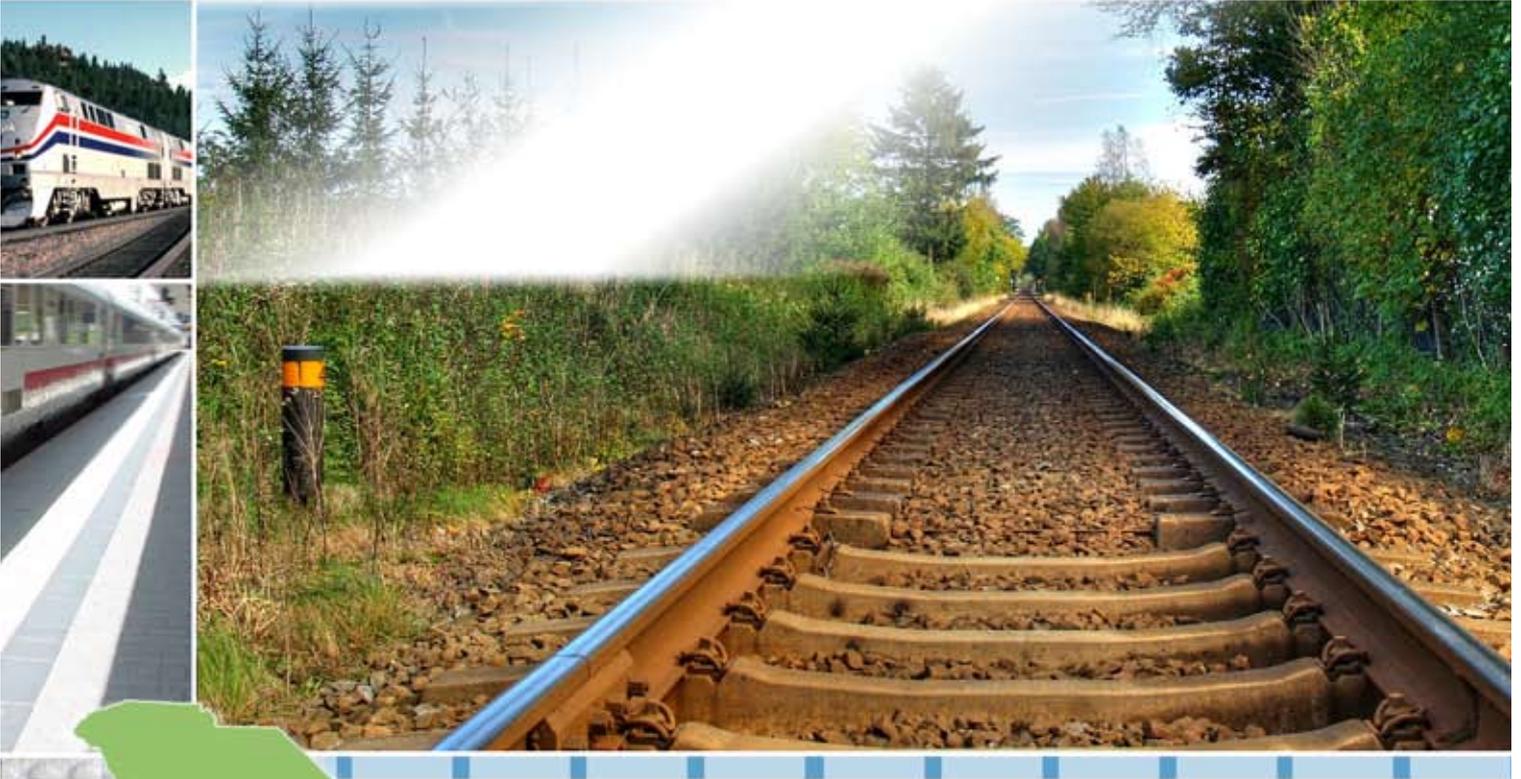


PROPOSED DIRECTION AND NEXT STEPS



12. Rail Project Funding Needs and Sources

Federal funding assistance for rail and rail-related intermodal capital projects stands at a critical juncture. Except for the Local Rail Freight Assistance Program, which essentially sunset in the early 1990s, and the Section 130 Rail Highway Crossing Program, there has been no federal allocation programs to states for rail freight capital project assistance. The few programs that have been included in the most recent Intermodal (TEA-21, ISTEA, SAFETEA-LU) Acts have suffered from little or no funds being appropriated or all funds being earmarked.

Funding for rail projects have been utilized from funding categories primarily intended for highway-related investments by various states where eligibility criteria has allowed.

Recent emphasis on the necessity for the rail mode to maintain or increase its market share due to highway congestion, fuel and environmental benefits, and cost efficiencies related to bulk or intermodal movements, have led to various policy proposals and legislative initiatives that could lead to rail freight and passenger programs that will allow states the flexibility to make rail capital investments. **Section 12.2** and subsequent sections address existing sources of federal financial assistance for rail projects as well as proposals for rail financial assistance in the future. Firstly though a summary of funding needs is provided.

12.1 Rail Project Funding Needs

Several rail projects described in this report will either require or will be the subject of requests for public funding. Those that are active or most likely to be advanced are discussed in the following paragraphs.

12.1.1 Short Lines

Needs of the state's short line rail carriers were detailed in **Section 8.3**. The statewide total amounted to \$78.3 million.

12.1.2 Southeast High Speed Rail Corridor

Route costs for the Upstate line are estimated in a report from U.S. DOT's Volpe Center at \$1.2 to \$1.4 billion.⁹⁸ Based on 80 percent federal funding and half of the route lying in South Carolina, the state's share would be approximately \$140 million.

12.1.3 Commuter Rail

Charleston has applied to the State Infrastructure Bank for \$206 million for capital costs. An active investigation of service between Columbia and Camden is ongoing. Capital costs were estimated at \$80 million in a prior study.

12.1.4 Class I Railroad Corridor Initiatives

The Class I Corridor initiatives have been presented as public-private partnerships and following the model used in preceding projects, the state will be targeted as a public partner. CSX

⁹⁸ Preliminary estimate and does not include equipment nor operating costs.

Transportation identified specific projects in the state, but NS did not. However, replacement of the second track removed in part on the NS main track through the Upstate will most likely be the designated improvement. Costs for the two Class I corridor projects could approach \$500 million or more with the state's potential share one-third or \$165 million.

12.1.5 Charleston Intermodal

It is likely the state will become involved in funding some approach to improvement of rail intermodal service in Charleston. While an approach has yet to be formulated, based on the options presented in this report, total costs will probably be in excess of \$200 million. The public share of the costs is yet to be determined.

12.1.6 Columbia's Assembly Street Grade Separation Project

Several alternatives have been developed for this railroad consolidation and improvement project. Estimated costs range from a low of \$23 million to a high of \$87 million with the most likely implementable alternative in the middle of the range.

