

## Element 640 State of Rhode Island Airport System Plan - Overview

This document represents the Rhode Island Airport Corporation's (RIAC) plan for the state airport system (ASP). The plan establishes state goals, objectives, policies and strategies on the development and management of the airports. It includes an overview of system needs through the year 2021. The plan was approved by the State Planning Council as an element of the State Guide Plan and accepted by the Federal Aviation Administration, as the Rhode Island's Airport System for the period 2010-2021. There are seven parts to this State Guide Plan Element:

### Part One Introduction and Background

The Rhode Island State Airport System Plan, State Guide Plan Element 640 (ASP) is a strategic plan for the six state-owned airports looking forward to the year 2021. It outlines the efforts needed to ensure that Rhode Island maintains an airport system capable of meeting the state's long-term transportation and economic needs. Aviation is a mode of transportation that is critical to a well-balanced transportation network that allows Rhode Island travelers and visitors the ease of travel to connect to the country and the world.

The purpose of the airport system planning process is to provide a foundation for a balanced and integrated system of airports with clearly defined roles developed in consideration of state, regional, and local goals and policies. The ASP is a strategic plan for the purposes of implementing a "top-down" planning approach. It examines the airport system as a whole and how its parts, the individual airports, interact with each other. The plan documents the airports, their needs, and outlines improvements that are important for the airports to function successfully in their designated roles and to meet the current and forecasted air transportation needs of the state in balance with the surrounding communities. It is also used to study and monitor the performance of the entire aviation system; to understand the interrelationship of the member airports; to provide an overall perspective in capital budgeting; and to assist in maximizing the benefits of investments and alignment of federal priorities with state and local objectives. The ASP broadly defines future development objectives. It does not anticipate all projects that might be needed; it does not design or select individual projects. It can be a foundation for preparing airport master plans for individual airports. The Introduction includes Rhode Island's Airport System.

#### Name and location

- Block Island Airport in New Shoreham (BID)
- Robert F. Wood (UUU)
- North Central Airport in Smithfield (SFZ)
- Quonset Airport in North Kingstown (OQU)
- T.F. Green Airport in Warwick (PVD)
- Westerly Airport in Westerly (WST)

#### Facility's Role

*Non Primary Commercial Service*  
*General Aviation (also referred to as Newport Airport)*  
*General Aviation / Reliever*  
*General Aviation / Reliever*  
*Primary Service, Medium Hub*  
*Non-Primary Commercial Service*

The Introduction also contains a section the seven general planning factors which were developed for the general aviation system plan, including T.F. Green Airport. These factors were used to help define and guide the analysis completed for this State guide plan element. Those planning factors include:

- Economic: Ability to support Rhode Island's economy and airport financial self-sufficiency.
- Capacity: Ability to provide airside and landside facilities to meet existing and future needs.
- Air Accessibility: Ability of Rhode Island's airports to be accessible from the air.

- Ground Accessibility: Ability of Rhode Island’s airports to be accessible from the ground.
- Compatibility: Ability to operate as compatibly as possible within the community.
- Compliance: Ability to meet environmental regulatory requirements.
- Standards: Ability to meet applicable design and safety standards.

## **Part Two      Inventory**

The key objective of this chapter is to provide a comprehensive summary of currently available airport information and an overview of how the existing state owned airports function within the system. It includes airport background and terminology and summaries of all RI airports and other Rhode aviation facilities. It also discusses other regional aviation facilities.

## **Part Three      Forecasts of Aviation Demand**

Forecasts of aviation demand for the publicly owned airports in Rhode Island are used in this plan to help in determining if system facilities are adequate to meet current and future demand. Forecasts included:

- General Aviation Forecasts
- General Aviation Industry Trend
- General Aviation Forecasts Considerations
- Baseline Projection of Based Aircraft
- Baseline Projection of General Aviation Operations
- Commercial Service Projections for Block Island and Westerly
- Military Activity Projections
- Airport User Needs and Enhanced Growth Projections
- Green Operations and Forecasts
- Existing Operations and Markets Served (for TF Green)
- Aviation Industry Trend

## **Part Four      Airport System Performance**

This section provides an understanding of the current condition of the system to establish the base measure against which to assess future performance. This measuring process requires (a) defining the functional roles of each airport and (b) establishing a system of measures by which to quantify performance. The assessment process utilized reasonably well defined aviation parameters. Quantifying or measuring the individual results can be somewhat subjective. In summary, the assessment provides a general understanding of the airport and system performance. Included in this part are: Airport and System Performance Measures, Functional Roles, System Performance Measures, and System Performance.

