of Past Funding and Planned Development Costs by Type of Airport

DoA used the percentages reported by GAO, shown in Table 5, to compute the amount of funding by source in order to provide an expected amount of airport-generated net income each type of airport would likely contribute to their projects, based on historical averages. Table 6 shows those amounts.

Table 6: N.C. COMMERCIAL SERVICE AIRPORTS' ANNUAL NEAR-TERM FUNDING NEEDS OF \$770 MILLION BY SOURCE, BASED ON HISTORICAL AVERAGES FOR AIRPORT TYPE

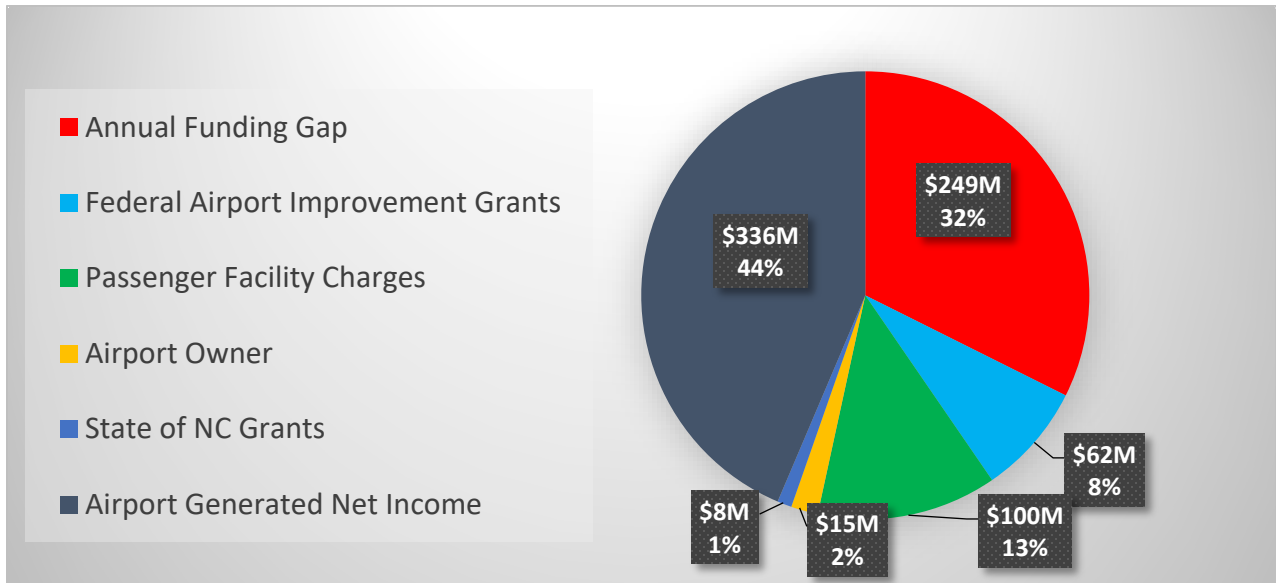
Airport	FAA Airport Category	Annualized Short Term Funding Needs	Airport-generated Net Income	AIP Grants	PFC	Airport Owner	State Grants
Albert J. Ellis Airport (OAJ)	Non-Hub	\$8,402,429	\$(55,622)	\$6,698,999	\$173,819	\$469,312	\$1,115,920
Asheville Regional Airport (AVL)	Non-Hub	\$18,501,274	\$(122,474)	\$14,750,498	\$382,732	\$1,033,377	\$2,457,141
Charlotte Douglas International Airport (CLT)	Large	\$414,911,332	\$233,271,110	\$49,847,718	\$106,098,639	\$18,723,289	\$6,970,575
Coastal Carolina Regional Airport (EWN)	Non-Hub	\$8,073,751	\$(53,446)	\$6,436,954	\$167,020	\$450,954	\$1,072,269
Concord Regional Airport (JQF)	Non-Hub	\$13,009,000	\$(86,117)	\$10,371,677	\$269,115	\$726,609	\$1,727,716
Fayetteville Regional Airport (FAY)	Non-Hub	\$8,519,734	\$(56,399)	\$6,792,523	\$176,246	\$475,864	\$1,131,500
Piedmont Triad International Airport (GSO)	Small	\$135,362,000	\$39,892,268	\$61,505,726	\$17,290,766	\$12,227,042	\$4,446,197
Pitt-Greenville Airport (PGV)	Non-Hub	\$9,597,458	\$(63,533)	\$7,651,759	\$198,541	\$536,060	\$1,274,631
Raleigh-Durham International Airport (RDU)	Medium	\$141,220,982	\$62,691,170	\$31,428,510	\$26,287,170	\$16,667,890	\$4,146,241
Wilmington International Airport (ILM)	Non-Hub	\$12,334,286	\$(81,650)	\$9,833,748	\$255,157	\$688,924	\$1,638,107
Total Funding		\$769,932,245	\$335,335,307	\$205,318,112	\$151,299,206	\$51,999,322	\$25,980,298
Historical Percentage of Funding			43.6%	26.7%	19.7%	6.8%	3.4%

Based on those calculations, DoA determined that the 10 commercial service airports collectively would contribute 43.6% (\$336 million annually) of airport-generated net income toward their \$770 million estimated annual near-term project needs. *(Note: The 43.6% figure is a weighted average. Large hubs generate more than non-hubs, which typically do not generate revenues sufficient to cover more than overhead at their airports.)*

Funding Gap

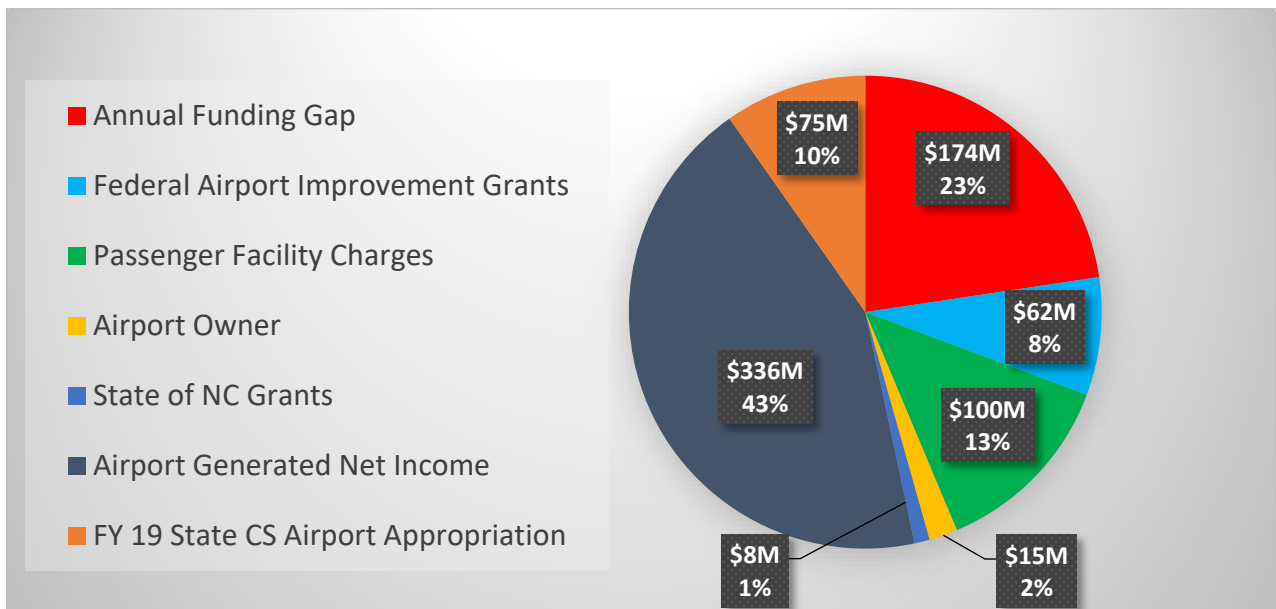
DoA's analysis, based on this historical data, shows that N.C.'s 10 commercial service airports face a nearly \$250 million a year gap in funding needed to meet their \$770 million a year near-term project needs through 2024 (See Figure 1).

FIGURE 1. FUNDING GAP (\$249 MILLION) FOR ANNUAL NEAR-TERM (THROUGH 2024) PROJECT NEEDS OF \$770 MILLION



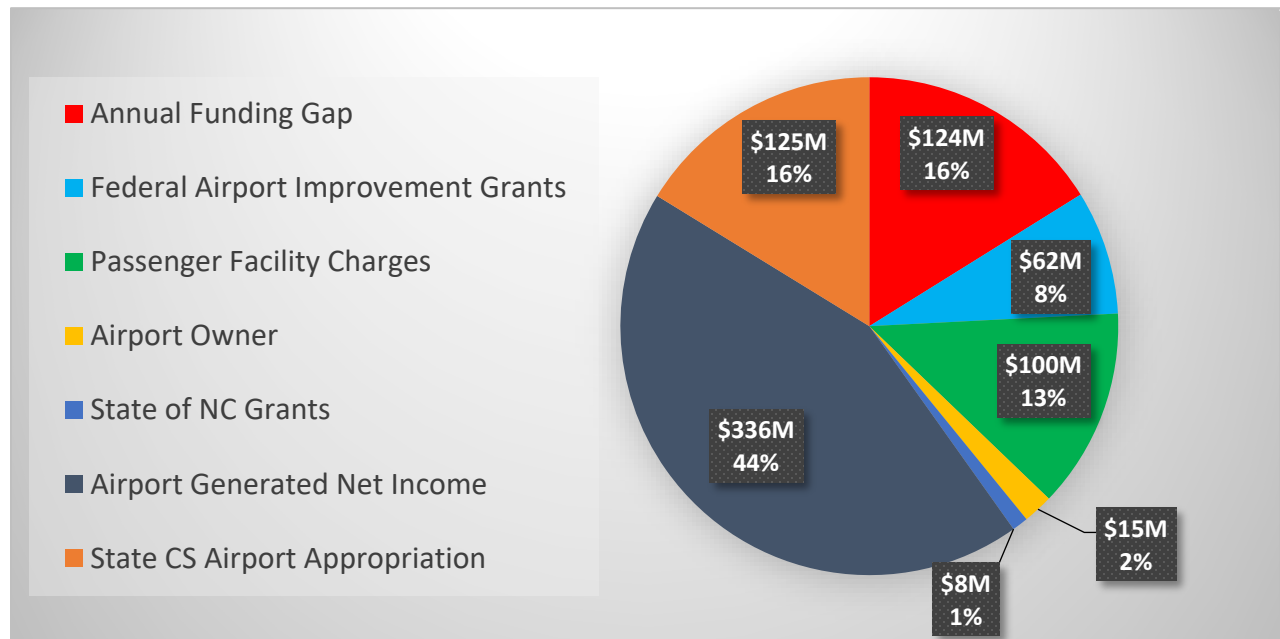
Providing recurring state funding for the 10 airports at current levels (\$75 million) would reduce that annual funding gap to \$174 million (See Figure 2).