12.2 Existing Federal Rail Financial Assistance Programs

Existing federal transportation programs from which rail financial assistance is available for states are discussed in the following paragraphs by agency. The program descriptions include the type of assistance (grant/loan), eligibility criteria, funding match criteria, application requirements, and typical project types for which states have utilized the program funds.

12.2.1 Federal Railroad Administration (FRA) Programs

12.2.1.1 Rail Rehabilitation and Improvement Financing (RRIF)

The RRIF program, SAFETEA_LU Section 9003, provides loans and credit assistance to both public and private sponsors of rail and intermodal projects. Eligible projects include acquisition, development, improvement, or rehabilitation of intermodal or rail equipment and facilities. Direct loans can fund up to 100 percent of a railroad project with repayment terms of up to 25 years and interest rates equal to the cost of borrowing to the government. SAFETEA-LU authorizes \$35 billion for this credit program, of which \$7 billion is directed to short line and regional railroads.

Eligible borrowers include railroads, state and local governments, government sponsored authorities and corporations, joint ventures that include at least one railroad, and limited option freight shippers who intend to construct a new rail connection. Applicants are responsible for providing a Credit Risk Premium that must be paid for each loan before it can be disbursed. In addition, each applicant must pay an investigation fee, not to exceed one half of one percent of the requested loan amount, regardless of whether the loan is approved.

Approximately 20 railroads have received RIFF loans since 2002.

12.2.1.2 Rail Line Relocation and Improvement Capital Grant Program

Section 9002 of SAFETEA-LU authorized \$350 million per year for the purpose of funding a grant program to provide financial assistance for local rail line relocation and improvement

projects. Under the program, a state is eligible for a grant from FRA for any construction project that improves the route or structure of a rail line and 1) involves a lateral or vertical relocation of any portion of the rail line, or 2) is carried out for the purpose of mitigating the adverse effects of rail traffic on safety, motor vehicles traffic flow, community quality of life, or economic development.

Congress did not appropriate funding for this program until FY 2008. A total of \$20,040,000, with \$5,250,000 directed to nine non-competitive projects, was appropriated. Final rules for the program were published on July 11, 2008 and FRA is accepting applications for the remaining funds available. The federal share for this program is 90 percent.

12.2.1.3 Capital Assistance to States – Intercity Passenger Rail Service Program

The Fiscal Year 2008 Budget makes \$30 million in matching federal funds (50% match required) available directly to states for rail capital investments and planning activities necessary to achieve tangible improvements to, or institute new, passenger rail service. FRA is interested in receiving proposals that lead to an on-time performance of 80 percent or greater, or which reduce travel time, increase service frequency or enhance service quality for intercity rail passengers.

Improvements may include the purchase of passenger rolling stock, the improvement of existing track to allow higher maximum operating speeds, the addition or lengthening of passing tracks to increase capacity, the improvement of interlocking to increase capacity and reliability, and the improvement of signaling systems to increase capacity and maximum speeds, and improve safety. Individual or multiple states working together may submit applications.

FRA began accepting applications on March 18, 2008.

12.2.1.4 Passenger Rail Investment and Improvement Act of 2008

On October, 16, 2008, President Bush signed into law H.R. 2095, the rail safety and Amtrak funding authorization bill. This bill authorizes approximately \$1.9 billion or \$380 million per year for rail capital and operating funds for Amtrak over the next five years. It also provides for grants to states to pay for the capital costs of facilities and equipment necessary to provide new or improved intercity passenger rail service. The bill also provides approximately \$65 million per year for high-priority rail corridors (earmarked states include VA, NC, WA, OR, IL and IN) to increase capacity along certain lines in order to reduce congestion and increase facility ridership growth.

An additional \$300 million per year is authorized for High Speed Rail Corridor grants to finance the construction and equipment for 11 authorized high speed rail corridors, including the Raleigh-Atlanta and Raleigh-Jacksonville legs of the Southeast High Speed Rail Corridor that pass through South Carolina. Another \$5.0 million is authorized annually to carry out a rail cooperative research program.

It should be noted that although the funding for the above programs is authorized, it must be appropriated annually by Congress from the general fund. This bill requires that any state applying for these funds must have an approved State Rail Plan. New State Rail Plan requirements are contained in the legislation and are significantly different than the requirements

that were developed in the 1970s. See **Appendix B** for a copy of the requirements as contained in Section 303 of the Legislation.

12.2.1.5 Appropriation Act Earmarks

Within the annual appropriation language for USDOT, there are often earmarked projects for rail and other modes. FRA provides grants to those states in which these earmark projects are located. In recent years rail-related earmarks have included projects for rail line rehabilitation, intermodal and transfer facilities, rail relocation, and safety-related improvements, such as High Speed Rail crossing improvements.

12.2.1.6 Local Rail Freight Assistance (LRFA) Program

This program was originally established in 1973 to provide financial assistance to states for the continuation of rail freight service on abandoned light density lines in the Northeast. The Railroad Revitalization and Regulatory Reform Act of 1976 expanded the program to all states and to lines threatened with abandonment.

Funding for this program has not been re-authorized since 1989. However, some states utilized LRFA funds to create revolving loan programs which permitted new loans to be made as existing loans were repaid.

While South Carolina did make use of these funds, they were all expended on projects without establishing a revolving loan program. Thus, this program is not relevant for project financing in South Carolina.

12.2.1.7 Research and Development Programs

FRA oversees a number of programs that provide start-up funding for promising but unproven rail-related innovations. The Innovations Deserving Exploratory Analysis (IDEA) Program provides grants ranging from \$25,000-\$100,000 for concepts exploration projects and \$50,000-\$100,000 for prototype application projects. The High-Speed Rail IDEA program solicits proposals for innovative concepts and technologies that result in cost-effective rail infrastructure for high-speed rail passenger service. The Safety IDEA provides funding for projects that promote innovative approaches that improve railroad safety through vehicle improvement, improved operating practices, and hazard reduction.

In 2007 FRA published a Broad Agency Announcement (BAA) to announce funding and technical support to stimulate development of new equipment, new infrastructure, and new processes to enhance the safety, capacity and efficiency of both passenger and freight services in the railroad industry. Areas of interest for the technology research include: grade crossing hazard mitigation; positive train control; wireless communication systems, train tracking systems, risk assessment and hazardous analysis; and positive train control/communication enabling projects.

Any responsible source may submit a proposal concept paper for consideration, including states or local governments. This BAA was scheduled to close on September 30, 2008 and thus is no longer relevant.

