



DIVISION OF  
**AVIATION**

# Aviation 101

## North Carolina Association of Rural Planning Organizations

Alex Rotenberry, AICP

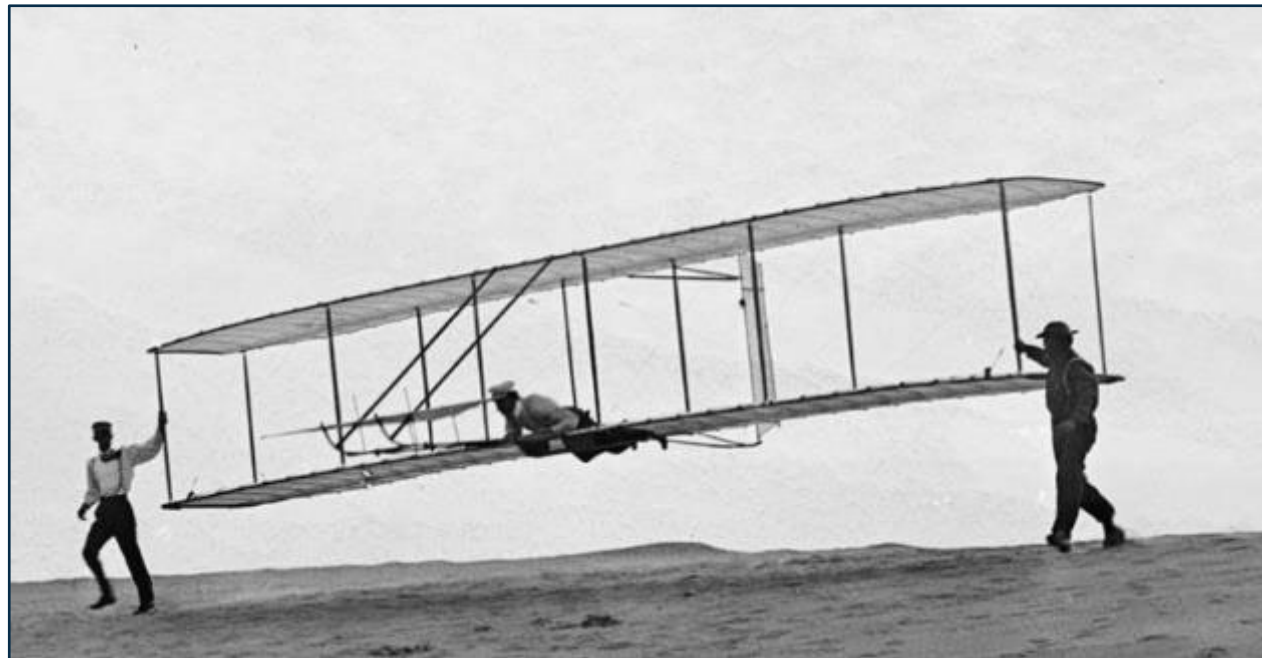
Aviation Planner

NCDOT Division of Aviation

February 26, 2026

Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina

## North Carolina: Forever First in Flight



December 17, 1903  
World's first powered  
manned flight



January 7, 2020  
North America's first  
unmanned air taxi flight



## Topics for Today

- Introduction
- NCDOT Aviation Overview
- Airports 101
- Airport Development
- Airports and STIP
- Aviation Innovations
- Questions

# About Me

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## Alex Rotenberry



### University of Texas – Arlington

- Masters in City and Regional Planning (2013)

### 12+ years of experience in transportation planning

- Over 8 in two MPOs in Missouri
- Over 4 at NCDOT (3+ with Integrated Mobility)

Member of the American Institute of Certified Planners since 2016

# **NCDOT Division of Aviation**

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# NCDOT Aviation Mission

Promote the economic well-being of North Carolina by developing a safe and robust air transportation system

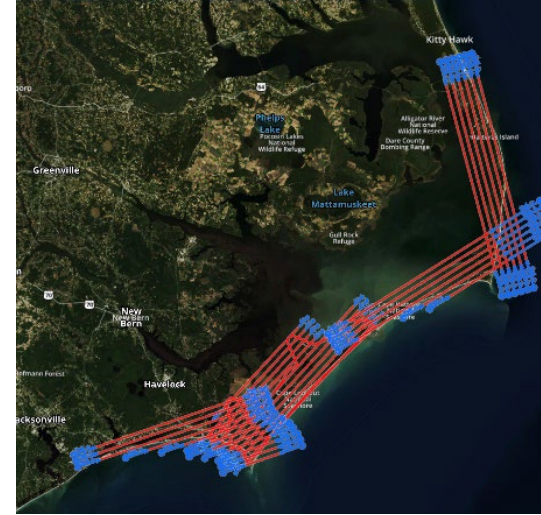
## FOUR CORE FUNCTIONS



Airport Development  
Funding & Technical  
Assistance



Emerging  
Technologies  
Integration



State Agency  
Flight Services



Aviation Economic  
Development



# Division of Aviation Unit Roles



## Airport Development manages:

- Funding: Federal & state
- Project management, oversight, and technical assistance