FIGURE 2: FUNDING GAP (\$174 MILLION) FOR ANNUAL NEAR-TERM (THROUGH 2024) PROJECT NEEDS WITH \$75 MILLION SFY 2019 COMMERCIAL SERVICE AIRPORT APPROPRIATION



A state appropriation of \$125 million a year would cut the funding gap by more than half, to \$124 million (See Figure 3).

FIGURE 3: FUNDING GAP (\$124 MILLION) FOR ANNUAL NEAR-TERM (THROUGH 2024) PROJECT NEEDS WITH \$125 MILLION STATE COMMERCIAL SERVICE AIRPORT APPROPRIATION



RECOMMENDED PROJECTS FOR STATE FUNDING

Given the wide range of projects identified by the state’s 10 commercial service airports (from terminal buildings and airfield capacity and safety standard improvements to reconstruction and surface access enhancements) and the near-even split of projects between Capital and Operations and Maintenance (O&M), **DoA with the support of the airports, recommends that both Capital and O&M projects be eligible for state funds, as well as debt service.** This would include projects funded entirely with state funds and those that use a combination of state funds and funds from other sources.

PROPOSED FUNDING FORMULA

DoA, with support of the 10 commercial service airports, recommends that future state funds be allocated using a formula based essentially on economic impact, as reported in DoA’s biennial economic impact study, but with leveling mechanisms recommended by Charlotte Douglas and Raleigh-Durham international airports to ensure an equitable distribution to the other eight airports, which have lesser capacities to generate revenue for infrastructure improvements.

Specifically, DoA, with support of the 10 commercial service airports, recommends allocating state funds as follows:

- Step 1 – Allocate the annual state appropriation to the 10 airports based on the total economic impact percentage reported in the most recent Economic Impact of North Carolina Airports, produced biennially by DoA.
- Step 2 – Calculate the amount of funds that exceed a set percentage, as listed below, of Charlotte Douglas and Raleigh-Durham international airports’ allocations:
 - 70% and 80%, respectively, if the state appropriates \$125 million.
 - 80% and 85%, respectively, if the state appropriates \$75 million.
 - A pro-rata percentage calculated on a straight-line basis between the two limits if state funding falls between \$75 million and \$125 million.
- Step 3 – Distribute those funds to the eight smaller airports using a two-step process:
 - Step 3a – Allocate 25% equally to each of the eight airports.
 - Step 3b – Allocate the remaining 75% to each airport based on its most recent calendar year total enplanements, as reported by the Federal Aviation Administration.

This formula is based on the recommendation of the 10 N.C. commercial service airports. (See Appendix V for the proposal from the 10 commercial service airports.)

Table 7 shows the estimated distribution to the 10 airports based on a \$125 million annual state appropriation.

TABLE 7: AIRPORT FUNDING APPLYING PROPOSED FUNDING FORMULA TO \$125 MILLION STATE APPROPRIATION

Proposed Funding Formula - \$125 Million Annual State Appropriation

Funding Amount	\$ 125,000,000
CLT Set Percentage	70%
RDU Set Percentage	80%

Airport Name	Total Economic Impact	% Based on Economic Impact	Funding Allocation Based on Economic Impact	CLT/RDU Funds Exceeding Set Percentage	Base Funding for 10 Airports	Equal Distribution of 25% of Funds that Exceed CLT/RDU Percentage	Total Enplanements	Prorata Share Based on Enplanements (Exclude CLT & RDU)	Distribution of 75% to 8 Airports Based on Enplanements	Total Funding Per Airport
Albert J. Ellis (OAJ)	\$ 237,120,000	0.87%	\$ 1,085,603		\$ 1,085,603	\$ 828,838	149,987	6.53%	\$ 1,298,997	\$ 3,213,438
Asheville Regional (Avi)	\$ 555,660,000	2.04%	\$ 2,543,971		\$ 2,543,971	\$ 828,838	416,939	18.15%	\$ 3,610,995	\$ 6,983,804
Charlotte Douglas International (CLT)	\$ 13,591,800,000	49.78%	\$ 62,227,157	\$ 18,668,147	\$ 43,559,010		21,511,880			\$ 43,559,010
Coastal Carolina Regional (EWN)	\$ 179,110,000	0.66%	\$ 820,017		\$ 820,017	\$ 828,838	106,110	4.62%	\$ 918,990	\$ 2,567,845
Concord Regional (JQF)	\$ 160,940,000	0.59%	\$ 736,829		\$ 736,829	\$ 828,838	90,338	3.93%	\$ 782,393	\$ 2,348,060
Fayetteville Regional/Grannis Field (FAY)	\$ 312,520,000	1.14%	\$ 1,430,806		\$ 1,430,806	\$ 828,838	224,541	9.78%	\$ 1,944,688	\$ 4,204,333
Piedmont Triad International (GSO)	\$ 1,953,290,000	7.15%	\$ 8,942,722		\$ 8,942,722	\$ 828,838	848,261	36.93%	\$ 7,346,558	\$ 17,118,117
Pitt-Greenville (PGV)	\$ 103,400,000	0.38%	\$ 473,395		\$ 473,395	\$ 828,838	47,457	2.07%	\$ 411,012	\$ 1,713,245
Raleigh-Durham International (RDU)	\$ 8,578,180,000	31.42%	\$ 39,273,367	\$ 7,854,673	\$ 31,418,694		5,401,714			\$ 31,418,694
Wilmington International (ILM)	\$ 1,630,770,000	5.97%	\$ 7,466,133		\$ 7,466,133	\$ 828,838	413,185	17.99%	\$ 3,578,483	\$ 11,873,454
Total	\$ 27,302,790,000	100.00%	\$ 125,000,000	\$ 26,522,821	\$ 98,477,179	\$ 6,630,705	29,210,412	100%	\$ 19,892,115	\$ 125,000,000



Table 8 shows the estimated distribution based on a \$75 million annual state appropriation.

TABLE 8: AIRPORT FUNDING APPLYING PROPOSED FUNDING FORMULA TO \$75 MILLION STATE APPROPRIATION

Proposed Funding Formula - \$75 Million Annual State Appropriation
 Funding Amount \$ 75,000,000
 CLT Set Percentage 80%
 RDU Set Percentage 85%

Airport Name	Total Economic Impact	% Based on Economic Impact	Funding Allocation Based on Economic Impact	CLT/RDU Funds Exceeding Set Percentage	Base Funding for 10 Airports	Equal Distribution of 25% of Funds that Exceed CLT/RDU Percentage	Total Enplanements	Prorata Share Based on Enplanements (Exclude CLT & RDU)	Distribution of 75% to 8 Airports Based on Enplanements	Total Funding Per Airport
Albert J. Ellis (OAJ)	\$ 237,120,000	0.87%	\$ 651,362		\$ 651,362	\$ 343,808	0.51%	6.53%	\$ 538,833	\$ 1,534,004
Asheville Regional (AVJ)	\$ 555,660,000	2.04%	\$ 1,526,382		\$ 1,526,382	\$ 343,808	1.43%	18.15%	\$ 1,497,867	\$ 3,368,058
Charlotte Douglas International (CLT)	\$ 13,591,800,000	49.78%	\$ 37,336,294	\$ 7,467,259	\$ 29,869,035		73.64%		\$ -	\$ 29,869,035
Coastal Carolina Regional (EWN)	\$ 179,110,000	0.66%	\$ 492,010		\$ 492,010	\$ 343,808	0.36%	4.62%	\$ 381,204	\$ 1,217,022
Concord Regional (JQF)	\$ 160,940,000	0.59%	\$ 442,098		\$ 442,098	\$ 343,808	0.31%	3.93%	\$ 324,542	\$ 1,110,448
Fayetteville Regional/Grannis Field (FAY)	\$ 312,520,000	1.14%	\$ 858,484		\$ 858,484	\$ 343,808	0.77%	9.78%	\$ 806,671	\$ 2,008,963
Piedmont Triad International (GSO)	\$ 1,953,290,000	7.15%	\$ 5,365,633		\$ 5,365,633	\$ 343,808	2.90%	36.93%	\$ 3,047,406	\$ 8,756,848
Pitt-Greenville (PGV)	\$ 103,400,000	0.38%	\$ 284,037		\$ 284,037	\$ 343,808	0.16%	2.07%	\$ 170,491	\$ 798,336
Raleigh-Durham International (RDU)	\$ 8,578,180,000	31.42%	\$ 23,564,020	\$ 3,534,603	\$ 20,029,417		18.49%		\$ -	\$ 20,029,417
Wilmington International (ILM)	\$ 1,630,770,000	5.97%	\$ 4,479,680		\$ 4,479,680	\$ 343,808	1.41%	17.99%	\$ 1,484,381	\$ 6,307,869
Total	\$ 27,302,790,000	100.00%	\$ 75,000,000	\$ 11,001,862	\$ 63,998,138	\$ 2,750,465	100%	100%	\$ 8,251,396	\$ 75,000,000

DoA also recommends annually capturing any grant funds that airports cannot encumber or expend within 60 days following the end of the state fiscal year in which they are awarded. DoA will reallocate those funds to commercial service airports based on projects deemed to be the highest priority.



APPENDIX I

Session Law 2017-57

SESSION LAW 2017-57

FUNDING FOR AIRPORT IMPROVEMENTS AND DEBT SERVICE

SECTION 34.19.(a) 2017-2018 Allocations. – Of the funds appropriated from the Highway Fund to the Department of Transportation for capital improvements at commercial airports, the following sums in nonrecurring funds for the 2017-2018 fiscal year shall be allocated by the Department as follows:

- (1) Twenty-one million two hundred eighty-two thousand one hundred thirty-one dollars (\$21,282,131) to the Raleigh-Durham International Airport.
- (2) Eight hundred sixty-four thousand seven hundred eight dollars (\$864,708) to the Albert J. Ellis Airport.
- (3) Two million twenty-six thousand three hundred thirty-one dollars (\$2,026,331) to the Asheville Regional Airport.
- (4) Six hundred fifty-three thousand one hundred sixty-two dollars (\$653,162) to the Coastal Carolina Regional Airport.
- (5) Five hundred eighty-six thousand nine hundred one dollars (\$586,901) to the Concord Regional Airport.
- (6) One million one hundred thirty-nine thousand six hundred seventy dollars (\$1,139,670) to the Fayetteville Regional Airport.
- (7) Seven million one hundred twenty-three thousand eighty-two dollars (\$7,123,082) to the Piedmont Triad International Airport.
- (8) Three hundred seventy-seven thousand seventy dollars (\$377,070) to the Pitt-Greenville Airport.
- (9) Five million nine hundred forty-six thousand nine hundred forty-five dollars (\$5,946,945) to the Wilmington International Airport.

SECTION 34.19.(b) 2018-2019 Allocation to RDU. – Of the funds appropriated from the Highway Fund to the Department of Transportation for capital improvements at commercial airports, and beginning in the 2018-2019 fiscal year, the sum of thirty-one million two hundred eighty-two thousand one hundred thirty-one dollars (\$31,282,131) in recurring funds shall be allocated by the Department to the Raleigh-Durham International Airport.

