
AVIATION SYSTEM PLAN ISSUES, GOALS, & OBJECTIVES

THIS CHAPTER IS CONCERNED WITH THE IDENTIFICATION of both general and specific issues that the study effort must address. In addition, goals and objectives must be defined to help direct the study toward desired ends. In this regard, the existing goals and objectives of the State of Delaware, FAA, and any other appropriate agencies were utilized in providing a starting point for updated aviation goals and objectives for the study. However, aviation technology, new business applications, and other system parameters have changed over time. Also, changes in policies or funding can impact the role of the State of Delaware in managing their aviation system, and thus must be incorporated into this new study effort. It should be noted that the study process will be open through Phases 1 and 2 to incorporating new goals and objectives which may be dictated by interim results.

1. SYSTEM PLAN ISSUES

THERE IS AN ACCELERATED PACE AT WHICH changes are coming to the National Airspace System (NAS). This includes the implementation of Automatic Dependent Surveillance-Broadcast (ADS-B) instrumentation in aircraft, the integration of Unmanned Aviation Systems (UAS) into conventional airspace corridors, and the introduction of autonomous flying vehicles that may carry passengers in the future. In addition,



Figure 1 – NASCAR Teams at the Civil Air Terminal

the decreasing growth of single engine, propeller aircraft point toward lower numbers of overall aircraft operations within the U.S. airspace system. At the same time, there is an increased usage of larger business and jet aircraft which drive the economics of airports and aviation.

In Delaware, these and other issues impact the technical, physical, financial, and environmental aspects of the aviation system. Aviation issues that were identified at the outset of this system plan included, but were not limited to, the following:

- **UAS Integration into Delaware Aviation System:** In 2015, the UAS Task Force identified a range of issues associated with the integration of UAS vehicles into full economic commerce and development in Delaware. There were remaining objectives that the Task Force did not fully examine, but instead were recommended for further study.

- **Inclusion of Privately-Owned, Public-Use Airports in Facility Requirements:** With the prospect of increased State funding for aviation through a proposed jet-fuel fee, DelDOT may be in a position to use capital funding for privately-owned, public-use airports.



Figure 2 – Skydivers at Laurel Airport

- This could include potential assistance to Summit Airport, Chorman, and a number of the turf runway airports.
- **More Detailed Facility Requirements than “System Plan Level”:** The system plan should examine the creation of facility “must haves” for private airports (Level 1, 2, 3, etc.) These airports must have priority rankings in the system plan and must serve a defined segment of general aviation in Delaware to achieve higher rankings. Details would cover facility items such as runway length, paving needs, airspace obstructions, development standards, and other safety and operational issues.
 - **Costing of Facility Needs for Potential State Funding Program:** To plan adequately for needed airport capital improvement funding, the facility needs program must use more detailed costing efforts. The greater the detail and accuracy, the better able to manage State-generated funding resources.
 - **Consideration of Geographic Coverage/Acquisition of Private Airport:** In previous statewide aviation system plans, the geographic coverage standards for general aviation service areas showed a deficiency in western Sussex County. This implicated the need for Laurel Airport to remain open. If threatened with closure, the State could decide whether it could purchase the facility (similar to Delaware Airpark), or work with public-private-partnerships to keep the facility open for the long term.
 - **Development of Public-Use Heliports in Demand Areas:** In a previous study, both the city of Wilmington and the southern beach communities were identified as possible demand areas for public-use heliports. The system plan could examine whether or not this demand still existed, and if so, what the interest of the State may be in providing facilities or partnering with private enterprise to do so.

- **Priority Rating System for State-funded Projects:** Because of the potential for higher State funding levels, a detailed priority rating system is needed for these projects. This rating system must consider all factors, including safety, geographic coverage, economic viability, business use, population service area, economic impact, and any other relevant decision metric.

- **Potential Development of Civil Air Terminal/Possible Extension of Delaware Airpark Runway:**

Given the new runway location at Delaware Airpark and the possible development of the CAT for commercial purposes, a mini-system analysis is needed for interaction between Delaware Airpark and the



Figure 3 – Galaxy C-5s at Dover AFB

CAT. It is possible that demand for a longer runway exists at Delaware Airpark and if so, the feasibility of such a project should be examined at a preliminary level of detail.

- **Examination of State Aviation Regulations/Update:** If the State is to become more involved in funding private airport development, adjustments to current regulations will be needed. Currently, the State is authorized to remove airspace obstructions off private airport property, if the airport owner will commit to keeping the airport open for at least 10 years. There is a repayment schedule for the grant if the private airport owner violates this agreement. Similar language needs to be developed for other State-funded capital improvements at privately-owned, public-use airports.
- **Land Use Compatibility Measures/Encroachment Analyses:** A continuing issue with airports and residential development around them is the nature of continued expansion on both sides. The least compatible uses surrounding an airport are residential. However, a brief inventory of airports in Delaware shows that pattern unabated. As a result, potential solutions should be developed that employ zoning, easements, and other means of avoiding or mitigating these conflicts.
- **Future Technology Impacts to the Delaware Aviation System:** To date, no state aviation system plan for Delaware has examined the potential impacts of future technology on the aviation system. This would include the possible deployment of Uber/Lyft air taxi service, self-driving cars, virtual reality, drone-carried air freight, etc.
- **Increased Public Involvement Program:** In previous aviation system planning efforts, public involvement occurred mostly through the Delaware Aviation Advisory Council (DAAC). For this effort, the expansion of possible public involvement portals can be

examined. If there is an interest in the work of the plan by the public, this part of the planning process can be expanded to meet the interest. It is believed that briefings and project workshops with the DAAC and County and Municipal Planning/Zoning agencies would be a firm component of the public information program. In addition, open meetings with the public could be held on a same-day basis in the evening to permit broader circulation of the study findings and processes.