## Programs & Planning manages:

- Business & workforce development
- Emerging aviation technologies
- Expanded roles:
  - Statewide Programs (safety, maintenance)
  - Planning, Environmental, Compliance

# Division of Aviation Staff

## Leadership



**Nick Short**  
Director  
Division of Aviation



**Jason Schronce**  
Deputy Director  
Programs and Planning



**Thad Howell**  
Deputy Director  
Flight Operations and  
Airport Affairs

# Division of Aviation Staff

## Airport Project Managers (APMs)

Your go-to resource for airport development

- Primary contact for airports
- Annual planning
- Project meetings



**Raj Kondapalli**  
Western Region Lead  
Interim NW Region



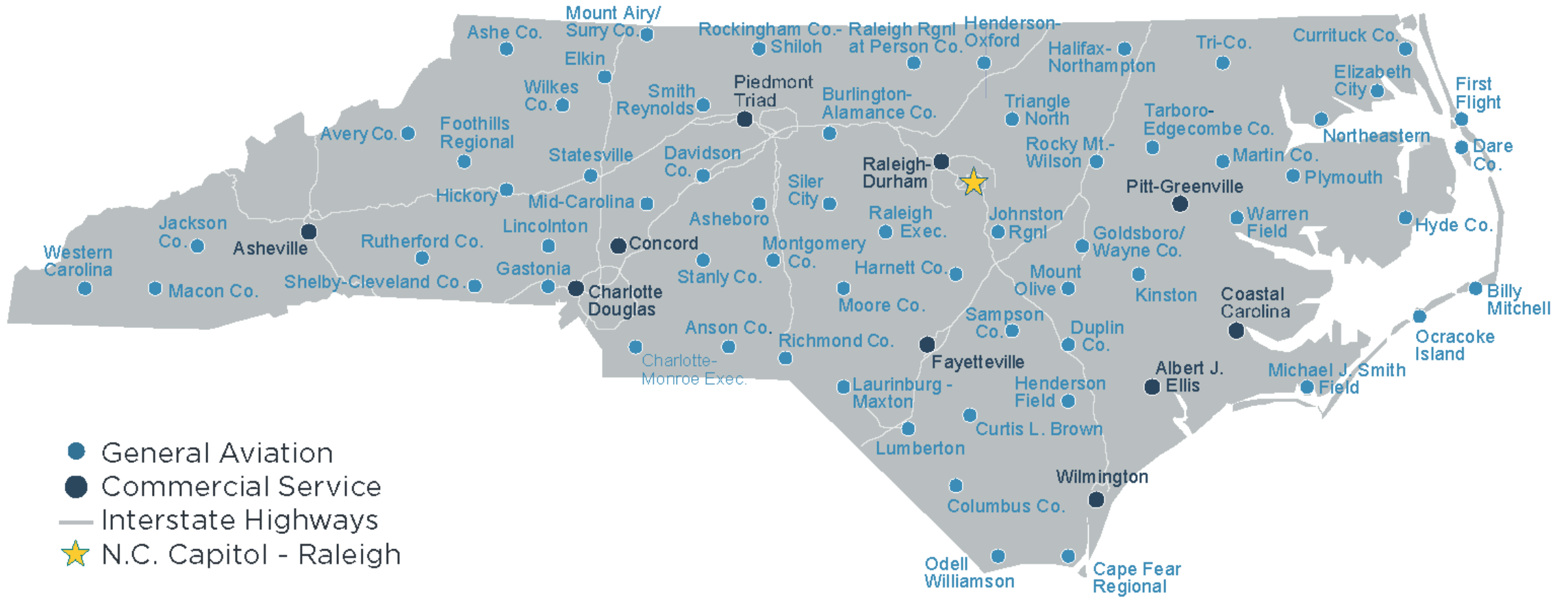
**Tommy Mann**  
Eastern Region Lead  
Interim SE Region