SECTION 34.19.(c) 2018-2019 Allocations to Other Airports. – Of the funds appropriated from the Highway Fund to the Department of Transportation for capital improvements at commercial airports, the following sums in nonrecurring funds for the 2018-2019 fiscal year shall be allocated as follows:

- (1) Eight hundred sixty-four thousand seven hundred eight dollars (\$864,708) to the Albert J. Ellis Airport.
- (2) Two million twenty-six thousand three hundred thirty-one dollars (\$2,026,331) to the Asheville Regional Airport.
- (3) Six hundred fifty-three thousand one hundred sixty-two dollars (\$653,162) to the Coastal Carolina Regional Airport.
- (4) Five hundred eighty-six thousand nine hundred one dollars (\$586,901) to the Concord Regional Airport.
- (5) One million one hundred thirty-nine thousand six hundred seventy dollars (\$1,139,670) to the Fayetteville Regional Airport.
- (6) Seven million one hundred twenty-three thousand eighty-two dollars (\$7,123,082) to the Piedmont Triad International Airport.
- (7) Three hundred seventy-seven thousand seventy dollars (\$377,070) to the Pitt-Greenville Airport.

- (8) Five million nine hundred forty-six thousand nine hundred forty-five dollars (\$5,946,945) to the Wilmington International Airport.
- (9) Twenty-five million dollars (\$25,000,000) to the Charlotte Douglas International Airport.

SECTION 34.19.(d) Permissible Uses. – Each airport receiving funds under this section may use the funds allocated to it under this section to (i) fund improvements to the airport and (ii) pay debt service or related financing costs and expenses on revenue bonds or notes issued by the airport.

SECTION 34.19.(e) Limitation. – Notwithstanding any provision of law to the contrary, it is the intention of the General Assembly that the appropriation of funds to the airports listed in this section, the enactment of this section, and the issuance of bonds or notes by the airports in reliance thereon shall not in any manner constitute a pledge of the faith and credit and taxing power of the State, and nothing contained herein shall prohibit the General Assembly from amending an appropriation made to the airports at any time to decrease or eliminate the amount appropriated to the airports.

SECTION 34.19.(f) Report. – The Department of Transportation shall provide a report on the use or uses by each airport of funds allocated to the airport under this section. The Department shall submit the report required under this subsection by March 1, 2019, to the Joint Legislative Transportation Oversight Committee.

SECTION 34.19.(g) Funding Needs Assessment; Formula. – The Division of Aviation of the Department of Transportation shall develop a funding needs assessment setting out (i) the amount of State funding needed by each commercial airport listed in this section and (ii) what projects would be funded using the needed State funding. The Division shall utilize the data gathered in the funding needs assessment required under this section to develop a formula for allocating State funds to commercial airports that is based on the State funding needs of each airport and the economic output of each airport. By April 15, 2018, the Division shall submit the funding needs assessment and a description of the formula to the chairs of the House of Representatives Appropriations Committee on Transportation, the chairs of the Senate Appropriations Committee on the Department of Transportation, and the Fiscal Research Division of the General Assembly.



APPENDIX II

Near-term (through 2024) Commercial Service Airport Projects

The following pages show the estimated cost of near-term projects (through 2024) identified by each of the 10 commercial service airports.

Albert J. Ellis Airport (OAJ) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Air Traffic Control Tower	2018	\$ 5,750,000
Land Acquisition Phase II	2018	\$ 362,000
Airfield Lighting Improvements	2018	\$ 1,556,000
Baggage Handling	2018-2019	\$ 2,000,000
SRE Building	2018-2019	\$ 605,000
South GA Development Phase 1	2018-2019	\$ 1,728,000
Runway/Taxiway Extension and NC111 Realignment	2020-2024	\$ 23,863,000
Public Parking Improvements	2020-2024	\$ 4,550,000
Terminal Area Roadways Phase 3	2020-2024	\$ 4,550,000
Rental Car Facilities	2020-2024	\$ 4,000,000
GA Apron Expansion	2020-2024	\$ 1,700,000
Security/Wildlife Improvements	2020-2024	\$ 303,000
Airfield Drainage Improvements	2020-2024	\$ 440,000
ARFF Truck Replacement	2020-2024	\$ 750,000
Hangars	2020-2024	\$ 740,000
Rental Car Canopies	2020-2024	\$ 535,000
Emergency Access Road Improvements	2020-2024	\$ 385,000
Entrance Road Realignment	2020-2024	\$ 5,000,000
Total		\$ 58,817,000

Asheville Regional Airport (AVL) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Parking Garage Construction	2017	\$ 22,200,000
Airfield Redevelopment BP-4	2018	\$ 45,000,000
Terminal Security System Improvements	2018	\$ 1,535,581
Snow Removal Equipment (broom/ blower)	2018	\$ 1,580,280
Wright Brothers Way Extension	2019	\$ 3,000,000
Terminal Apron Expansion - South	2019	\$ 8,500,000
Snow Removal Equipment - Plow Trucks	2019	\$ 2,400,000
Terminal Rehabilitation and Expansion	2020	\$ 23,000,000
Terminal Apron Repairs	2020	\$ 1,111,111
SW Development Environmental Services	2021	\$ 300,000
SW Development Area Site Preparation	2022	\$ 4,300,000
Southeast Development Area: Environmental Services	2022	\$ 300,000
Roadway Improvements and Rehabilitation	2022	\$ 4,981,944
Airport Master Plan	2022	\$ 1,000,000
Southeast Development Area Site Preparation	2023	\$ 7,000,000
Parking Lot Rehabilitation	2023	\$ 1,100,000
NW Development Area Roadway and Infrastructure	2024	\$ 1,700,000
NW Development Area Environmental Services	2024	\$ 500,000
Total		\$ 129,508,916

Charlotte Douglas International Airport (CLT) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Terminal Voice Evacuation System	2017	\$ 3,000,000
Airport Water System Master Plan	2017	\$ 186,000
Atrium Refresh	2017	\$ 600,000
CLT Center Phase 11	2017	\$ 900,000
Centralized Receiving and Distribution Center Construction	2017	\$ 27,900,000
Terminal Lobby Canopy	2017	\$ 75,000,000
Concourse C Expansion Design	2017	\$ 32,410,000
Airport Entrance Gateway	2017	\$ 5,000,000
Concourse C Expansion Construction	2017	\$ 430,590,000
Concourse B Expansion Design	2017	\$ 32,410,000
Runway 18R/36L and Assoc TWY Joint Seal Replacement	2017	\$ 1,897,365
Center Airfield Lighting Vault Relocation	2017	\$ 4,000,000
North EAT, Hold Pads, & Relos (Old Dowd, Overlook, RTR, ASOS) Design	2017	\$ 21,940,000
Concourse A Expansion - Phase I (9 gates) Construction	2017	\$ 134,151,088
Concourse A Expansion Phase II & III Design	2017	\$ 21,000,000
Concourse A Expansion Phase II Construction	2017	\$ 139,500,000
Concourse A Expansion Phase III Construction	2017	\$ 139,500,000
Air Cargo Cold Storage Facility	2017	\$ 9,050,000
Central Energy Plant Design	2017	\$ 2,100,000
FedEx GSE Expansion	2017	\$ 2,150,000
FedEx Parking Lot	2017	\$ 3,780,000
Centralized Receiving and Distribution Center Design	2018	\$ 2,100,000
Main Terminal Conference Room Renovations	2018	\$ 1,000,000
Long Term 1 Expansion	2018	\$ 400,000
Concourse E Passenger Boarding Bridges - Phase II (11)	2018	\$ 12,868,783
FIS Renovations	2018	\$ 10,000,000
South Ramp Expansion Phase I Construction	2018	\$ 46,500,000
Fourth Parallel Runway Design	2018	\$ 25,403,683
Fourth Parallel Runway Construction	2018	\$ 337,506,068
North EAT& Relos (Old Dowd, Overlook, RTR, ASOS) Construction	2018	\$ 109,696,313
East Terminal Expansion - Phase II Construction	2018	\$ 33,906,259
Field Maintenance Facility	2018	\$ 14,500,000
Concourse E Expansion - Phase 8 Construction	2018	\$ 32,038,000
Cargo Study	2018	\$ 300,000
New Taxiway and Two Hold Pads Design	2018	\$ 7,680,000
Old Dowd Rd East Relocation Design	2018	\$ 2,078,750
South Ramp Expansion Phase I Design	2019	\$ 3,500,000
Taxiway A Rehabilitation Construction	2019	\$ 12,868,949
Taxiway M Rehabilitation Design	2019	\$ 980,000
Taxiway M Rehabilitation Construction	2019	\$ 13,020,000
Terminal Curbfront Roadway	2019	\$ 44,689,049
Central Energy Plant Construction	2019	\$ 27,900,000
New Taxiway and Two Hold Pads Construction	2019	\$ 38,397,438
Old Dowd Rd East Relocation Construction	2019	\$ 10,392,375
Tree Renovation	2020	\$ 325,000

Charlotte Douglas International Airport (CLT) Near-term Projects and Funding Needs -- Continued		
Project	Project Year	Estimated Cost
Tree Renovation	2020	\$ 325,000
Terminal Rehabilitation Incidental Projects	2020	\$ 19,000,000
Terminal Lobby Expansion - Design	2020	\$ 18,000,000
Terminal Lobby Expansion - Construction	2020	\$ 318,081,600
Cargo Building #8 Expansion	2020	\$ 2,600,000
Terminal Fuel Farm Expansion - Phase III	2022	\$ 10,000,000
South Ramp Expansion Phase II Design	2022	\$ 3,500,000
West Ramp Expansion Phase I Construction	2022	\$ 41,624,604
Steele Creek Cargo Facility	2022	\$ 7,400,000
TWY F Extension, Deice Pad, & TWY SCF Construction	2023	\$ 125,180,500
West Terminal Seating Area	2024	\$ 250,000
West Ramp Expansion Phase II & Fuel Station Design	2024	\$ 1,750,000
West Ramp Expansion Phase II & Fuel Station Construction	2024	\$ 26,250,000
TWY F Extension, Deice Pad, & TWY SCF Design	2024	\$ 25,037,500
Concourse B Expansion Construction	N/A	\$ 430,590,000
Total		\$ 2,904,379,323