## **Part Five      Needs Assessment**

This chapter outlines the future needs of Rhode Island’s airport system as perceived at this point in time based on the anticipated future demands presented in Part 3 and the performance assessment

presented in Part 4. The needs are based on the airport's role within the system and region, and the design aircraft for the airport. The needs addressed encompass a wide spectrum of topics including economic, capacity, accessibility, technical parameters of operations, ground transportation including transit, environmental, regulatory, community compatibility, safety design, and individual facility needs.

## **Part Six            Goals, Policies, Objectives and Strategies**

This chapter outlines the anticipated needs of the airport system and the framework for its future development through the seven planning factors established at the outset of the airport system planning process. It translates the planning factors addressed in prior chapters into specific goals, policies, objectives, and strategies to be pursued by the State, the Rhode Island Airport Corporation (RIAC), and the host communities. Many of the recommendations included in this chapter are a result of the information generated by the system planning process, and the recommendations will be used in future decision making processes to achieve the stated goals. It also includes the Vision Statement.

### **Vision Statement**

*A safe, secure, and efficient system of airports with convenient intermodal connections that meets the anticipated need for aviation services, advances economic development goals of the state, enhances transportation opportunities and quality of life, and exists compatibly with the environment and surrounding communities.*

### **Goals**

The planning factors were used to develop the Rhode Island airport system goals. Once these were identified, the "policies, objectives, and strategies" by which to achieve the goals were developed. The details of objectives and strategies can be found on pages 06.1 through 06.10 of the guide plan element. The State's goals, policies, and objectives are as follows:

- **Goal 1** – Rhode Island's system of airports will contribute to the State's economic growth while maintaining financial self-sufficiency.

### **Policies**

A - Maximize the airport system's economic benefit to Rhode Island.

B - Pursue funding for necessary improvements, especially those projects that may generate revenue for the overall state aviation system.

C - Encourage the development of aviation related industries on or near airport property in cooperation with host communities, to the benefit of the state and the host communities.

D - Use best management practices to maintain and operate facilities and equipment in acceptable condition and protect infrastructure investments.

E - Employ current industry standards in establishing and maintaining appropriate rates, charges, and lease agreements for airport tenants.

F - Comply with all FAA requirements such as AIP grant assurances, land transfer processes, etc.

### **Objectives**

G - Produce sufficient revenue to cover operating and maintenance costs at a system level.

H - Provide services and amenities to support general aviation and attract business aircraft, thereby generating revenue from fees, fuel, repair and creating secondary economic impacts in the communities.

I - Provide basic or enhanced FBO services depending on the role of the airport.

J - Ensure sufficient fuel is available for each airport depending on the role of the airport and based on feasibility.

K - Provide some type of food service at all terminals ranging from vending machines to full service restaurants.

- **Goal 2** – Rhode Island will be served by a system of airports whose roles and capacities are sufficient to meet current and projected demand within the context of the natural, social, and economic environment.

### **Policies**

A - Maximize efficiency of the existing system by fostering the ability of the individual airports to better fulfill their roles within the System. This includes encouraging GA traffic to use reliever airports to maintain capacity for commercial operations at T.F. Green.

B - Recognize T.F. Green's role not only as RI's primary commercial service airport, but also as a vital component of the New England Regional Airport System serving short, medium, and long-haul nonstop destinations. Strive to maintain convenience and user-friendly reputation as a competitive advantage.