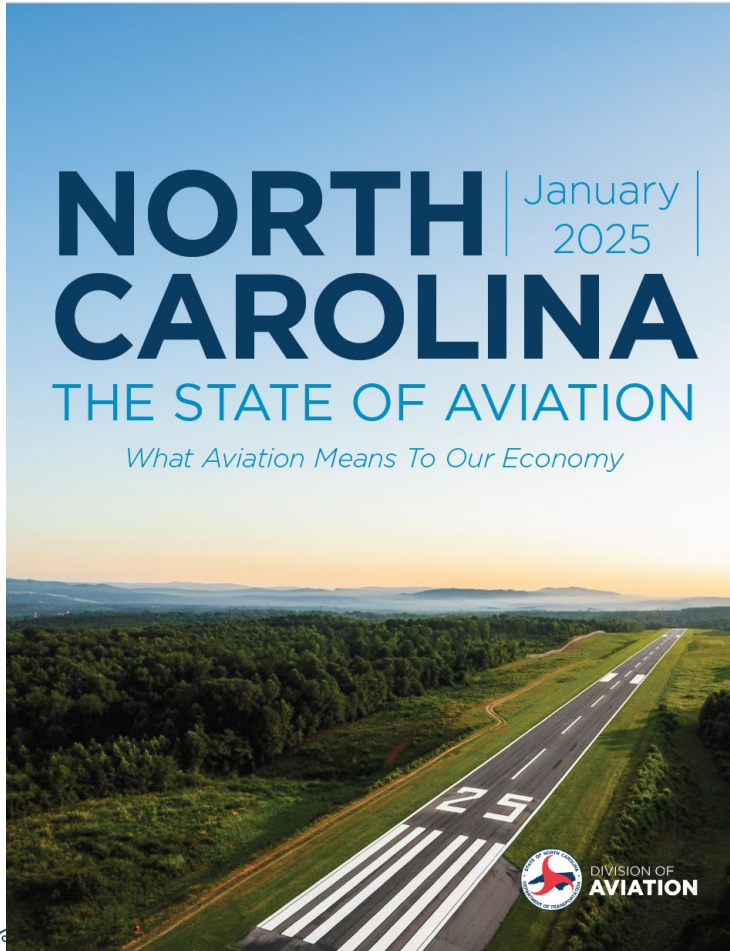
**Mortaza Habibi**  
Commercial Service Airports

# North Carolina's 72 Public Use Airports

96% of N.C. population within a 30-minute drive of a public airport

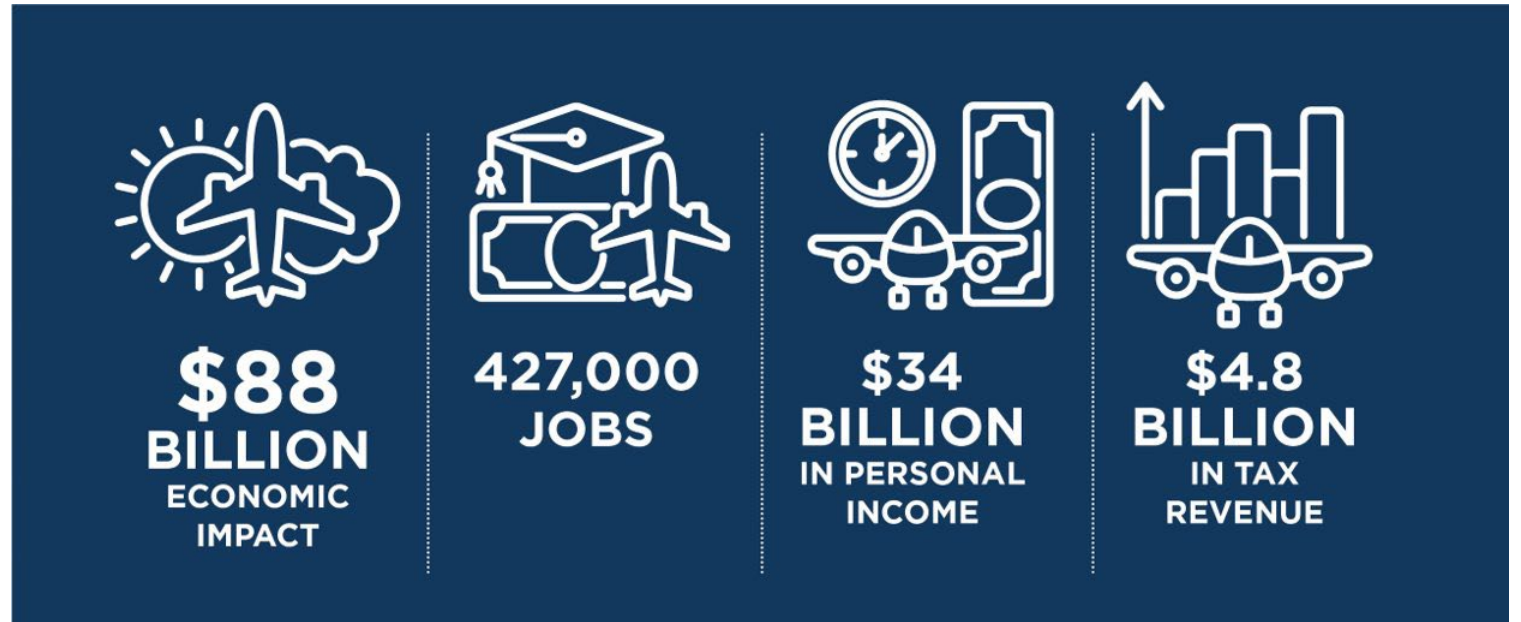


# 2025 North Carolina: The State of Aviation



## Key Findings:

- \$88+ Billion N.C. Airport Economic Impact Annually
- ~ 11% of North Carolina's GDP