Coastal Carolina Regional Airport (EWN) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Airfield Lighting Rehabilitation (Runway 14-32) - Design	2018	\$ 50,000
Airfield Lighting Rehabilitation (Runway 14-32) - Construction	2018	\$ 460,000
GA Area Expansion - Design (2027 STI Project)	2018	\$ 50,000
GA Area Expansion - Construction (2027 STI Project)	2018	\$ 450,000
Runway 14-32 Rehabilitation - Design	2018	\$ 210,000
Runway 14-32 Rehabilitation - Construction	2018	\$ 2,420,000
GA Apron And Air Cargo Apron Rehabilitation - Design and Construction	2018	\$ 1,750,000
FY 2017 Federal Match	2018	\$ 296,974
Air Carrier Apron Rehabilitation and Expansion - Construction	2018	\$ 4,700,000
New ARFF Building - Design	2019	\$ 600,000
Terminal Building Expansion/Improvements - Design	2019	\$ 1,000,000
GA Area T-Hangars - Design and Construction	2019	\$ 623,000
FY 2018 Federal Match	2019	\$ 516,280
Runway Visual Range (RVR) System Installation	2020	\$ 400,000
Entrance Road Rehabilitation - Design	2020	\$ 100,000
Entrance Road Rehabilitation - Construction	2020	\$ 3,300,000
ARFF Building - Construction	2020	\$ 6,000,000
Terminal Building Expansion/Improvements - Construction	2020	\$ 15,000,000
Runway 4-22 Extension - Environmental	2021	\$ 400,000
Runway 4 MALSR - Environmental	2021	\$ 250,000
New ARFF Truck	2021	\$ 700,000
Runway 4-22 Extension - Design and Wetlands Mitigation	2022	\$ 1,500,000
Runway 4 MALSR - Design	2022	\$ 150,000
Taxiway A Rehabilitation - Design	2023	\$ 250,000
Air Traffic Control Tower - Design and Environmental	2023	\$ 750,000
Runway 4-22 RPZ Land Acquisition	2023	\$ 3,240,000
Runway 4 Approach Light System (MALSR) - Construction	2024	\$ 3,000,000
Runway 4-22 Extension Public Road Relocation	2024	\$ 4,600,000
Air Traffic Control Tower Rebuild - Construction	2024	\$ 3,750,000
Total		\$ 56,516,254

Concord Regional Airport (JQF) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Air Traffic Control Communication System Intergration	2018	\$ 400,000
Apron Strengthening / Hangar Taxilane Rehabilitation	2019	\$ 6,171,000
EMAS System for Runway 2 Over-run Area	2019	\$ 4,693,000
North Apron Expansion - EA	2020	\$ 250,000
Runway 2-20 Widening	2020-2021	\$ 10,000,000
Fire Station/Security Center	2020-2021	\$ 2,121,000
North Apron Expansion	2021	\$ 1,920,000
Land Acquisition/Relocation: Ivey Cline	2021	\$ 7,000,000
South Apron Expansion - Phase II - EA	2021	\$ 300,000
South Apron Expansion - Phase II	2022	\$ 5,914,000
Commercial Services Terminal, Apron and Parking (North Side)	2022	\$ 600,000
New Relocated Control Tower - EA	2022	\$ 200,000
Commerical Terminal Expansion	2023	\$ 7,244,000
New Relocated Control Tower	2023	\$ 3,500,000
Commercial Services Terminal, Apron and Parking (East Side)	2023	\$ 40,750,000
Total		\$ 91,063,000

Fayetteville Regional Airport (FAY) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
New Concourse A (ATI Part 1, Under Grant)	2018-2019	\$ 17,618,141
Airline Terminal Improvements (Part 2)	2020	\$ 20,000,000
Airline Terminal Improvements (Part 3)	2021	\$ 7,170,000
Stormwater Master Plan	2021	\$ 500,000
Perimeter Fence Improvements	2022	\$ 2,600,000
Perimeter Service Road Improvements	2022	\$ 2,660,000
Construct 14-unit T-hangar in the South GA area	2023	\$ 1,430,000
Taxiway F and G Rehabilitation (Pavement and Lights)	2023	\$ 3,500,000
Stormwater Improvements	2024	\$ 4,160,000
Total		\$ 59,638,141

Piedmont Triad International Airport (GSO) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Noise Mitigation	2018	\$ 2,200,000
Grading of Northwest Economic Development Sites	2018	\$ 89,000,000
South Apron Rehabilitation (Common Use Ramp)	2018	\$ 14,000,000
Local Match of Federal Funding for Runway 5R-23L Rehabilitation	2018	\$ 5,500,000
Rehab Concourses/Terminal Improvements	2018	\$ 21,000,000
Relocate ASR-9	2018	\$ 9,500,000
West Site Grading	2018	\$ 17,000,000
Parking Deck Maintenance	2018	\$ 21,000,000
Runway 5R-23L Rehabilitation with SMGCS (Taxiway M, K and Connectors)	2018	\$ 90,250,000
Part 150	2018	\$ 4,000,000
High Speed Taxiway to Runway 5R-23L	2018	\$ 3,500,000
PTAA Vehicles (police, buses, etc.)	2018	\$ 1,580,000
Miscellaneous Maintenance to other PTAA Structures/Facilities	2018	\$ 8,100,000
Land Acquisition Program - Phase 1	2018-2025	\$ 49,050,000
Taxiway K Rehabilitation with SMGCS	2019	\$ 43,057,000
Grading of Eastern Economic Development Site	2019	\$ 15,000,000
Federal Inspection Station (FIS) Facility	2019	\$ 4,200,000
Terminal Apron Pavement Repairs/Replacement	2019	\$ 26,000,000
Taxiway to Northwest Development over I-73	2019	\$ 15,500,000
Perimeter Road Relocation at West Site	2019	\$ 1,320,000
Stormwater System Repairs/Replacement	2019	\$ 10,000,000
Land Acquisition Program - Phase 2	2019	\$ 100,000,000
New Rental Car Lots	2019	\$ 20,000,000
ARFF Equipment	2019	\$ 10,400,000
Maintenance Equipment (tractors, snow removal, mowers, trucks)	2019	\$ 6,200,000
Taxiway D Rehabilitation with SMGCS	2020	\$ 9,347,000
Mitigation of Both East Site Streams	2020	\$ 2,030,000
Prepare for FedEx Phase 2	2020	\$ 25,000,000
20 Acres between Runway 32, Radar Rd and Cessna	2020	\$ 10,000,000
54 Acre Site Development at Intersection of Taxiway D and H	2020	\$ 20,000,000
Taxiway F (Including bridge)	2020	\$ 27,000,000
Terminal Building Roof Replacement	2020	\$ 8,000,000
Taxiway C and J Rehabilitation with SMGCS	2021	\$ 25,000,000
Air Cargo Apron Rehabilitation	2021	\$ 4,000,000
Old Oak Ridge Road Relocation	2021	\$ 6,900,000
Runway 5R-23L Extension Program (to Northeast)	2021	\$ 29,000,000
Taxiway G - Including Extension of Box Culvert and Mitigation	2021	\$ 16,000,000
Entire East Site Grading - Planned Airfield Elevation	2021	\$ 25,800,000
Fence Relocations/Replacements/Upgrade	2021	\$ 2,000,000
Perimeter Road around Airfield	2021	\$ 11,000,000
Runway 5R-23L Group VI Upgrade	2022	\$ 65,000,000
Grading and Stream Mitigation for HAECO Expansion 2	2022	\$ 10,100,000
85 Acre Site Development at Intersection of Taxiway A and H	2022	\$ 30,000,000
Taxiway J Extension between Taxiway D and Taxiway J2	2022	\$ 6,000,000
Miscellaneous Taxiway Rehabilitations	2023	\$ 22,000,000
Baggage Belt Improvements	2024	\$ 6,000,000
Total		\$ 947,534,000

Pitt-Greenville Airport (PGV) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Runway 2-20 Rehabilitation	2017	\$ 10,139,059
Obstruction/Land	2017	\$ 1,150,000
Taxilane Reconstruction	2017	\$ 3,514,257
Land/Obstruction - Runway 2-20	2018	\$ 878,889
Land/Obstruction - Runway 8-26	2018	\$ 930,000
EA Perimeter Fence/Road	2018	\$ 50,000
Expand and Pave GA Vehicle Parking Lot	2018	\$ 200,000
Relocate Rent Car Wash/Service Bay	2018	\$ 200,000
Relocate Rotating Beacon	2018	\$ 110,000
Site Prep for New Corporate Hangar Area	2018	\$ 500,000
Construct 700' Stub Taxilane for New Corporate Hangar Area	2018	\$ 1,000,000
Construct Two 8000 sf Community Hangars	2018	\$ 1,800,000
Rehabilitate 115,000 sf of Public Parking Lot Pavement	2018	\$ 300,000
Replace Two 32-year-old Snow Plows	2018	\$ 1,000,000
Purchase Snow Blower	2018	\$ 600,000
GA Apron Rehabilitation and Expansion	2019	\$ 2,500,000
Acquire ARFF truck	2019	\$ 700,000
Fencing/Perimeter Road	2019	\$ 5,200,000
Replace Two 26-year-old Fuel Storage Tanks	2019	\$ 100,000
Replace Three 21-year-old Fuel Trucks	2019	\$ 600,000
Purchase Runway Deicer Trailer/Spreader	2019	\$ 100,000
Purchase Snow Broom	2019	\$ 500,000
Improve Storm Drainage in FBO Area	2019	\$ 300,000
Purchase 3.7 acres on N. Memorial Drive for T-hangars	2019	\$ 200,000
Runway 8-26 Rehabilitation/Remove Old Runway	2020	\$ 7,000,000
Taxiway A Design	2020	\$ 270,000
Construct Shadeport next to the T-hangars	2020	\$ 200,000
Construct New Taxiway North of the Terminal	2020	\$ 1,250,000
Construct Two 10-unit T-hangars North of the Terminal	2020	\$ 1,000,000
Repair Damaged Perimeter Fence/Create Tree-Free Buffer Zone	2020	\$ 50,000
Construct Control Tower	2021	\$ 5,000,000
Repair 10,000 LF of Drainage Ditches/Add Rip-Rap	2021	\$ 700,000
Taxiway A Rehabilitation, Paved Shoulders	2021	\$ 10,200,000
Construct Maintenance Storage Building	2022	\$ 300,000
Land Acquisition	2022	\$ 1,400,000
Air Carrier Apron Rehabilitation	2022	\$ 1,730,000
Taxiway B/C Rehabilitation	2023	\$ 3,600,000
Airfield Drainage	2023	\$ 810,000
Construct New North Taxiway	2024	\$ 1,100,000
Total		\$ 67,182,205