2. GOALS AND OBJECTIVES

GOALS AND OBJECTIVES FOR THE AVIATION SYSTEM Plan Update were aligned to the Delaware Long Range Transportation Plan (DLRTP). Goals can be described as the ideal vision of aviation system infrastructure and performance. The attainment of goals may take decades. However, they remain the prime reasons for action steps toward their fulfillment. Objectives, on the other hand, are measures of goal attainment.



Figure 4 – Delaware Airpark

Objectives should be quantifiable and should serve to gauge the progress toward goal achievement. In this regard, there are seven primary goals in the DLRTP that fit aviation transportation modes. The applications of these goals have been altered slightly from considering the broad transportation systems in Delaware to focusing on the specific needs of the aviation system. Goals and their associated objectives include the following:

Goal 1: Economic Vitality:

Promote and strengthen the economic vitality of Delaware with an excellent aviation transportation network that meets the needs of a diverse and growing economy.

Objectives:

- 1.1 Continue to invest in the growth of the Civil Air Terminal (CAT) at the Dover Air Force Base (DAFB) due to the increased flexibility of the Joint Use Agreement.
- 1.2 Continue to provide capital funds to assist with 10 percent sponsor match requirements of FAA Airport Improvement Program (AIP) grants at federally-eligible airports in the National Plan for Integrated Airport Systems (NPIAS).
- 1.3 Coordinate with the Delaware Prosperity Partnership (DPP) to identify future economic development opportunities and identify specific resources that can be provided.

- 1.4 Update and maintain an Economic Impact Assessment of Aviation in Delaware and provide the output data to aviation stakeholders and policy makers for use in decision-making.
- 1.5 Develop and maintain a program for identifying specific facility needs at system airports, including privately owned airports that may be eligible for State funding.
- 1.6 Develop a program to provide limited capital funds for airport improvements at public-use airports that are not classified as NPIAS airports and therefore ineligible for federal AIP grant funds.

Goal 2: Safety and Security:

Ensure the safe and secure movement of people and goods while limiting the potential for incidents that may cause harm or disrupt aviation operations.

Objectives:

- 2.1 Continue periodic safety inspections to update the master records (FAA Form 5010) for Delaware's public-use airports and improve data collection procedures through staff training and new technology.
- 2.2 Improve the airspace obstruction review process by evaluating current regulations, technical criteria and the application process to develop new efficiencies and technological advancements.
- 2.3 Develop outreach materials to increase public awareness about agricultural spraying flights and related safety tips.

Goal 3: Quality of Life:

Maintain and enhance vibrant and appealing communities and support planned growth and development through an aviation transportation network that serves the mobility needs of Delawareans.

Objectives:

- 3.1 Coordinate with local government agencies to ensure that current zoning and future land use plans consider the impacts of development to the operations at airports.
- 3.2 Identify methods to educate local community members about the value and potential of Delaware's airports, such as events, publications and contests.
- 3.3 Reach out to local community groups and Homeowners Associations (HOAs) to find opportunities to spread awareness.

Goal 4: System Preservation:

Provide access to safe, attractive, and reliable transportation options and enhance integration of a well-connected multi-modal transportation system.

Objectives:

- 4.1 Coordinate with airport management, private businesses and government officials to identify opportunities to integrate Unmanned Aircraft Systems (UAS) technology into airport operations.
- 4.2 Update the current Aviation System Plan (Phases I and II) to establish statewide goals, forecast aviation demand and recommend future capital funding priorities.
- 4.3 Identify potential airspace obstruction mitigation projects to preserve the safe operation of the aviation system.

Goal 5: System Management and Operations:

Enhance system management and operations through innovative strategies and technology that increase the efficiency of the aviation transportation system.

Objectives:

- 5.1 Continue collecting sample data of the number of take-offs and landings at non-towered airports and develop more efficient and precise sampling techniques.
- 5.2 Evaluate the current state licensing procedures for public-use airports and determine if changes are necessary.
- 5.3 Review State aviation regulations to ensure there is a mechanism to fund eligible capital needs for privately-owned, public-use airports.
- 5.4 Improve the partnership with Delaware State University (DSU) to expand opportunities to support the Aeronautics Program through staffing and research.
- 5.5 Evaluate the current DelDOT Helipad lighting system and determine if upgrades or a full replacement is needed.

Goal 6: Travel and Tourism:

Facilitate efficient mobility options for tourist destinations that support Delaware residents, businesses, and visitors.

Objectives:

- 6.1 Partner with the Division of Small Business, Development & Tourism to identify current programs and/or develop new programs to promote General Aviation (GA).
- 6.2 Examine the impacts of future technology (other than UAS) on the aviation system and how gains in personal transportation technology may provide opportunities for tourism at the beach communities and other Delaware locations.

Goal 7: Customer Service & Communication:

Provide the highest level of customer service possible in order to proactively provide information and to learn from and address Delaware customers' needs.

Objectives:

- 7.1 Continue to engage the Delaware Aviation Advisory Council (DAAC) to advise staff on the development and prioritization of strategies for the Aeronautics Program.
- 7.2 Rebuild the Aeronautics Program website to promote Delaware aviation to new audiences.
- 7.3 Improve and update GIS data and develop interactive web maps for Gateway.



Figure 5 – Aerial of New Castle Airport