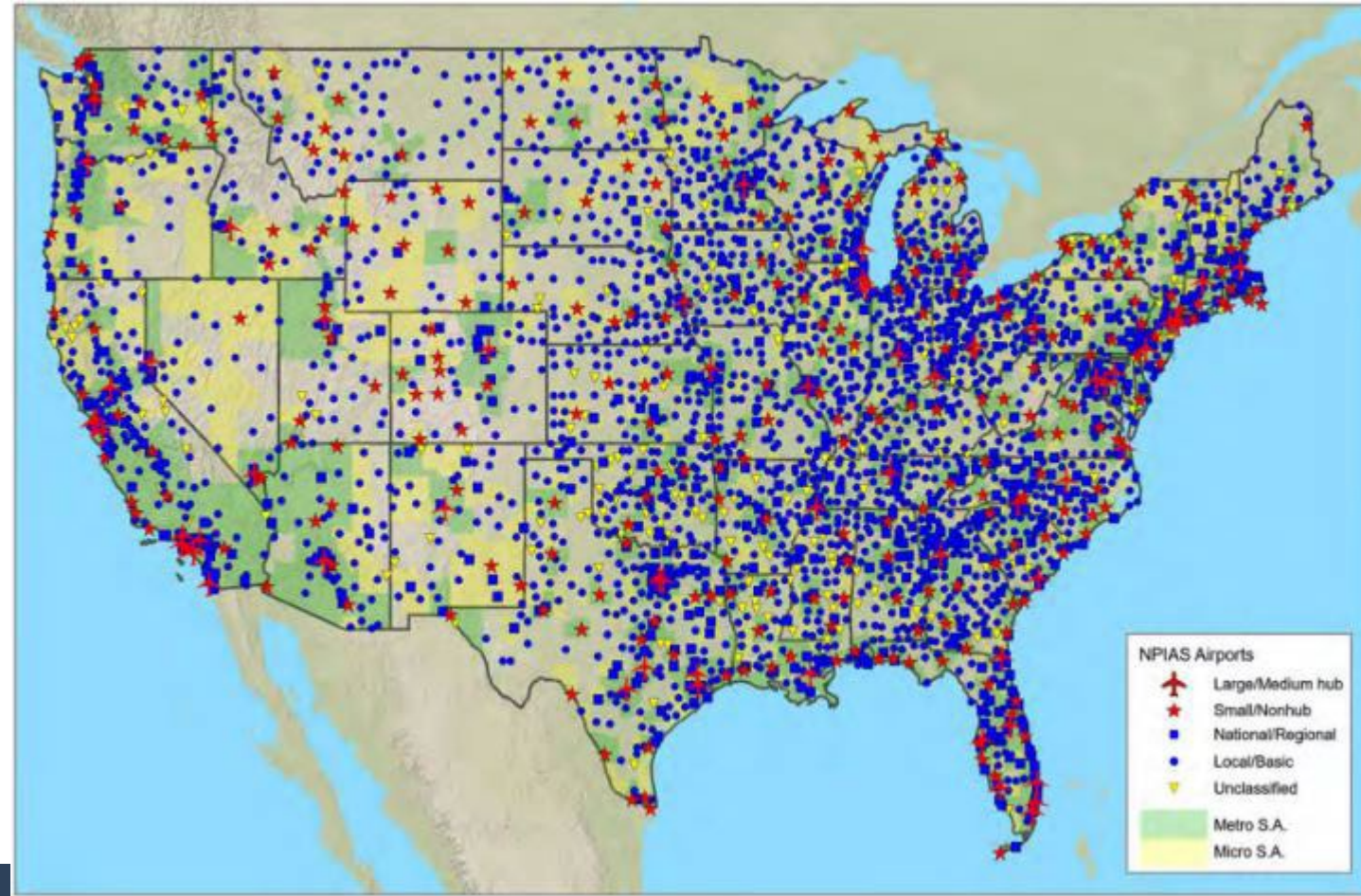


# **Airports 101**

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# Types of Airports

- **Public-Use, Public-Owned**
  - *Commercial Service*
  - *General Aviation*
- **Public-Use, Private-Owned**
- **Private-Use, Private-Owned**



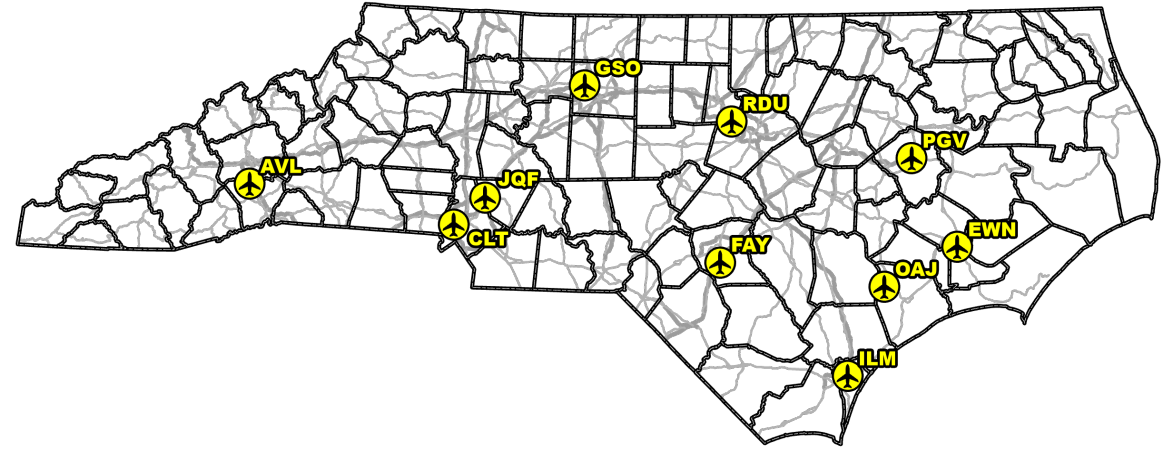
U.S. Department  
of Transportation  
**Federal Aviation  
Administration**