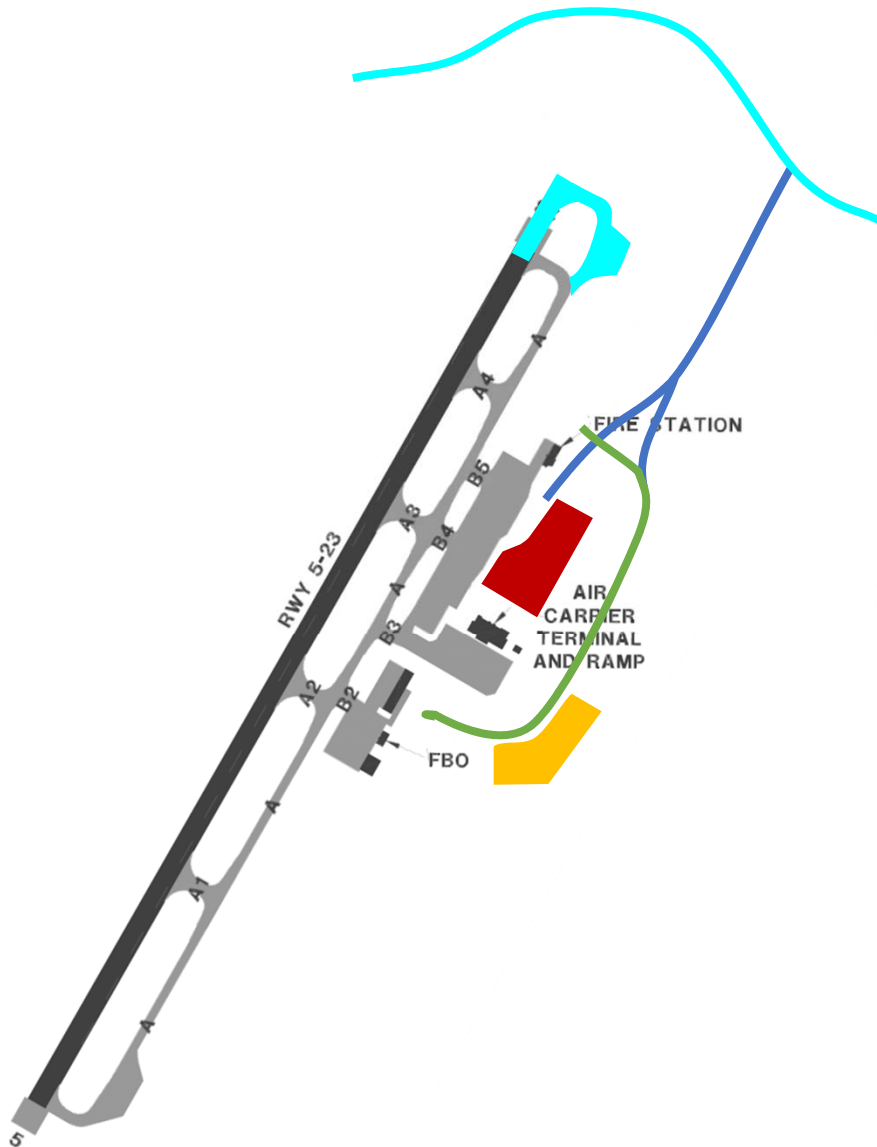
Raleigh-Durham International Airport (RDU) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Relocation of Runway 5L-23R	2019	\$ 245,326,975
Taxiway E Rehabilitation	2019	\$ 781,092
Remote Public Parking Expansion (ParkEconomy 3 surface lot)	2019	\$ 19,059,797
Terminal 2 Ground Transportation Center Modification of PG1/PG2	2020	\$ 20,000,000
Terminal 1 Ground Transportation Center	2020	\$ 5,433,908
RAC Storage 2,200 spaces (Phase 1)	2020	\$ 13,341,758
Bus/Shuttle Road (adjacent to Dept Drive)	2020	\$ 11,771,840
John Brantley Boulevard Reconfiguration	2020	\$ 30,661,663
Taxiway B Reconstruction	2022	\$ 58,212,108
Runway 14-32 Rehabilitation	2022	\$ 2,841,716
CONRAC Portion of New Structure	2022	\$ 140,014,163
CONRAC QTA Facility	2022	\$ 75,720,208
Taxiway B Reconstruction North of Taxiway C	2022	\$ 40,000,000
Terminal 1 Ramp Rehabilitation (partial)	2023	\$ 1,524,789
Extension of Runway 5L-23R	2023	\$ 33,981,809
Taxiway extensions - support Runway 5L-23R extension	2023	\$ 9,339,694
GA Ramp Rehabilitation	2023	\$ 2,943,931
West Ramp Rehabilitation - NCDOT	2023	\$ 490,959
Terminal 2 (Terminal Building) North Expansion and Apron Modification	2023	\$ 51,069,770
RDU Office Expansion	2023	\$ 17,951,904
T1 4 Gate Expansion, Check-in Lobby Reconfiguration/CBRA Expansion	2023	\$ 113,630,630
Terminal 1 Apron Replacement	2023	\$ 14,067,353
Terminal 2 North RON Apron - Phase 1	2024	\$ 29,212,895
Airside Service Road Rehabilitation (Phases 1 through 4)	2024	\$ 1,203,035
Remote Public Parking Facility (surface lot) adjacent to ParkEconomy 3 - Phase 2	2024	\$ 35,618,198
Phase 1 of Employee Parking (Surface) - 1500 spaces	2024	\$ 7,093,472
National Guard Drive Extension to East GA Campus	2024	\$ 7,253,208
Total		\$ 988,546,875

Wilmington International Airport (ILM) Near-term Projects and Funding Needs		
Project	Project Year	Estimated Cost
Runway Lighting Replacement	2018	\$ 2,200,000
Air Carrier Apron Expansion (Design and Short Form EA)	2018	\$ 1,000,000
Remove Wet Detention Basins on Airfield	2018	\$ 1,200,000
GA Apron Development (Construction)	2019	\$ 1,500,000
Terminal Improvements Phase 1B (Design)	2019	\$ 2,000,000
Air Carrier Apron Expansion (Construction)	2020	\$ 3,940,000
Construct Corporate Aircraft Fuel Farm	2020	\$ 750,000
Air Carrier Lavatory Disposal Improvement	2020	\$ 350,000
Terminal Expansion Phase 1B Construction	2020	\$ 35,000,000
Master Plan	2021	\$ 1,500,000
Taxiway B Improvements	2021	\$ 5,600,000
Perimeter Access Road Relocation Runway 24	2021	\$ 900,000
Runway 35 Land Acquisition	2021	\$ 3,600,000
Taxiway A and H Widening and Paved Shoulder to 75'	2022	\$ 6,500,000
Midfield Taxiway Improvements	2022	\$ 3,500,000
First Paved Aircraft Taxilane	2022	\$ 1,500,000
Rehabilitate Runway 6-24	2023	\$ 7,500,000
Runway 35 Wind Cone/PAPI Replacement	2023	\$ 500,000
Runway 6-24 Blast Pad	2023	\$ 1,500,000
Runway 17 Protection Zone Improvements	2024	\$ 5,000,000
Perimeter Fence/Security Gate Improvements	2024	\$ 800,000
Total		\$ 86,340,000

APPENDIX III

Diagrams Showing Key Near-term Projects (Through 2024) by Airport

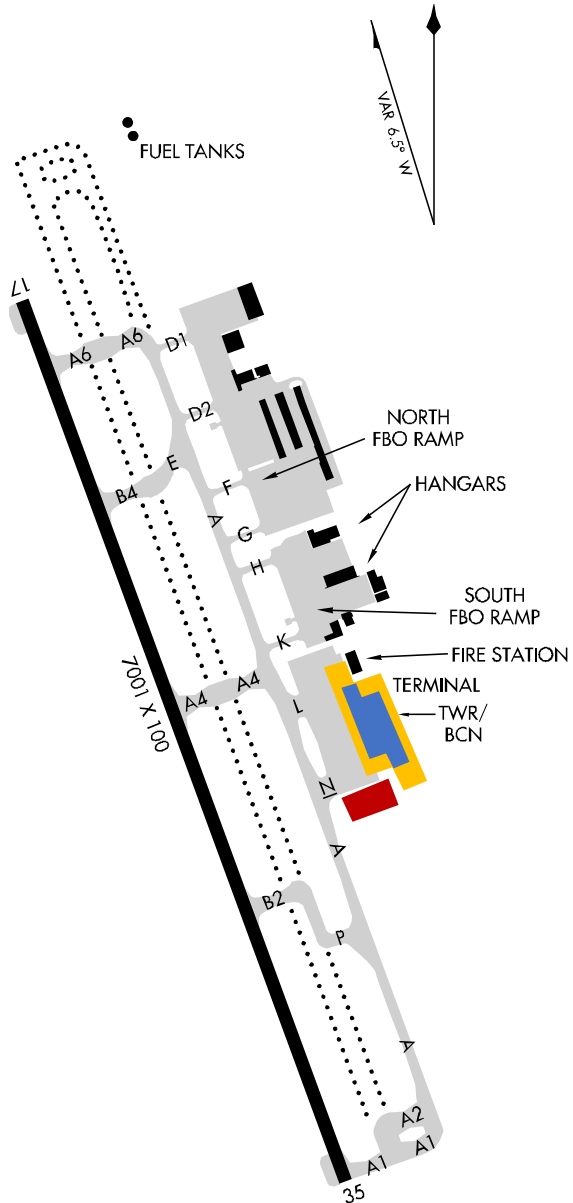
Albert J. Ellis Airport (OAJ) Year 2020-2024 Key Projects



-  **Public Parking Improvements \$5 million**
-  **Rental Car QTA Facilities \$4 million**
-  **Runway Extension & Roadway Realignment \$24 million**
-  **Terminal Area Roadways Phase 3 \$5 million**
-  **Entrance Road Realignment \$5 million**

Total number of projects through 2024: 18
Estimated cost of all these projects: \$59 million
Note that only major projects are illustrated.

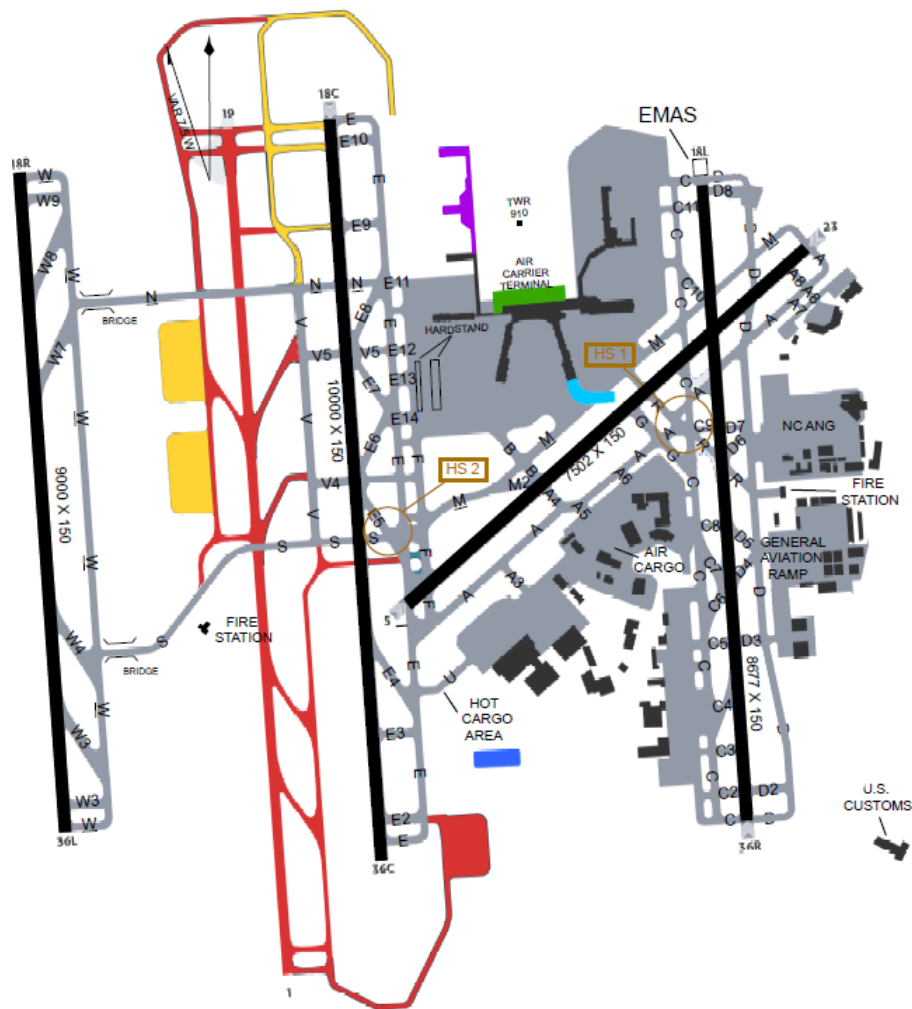
Asheville Regional Airport (AVL) Year 2020-2024 Key Projects



- Terminal Rehabilitation and Expansion \$23 million
- Terminal Infrastructure Improvements \$3 million
- Terminal Apron Expansion - South \$9 million

Total number of projects through 2024: 18
Estimated cost of all these projects: \$130 million
Note that only top projects are illustrated.