C - Promote and develop the GA airports according to their roles as follows:

North Central and Quonset: General Aviation – Reliever Block Island and Westerly: General Aviation and Primary Commercial Service as possible. Newport: General Aviation

D - Maintain capacity for military use by the RI Air and Army National Guard at Quonset for the purposes of national defense, homeland security, and emergency operations.

E - Expand airside, terminal, and landside facilities as planned and as necessary in response to demand and in consideration of local comprehensive plans for landside facilities.

F - Maintain adequate infrastructure to provide delay free operations.

G - Scrutinize projects or activities that may result in loss of capacity.

### **Objectives**

H - Maintain delay free operations and effectively plan for improvements.

I - Provide covered aircraft storage (either T-hangars or conventional hangars) to accommodate both based and transient aircraft.

J - Provide adequate aircraft parking areas to accommodate loading and unloading of passengers, short-term parking by aircraft utilizing the airport's facilities, and visiting aircraft.

K - Provide adequate terminal/administration building facilities for serving peak hour operations and passengers, and accommodating amenities central to the airport's role.

- **Goal 3** – Rhode Island will be served by a system of airports that is readily accessible from the air.

### **Policies**

A - Provide and maintain runway systems that are consistent with the role of the airport, effectively accommodate critical design aircraft, and provide the greatest operational flexibility with the least amount of community and environmental impact.

B - Provide facilities to ensure that T.F. Green is competitive considering its role in the New England region. Defer to the NEPA process where applicable as the proper vehicle for assessing and

balancing community and environmental impacts in the selection of preferred runway extension alternatives.

C - Provide, maintain, and enhance airfield lighting, aids to navigation, and air traffic control as appropriate.

D - Provide facilities for air cargo of local origin and destination.

E - Ensure that intrastate commercial service between Westerly and Block Island is maintained.

### **Objectives**

F - Provide precision approach systems to commercial and reliever airports.

G - Provide non-precision approach systems to all airports.

H - Maintain on-site weather reporting equipment at all airports.

I - Provide runway length adequate to service the current or projected design aircraft.

J - Provide a crosswind runway length of least 80% of the primary runway length where practicable.

- **Goal 4** – Rhode Island will be served by a system of airports that is readily accessible from the ground.

### **Policies**

A - Participate in coordinated planning efforts with local and state officials for landside facilities and intermodal surface transportation connections.

B - Provide a system of airports with adequate and efficient ground transportation, circulation and access roads, and parking.

C - Encourage frequent and effective transit service to reduce congestion and parking requirements, especially at T.F. Green.

### **Objectives**

D - Maintain eligibility of primary access roads for federal funding through inclusion in the Highway Functional Classification System.

E - Work with RIPTA, MBTA and others to provide and enhance regularly scheduled transit service to TF Green and some level of transit (e.g. Flex-Service) to other commercial service airports.

F - Provide adequate automobile parking based on the number of passengers, based aircraft, employees, visitors, and other airport businesses such as rental cars.

G - Provide access to rental or courtesy cars for passengers and pilots.

- **Goal 5** – Rhode Island’s airports will exist compatibly within their communities while providing air services appropriate to their roles.

### **Policies**

A - Promote land use planning principles that limit incompatible land uses; further safety, security, and viability and preserve opportunities for reasonable future enhancements of the airport system.

B - Maintain continuing and cooperative planning processes with host communities that encourage responsible land use practices in and around airports. Encourage multi-disciplinary participation in airport master and system plans; regional aviation planning efforts and local comprehensive planning.

C - Minimize noise impacts to the extent possible.

D - Develop land in the immediate vicinity of airports in a manner that will be compatible with airport operations. Promote re-use of vacant airport land with priority to airport purposes and

consistent with state approved municipal comprehensive plans and the requirements of 14CFR Part 150. Minimize adverse impacts, if any, to pre-existing land uses.

E - Promote protection of property and rights of way to secure the long- term transportation needs of the state.

### **Objectives**

F - Maintain and update the Noise Exposure Map at T.F. Green as operations warrant and in accordance with FAA Guidelines. Use the Integrated Noise Model to identify those areas beyond airport property that have incompatible residential land uses. Comply with RIGL 1-5 Permanent Noise Monitoring Act. Notify carriers of non-weather or safety related diversions from Part 150 operating procedures.

