

Company Name: North Carolina Department of Transportation – Aviation Division

Project Title: Advanced Air Mobility and Uncrewed Aerial Systems Deployment Project

The North Carolina Department of Transportation (NCDOT) Aviation Division proudly submits this application for the *Local Government Award* in recognition of its pioneering efforts in planning, deploying, and integrating Advanced Air Mobility (AAM) and Uncrewed Aerial Systems (UAS) into the state's multimodal transportation ecosystem. The following are various aspects of the project.

Leadership in AAM Infrastructure and Deployment

North Carolina has emerged as a national leader in AAM through the strategic deployment of Beta Technologies' electric vertical takeoff and landing (eVTOL) aircraft and charging infrastructure. In 2024, NCDOT facilitated the installation of the first Beta electric aircraft chargers at key aviation hubs across the state, enabling sustainable, zero-emission air mobility. These chargers are now operational at Raleigh-Durham International Airport, Charlotte Douglas International Airport, and several regional airports, laying the groundwork for a statewide AAM network.

First-Ever Interstate AAM Corridor

In a landmark achievement, NCDOT is working with Georgia DOT to lead the design and planning of the first-ever interstate AAM corridor between Atlanta, Georgia, and Charlotte, North Carolina. This corridor, developed in collaboration with GDOT, integrates vertiport locations, airspace deconfliction strategies, and emergency response protocols. It serves as a model for future regional AAM corridors and demonstrates the feasibility of interstate electric air travel as well as the impact on multi-modal goods movement.

Public-Private Partnership (P3) Analysis and Transit Integration

As part of the same project, NCDOT conducted a comprehensive Public-Private Partnership (P3) analysis to identify sustainable business models for AAM deployment. This analysis informed the development of collaborative frameworks with private operators, infrastructure providers, and local governments. Additionally, the Aviation Division is actively exploring AAM as a transit enhancement tool, integrating eVTOL services with existing public transportation systems to improve first-mile/last-mile connectivity in underserved communities. The project specifically included the augmentation of ferry routes which were being impacted by shoaling, the increase of mud under routes moving people to and from the Outer Banks.

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Academic Engagement and Workforce Development

To foster innovation and workforce readiness, NCDOT awarded AAM research and development grants to several North Carolina universities, including NC State University, UNC Charlotte, and Elizabeth City State University. These grants support research in AAM safety, automation, and community integration, while also preparing the next generation of aerospace engineers and transportation planners.

UAS for Disaster Response and Resilience

North Carolina's UAS program has been instrumental in hurricane and flood recovery efforts. During Hurricane Idalia in 2023, NCDOT deployed drones for rapid damage assessment, infrastructure inspection, and delivery of emergency supplies to isolated communities. These efforts significantly reduced response times and enhanced situational awareness for emergency management teams.

Conclusion

Through visionary planning, strategic partnerships, and a commitment to innovation, the NCDOT Aviation Division has positioned North Carolina at the forefront of intelligent transportation. Its work in AAM and UAS not only enhances mobility and resilience but also sets a national precedent for the future of air transportation.

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