*National Plan of Integrated Airport  
Systems (NPIAS)*

## 10 N.C. Commercial Service Airports

“Regularly scheduled” passenger service



- Albert J. Ellis Airport (Jacksonville)
- Asheville Regional Airport
- Charlotte Douglas International Airport
- Coastal Carolina Regional Airport (New Bern)
- Concord-Padgett Regional Airport
- Fayetteville Regional Airport
- Piedmont Triad International Airport (Greensboro)
- Pitt-Greenville Airport
- Raleigh-Durham International Airport
- Wilmington International Airport



## Commercial Service Airports

Regularly scheduled passenger service

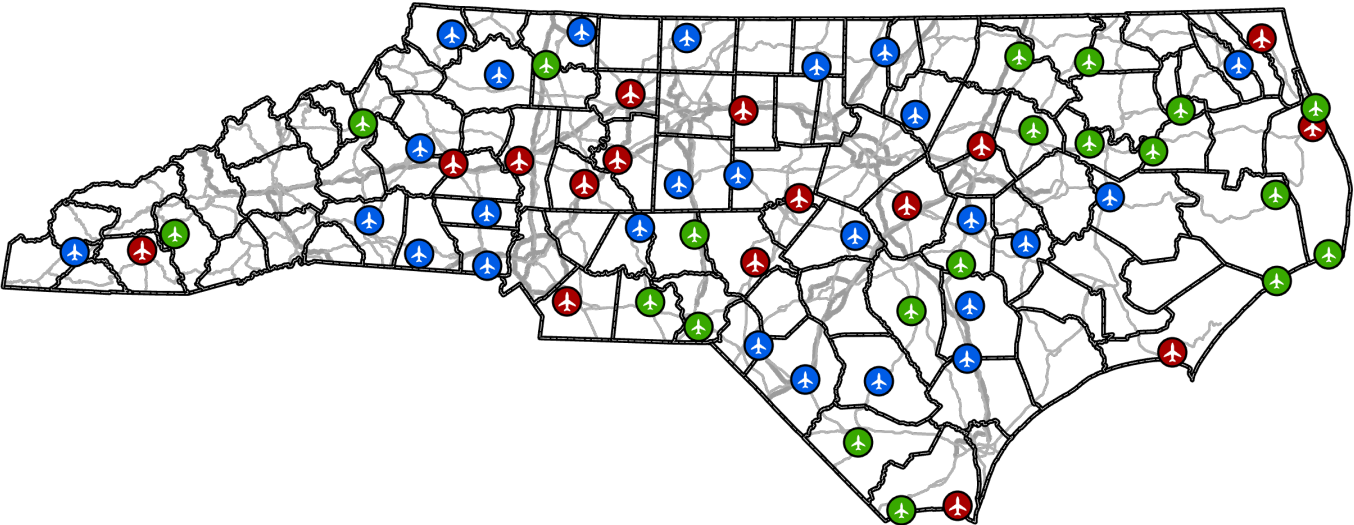
The 10 commercial service airports in N.C.




- Host nearly 1 million flights annually
- Connect to 188 destinations
- Support more than 396,000 jobs
- Generate more than \$80 billion in economic output





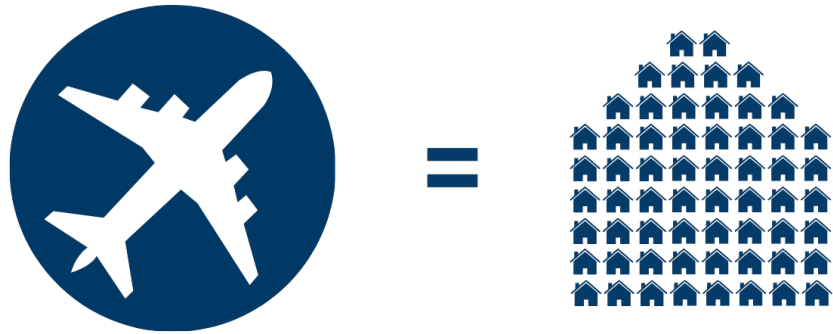
# 62 N.C. General Aviation (GA) Airports



-  GA Regional/Business Airport
-  GA Community Airport
-  GA Small Community Airport

## General Aviation (GA) Airports

### PROPERTY TAXES



One \$15 million aircraft based at Hickory Regional airport generates the same property taxes as 60 typical homes.

