

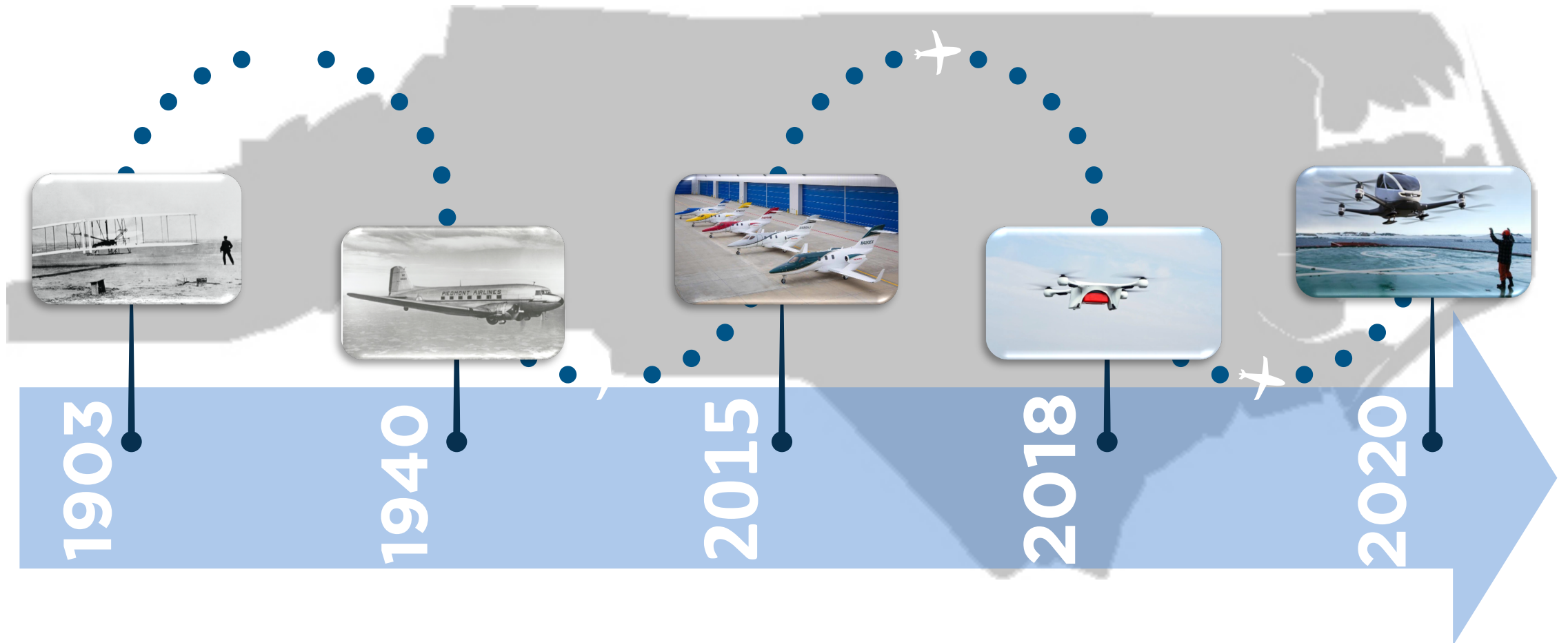


# North Carolina

Forever First in Flight

LEADING THE WAY

# North Carolina Aviation Timeline





## Our Vision

NCDOT: A global leader in providing innovative transportation solutions

## Our Mission

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



**one of the largest**

state-maintained highway systems in the nation with about 80,000 miles of road

**more than 13,500 bridges**



Inspectors check about 9,000 of these bridges and culverts each year.

**more than 15,000 miles** of primary highways (Interstate, US and NC routes)

**nearly 65,000 miles** of secondary roads

**More than 58 million passengers fly to and from North Carolina** and over 1.5 billion pounds of cargo pass through the state's airports.



**72**

**publicly owned airports and nearly 300 privately owned airports, heliports and other landing areas;** more than 8,000 registered aircraft and 14,000 licensed pilots

nearly **3,300**

miles of mainline railroad track and about **6,200 total at-grade railroad crossings** in North Carolina



**98 transit systems** serve residents in all **100 counties** provided more than **70 million passenger trips**

**more than 5,000** miles of regional and statewide bicycle and pedestrian routes planned

# UAS (Drones) – A new mode in North Carolina!



Lives saved & improved

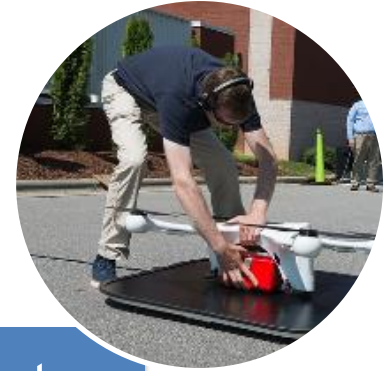
Safer, cost-effective government operations