Charlotte Douglas International Airport (CLT) Year 2020-2024 Key Projects



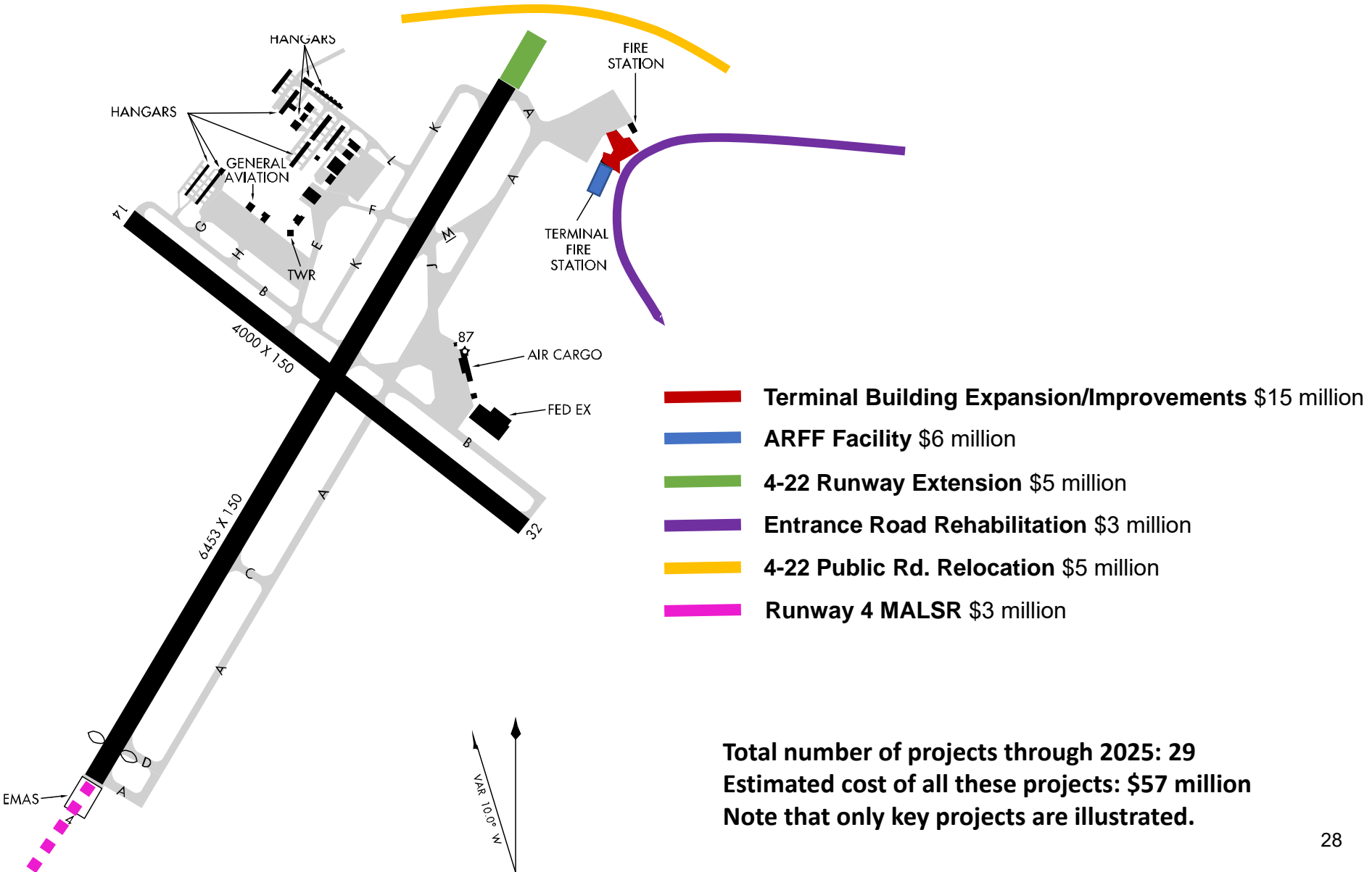
- █ **Fourth Parallel Runway** \$363 million
- █ **North EAT, Hold Pads and Relos** \$190 million
- █ **Terminal Lobby Expansion** \$451 million
- █ **Concourse A North Phase II and III** \$300 million
- █ **Concourse C Expansion** \$463 million
- █ **Future Air Cargo Program** \$25 million

Total number of projects through 2024: 59
Estimated cost of all these projects: \$2.9 billion
Note that only certain key projects are illustrated.



Coastal Carolina Regional Airport (EWN)

Year 2020-2024 Key Projects

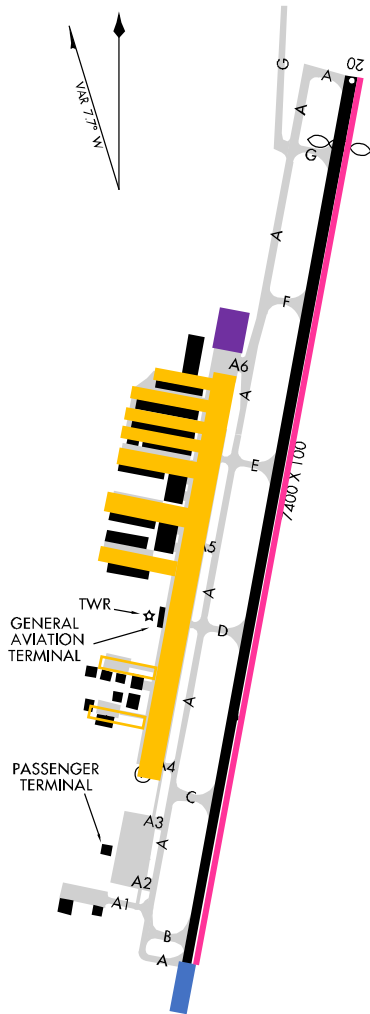


- Terminal Building Expansion/Improvements \$15 million
- ARFF Facility \$6 million
- 4-22 Runway Extension \$5 million
- Entrance Road Rehabilitation \$3 million
- 4-22 Public Rd. Relocation \$5 million
- Runway 4 MALSR \$3 million

Total number of projects through 2025: 29
Estimated cost of all these projects: \$57 million
Note that only key projects are illustrated.

Concord Regional Airport (JQF)

Year 2020-2024 Key Projects

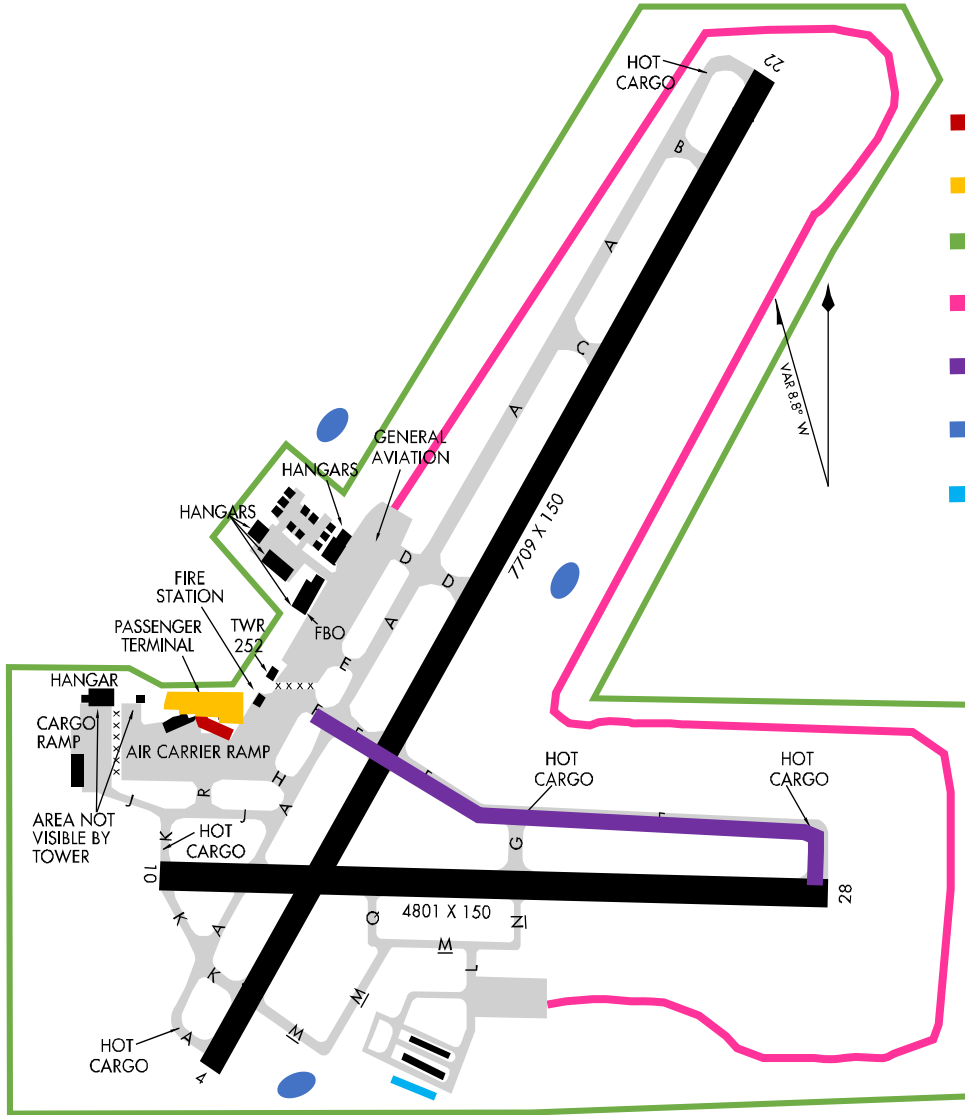


- Apron Strengthening/Hangar Taxilane Rehabilitation \$6 million**
- North Apron Expansion \$2 million**
- EMAS System for Runway \$5 million**
- Runway 2-20 Widening \$10 million**

Total number of projects through 2024: 15
Estimated cost of all these projects: \$91 million
Note that only key projects are illustrated.