- 62 public-owned and public-use GA airports
  - Includes three national park airports
- General aviation:
  - Supports over 30,000 jobs
  - Generates more than \$7 billion in economic output

# Community Support

## Airports Support Communities



*Community volunteers unload relief supplies for Hurricane Helene relief*

- **Economic engine:**
  - Agricultural spraying
  - Cargo transport
  - Maintenance, Repair, and Overhaul
- Flight training
- Medical:
  - Aerial ambulance
  - Organ transport
- Military training
- Public safety:
  - Aerial firefighting
  - Drug enforcement
  - Search and rescue
- Disaster relief
- Recreation
- Business Travel

# Airport Development

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# Airport Development

Grants, engineering, planning and services to build and maintain public airports



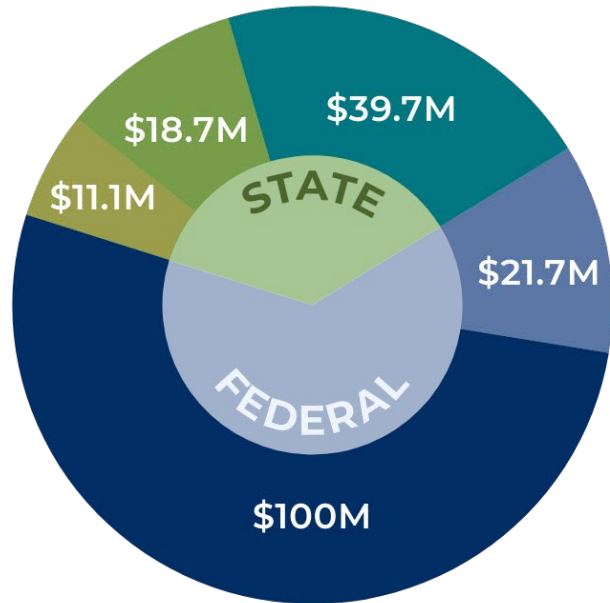
# Airport Development



- Prioritizes grant funding
- Oversees compliance of design and construction of publicly funded airport projects
- Provides planning and engineering assistance to airports and consultants
- Monitors statewide pavement and navigation aid maintenance

## Airport Development Funding Allocation

In FY 2025, NCDOT Division of Aviation allocated more than **\$191 million** to North Carolina airport projects, including:



✈️ **\$11.1M** in STIP Funding

✈️ **\$18.7M** for Economic Development Projects

✈️ **\$39.7M** in State Aid

✈️ **\$21.7M** in Federal Funding

✈️ **\$100M** in Federal Pass-Through Funding for Commercial Service

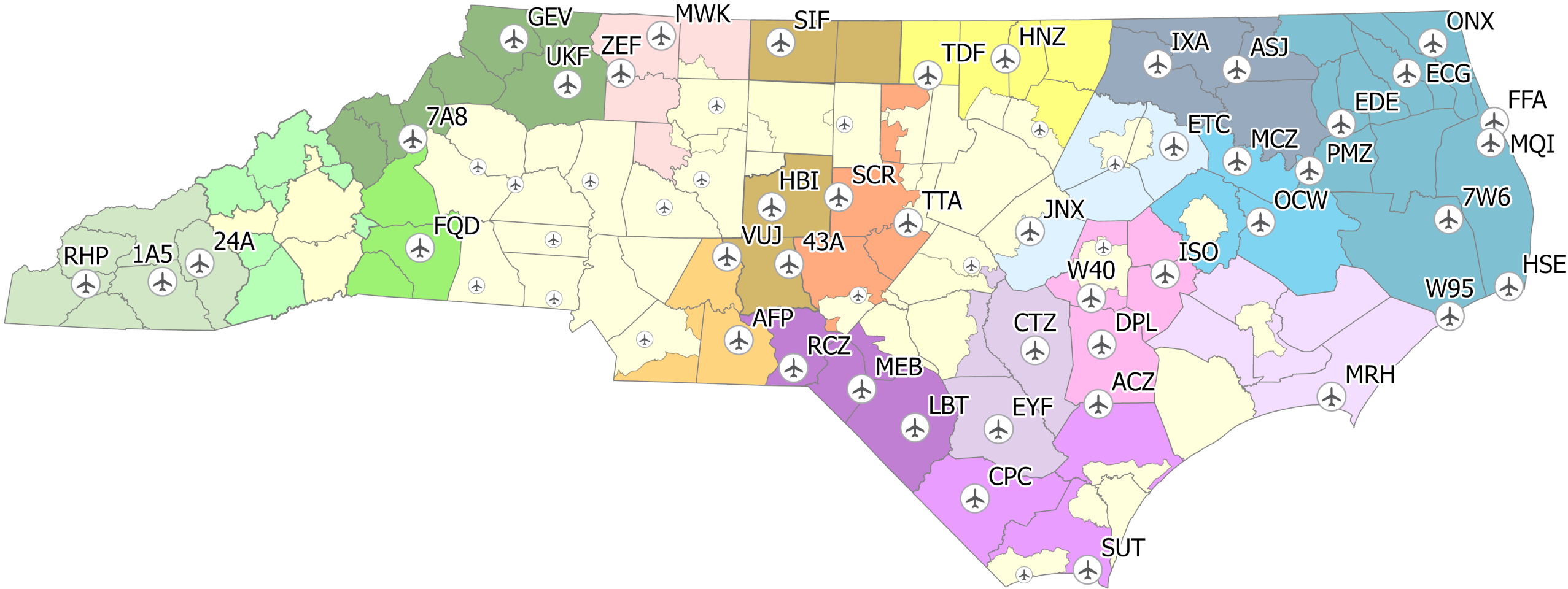
**\$191 million+** in project funding



# **Airports and STIP**

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# North Carolina General Aviation Airports and Planning Organizations ([link](#))



## CPC: Columbus County Airport Whiteville, NC

- Cape Fear RPO
- \$3,000,000
- Construct apron expansion
- Completion date late summer 2025
- AV-5748



## IXA: Halifax Northampton Regional Airport Halifax, NC

- Peanut Belt RPO
- \$1,400,000
- Construct taxi lane and prepare for additional T-hangers
- Completed July 2025
- AV-5822



## TTA: Raleigh Executive Jetport Sanford, NC

- Central Pines RPO
- \$4,199,000
- Construct run-up lane at each end of runway 21 and runway 3 bypass taxiway
- Projected completion date June 17, 2026
- AV-5899



## GEV: Ashe County Airport Jefferson, NC

- High Country RPO
- Fund Amount: \$2,700,000
- Agreement Amount: \$315,853
- Expand aprons
- Completed November 29, 2024
- AV-5848



# Aviation Innovations

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# Advanced Air Mobility (AAM):



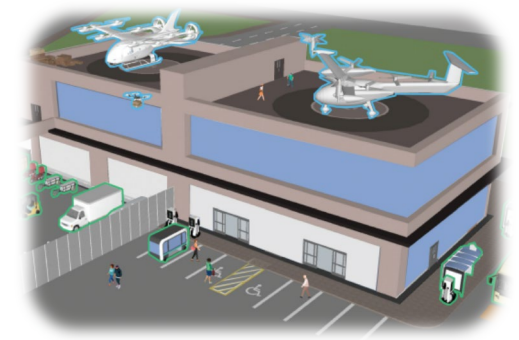
Urban / Regional  
Air Mobility  
(UAM) / (RAM)



Aircraft Electrification and  
Charging



Small Uncrewed Aerial Systems  
(sUAS)



Infrastructure Development  
Vertiports at Mobility Hubs

- Enables safe, sustainable, affordable, and accessible aviation services
- Integrates technology to solve complex problems
- Enhances the existing transit network

