

## **ELEMENT 661: RHODE ISLAND STATE RAIL PLAN**

### **1 INTRODUCTION**

The Rhode Island State Rail Plan was approved by the State Planning Council on March 13, 2014, and as of that date it replaces the 1993 Rhode Island Freight Rail Plan as State Guide Plan Element 661.

The State Rail Plan addresses Rhode Island’s passenger and freight rail transportation needs over the next twenty years. It describes the state’s existing rail systems, assesses future needs, and includes prioritized short and long-term investment programs. The plan was prepared to ensure compliance with the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) and the federal transportation authorization, Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21).

The State Rail Plan has nine chapters.

#### **Chapters 1 and 2 Introduction and Development of the State Rail Plan**

Chapter 1 describes the history of rail in Rhode Island and its role in the state’s economy. It also describes federal goals and requirements for rail and state rail plans. Chapter 2 provides a description of the process used to develop the State Rail Plan.

#### **Chapter 3 Public Rail Program Activities in Rhode Island**

The chapter discusses the administrative structure of rail planning, policy, and management in Rhode Island. It also describes federal and state funding for rail, past rail studies conducted in the state, and the regional rail context.

#### **Chapter 4 Rhode Island’s Freight Rail System**

Chapter 4 describes Rhode Island’s freight rail system, including active and inactive freight rail lines, intermodal system, freight traffic and goods movement, and significant freight rail issues facing the state.

#### **Chapters 5 and 6 Rail Passenger Service in Rhode Island and Proposed Passenger Rail Service**

Chapter 5 provides a description and analysis of Rhode Island’s existing intercity rail passenger service, including commuter rail and excursion services. It also discusses existing and projected passenger rail issues. Chapter 6 describes proposed passenger rail service in the state including South County rail service, Providence Street Car, new stations in Cranston and Pawtucket, and intrastate rail shuttle service.

#### **Chapter 7 Analysis of Rail Transportation Impacts**

The chapter presents descriptions and analyses of the economic, environmental, energy, and land use impacts of rail in Rhode Island.

#### **Chapter 8 Rail Safety and Security**

Chapter 8 describes the state of rail and grade crossing safety, hazardous materials, positive train control, rail security, and the Strategic Rail Network in Rhode Island.

## **Chapter 9 Implementation Program**

Chapter 9 presents the vision for rail in Rhode Island, a summary of the needs presented in the previous chapters, goals, objectives, policies, implementation actions, and performance measures for the State Rail Plan, and a program of projects that the State will strive to undertake in the short and long term to implement the rail vision.

## **2 VISION**

The State Rail Plan vision statement describes the desired future for Rhode Island's rail system.

*The Rhode Island rail system provides safe, reliable, efficient, and effective mobility for people and goods. It contributes to a more balanced transportation system, contributes to economic development, and enhances environmental quality. It efficiently links Rhode Island passengers and goods to national and global markets to cost effectively meet freight and passenger market demands.*

## **3 GOALS, OBJECTIVES, POLICIES, AND IMPLEMENTATION ACTIONS**

The State Rail Plan describes goals, objectives, policies, implementation actions, and performance measures in six topic areas: safety and security, infrastructure condition, system reliability, congestion reduction, economic vitality, and environmental sustainability.

- **Goal 1 Safety and Security**  
The rail system will be a safe and secure means of transporting people and goods.
- **Goal 2 Infrastructure Condition**  
The rail system will efficiently serve the long-term needs of Rhode Island businesses and residents.
- **Goal 3 System Reliability**  
The Rail system will provide for the effective and efficient mobility of goods and people as an element of an integrated multi-modal transportation system.
- **Goal 4 Congestion Reduction**  
The rail system will provide a vital transportation mode that accommodates travel and commerce and reduces congestion within the overall transportation system.
- **Goal 5 Economic Vitality**  
The rail system will support a vigorous economy by facilitating the movement of people and freight within Rhode Island and the region.

Maintain a well-integrated and sustainable rail system that operates as an integral and coordinated component of the multimodal transportation system and has the supporting land use designations that provide access to intermodal facilities and to compact, mixed use centers to accommodate Rhode Island's growing population and economy.

- **Goal 6 Environmental Sustainability**

The rail system will protect and enhance the quality of the state's environmental resources and the livability of its communities through well-designed rail projects and operations.