Economic and societal benefits, with safety and privacy protected

Convenient, low-cost commercial services

More businesses, jobs and economic growth



# North Carolina UAS Program Building Each Component

1

FAA Integration  
Pilot Program



2

Statewide  
Unmanned Traffic  
Management



3

NCDOT  
Operations



4

State Agency  
Drone Support



5

Economic  
Development



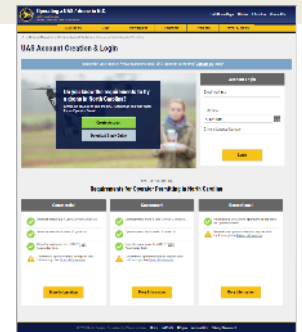
6

Public  
Education



7

Knowledge  
Testing and  
Permitting



1

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# FAA UAS Integration Pilot Program

## North Carolina's Participation

- Tests local UAS package delivery within rural, suburban and urban areas in North Carolina
- Focus:
  - Medical package delivery
  - Food delivery
  - Transportation infrastructure inspection



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# FAA UAS Integration Pilot Program

Industry

Local Government



Universities



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# FAA UAS Integration Pilot Program



- **FIRST:** Medical package delivery over people (2018)
- **FIRST:** Routine commercial medical package delivery over people (2019)
- **FIRST:** First full Part 135 operator certificate (2019)



**MATTERNET**



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# FAA UAS Integration Pilot Program



- **COVID-19 Response:** Variety of use-cases identified
- **May 2020:** Novant starts using Zipline aircraft to deliver PPE within their hospital network





3

# Strategically Deploying Drone Use Across NCDOT



4

# Supporting North Carolina State Agency Drone Use



5

# Promoting UAS Sector Growth

## Aviation Economic Development Program



# 6 Educating the Public, Preserving Safety and Privacy

**NO DRONES OVER PRISONS**  
It's the law.

No Recreational drones within **500 feet around or 250 feet above** a prison

No Commercial/Public Utility drones within **150 feet around or 150 feet above** a prison

**EXCEPTIONS**

- Law enforcement
- Emergency responders
- A person who obtains written consent from the prison
- Commercial and Public Utility Operators
  - Must notify the prison at least 24 hours prior to flying a drone within the no-fly zone

**PENALTIES**

|  |                     |              |
|--|---------------------|--------------|
| Attempting to deliver a weapon via a drone   | Class H Felony      | \$1,500 fine |
| Attempting to deliver contraband via a drone | Class I Felony      | \$1,000 fine |
| Any other violation                          | Class 1 Misdemeanor | \$500 fine   |

DIVISION OF AVIATION  
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Learn more about UAS regulations at [www.ncdot.gov/aviation/uas](http://www.ncdot.gov/aviation/uas)

Session Law 2017-179, N.C. General Statute §15A-300.3 | Effective Dec. 1, 2017

## Unmanned Aircraft Systems in NORTH CAROLINA

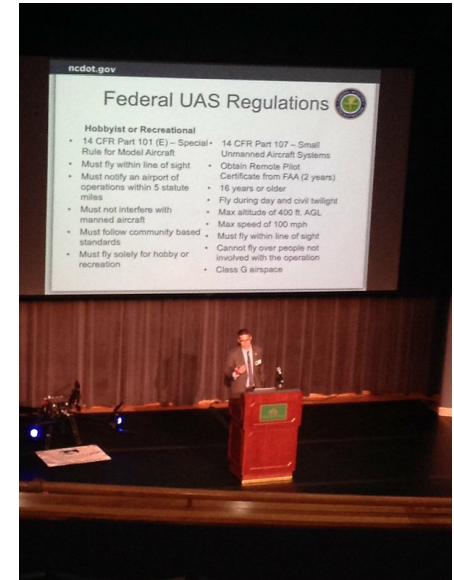
### HOBBYIST GUIDELINES

Rules for flying hobbyist or recreational drones

- Must fly below 400 feet
- Must fly within your line of sight
- Do not fly within 5 miles of an airports, above stadiums, or above other public events
- Do not fly for compensation
- Aircraft must weigh less than 55 lbs
- Do take lessons before flying

For more information, visit [www.ncdot.gov/aviation/uas](http://www.ncdot.gov/aviation/uas), [www.faa.gov/uas](http://www.faa.gov/uas), or [www.knowbeforeyoufly.org](http://www.knowbeforeyoufly.org)

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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



## 7

# Educating and Permitting Government and Commercial Operators

The screenshot displays the website for "Operating a UAS / drone in N.C." under the North Carolina Department of Transportation. The page features a navigation menu with links for Business, DMV, Newsroom, Programs, Projects, and Travel & Maps. The main content area is titled "UAS Account Creation & Login" and includes a blue banner with the text: "Issues with your account? Have questions about UAS operator permitting? [Contact us](#) today!". Below this banner, there is a large image of a woman holding a drone. Overlaid on this image is a dark blue box with the text: "Do you know the requirements to fly a drone in North Carolina? Create an account to take the UAS Knowledge Test and apply for an Operator Permit." Below this text are two buttons: a green "Create Account" button and a grey "Download Study Guide" button. To the right of the image is a white "Account Login" form with fields for Email Address, Birthdate (with a calendar icon), and Driver's License Number, and a yellow "Login" button.