# AAM Aircraft

## sUAS

Small Uncrewed Aircraft Systems

## eVTOL

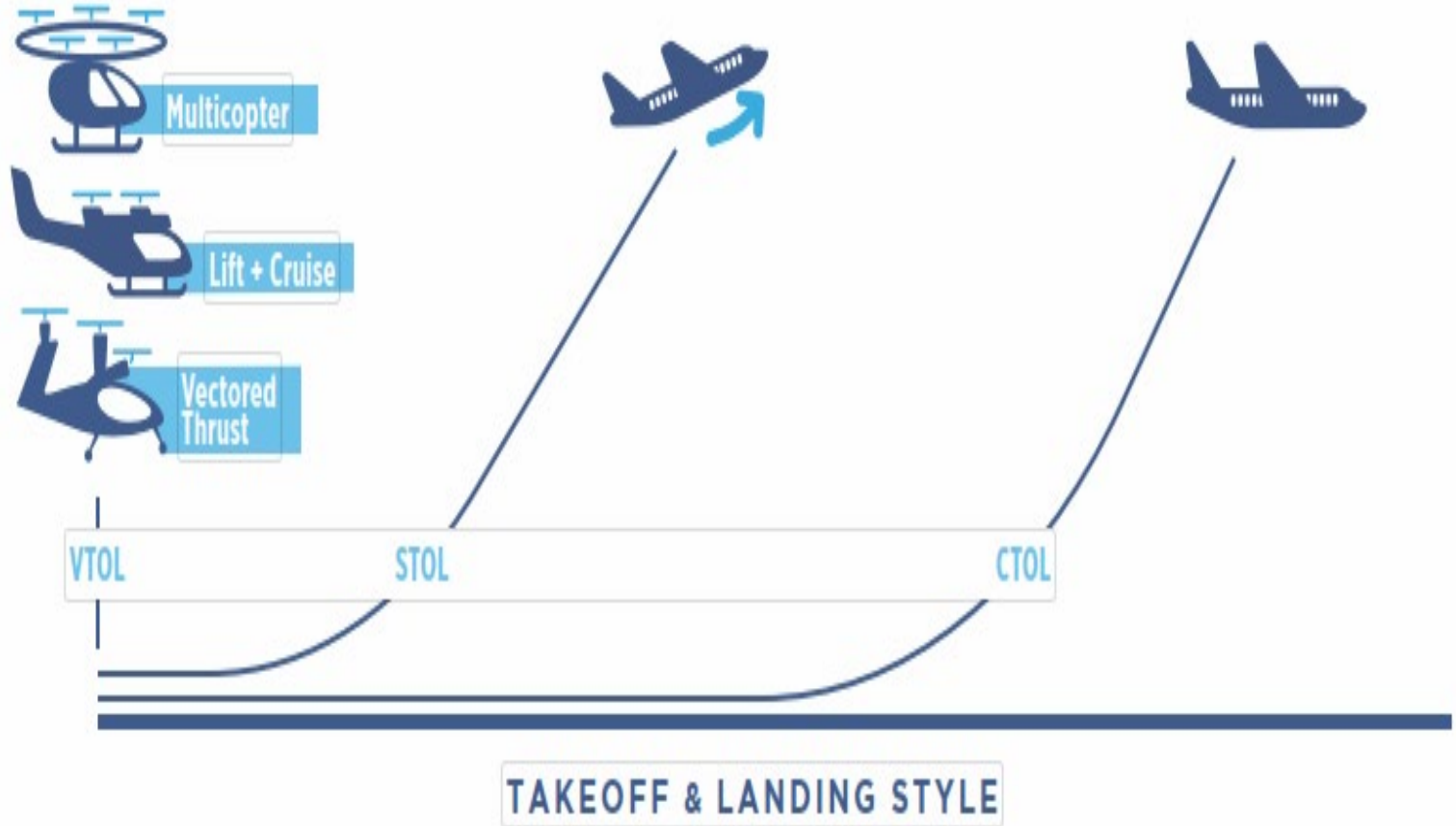
Electric Vertical Take-off & Landing

## eCTOL

Electric Conventional Take-off & Landing

## eSTOL

Electric Short take-off & Landing



\* Advanced Air Mobility (AAM) aircraft exhibit diversity across several critical parameters. Including take-off and landing method, propulsion type, degree of autonomy, and payload capacity. These variations significantly influence the suitability of AAM operations and use cases within specific locations.

# AAM Example: NCDOT & BETA Technologies Partnership

- N.C.'s first electric aircraft charging station
- Raleigh Executive Jetport, Sanford



# THE FUTURE TODAY

NCDOT Division of Aviation plays a major role



UAS (drone) program with national firsts:

- Medical package delivery
- Food delivery
- Infrastructure inspections
- Complex drone operations

Preparing airports to capitalize on AAM innovations:

- AAM Airport Guidebook
- AAM Planning Grant Opportunity
- Funding for AAM innovations

# THE FUTURE TODAY

## NCDOT Division of Aviation Planning Program



NCDOT has established the Advanced Air Mobility (AAM) Planning Program — a statewide initiative designed to help regional and local planning organizations explore, understand, and prepare for how AAM technologies may integrate into future transportation systems.

# THE FUTURE TODAY

NCDOT Division of Aviation plays a major role



**Metropolitan Planning Organizations (MPO)**



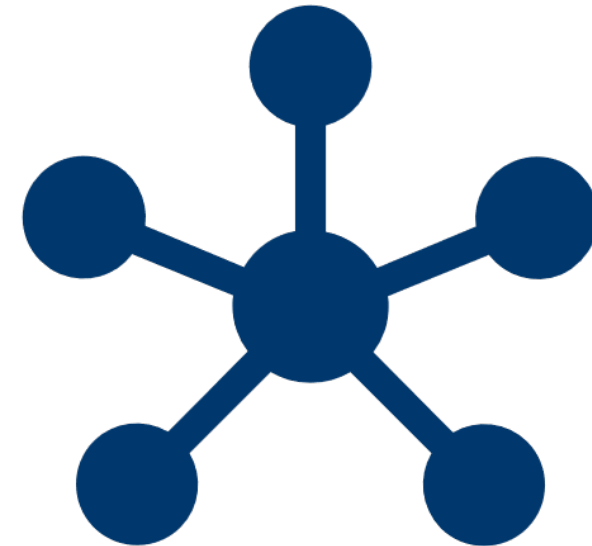
**Rural Planning Organizations (RPO)**





**Councils of Government (COG)**



**Consortium of multiple applicants**



# 2025 AAM Planning Program Participants

	Planning a future AAM tech incubator with Forsyth Tech College
	Emphasizing policy and public outreach across the Greensboro MPO region
	Educating regional partners and hosting a one-day AAM symposium.
	Advancing policy and drone operations
	Connecting diverse rural-to-urban areas through AAM

## Round 2 Coming Soon

# Questions?

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# Contact Us

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 [ncdot.gov/aviation](https://www.ncdot.gov/aviation)



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