#### **4 RAIL INVESTMENT PROGRAM**

The Rail Investment Program is comprised of a list of short-range capital projects supported or under consideration for advancement by the state within the next five years and a list of long-range rail capital projects under consideration for advancement within the next six to twenty years. Projects in the investment program were evaluated and prioritized according to seven criteria: safety, infrastructure condition, system reliability, congestions reduction, economic vitality, environmental sustainability, and financial feasibility and public support. Passenger and freight projects have separate evaluation criteria. In some instances where projects provide improvement and benefit to both passenger and freight, projects received a score from both sets of criteria.

The highest scoring projects were as follows.

##### **Passenger and Freight**

- Preliminary engineering and environmental analysis of the Providence Station and Tunnel to address operational and safety concerns regarding the movement of hazardous materials.
- Planning level analysis of adding a third track from TF Green Airport south to add capacity to accommodate intra-state commuter and freight rail movements.

##### **Passenger Rail**

- Preliminary engineering and environmental analysis of the Providence Street Car project.
- Planning level analysis of added Amtrak intercity service at the Warwick Interlink.
- Final design and construction of exterior improvements at the Providence Station.
- Engineering and environmental analysis of the proposed Pawtucket commuter rail station.

##### **Freight Rail**

- Final engineering design and construction of five bridges over the Blackstone River in Massachusetts.
- Preliminary engineering and environmental analysis of new sidings for the Seaview Railroad in the Quonset Business Park.
- Preliminary engineering and environmental analysis of bridge structures in Rhode Island to increase the vertical clearance to 21' 6".
- Construction of internal rail lines within the Port of Providence.

### 9.3 GOALS, OBJECTIVES, POLICIES, AND IMPLEMENTATION ACTIONS

Based upon the vision previously described, the goals articulated in the *1993 State Freight Rail Plan* and in *Transportation 2035*, and the needs assessment outlined above, the proposed goals, objectives, policies, implementation actions and performance measures are outlined below. Goals, objectives, policies, and implementation actions are defined according to the following:

- **Goals:** The end or ideal that is desired; a state or value toward which an effort is directed even though it may not be perfectly attainable. Goal statements are broad in scope and long-term in nature but should not be vague.
- **Objectives:** Like a goal, an objective is an end toward which an effort is directed. An objective, however, should be measurable and attainable. Objectives are stated in more narrow and specific terms than goals and may be set within definite time periods and establish performance measures.
- **Policies:** Policies are intended to guide decisions and courses of action toward implementing a plan. Policies are not an endpoint but set forth the acceptable and recommended procedures for attaining goals and objectives.
- **Implementation Action:** A specific action suggested as a recommendation that will further the advancement toward a goal or objective.
- **Performance Measure:** A metric for assessing progress toward achieving goals. Performance measures can be quantitative or qualitative targets tied to specific implementation actions or overall goals.

#### 1. SAFETY AND SECURITY

##### GOAL

The rail system will be a safe and secure means of transporting people and goods.

##### OBJECTIVES

1. Reduce fatalities and serious injuries on the overall rail system.
2. Increase passenger safety.
3. Reduce illegal trespassing and enhance security of rail rights-of-way.
4. Improve security of rail passengers on railcars and at stations consistent with federal policy.

##### POLICIES

1. Support educational efforts directed toward all population groups regarding the safe use of the rail system.

## IMPLEMENTATION ACTIONS

1. Continue RIDOT's program to eliminate or improve at-grade rail crossings.
2. Partner with rail owners/operators to examine safety and security issues around the rail system and develop an action plan to address the issues.
3. Partner with the law enforcement community to identify and prioritize enforcement security measures to reduce injuries and deaths from rail trespassing.
4. Partner with passenger rail operators to provide educational materials regarding rider safety at rail stations, on trains and, as appropriate, in public schools.
5. Partner with rail operators to expand and enhance existing positive train control technology in the state and encourage rail operators to implement new technology in the future.
6. Develop an incident response protocol for train derailments and other rail related incidents.
7. Work with rail right of way owners to install protective barriers between operating rail lines and public access points, especially in locations with previous incidents reported.
8. Support the Operation Lifesaver program to help educate schools, drivers, and the general public about the dangers of trespassing on the rail right-of-way.
9. Continue the efforts of Amtrak, RIDOT and others to increase ADA accessibility.
10. Develop a Transit Safety Plan as required by MAP-21.

## PERFORMANCE MEASURES

1. Reduce the 5-year rolling average of serious injuries and fatalities throughout rail operations by 4 percent annually. The 4 percent represents the Toward Zero fatalities goal to halve serious injuries and fatalities by 2030 as adopted by the RI Strategic Highway Safety Plan.
2. Reduce the 5-year rolling average of grade-crossing serious injuries and fatalities by 50% by 2030.