G - Ensure that landside airport plans and projects are consistent with state approved local comprehensive plans and the State Guide Plan.

H - Maintain adequate height zoning and Part 77 Surfaces with no penetrations.

I - Identify Airport Hazard Areas around each airport (RIAC) and work with host communities to adopt appropriate zoning (host communities), consistent with RIGL § 1-3-5.

J - Maintain current airport master plans and Airport Layout Plans (updated every 5 years) and a current state system plan (reevaluated and amended as needed and updated every 10 years).

- **Goal 6** – Rhode Island’s system of airports will meet all federal, state, and local environmental regulatory requirements.

### **Policies**

A - Promote actions that protect public health and the natural environment.

B - RIAC and the airlines should strive to minimize emissions of air pollutants and greenhouse gasses from aircraft operations and ground support equipment.

C - Improve surrounding water quality by effectively managing storm water runoff.

D - Ensure implementation of mitigation requirements identified in environmental documents.

E - Promote energy conservation, efficiency, and use of renewable sources of energy.

### **Objectives**

F - Maintain and implement current Spill Prevention Control Countermeasures (SPCC) plans in order to address accidental spills.

G - Meet requirements for Underground Storage Tanks (UST) in order to protect quality of groundwater.

H - Maintain and implement current Wildlife Management Plans (WMP) in order to protect both aircraft and wildlife.

I - Maintain and implement current Storm Water Pollution Prevention Plans (SWPPP) in order to protect water quality.

J - Meet requirements for Underground Injection Control (UIC) in order to protect groundwater.

K - Identify and properly manage hazardous materials in order to protect airport employees, host communities, and the environment.

L - Comply with RIGL 1-7 Permanent Air Quality Monitoring Act. In cases where deviations from Part 150 arise that are not related to weather or safety, RIAC will work with FAA ATCT and/or the carrier to resolve the issue.

M - Maintain and implement Vegetation Management Plans (VMPs) in order to protect aircraft and fully utilize available runway length. Avoid repeated disturbances in or near wetlands and rivers, and avoid cutting and planting during sensitive breeding, nesting, or spawning periods.

- **Goal 7** – Rhode Island’s airport system will be safe, efficient, and meet applicable FAA design standards and TSA security standards.

#### **Policies**

A - Provide for an airfield layout that meets applicable design standards.

B - Control land in the runway protection zones through airport ownership or other legal means.

C - Protect airspace and maintain aircraft safety by preventing artificial and natural obstructions from penetrating critical airspace surfaces, and take all prudent measures to avoid runway incursions.

D - Embrace technological advances that improve efficiency, safety, and passenger experience, and reduce need for more costly infrastructure.

#### **Objectives**

E - Maintain airport facilities consistent with approved ALP. The facilities include pavement, firefighting apparatus, terminal and hangar structures, and other essential facilities.

F - Maintain all airport pavements (above) in good condition in order to prevent costly reconstruction projects over the long term.

G - Provide sufficient runway/taxiway separation to reduce chances of wingtip collisions.

H - Provide Runway Safety Areas to meet FAA standards.

I - Maintain Primary Surfaces clear of all above ground objects.

J - Maintain Runway Protection Zones such that land is undeveloped and free of any objects.

K - Maintain Runway Object Free Areas clear of all above ground objects unless the object is for the purpose of air navigation or aircraft ground maneuvering.

L - Maintain approaches free from obstructions that present hazards to aircraft.

M - Meet requirements for passenger, baggage, cargo, and perimeter security.

### **Part Seven**

#### **Airport System Improvements**

The recommended facility and service improvements, or projects, set forth in this part have been identified through the process described in Parts 4 and 5 and in consideration of the goals and strategies established in Part 6 and airport-specific Master Plan Updates. Airport-specific recommendations were identified to meet system objectives and ultimately achieve higher performance levels for their system role. In addition, project costs are estimated, various funding sources and mechanisms are also outlined here.