City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: **Denton Enterprise Airport**

ACM: **Frank Dixon**

DATE: **February 12, 2025**

SUBJECT

Receive a report, hold a discussion, and provide a recommendation to the City Council regarding the adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager, or their designee, to execute an interlocal agreement with the University of North Texas, under the Texas Government Code, Chapter 791, to authorize an economic feasibility study for unmanned aerial systems in the City of Denton; and declaring an effective date.

STRATEGIC ALIGNMENT

This action supports Key Focus Area: Foster Economic Opportunity and Affordability.

BACKGROUND

While emerging technology of unmanned aerial systems ("UAS", or drones) has the potential to significantly impact the aviation industry, the regulation of and infrastructure development for UAS is still a developing field of aviation. The City of Denton recognizes the potential of this technology to positively impact Denton Enterprise Airport and the local business economy.

As of January 2025, the Federal Aviation Administration ("FAA") has not yet mandated UAS infrastructure planning in airport master plans. However, the FAA Reauthorization Act of 2024 directs the FAA to update design standards for Advanced Air Mobility ("AAM") landing and takeoff facilities, known as vertiports, and to streamline environmental reviews of vertiports and airport infrastructure changes to accommodate AAM operations. Further, in response to the emerging AAM industry, the FAA has released regulations for electric vertical takeoff and landing ("eVTOL") vehicles, marking them as the first new category of VTOL aircraft since helicopters were introduced. These regulations include guidelines for pilot training and operational requirements, aiming to facilitate the integration of air taxis (passengers), cargo delivery, and first responder/rescue operations into the airspace. Given these developments, it is anticipated that the FAA will issue new requirements and guidance for vertiport planning and integration into airport master plans in the coming months.

Planning efforts are currently underway in collaboration with the North Central Texas Council of Governments (NCTCOG), the University of North Texas, and aviation industry stakeholders within the Dallas-Fort Worth (DFW) metroplex to explore the development of a regional network of vertiports to enable Advanced Air Mobility (AAM). Given its strategic location, Denton Enterprise Airport (DTO) could be considered a potential addition to this network in the future. However, substantial economic development initiatives and planning considerations will be necessary to make this a viable reality. Denton Enterprise Airport would like to understand the economic feasibility and options of the upcoming AAM vertiport opportunities in advance of any formalized FAA master planning guidance.

This economic feasibility study, led by The University of North Texas (UNT) - recognized for its research excellence in aviation logistics and the emerging AAM industry - will incorporate a limited research study engagement to assess the economic feasibility of a vertiport in Denton, TX. This study aims to provide foundational insights to guide future planning efforts. This study will supplement the ongoing Airport Master Plan update.

Objectives of the Study:

1. **Economic Feasibility Analysis:**
    - Evaluate the potential economic impact of a vertiport in Denton, TX, on the local community, utilizing agreed-upon factors and considerations.
2. **Demand Analysis for AAM Services:**
    - Assess theoretical demand for vertiport services supporting electric vertical takeoff and landing (eVTOL) aircraft.
    - Consider various vertiport designs, Final Approach and Takeoff (FATO) configurations, and operational activity targets.
3. **Business Model Exploration:**
    - Identify and analyze potential business models for vertiport operations.
    - Examine feasibility under different vertiport designs and operational frameworks.
4. **Regulatory and Environmental Review:**
    - Conduct a literature review of documented and anticipated regulatory and environmental factors relevant to vertiport design and construction.
5. **Considerations for Future Development Planning:**
    - Present key factors and recommended questions for an extended vertiport development plan, which could be integrated into future airport master planning efforts.
    - Provide preliminary insights into:
        - **Infrastructure Requirements:** Evaluate potential funding options, including city-funded and privately funded infrastructure models.
        - **Site Considerations:** Identify potential locations for a vertiport at or near Denton Enterprise Airport within Denton County.

UNT will engage with representatives from Denton Enterprise Airport, the Denton Economic Development Department, and local and regional UAS and business stakeholders to accomplish the study's objectives.

Next Steps:

This initial study will serve as a foundational step in assessing economic impact considerations and opportunities in the evolving AAM landscape within the DFW network. Findings from the study will inform subsequent planning efforts and engagement with stakeholders, including municipal leaders, airport authorities, industry representatives, and regulatory bodies. The study outcomes may also guide further in-depth research, funding pursuits, and integration into regional transportation and economic development initiatives.

This research initiative will be an important step to determining Denton's readiness and positioning within the broader AAM ecosystem in North Texas as the FAA finalizes it rule-making and regulatory guidance.

OPTIONS

n/a

RECOMMENDATION

Approval of the Ordinance

ESTIMATED SCHEDULE OF PROJECT
Approximately seven (7) to eight (8) months

PRIOR ACTION/REVIEW (Council, Boards, Commissions)
Feb. 12, 2024: Airport Advisory Board Recommendation

FISCAL INFORMATION
The agreement has a not-to-exceed cost of $49,998. It will be funded through residual project funds that are unallocated. There will be no cost to the current year's operating budget.

EXHIBITS
1. Agenda Information Sheet

Respectfully submitted:
Ryan Adams
Airport Director