## 2. INFRASTRUCTURE CONDITION

### GOAL

The rail system will efficiently serve the long-term needs of Rhode Island businesses and residents.

### OBJECTIVES

1. Maintain rail infrastructure in a state of good repair.
2. Improve or enhance infrastructure, service, and capacity in the regional rail network, particularly those measures which increase bridge clearances, remove weight restrictions, increase yard capacity, and increase track capacity.
3. Improve user comfort, convenience, and information at rail stations and on railcars.

### POLICIES

1. Preserve rail rights-of-way for rail use or to use as part of the overall transportation network.

2. Ensure that the maintenance and expansion of the rail system and facilities are adequately and reliably funded.
3. Support programs to increase investment in Rhode Island's rail system, including public-private partnerships that result in rail system enhancement.
4. Support regional projects that remedy clearance and weight restrictions affecting freight movements in and out of Rhode Island.

#### IMPLEMENTATION ACTIONS

1. Develop a Transit Asset Management Plan to assist in programming capital and state of good repair improvements for the rail system and station facilities as required by MAP-21.
2. Continue participation in the congressionally mandated Northeast Corridor Infrastructure and Operations Commission, which establishes Northeast Corridor priority capital projects and user cost allocation methodology.
3. Develop a mechanism to fund the routine and long-term maintenance of RIDOT rail stations, including landscaping, cleaning, and improved pedestrian accessibility.
4. Continue to improve on station amenities including convenient drop off and pick up areas for passengers, cars, and buses, self-service ticket kiosks, canopies to protect riders, real time train information, secure bike parking, and security cameras and emergency phones.
5. Incorporate a commuter rail component into the Rhode Island Travel Demand Model for more accurate ridership projections for proposed commuter rail stations.

#### PERFORMANCE MEASURES

1. Reduction in the bridges in Rhode Island that do not meet the clearance of 21 feet, 6 inches to accommodate the next generation of auto racks.
2. Reduction in the 5 bridges in Massachusetts that cannot accommodate 286,000 lb. rail cars.
3. Implement recommended improvements to rail facilities, including rail stations, as outlined in the Transit Asset Management Plan.

### **3. SYSTEM RELIABILITY**

#### GOAL

The rail system will provide for the effective and efficient mobility of goods and people as an element of an integrated multi-modal transportation system.

#### OBJECTIVES

1. Balance multimodal passenger service alternatives with reliable freight service.
2. Increase speed and on-time performance of freight and passenger service.

## POLICIES

1. Promote seamless connections between rail and other modes of transportation.
2. Support initiatives to increase reliable and timely access to passenger commuter rail service, including connections to complementary rail service in Massachusetts and Connecticut.
3. Consider new stations and expanded service options to encourage new ridership.
4. Promote more efficient utilization of shared freight and passenger rail lines to improve reliability.
5. Ensure that the operation of the rail system is adequately and reliably funded.
6. Explore the feasibility of public financing options, including value capture, when considering system expansion and new stations.

## IMPLEMENTATION ACTIONS

1. Regularly meet with MBTA and future alternate operators to review system operation and discuss opportunities for increased reliable and timely commuter rail service.
2. Work together with all transit operators in the State to look for ways to create an integrated fare system.
3. Lead a group of relevant stakeholders in state government and quasi-public agencies to review the long-term needs of commuter rail operations. The group should make recommendations for a transportation organizational structure that coordinates the ongoing planning, marketing, and operation of existing and future commuter rail and ensures that any future expansion meets customer demand.
4. Work with the Northeast Corridor Commission to establish reasonable access fees, freight charges, and projects on Amtrak's Northeast Corridor.
5. Coordinate with passenger rail providers and track owners to identify opportunities for freight rail access, in order to improve freight reliability.

## PERFORMANCE MEASURES

1. Increase the number of riders on commuter rail service by 2 percent per year.
2. Improve on-time performance of MBTA commuter rail service to 95%.
3. Improve on-time performance of Amtrak Acela service to 90%
4. Improve on-time performance of Amtrak Northeast Regional service to 85%
5. Improve on-time performance of freight service by 10 percent by 2023.
6. Establish MBTA weekend service south of Providence.
7. Increase the number of peak hour commuter trains serving Rhode Island stations.

## 4. CONGESTION REDUCTION

### GOAL

The rail system will provide a vital transportation mode that accommodates travel and commerce and reduces congestion within the overall transportation system.

## OBJECTIVES

1. Reduce vehicular (passenger) or truck (freight) miles traveled.
2. Improve overall traffic flow in Rhode Island's transportation network.
3. Increase capacity along congested rail routes.