Fayetteville Regional Airport (FAY)

Year 2020-2024 Key Projects

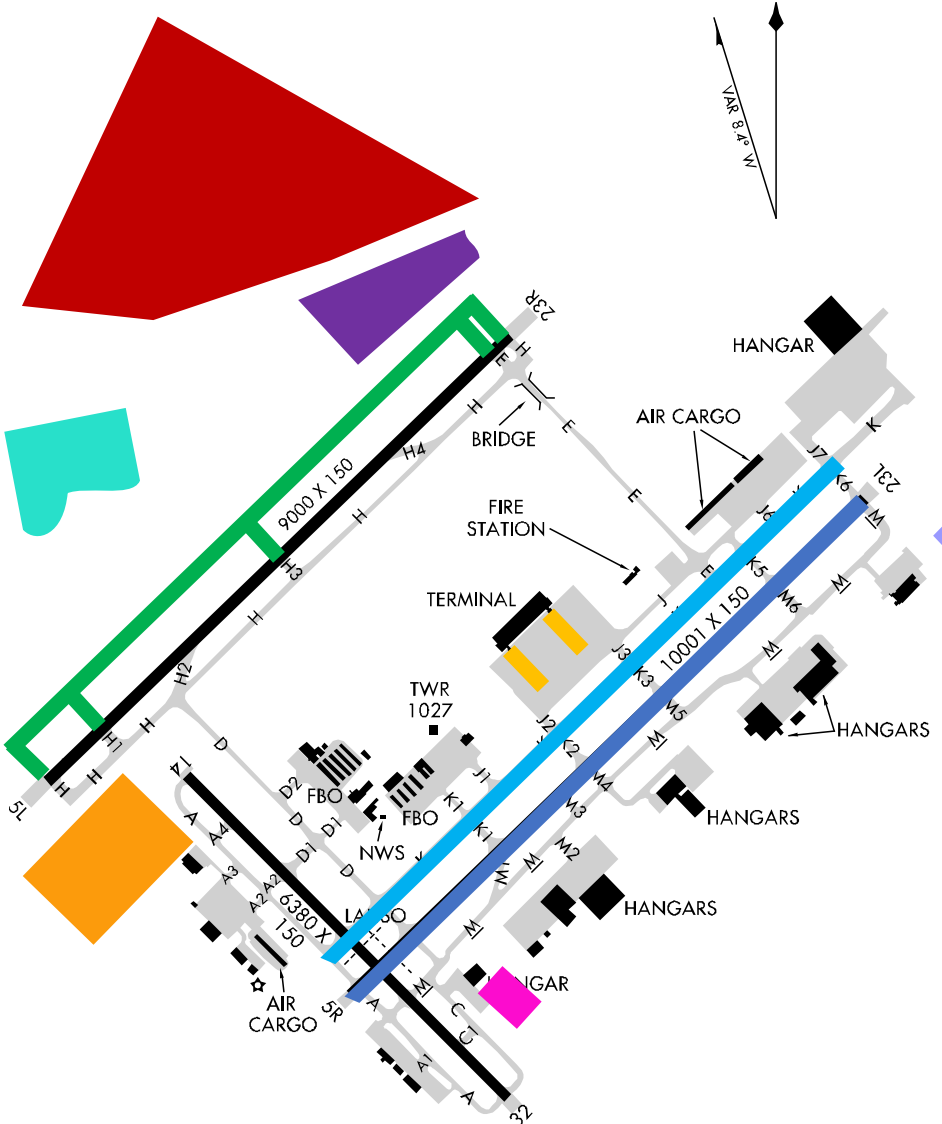


- New Concourse A \$18 million**
- Airline Terminal Improvements \$27 million**
- Perimeter Fence \$3 million**
- Perimeter Service Road \$3 million**
- Taxiway F/G Rehabilitation \$4 million**
- Stormwater \$5 million**
- GA T-Hangar \$1 million**

Total number of projects through 2024: 9
Estimated cost of all these projects: \$60 million
Note that only key projects are illustrated.

Piedmont Triad International Airport (GSO)

Year 2020-2024 Key Projects



- Grading NW Economic Development Site \$89 million
- Rehab Concourses/Terminal \$29 million
- Runway 5R-23L Rehabilitation \$90 million
- Taxiway G \$16 million
- West Site Grading \$17 million
- Taxiway K Rehab with SMGCS \$43 million
- Entire East Site Grading \$26 million
- New Rental Car Lots \$20 million
- 20 Acre Development between Runway 32 and Radar Rd. \$10 million
- 85 Acre Development at Intersection of Taxiway A and H \$30 million
- Land Acquisition \$49 million

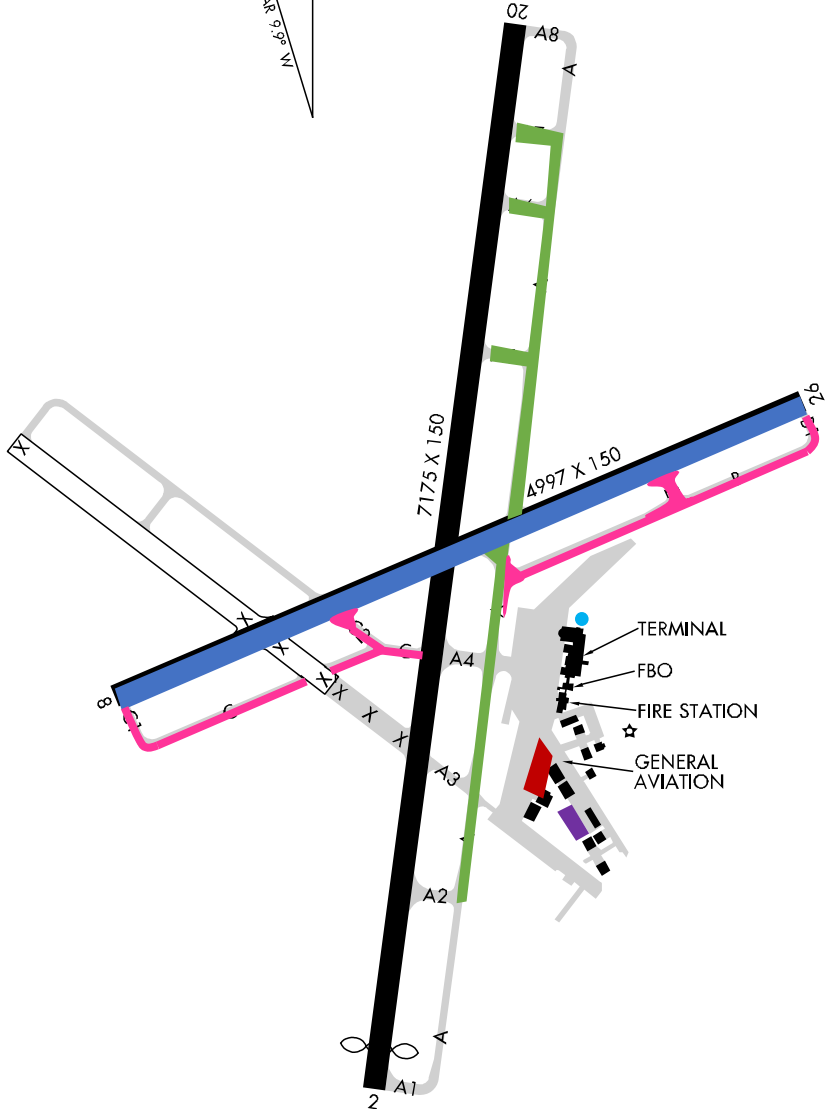
Total number of projects through 2024: 46
Estimated cost of all these projects: \$947 million
Note that only key projects are illustrated.

Pitt Greenville Airport (PGV)

Year 2020-2024 Key Projects



- GA Apron Rehabilitation and Expansion \$3 million**
- Community Hangars \$2 million**
- Runway 8-26 Rehabilitation \$7 million**
- Taxiway A Rehabilitation \$10 million**
- Control Tower \$5 million**
- Taxiway B/C Rehabilitation \$4 million**

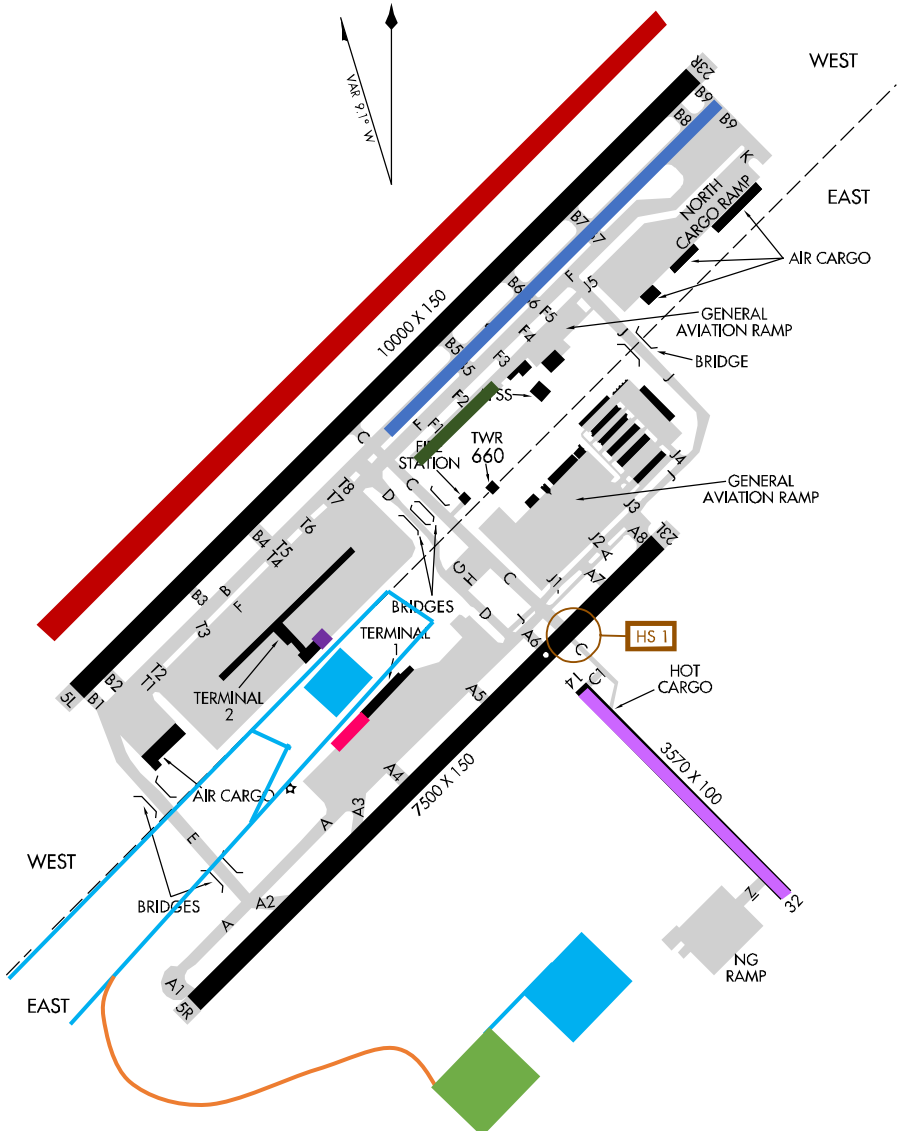


Total number of projects through 2024: 39
Estimated cost of all these projects: \$67 million
Note that only key projects are illustrated.