12.2.2 Federal Highway Administration (FHWA) Programs

12.2.2.1 Railway-Highway Crossings Program (Sec. 1401(d))

This program provides funding for projects that improve safety at public highway-rail at-grade crossings through the elimination of hazards and/or the installation/upgrade of protective devices at crossings. SAFETEA-LU requires that states set aside at least 50 percent of their funding allocation for the installation of protective devices at highway-rail crossings. If all needs for installation of protective devices have been met, then the funds available can be used for other at-grade crossing projects eligible under the program.

Eligible projects include: separation or protection of at-grade crossings; the reconstruction of existing railroad grade crossing structures; and, the relocation of highways or rail lines to eliminate grade crossings.

Eligible state agencies or MPOs select and approve projects for funding. South Carolina through the Department of Transportation receives approximately \$4 million annually from this program. The funds permit the improvement of 18-20 crossings annually. The federal matching share for these funds is 90 percent.

12.2.2.2 National Highway System (NHS) Program

This is a general federal aid grant program eligible for highway improvements to the National Highway System. An eligible use of the funds is for improvements to designated highway intermodal connectors to intermodal facilities. Funds may be applied for construction, reconstruction, resurfacing, and rehabilitation on a roadway connecting the National Highway System with a truck-rail transfer facility.

State DOTs select and approve projects for funding. The federal matching share for these funds is 80 percent.

12.2.2.3 Surface Transportation Program (STP)

This is a general federal aid grant program for improvements on any Federal aid highway, bridge, transit capital project, and other state or local projects. Eligible rail freight improvements include: lengthening or increasing vertical clearance of bridges; eliminating crossings; and, improving intermodal connectors.

State DOTs/MPOs select and approve projects for funding. The federal matching share for these funds is 80 percent.

12.2.2.4 Congestion Mitigation and Air Quality (CMAQ) Improvement Program

This program funds transportation projects and programs that improve air quality by reducing transportation-related emissions in non-attainment and maintenance areas for ozone, carbon monoxide, and particulate matter.

Examples of CMAQ-funded rail projects include the construction of intermodal facilities, rail track rehabilitation, diesel engine retrofits and idle-reduction projects in rail yards, and new rail sidings. CMAQ funds may be used to fund construction and other activities that benefit a private entity such as railroads.

In addition to its eligibility for various rail capital projects, CMAQ funds may also be used to subsidize operations of emission reducing transportation services for a three year period. Amtrak's Downeaster intercity rail passenger service has been subsidized by the State of Maine using CMAQ funds. They have also been used in a number of freight-related projects including intermodal and low- emission motive power.

State DOTs/MPOs select and approve projects for funding. Projects must be justified based on emissions reduction and reporting on actual vs. projected results following project completion may also be required. The federal matching share for these funds is 80 percent.

12.2.2.5 Transportation Infrastructure Finance and Innovation Act (TIFIA)

This program (Section 1601) provides credit assistance to large-scale projects (over \$50 million or one-third of the state's annual federal-aid funds) of regional or national significance that might otherwise be delayed or not constructed because of risk, complexity, or cost. There are three forms of credit assistance available – secured loans, loan guarantees and standby lines of credit – for surface transportation projects. Eligibility includes a wide variety of intermodal and rail infrastructure projects, and can include equipment, facilities, track, bridges, yards, buildings and shops. TIFIA funds can also be used at port facilities to facilitate intermodal interchange, transfer, and access into and out of the port. Examples of TIFIA rail-related projects include the Moynihan Rail Station in New York City, the Warwick, RI Rail Station, and the Miami Intermodal Center.

The interest rate for TIFIA loans is the U.S. Treasury rate and the debt must be repaid within 35 years.

12.2.2.6 State Infrastructure Banks (SIB) – Sec. 1602

The State Infrastructure Banks program allows all states to set aside up to 10 percent of highway formula grants to establish revolving funds that can be used to provide loans for eligible transportation projects. Implementation of multistate SIBs, to fund projects that cross jurisdictional boundaries, is also permitted. Through the SIB, states can issue loans and other credit tools to public and private sponsors of transportation infrastructure projects.

The State of Ohio utilized SIB funds for rehabilitation of the Ohio Southern Rail Line. South Carolina funded the Arthur Ravenell, Jr. Bridge over the Cooper River in Charleston with SIB funding. The BCDCOG has applied for SIB funding for commuter rail in Charleston as mentioned elsewhere.

States must provide 20 percent of the capitalization amount and debt must be repaid within 30 years. All SIB assisted projects are subject to federal requirements. The SIB in South Carolina, however, does not have any funds available at the time this report was prepared (January 2009).

12.2.2.7 High Speed Rail Corridor Development Program – Sec. 9001

This program authorized \$70 million per year for high speed rail corridor development activities and \$30 million per year for high speed rail technology improvements on federal designated high speed rail corridors. The designated Southeast High Speed Rail Corridor (Raleigh-Atlanta and Raleigh-Jacksonville) within the state would be eligible.

At this time no funding has been appropriated for this program. Future funding is dependent on future general fund appropriations.

12.2.2.8 Transportation and Community and System Preservation (TCSP) Pilot Program

These funds are used to help achieve locally determined goals such as improving transportation efficiency; reducing the negative effects of transportation on the environment; providing better access to jobs, services and trade centers; reducing the need for future infrastructure; and revitalizing underdeveloped and Brownfield sites. This program has not routinely been used for rail projects, but based on its program eligibility criteria; small rail freight or passenger projects could be eligible. The federal share for this program is 80 percent.

12.2.2.9 Transportation Enhancement Program

The purpose of this program is to strengthen the cultural, aesthetic, and environmental aspects of the Nation's intermodal transportation system. Projects are usually chosen at the local government level.

Rail-related use of this program has centered on rail passenger station improvements and conversion of abandoned rail rights-of-way to recreational uses. The federal share of project costs for this program is 80 percent.

12.2.2.10 High Priority Projects – Section 1702

All funds available under this SAFETEA-LU program were earmarked for specific projects. A review of South Carolina projects found two freight/rail-related projects:

- An intermodal connector between U.S Rt. 1 and I-26
- Upgrade of Hwy 21 Bypass grade crossings

12.2.2.11 Other FHWA Programs

The following programs were all established within SAFETEA-LU.

- Transportation Improvement Projects – Sec. 1934
- Freight Intermodal Pilot Program – Sec. 1306
- Projects of National and Regional Significance – Sec. 1301

Although these programs are nominally discretionary, all funds available were earmarked for specific projects. A review of these programs found no freight/rail projects in South Carolina. As these funds are not available on a discretionary basis, they will not be included for consideration of new projects.

12.2.3 Federal Transit Administration (FTA)

FTA Rail/Fixed Guideway Modernization Program – Sec. 3035. This program provides funding for capital improvements on “fixed guideway” systems, including heavy rail, commuter rail, and light rail. Transit and commuter rail providers are eligible to receive funds from this program for systems that have been in place for at least seven years. The funds are allocated to urbanized areas by statutory formula.