**Operating a UAS / drone in N.C.**  
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UAS Home Page | Division of Aviation | Contact Us

Business | DMV | Newsroom | Programs | Projects | Travel & Maps

Division Of Aviation » Unmanned Aircraft Systems » Knowledge Test & Operator Permitting

## UAS Account Creation & Login

Issues with your account? Have questions about UAS operator permitting? [Contact us](#) today!

**Do you know the requirements to fly a drone in North Carolina?**  
Create an account to take the UAS Knowledge Test and apply for an Operator Permit.

[Create Account](#)

[Download Study Guide](#)

### Account Login

Email Address

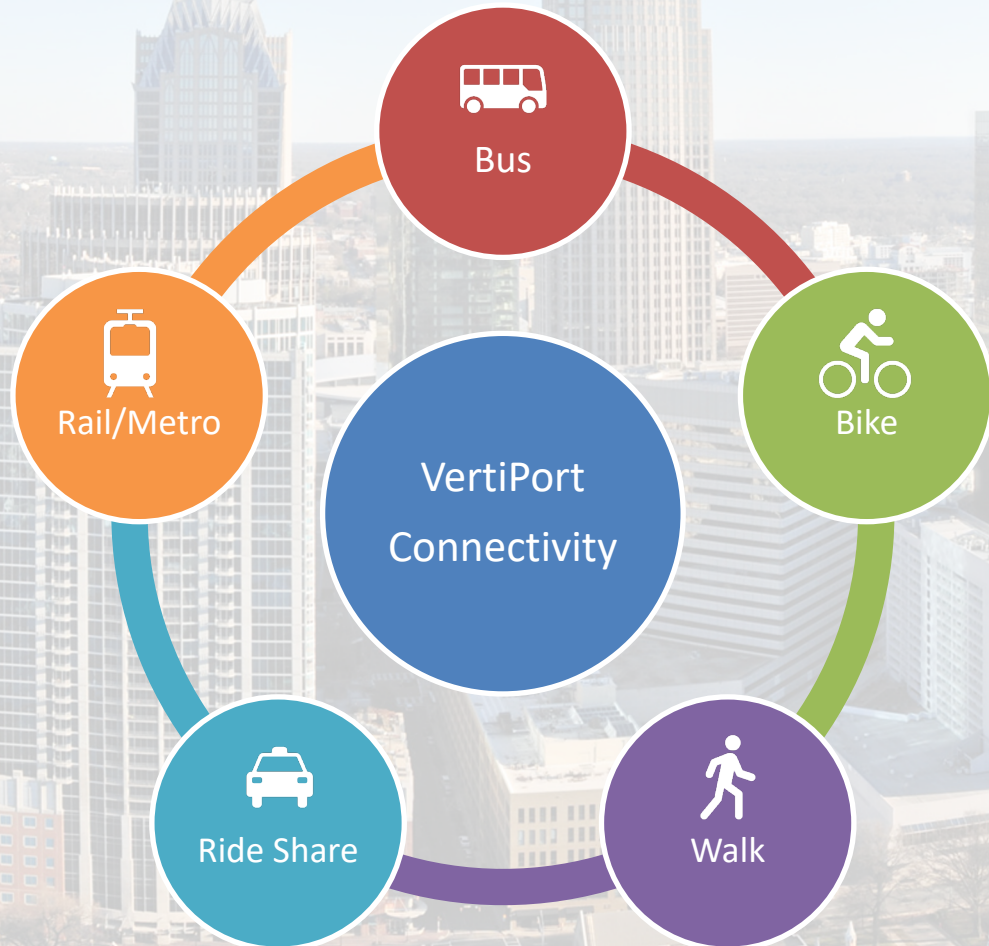
Birthdate  
4/12/2003

Driver's License Number

[Login](#)

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# Urban (or Rural) Air Mobility



## Use Case Focus

- **Infrastructure Inspection**
- **Routine Medical Package Delivery**
- **Routine Food/Parcel Package Delivery**
- Autonomous Ambulatory Services
- Single Pilot Cargo Aircraft
- Unmanned Cargo Aircraft
- **Unmanned Traffic Management**









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