Raleigh-Durham International Airport



Year 2020-2024 Key Projects



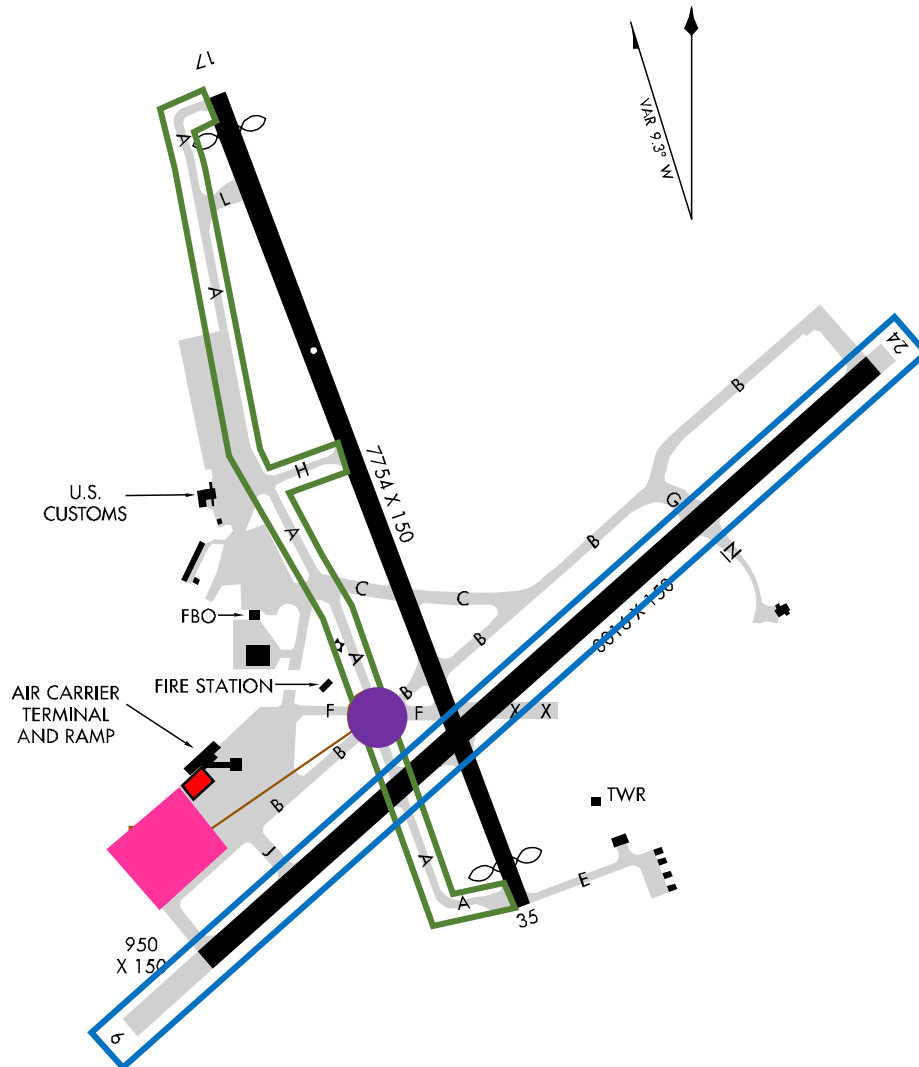
- █ Future Runway 5L-23R/Taxiway B \$338 million
- █ CONRAC/John Brantley Blvd Rehab/GTC \$285 million
- █ Runway 14-32 Rehabilitation \$3 million
- █ Park Economy 3 Expansion \$55 million
- █ Bus/Shuttle Road \$12 million
- █ Terminal 2 FIS Expansion \$51 million
- █ Terminal 1 Airline Fit Out and 4 Gate Expansion \$129 million
- █ Reconstruct Taxiway B North of Taxiway C \$40 million
- █ Terminal 2 North RON Apron \$29 million






Total number of projects through 2024: 27
Estimated cost of all these projects: \$989 million
Note that only key projects are illustrated.

Wilmington International Airport (ILM)



Year 2020-2024 Key Projects



-  Taxiway B Improvements \$6 million
-  Terminal Improvements Phase 1B \$35 million
-  Air Carrier Apron Expansion \$4 million
-  Taxiway A and H Widening \$7 million
-  Rehabilitate Runway 6-24 \$8 million

Total number of projects through 2024: 21
Estimated cost of all these projects: \$86 million
Note that only key projects are illustrated.

APPENDIX IV

FAA Definitions of Airport Types

FAA DEFINITIONS OF AIRPORT CATEGORIES

FAA defines airports by categories of airport activities, including commercial service, primary, reliever, and general aviation airports, as shown below:

FAA Airport Categories

Airport Classifications		Hub Type: Percentage of Annual Passenger Boardings	Common Name
<i>See Definitions of Airport Categories below for more information.</i>			
Commercial Service: Publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service §47102(7)	Primary: Have more than 10,000 passenger boardings each year §47102(11)	Large: 1% or more	Large Hub
		Medium: At least 0.25%, but less than 1%	Medium Hub
		Small: At least 0.05%, but less than 0.25%	Small Hub
		Non-hub: More than 10,000, but less than 0.05%	Non-hub Primary
	Nonprimary	Non-hub: At least 2,500 and no more than 10,000	Nonprimary Commercial Service

Commercial Service Airports are publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service. Passenger boardings refer to revenue passenger boardings on an aircraft in service in air commerce whether or not in scheduled service. The definition also includes passengers who continue on an aircraft in international flight that stops at an airport in any of the 50 States for a non-traffic purpose, such as refueling or aircraft maintenance rather than passenger activity. Passenger boardings at airports that receive scheduled passenger service are also referred to as Enplanements.

Primary Airports are Commercial Service Airports that have more than 10,000 passenger boardings each year. Hub categories for Primary Airports are defined as a percentage of total passenger boardings within the United States in the most current calendar year ending before the start of the current fiscal year. For example, calendar year 2001 data are used for fiscal year 2003 since the fiscal year began 9 months after the end of that calendar year. The table below depicts the formulae used for the definition of airport categories based on statutory provisions cited within the table, including Hub Type described in 49 USC 47102.

Nonprimary Airports are Commercial Service Airports that have at least 2,500 and no more than 10,000 passenger boardings each year.



APPENDIX V

Proposed Funding Formula Recommended by N.C. Commercial Service Airports

Proposed Funding Methodology

for

Commercial Service Airports in North Carolina

SUMMARY

This proposal was developed as a result of numerous meetings and discussions of representatives of each of the commercial service airports (“Airports”) in the state including Albert J. Ellis (OAJ); Asheville (AVL); Charlotte Douglas (CLT); Coastal Carolina (EWN); Concord (JQF); Fayetteville (FAY); Piedmont Triad (GSO); Pitt Greenville (PGV); Raleigh Durham (RDU) and Wilmington (ILM). This group has unanimously agreed upon the methodology recommended herein as the most efficient, straightforward and fair process to follow for the state to provide critical infrastructure funding for its commercial service airports.

FUNDING LEVEL

The Airports propose a total annual funding level of \$125 Million in order for us to be able to satisfy a significant funding shortfall for airports in North Carolina and otherwise meet all of the challenges that we face in maintaining and expanding all commercial service airports in the state.

PROPOSED FUNDING DISTRIBUTION METHODOLOGY

The Airports propose a hybrid funding methodology at two levels. In the first level, it considers the economic impact of each airport and proposes funding based upon the expected economic return each airport provides. In the second level, it further allocates funding to the eight smaller airports based on passenger enplanements.

The proposed distribution methodology also includes collaborative sharing/return of funds from the largest two airports to the smaller facilities, and also includes another round of returns from the largest three of the small airports to the remaining five. The process proposed is as follows:

First Metric – Economic Impact

Every two years, prior to the approval of the biennial budget, an economic impact analysis will be completed by an independent party (eg: ITRE) for each airport. This data will be compiled and a calculation will be made to determine each airport’s portion of the overall economic impact on a percentage basis. These percentages would then be

applied to the total funding available to determine each airport's gross funding allocation.

Since these will now serve as the basis to determine the amount of funding each airport will receive, it is particularly imperative that these analyses be done in a consistent manner, with "apples to apples" comparisons of the impacts related to each airport. The Airports recommend the development of an oversight group to include a representative of each commercial service airport to ensure fair and equitable distribution of funds.

As the largest of the state's airports, Raleigh and Charlotte have agreed to donate a portion of their gross funding allocation to be redistributed among the eight remaining airports. At a \$125 MM total funding level, RDU has agreed to return 20% of its allocation, and CLT has agreed to return 30% of its share. At a total funding level of \$75 MM, RDU has committed to return 15% and CLT has agreed to return 20%. In the event that the total funding level is between \$75 MM and \$125 MM, each donor agrees to return a pro-rata percentage calculated on a straight-line basis between the two limits.

Total annual funding to be provided to RDU and CLT is then calculated by subtracting the amount to be returned from RDU and CLT's gross funding allocation.

Equal Amount Payment

Of the total amount of funds donated by RDU and CLT, 25% will be distributed in equal amounts to each of the remaining eight airports. This constitutes a second "donor" event, where GSO, AVL and ILM are contributing a portion of their funding (that would otherwise be distributed according to the following paragraph) to the remaining five small airports.

Second Metric –Enplaned Passengers (EPAX)

The balance of funds returned by RDU and CLT (75%) will be distributed to the remaining eight airports on a pro-rata basis according to EPAX (EPAX apportionment).

Total annual funding to be provided to the remaining eight airports will be the sum of each airport's gross funding allocation, equal amount payment, and EPAX apportionment.

FLEX FUND

A fund will be established to aggregate any and all funds that are unable to be used by the Airports on an annual basis. Airports with greater capital needs in any given year will be able to compete for these funds, and the funding will be awarded at the discretion of the Director of the Division of Aviation.