Although freight projects are not eligible to use this funding source, freight railroads can benefit from capital improvements on shared commuter rail lines.

12.2.4 U.S. Department of Transportation (USDOT)

12.2.4.1 Private Activity Tax Exempt Bonds

SAFETEA-LU (Sec. 11143) made private owners/financiers of highways and intermodal freight facilities eligible for private activity bonds. States and local governments are allowed to issue tax-exempt bonds to finance projects sponsored by the private sector.

Private project owners must work closely with the state or local government and projects must be on the STIP/TIP. The public agencies issue the bonds but the private companies make the payments and are responsible for the debt.

The Centerpoint Intermodal Freight Center project in Crete, Illinois has received a conditional allocation of private activity bonds.

12.2.4.2 Grant Anticipation Revenue Vehicle (GARVEE) Bonds

GARVEE bonds are financing instruments that allow states to issue debt backed by future federal-aid highway revenues. Eligibility for freight or rail projects is constrained by the underlying federal-aid highway programs that will be used to repay debt service.

Rhode Island's Freight Rail Improvement Project utilized GARVEE bonds.

12.2.5 U.S. Department of Commerce

Economic Development Administration (EDA) Funds

EDA provides grants for projects in economically distressed regions that promote job creation or retention. Eligible projects must be located within EDA-designated redevelopment areas or economic development centers. Eligible rail-related projects include railroad spurs and sidings.

Grant assistance is available up to 50 percent of the project, although EDA could provide up to 80 percent for projects in severely depressed areas.

Examples of rail projects utilizing this funding source include: rail rehabilitation of the Southern Tier line in New York State; and upgrading the Port of South Louisiana Rail Spur.

12.2.6 U.S. Department of Agriculture (USDA)

The USDA Rural Housing Service's **Community Facility Program** provides three funding mechanisms to fund construction, enlargement, extension, or improvement of community facilities providing essential services in rural areas and towns with a population of 20,000 or less. The three programs are: Direct Community Facility loans; Community Facility loans; and the Community Facility Grant Program. Grant assistance is available for up to 75 percent of the project cost.

Eligible rail-related community facilities include transportation infrastructure for industrial parks, railroads, and municipal docks.

12.2.7 Environmental Protection Agency (EPA)

EPA's Brownfield Redevelopment Program provides grants and loans for Brownfield site cleanup. Such Brownfield sites could be redeveloped for commercial and/or industrial uses, including intermodal freight facilities.

Site cleanup grants provide up to \$200,000 per site to fund cleanup conducted by cities, development agencies, and similar agencies at sites they own. A 20 percent match is required. The Revolving Loan Fund grants provide up to \$1 million per recipient, available for five years, to establish state or locally administered loan funds. Local governments, states, redevelopment agencies, and regional councils are eligible for these capitalization grants.

12.2.8 Other Provisions

In 2004, Congress enacted a tax credit program to help short line railroads upgrade their tracks to handle the 286,000 lb. rail cars that are becoming the industry standard. This tax credit expired at the end of 2007.

12.2.8.1 Emergency Economic Stabilization Act of 2008

The **Emergency Economic Stabilization Act of 2008**, signed by the President on October 3, 2008, extended the tax credits through December 31, 2009, and also made qualified railroad track maintenance expenditures made anytime during 2008 eligible for tax credits. The program provides a 50 percent tax credit for infrastructure rehabilitation on Class II and III railroads, up to a cap of \$3,500 per year per track mile owned.

12.2.8.2 The American Recovery and Reinvestment Act of 2009

On February 17, 2009, the American Recovery and Reinvestment Act of 2009 was signed into law. This legislation makes available \$789 billion to spur an economic recovery. The bill includes \$507 billion in spending programs and \$282 billion in tax relief. Included in the spending programs is \$46 billion for transportation projects.

Transportation-related funding includes \$27 billion for highway and bridge construction and repair; \$8.4 billion for mass transit; \$8 billion for construction of high-speed railways and \$1.3 billion for Amtrak.

Except for highway funds, which will be apportioned to states, a major portion of the funds will be disbursed through supplemental discretionary grants by the Office of the Secretary of Transportation and the modal administrations. The federal share of costs may be up to 100 percent. As this is a stimulus program, applications for funding must be submitted not later than one year after enactment of the Act and are subject to redistribution if not awarded in a timely manner.

With regard to rail-related eligibility, there are two specific state grant programs for intercity rail passenger service. A total of \$250 million is available for projects that improve the safety and reliability of intercity passenger trains. Specific projects must be on a Statewide Transportation Improvement Plan at the time of application to qualify. A total of \$2 billion is also available for grants related to high-speed rail corridor program projects.

Although there are no separate programs provided for freight rail projects, its eligibility is specifically noted in various USDOT programs. The Office of the Secretary's supplemental discretionary grants for a national surface transportation system provides \$5.5 billion for eligible projects including passenger and freight rail transportation projects and port infrastructure investments, including projects that connect ports to other modes of transportation and improve the efficiency of freight transportation. These eligibility criteria are also included under the supplemental grants for highway investment.

12.3 Prospective Federal Rail Assistance Programs

The significant increase in both domestic and international freight movements over the past two decades and the projections that the amount of freight will double over the next 20 years has resulted in significant discussion of how freight capacity can be increased to accommodate these increased freight levels. The existing and projected level of congestion on the nation's highway system has pointed to the need for the railroad industry to maintain its market share of freight and preferably increase its share. Recently published reports such as AASHTO's Rail Freight Bottom Line Report and the Association of American Railroads' National Rail Freight Capacity and Investment Study have addressed this issue.

The recently released report Transportation for Tomorrow by the National Surface Transportation Policy and Revenue Commission calls for significant changes in the way national transportation needs are addressed in the future. Specifically it calls for new program areas to better meet the nation's economic reliance on transportation. Suggested new program areas that could be associated with the rail mode include:

- Asset Management;
- Freight Transportation;
- Congestion Relief-Metropolitan Mobility;
- Safe Mobility;
- Access to Small Cities and Rural Areas; and
- Intercity Rail Passenger.

Federal funding of these recommended programs would be based on individual plans developed by each state and metropolitan area, as well as those developed by multi-state coalitions.

In addition to the above policy recommendations for future funding of transportation, specific legislative proposals have been advanced to help meet the projected funding gap faced by the railroad industry to meet future rail freight and passenger capacity and improved service needs.

The following proposals are currently under consideration or discussion by transportation policy makers.

- **Freight Rail Infrastructure Capacity Expansion Act of 2007 (S.1125/H.R. 2116)**

This proposed legislation, developed by AAR, calls for a 25 percent investment tax credit for spending on new track, intermodal facilities, and other projects that expand freight capacity. All businesses (not just railroads) that make capacity-enhancing investments in rail infrastructure would be eligible for the credit.