## POLICIES

1. Encourage the use of passenger and freight rail to reduce roadway congestion, energy use, and greenhouse gas emissions.
2. Promote commuter rail service as a commuting option.
3. Support initiatives that will relieve operational conflicts along congested rail lines.

## IMPLEMENTATION ACTIONS

1. Identify operational conflicts and bottlenecks on shared use tracks and work closely with freight and passenger operators to eliminate them.
2. Partner with employers to create incentives for workers to use commuter rail.
3. Use electronic highway signage to promote commuter rail service.
4. Work with freight rail operators to develop a system to track freight service delays.

## PERFORMANCE MEASURES

1. Compare travel time index of highway travel time and commuter rail travel time between origination commuter rail station points.

## **5. ECONOMIC VITALITY**

### GOAL 5A

The rail system will support a vigorous economy by facilitating the movement of people and freight within Rhode Island and the region.

### GOAL 5B

Maintain a well-integrated and sustainable rail system that operates as an integral and coordinated component of the multimodal transportation system and has the supporting land use designations that provide access to intermodal facilities and to compact, mixed use centers to accommodate Rhode Island's growing population and economy.

## OBJECTIVES

1. Move people and goods efficiently to, from, and within Rhode Island.

2. Increase opportunities for economic development adjacent to rail service.
3. Become a catalyst for smart growth community planning by providing for multi-modal connections and transportation mode choices, enabling transit oriented development, and fostering economic growth opportunities.
4. Reduce transportation costs and increase access to raw materials, goods, services, and world markets as a means for increasing Rhode Island's competitiveness in the region.

#### POLICIES

1. Provide rail options that meet the needs of employers, employees, visitors, students, and residents.
2. Support economic development opportunities and appropriate land use designations for parcels adjacent to freight rail that maximize the use of the rail connection for production and goods movement.
3. Encourage rail investments that support the creation and retention of high quality jobs and the generation of additional tax revenues.
4. Utilize rail investments to support community economic development, including downtown and village revitalization, tourism, and the creation of new, appropriately scaled growth centers.
5. Encourage state agencies and local governments to coordinate rail transportation, land use, and economic development planning.
6. Encourage the use of creative land use tools, like Transfer of Development Rights, as a means of implementing Transit Oriented Development.

#### IMPLEMENTATION ACTIONS

1. Partner with Rhode Island Commerce Corporation to develop ways to market Rhode Island's rail system as a means of attracting new businesses and jobs to the State.
2. Work with local communities to encourage transit oriented development (TOD) planning and zoning early in the process of planning new rail stations and at existing stations.
3. Research successful models of public/private partnerships related to TOD.
4. Survey and engage freight rail operators and businesses that import and export goods and materials to understand their needs related to rail shipping including barriers, costs, inefficiencies, and other limitations.
5. As part of the comprehensive planning process, encourage municipalities to consult with freight operators, warehouses, and/or distribution facilities on opportunities for freight industry related growth along the freight rail lines.
6. Explore possible incentives for businesses to locate within designated TOD areas.
7. Explore opportunities to assist freight railroad providers with siding implementation.
8. Complete a Freight and Goods Movements Plan for the State of Rhode Island.

#### PERFORMANCE MEASURES

1. Increase the number of rail served businesses in the state over the next 5 years.

2. Increase the number of local comprehensive plans that address the connection between rail access and land use.

## **6. ENVIRONMENTAL SUSTAINABILITY**

### **GOAL**

The rail system will protect and enhance the quality of the State’s environmental resources and the livability of its communities through well-designed rail projects and operations.

### **OBJECTIVES**

1. Better quantify and market the positive environmental impacts of rail based development and transportation.

### **POLICIES**

1. Avoid degradation of existing environmental resources, including air quality and water quality, when considering new or expanded rail service.
2. Carefully weigh the impacts of the rail system on neighborhoods and residents as service or infrastructure expansion is considered.
3. Consider the effects of climate change when planning for rail facilities including sea level rise, riverine flooding, and increased storm intensity and frequency.

### **IMPLEMENTATION ACTIONS**

1. In partnership with operators, pursue funding for low emissions locomotives and other technology to reduce locomotive idling for operators that do not currently have this equipment.
2. Identify specific rail infrastructure likely to be impacted by climate change and sea level rise, assess the vulnerability of the facilities, and prioritize long term adaptation strategies for addressing these impacts.
3. Actively pursue the input of local municipalities when studying the feasibility of rail system expansion.

### **PERFORMANCE MEASURES**

1. Continue to meet the air quality standards of the Federal Clean Air Act.