State transportation associations such as AASHTO, which generally agree with the concept, have withheld full support for this proposal based on their request that the proposal call for some level of assurance that projects show adequate public benefits.

- **The Rail Infrastructure Development and Expansion Act for the 21st Century (H.R. 6004)**

This legislative proposal provides \$12 billion in tax credit bonding authority to states over 10 years for passenger rail infrastructure and equipment. The legislation also authorizes \$560 million over eight years for 50/50 grants to states for planning and development and \$240 million for passenger rail technology development.

- **A Proposal to Rebuild America by Investing in Transportation and Environmental Infrastructure**

In December, 2008 the House Transportation and Infrastructure Committee developed a proposed stimulus program to address the current state of the economy, as well as to retain existing and establish new jobs. This proposal calls for the investment of \$85 billion in infrastructure to enhance the safety, security, and efficiency of the country's highway, transit, rail, aviation, environmental, inland waterway and maritime transportation systems.

Tax Credit Bonding has been discussed to address the shortfall of federal transportation funding for all modes, but especially for non-highway modes. This is a relatively new debt instrument and must be specifically authorized in the tax code. Tax credit bonds allow their purchasers to receive a nonrefundable tax credit against their federal income tax liability instead of the cash interest that is typically paid. The federal government would bear virtually all of the cost of borrowing – in the form of forgone revenue – even if the bonds are issued by state or local governments.

Additional analysis on the cost of tax credit bonding versus budget appropriations and their impact on future federal budgets will be required before widespread authority and use for transportation purposes is likely.

12.4 Existing Sources of State and Local Rail Financial Assistance

12.4.1 South Carolina Department of Commerce Grants Program

The Department of Commerce administers a Grant Program for infrastructure improvements that is tied to job creation. The types of eligible projects include land purchase and infrastructure improvement, such as roads, water, sewer, rail, etc.

For FY2009 the total amount available is approximately \$36 million, which comes from the following sources:

- State legislature - \$19 million
- Rural Infrastructure Fund - \$12 million
- Community Development Block Grants (a program of the U.S. Department of Housing and Urban Development) - \$5 million

For rail-related infrastructure improvements the typical project has involved the construction of a spur or short length of line of less than one mile in length.

12.4.2 South Carolina State Infrastructure Bank

Section 8.1.2.6 of this report provides information about State Infrastructure Banks in general. The South Carolina Transportation Infrastructure Bank is discussed below. It was created in 1997 by the General Assembly⁹⁹. The legislation stated that:

*“The corporate **purpose** of the bank is to select and assist in **financing major qualified projects** by providing loans and other financial assistance to government units and private entities for constructing and improving **highway and transportation facilities necessary for public purposes** including economic development.”*

The mission statement of the Bank is as follows:

“The mission of the South Carolina Transportation Infrastructure Bank is to utilize available funding sources to effectively provide financial assistance through authorized means to major, selected qualified transportation projects while ensuring the financial integrity of the Bank.”

The South Carolina Transportation Infrastructure Bank continues to be nationally recognized as the largest and most active State Infrastructure Bank in the country, and has been named in Federal Highway Publications as a national model for the way progressive states can build and fund transportation infrastructure. Thirty-three (33) states utilize Infrastructure Banks as a mechanism for enhancing funding for transportation investment.

The Bank Board adopted a Financial Assistance Application Process that provides the criteria for project eligibility and selection. There are two requirements for eligibility:

1. Must be a major project – in excess of \$100 million
2. Must provide a public benefit in one or more of the following areas:
 - Enhancement of mobility and safety
 - Promotion of economic development
 - Increase in the quality of life and general welfare of the public

Upon receipt of an application, the Bank Board determines whether the project is eligible and if so, refers the application to the Evaluation Committee, a three member Committee of the Board. The Evaluation Committee extensively reviews the application including meetings with the applicant, site visits to the proposed project, verification of traffic counts and accident data with SCDOT, among other analyses. The Evaluation Committee ranks the project based on public benefit, financial plan, and project approach. The Act that created the Bank requires the Board to give preference to eligible projects that have a local financial contribution.

12.4.3 South Carolina Recreational Trails Program

The Department of Parks, Recreation and Tourism administers the Recreational Trails Program. This program is a Federal-aid assistance program designed to help states provide and maintain

⁹⁹ SC Code Section 11-43-110.

recreational trails for both motorized and non-motorized recreational trail use. Details of the program are listed below:

- Grant Cycle – Annually
- Administered by the Federal Highway Administration
- Trails for Off-Road motorcycles, ATV's, mountain bikes, equestrians or hikers are eligible
- Qualified private organizations, municipal, county, State or Federal government agencies are eligible
- All Applications graded utilizing Open Project Selection Process (OPSP) reviewed by a grading team
- The Recreational Trails Program is an 80-20-match program
- Applications are solicited in December and the deadline is in March

Section 1109 of SAFETEA-LU¹⁰⁰, Recreational Trails, identifies permissible uses as:

- A. Maintenance and restoration of existing recreational trails;
- B. Development and rehabilitation of trailside and trailhead facilities and trail linkages for recreational trails;
- C. Purchase and lease of recreational trail construction and maintenance equipment;
- D. Construction of new recreational trails,
- E. Acquisition of easements and fee simple title to property for recreational trails or recreational trail corridors;
- F. Assessment of trail conditions for accessibility and maintenance;
- G. Development and dissemination of publications and operation of educational programs to promote safety and environmental protection; and
- H. Payment of costs to the state incurred in administering the program.

The conversion of abandoned rail corridors to recreational uses would be eligible for funding by this grant program, although the program is not limited to abandoned rail corridors. The minimum grant application amount is \$10,000 and the maximum is \$100,000. These limits are set by the Department of Parks, Recreation and Tourism. For FY2009, the total funds available for grant purposes amount to \$1,075,000 after allowances for administration and educational program costs.

12.5 Potential Sources of State and Local Rail Financial Assistance

The lack of substantial federal rail assistance programs and the need for states to address outstanding highway needs with programs for which rail projects are eligible has required those states that have active rail assistance programs to develop programs from substantially state resources. The types and criteria of these programs, as well as the funding sources, vary widely

¹⁰⁰ Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, Public Law 109-59-AUG 10, 2005.

from state to state. The following summary, however, will attempt to categorize program types and identify typical funding sources utilized by states. Approximate total or annual program levels provided are based on a state survey conducted by the AASHTO Rail Committee in 2004. It should be noted, however, that these levels have or can change significantly based on state appropriation levels or other factors.

12.5.1 State Infrastructure Grant Programs

A number of states provide grant funds to railroads for the purpose of track and bridge rehabilitation, preservation/acquisition, intermodal facilities, rail spurs and facilities ranging from engine houses to passenger stations. The state share of project costs generally range from 50-100 percent. Representative states with rail grant programs and their funding sources include:

- Georgia – Class III Rail Rehabilitation Program – General Fund and bonds (\$19.2 M total)
- Indiana
 - Class II and III Industrial Rail Service Fund – Sales and Use taxes (\$1.2M/yr)
 - Passive Grade Crossing Program – General Fund (\$0.465M/yr).
- Maine – Truck/Rail Intermodal Facilities Program – General Fund and bonds (\$1-2M/yr)
- Minnesota – Rail Improvement Program – General Fund (\$2.5M/yr)
- New Jersey – Class I and II Rail Program – State Transportation Trust Fund (\$10M/yr)
- New York – Rail/Port Capital Funds – Dedicated Transportation Fund, bonds (\$20M/yr)
- Ohio – Rail Assistance Program – General Fund ((\$1.5M/yr)
- Oregon – Short Line Rehabilitation Program – Lottery-backed bonds (\$4M/yr)
- Pennsylvania
 - Rail Capital Budget Program – State Bond Issue (\$20M/yr)
 - Rail Freight Assistance Program – General Fund (\$8.5M/yr)
- Tennessee – Short Line Track Rehabilitation Program – Railroad Diesel Fuel Tax (\$4.4M/yr)
- Virginia
 - Rail Enhancement Fund – Rental car taxes (\$23M/yr)
 - Rail Preservation and Access Funds (\$5M/yr)
- Washington – Freight Rail Assistance Program – General Fund (\$7M/yr)

12.5.2 State Rail Infrastructure Loan Programs

A significant number of states provide no interest or low interest loans to railroads for the purpose of rail rehabilitation or new capital projects. Many of these loans were originally made from revolving funds that were established under the LRFA program. These and other state programs have been established or supplemented with state budget appropriations. New loans are made as older loans are repaid. A number of states also combine loans with grants. Representative states with loan programs and their funding sources include:

- Illinois – Rail Freight Loan Program – General Fund (NA)

- Iowa – Rail Rehabilitation Program – General Fund (\$3M/yr)
- Michigan – Rail Loan Assistance Program – State Dedicated Transportation Fund (\$1.5M/yr)
- New Hampshire – Special Railroad Fund – State Capital Bonds (\$0.35M/yr)
- North Dakota – Rail Revolving Loan Fund – General Fund (\$6M total)
- Oklahoma – Rail Loan Program – Rail freight taxes, State rail property revenue (\$0.5M/yr)

12.5.3 State Rail Intercity Passenger Assistance Programs

Although many states provide infrastructure grants directly to Amtrak under the programs noted above, a number of states also provide state-supported intercity passenger service that is operated by Amtrak but not part of its core system. Many of these state-supported services have been operated since the inception of Amtrak, but a number of new routes have been added in recent years. In some instances states may utilize FTA funds when the services qualify as commuter operations.

Representative states that provide rail capital or operating assistance to Amtrak through state resources include:

- California – Passenger Operating and Capital Program – General Fund, bonds (\$168M/yr)
- Connecticut – Passenger Operating /Capital Investment Program – General Fund (\$92M/yr)
- Illinois – High Speed Rail Program – General Fund (\$12M/yr)
- Indiana – Commuter Rail Service Fund – Sales and use tax revenue (\$13.5M/yr)
- Missouri – Passenger Operating and Capital Program – General Fund (\$6.2M/yr)
- New York – Passenger Operating Program – State Dedicated Fund (\$4M/yr)
- North Carolina – Passenger Operating and Capital Program – General Fund (\$1.6M/yr)
- Oregon – Passenger Operating Fund – General Fund (\$5.2M/yr)
- Pennsylvania – Keystone Corridor Program – Bonds, General Fund (\$7.3M/yr)
- Vermont – Passenger Operating Fund – General Fund (\$2.5M/yr)
- Washington – Intercity Passenger Program – General Fund (\$14.4M/yr)

12.5.4 State Rail Commuter Programs

A number of states fund rail commuter services that are operated by state authorities or contract carriers, including Amtrak. These commuter services qualify for FTA operating or capital programs, but increasingly state funds provide the largest percentage of subsidy requirements.

Representative states that provide rail capital or operating assistance to rail commuter operations include:

- California – Metrolink and Commuter Capital Program – General Fund, bonds (\$170M/yr)

- Florida – Commuter Capital and Operations Program – General Fund, bonds (\$20.4M/yr)
- North Carolina – Triangle Transit Program – rental vehicle fees (NA)
- Pennsylvania – SEPTA Program – General Fund (\$200M/yr)
- Virginia – Commuter Rail Enhancement Fund – rental car taxes (\$23M/yr)

12.5.5 State Rail Industrial Access/Economic Development Programs

An increasing number of states are establishing assistance programs for railroad projects specifically for the purpose of providing industries or industrial development properties with access to rail freight service. These programs, which are funded separately from rail grant or loan programs, are generally used to provide rail connections between rail lines and new or expanding rail users through the construction of rail spurs or to provide rail car storage tracks.

States providing these programs include:

- Maine – Industrial Rail Access Program – General Fund (\$1.5M/yr)
- Michigan – Economic Development Loan Program – State Dedicated Fund (\$3M/yr)
- New York – Industrial Access Grant/Loan Program – General Fund (\$3M/yr)
- North Carolina – Industrial Access Program – General Fund (\$1M/yr)
- Oregon – Industrial Rail Spur Program – Lottery-backed bonds (\$4M/yr)
- Pennsylvania – Rail Economic Development Program – General Fund (\$1.5M/yr)

12.5.6 State Public-Private Partnerships (PPPs)

In reality all the state-based programs listed above qualify as public-private partnerships as the public agencies must partner primarily with private railroad companies or with public operators on rail lines owned by private railroad companies. The fact that states may be willing to provide all or a large share of rail infrastructure improvements may not result in complete cooperation and enthusiasm by railroads as the proposed projects may not be a high priority for the railroad for various reasons, including their need to advance projects with higher returns on investment, potential conflicts with their operations such as with rail passenger projects, or simply the lack of staff to advance new projects. Therefore any projects undertaken by railroads with public assistance should be considered partnership arrangements.

In recent years, however, private railroad companies have taken the initiative to recommend public-private partnerships for large-scale projects that provide significant benefits to the railroads as well as the public. These projects have typically required financial contributions from the federal government, states, local communities and the railroads. Examples of these large scale PPPs include:

- The Alameda Corridor Project
- The Heartland Corridor Project
- The proposed Crescent Corridor Project
- The proposed CREATE Project
- The proposed National Gateway Project

Both of South Carolina’s Class I railroads are big proponents of PPPs. Both have proposals involving South Carolina rail lines, namely the Crescent Corridor (NS) and the I-95 Corridor (CSXT), which are discussed in more detail elsewhere. Both railroads are also focusing on the public benefits of rail as compared to highway transport namely:

- Highway congestion relief and safety benefits;
- Reduction in highway capital and maintenance expenditures; and
- Environmental benefits derived principally from fuel consumption and related emissions.

Large-scale project partnerships require specialized legal vehicles, such as debt corporations or tax exempt corporations to ensure that all parties understand their respective financial responsibilities. Smaller scale partnerships between states and railroads also require clear contract provisions to clearly define the responsibilities of each partner.

The ongoing NS Heartland Corridor involving a five-plus-party PPP is a notable current example. There are few rail lines crossing the Appalachian Mountains and those that do were not constructed with clearances necessary for double-stack container movement, and the enormity of the task had precluded it from happening. After an initial inquiry concerning intermodal service from the West Virginia DOT, an effort to develop a double-stack rail route that was to become the Heartland Corridor was initiated in 2004. Planned to connect Virginia ports with the Midwest, it extends through Virginia, West Virginia and Ohio. The \$300+ million project consists of multiple efforts involving double-stack tunnel clearances, three new intermodal terminals (one in each participating state), and the relocation of an existing rail line in Portsmouth, Virginia in support of an on-dock rail facility at a new marine terminal.

The various components of the initiative and estimated costs¹⁰¹ are shown **Exhibit 12-1**.

Exhibit 12-1: Heartland Corridor Initiative Components

Item	Estimated Cost (\$millions)
Central Corridor Clearance Project	\$151.0
Prichard, WV Intermodal Terminal	\$18.0
Roanoke Region Intermodal Terminal	\$18.0
Rickenbacker Intermodal Terminal	\$68.5
Commonwealth Railway Mainline Safety Relocation Project	\$60.0
Crewe Yard	\$7.5
Total	\$323.0

Source: NS Website and assorted news articles

Participants in the project include the railroad, the federal government, all of the states involved as well as some local governments and organizations. The federal participation is through Sections 1301 and 1702 of SAFETEA-LU, totaling \$140.4 million. Virginia participation totals \$71.1 million from various funds with West Virginia investing \$16 million, and Ohio

¹⁰¹ Estimated costs are derived from the NS website and various news articles and may vary from other sources as costs and estimates have continued to change since the project’s inception.

\$0.8 million (Ohio Rail Development Commission). Other Ohio state and local agencies also participated in the Rickenbacker Intermodal Terminal in Columbus. Participation by NS will consist of the balance of necessary expenditures.

Another good example with a little different twist is the Shellpot Bridge in Wilmington, Delaware. The bridge was a former Conrail structure with a 242-foot swing span that failed and was taken out of service rather than repair it. After Norfolk Southern acquired that portion of line from Conrail, the railroad and the State of Delaware reached agreement on restoration of the bridge, which benefited both parties through improved flexibility in rail operations including rail passenger services in Wilmington. The \$13.5 million in repairs were funded by the Delaware DOT to be repaid by NS through carload tolls based on a sliding scale over a 20-year period of time with an annual minimum regardless of traffic levels. Fees and charges are also involved in other projects that used public funds, either all or in part, such as the Alameda Corridor in California.

13. Policy Options to Enhance Rail-related Economic Development

South Carolina's rail system is an essential element in its efforts to enhance transportation-related economic development. In simple terms, rail-related economic development objectives are:

- Supporting and promoting economic activity by preserving and improving the rail system, thereby increasing the availability and attractiveness of rail transportation;
- Identifying, preserving and developing rail-served industrial sites;
- Identifying means to increase the use of rail transportation for both freight and passengers; and,
- Promoting rail alternatives where it will improve quality of life.

South Carolina's continuing investment in rail has been limited to grade crossing improvement and elimination. It has in the past made rail investments in economic development projects, and rail preservation/improvement projects under past federal rail assistance programs. However, through carefully developed transportation policies, cooperative arrangements, and strategic investments, South Carolina can ensure that its rail system will better contribute toward achieving its economic development objectives. The objectives can be met by first strengthening the rail program in general and then addressing specific economic development actions.

This report describes how the development of internal policies, cooperative efforts with other agencies and stakeholders, and strategic investments can be applied to promoting economic development, enhancing employment opportunities, and increasing the use of rail in the state. The approach proposed is taken from a review of states with successful and productive relationships with rail carriers and users, as well as from states that have established partnerships with railroads to make strategic investments that produce public benefits, including those that produce economic development benefits. The initiatives chosen are also consistent with the rail and other transportation attributes that exist in South Carolina, such as the existence of significant port traffic and multimodal corridors.

13.1 Improve State Institutional Coordination and Development

As noted earlier, jurisdiction over various aspects of public rail system involvement in South Carolina lies with a number of agencies, including Department of Commerce's Public Railways Division, the Department of Transportation, and the SC Office of Regulatory Staff. While it is not suggested that all rail-related functions be transferred to a single agency or transferred between agencies, rather, the purpose of this action item is to establish a formal working structure between all agencies involved in rail and other agencies involved in economic development so as to set an overall rail vision for the state.

Eligibility for participation in the current rail funding program, the Passenger Rail Investment and Improvement Act of 2008 (see **Appendix B**) requires the designation of a rail transportation authority to develop a state rail plan and a rail plan approval authority to approve the plan. These designations would initiate development of a rail transportation working structure.

Formulation of an economic development-related rail vision is discussed in more detail in the section entitled Integrate Rail, Land Use and Economic Development Planning. As a precursor to establishing a vision, however, each of the agencies involved should first establish an internal policy to strengthen consideration of the state's rail freight and passenger system in project planning and investment decision making. This effort involves finding ways to more explicitly incorporate rail issues and needs into the planning, development, prioritization, and implementation of transportation projects and to modify existing programs to increase the effectiveness of rail as a transportation and economic development component, including consideration of rail in major investment studies, system plans and corridor studies.

The policies discussed above should apply not only to state level agencies, but also to local agencies such as MPOs, COGs, and local economic development agencies. State agencies should work with local and regional jurisdictions to accommodate, protect and promote rail uses in their transportation and land use activities.

There are a number of prerequisites to establishing the rail expertise necessary to represent rail interests in establishing transportation priorities among all the agencies involved. These are:

- Organizational strategies and staffing
- Professional development
- Use of consistent evaluation standards.

Organizational strategies and staffing levels within agencies with rail responsibilities will depend on the agencies' level of rail involvement and staffing capabilities. It is important however, that a rail contact for that agency's responsibility be designated and known to the rail industry and other agency rail contacts. It is also important that a clear chain of command to the agency's decision-makers be available to the rail contact person(s) to ensure that the agency is fully engaged in the state's rail decision structure.

Rail representatives to the state's rail decision structure should also have the rail freight and/or passenger expertise necessary to understand basic operational and infrastructure issues. Professional development in this area can range from comprehensive instruction in various aspects of rail transportation, such as those offered by the University of Wisconsin to more general freight professional development courses such as those offered by the FHWA Freight Development Program and the I-95 Corridor Coalition's Freight Development Program. Attendance at conferences and involvement in organizations such as the American Association of State Transportation and Highway Officials' (AASHTO) Standing Committee on Rail Transportation can also offer valuable information on national rail issues and case studies on successful rail improvement efforts.

In order for state and local agencies to cooperate and coordinate on improving the rail system in the state, it is necessary for them to develop and utilize consistent standards to evaluate project details, costs and benefits. This will be especially important in later dealings with rail carriers as it will provide a level playing field rather than dealing with individual standards set by various state and local agencies.

Act 114 of 2007 established changes to the South Carolina Code of Laws in regards to the project ranking process for MPOs and COGs for roadway projects. Improvements, specifically

road widening, functional intersection and new-location roadway improvement projects, each have a unique set of criteria to establish priorities. The Passenger Rail Investment and Improvement Act of 2008 also contains a set of considerations for listing of projects for funding and more detailed criteria will undoubtedly be developed in the process of implementing the legislation. The funding sources previously discussed also have unique evaluation and prioritization criteria. Each will have to be adopted as necessary to meet project funding requirements, but also will provide guidance in establishing criteria for any state funding sources that might be developed or for program guidance.

13.2 Improve Regional and National Coordination and Development

While South Carolina does have significant intrastate rail movements, the vast majority of the state's rail traffic originates in, or is destined for, other states. Therefore, South Carolina's industries may be affected by rail infrastructure or operational bottlenecks that exist in surrounding states. These problems can be addressed through the state's participation in multi-state coalitions organized to develop regional approaches to transportation issues. The I-95 Corridor Coalition has undertaken a regional study of the rail system through its Southeast Rail Operations Study (SEROps). South Carolina through SCDOT is participating in this and follow-up efforts. It should also assist the Coalition and other efforts to support federal funding assistance for projects of a regional nature. Other rail corridor initiatives, such as the Crescent Corridor, will provide the same opportunities for multistate coordination.

Existing and proposed rail passenger services also span multiple states, many of which are regional in nature. The SCDOT is currently working with other southeastern states in development of the Southeast High Speed Rail Corridor and participates in the States for Passenger Rail Coalition. Participation in other national organizations such as AASHTO's standing committee on rail transportation is also important.

13.3 Create or Strengthen Rail Stakeholder Partnerships

Improving the state's rail operations for the purpose of enhancing economic development requires the development of both public-public and public-private partnerships among the many stakeholders involved. The development of these partnerships will improve the communication and coordination necessary to identify and address issues and develop strategies preferably on an on-going basis, but also on an ad hoc basis or for individual projects if necessary.

The first partnerships should be among the public sector state and local agencies interested in advancing economic development through improved rail service or access. These partnerships will eventually guide the private sector carriers or shippers toward investments and operations consistent with public benefit and public purposes.

This guidance by the public sector is necessary because railroads and public agencies have different investment perspectives and expectations. Railroads place their capital investment priorities on projects that produce short-term results and have a high return on investment. Public agencies tend to have a longer term outlook and invest in projects with tangible public benefits.

Various states have established freight and/or railroad advisory committees to address issues or to develop and advance strategic programs. Their make-up varies as necessary.

Freight advisory committees are comprised of carriers from all modes of transportation and usually include shippers. These committees primarily address general issues, such as state transportation regulations and taxation as competitive concerns between the different modes, which preclude in-depth discussion of individual markets, strategies, needs, etc.

Rail advisory committees can be comprised of both freight and passenger interests or separate freight and passenger committees can be established. Rail freight advisory committees are typically comprised of state departments of transportation, economic development, and others, such as agriculture, if their clientele is rail dependent; state business councils or chambers of commerce; Class I freight railroads and short line railroads (a set number of short line representatives will usually be designated if many short lines operate in the state). Individual rail shippers may also participate on a regular or ad hoc basis. Rail passenger advisory committees are also comprised of the state departments of transportation, selected local representatives with large intercity rail passenger stations, Amtrak, the Class I freight railroads over which Amtrak services operate, rail passenger advocacy groups, and other agencies or advocacy groups as deemed necessary.

13.4 Integrate Rail, Land Use and Economic Development Planning

With coordination between agencies, internal agency policies established to ensure consideration of rail in the transportation process, and a Rail Advisory Committee in place, the development of plans and processes required to enhance economic development through improved rail operations and access will have a solid foundation in place. This step will identify those specific actions that can be implemented across the rail/transportation, land use and economic development planning activities to preserve and increase both rail capacity and related economic development activities.

13.4.1 Improve the Condition, Connectivity and Capacity of the Rail System

This document contains numerous discussions of rail capacity, intermodal connectivity and track improvement needs. While some funding may be available for selected projects, a long-term implementation program is yet to be developed. Such a program is required for passenger service under the new rail plan regulations (**Appendix B**) and should also be developed to address freight needs, especially given many of the same rail line segments are involved in both.

13.4.2 Land Use Planning

Implementing a smart growth land use strategy combined with rail access is essential to developing a sound economic development plan. Similar to protecting the rail system's ability to accommodate growth, developable land with access to the rail and highway systems must also be protected for economic development purposes. This can only be accomplished through coordination between state and local transportation and economic development officials. This coordination can be accomplished through a number of different means.

From the transportation perspective, the first requirement of a sound economic development process is early involvement in any efforts to identify candidate industrial sites. Input from

appropriate rail expertise will be needed to identify sites in the proximity of rail lines which may not be physically accessible for rail service or meet the railroad's operational requirements. As a general rule, since the number of rail accessible sites is limited, sites with good rail access should be reserved for industries that are seeking a rail option for their transportation needs and protected from alternate land uses to the extent possible.

While the railroads and the Department of Commerce have inventories of rail sites, it is necessary that local level planners and development personnel are aware of them. As local governments have authority over land use and regulations and goals for their jurisdictions, a collaborative approach is recommended. The proposition to these agencies is that coordinated action will yield better and cumulative results, for transportation and economic performance and for the management of their effects on quality of life, than isolated action.

The primary goal of this process is to identify local lands of regional significance. An example is a large parcel of developable land at an intersection of preferably two Class I railroads and at least one Interstate highway. These are prime locations for so-called "freight villages" that include warehouse/distribution facilities as well as additional businesses that perform value-added functions to goods. These prime freight opportunity sites can minimize vehicles miles of travel and encourage intermodal logistic development.

A key to South Carolina's ability to compete in locating large transportation-dependent industries or to establish large multimodal developments is the ability to provide dual or competitive rail access to these sites. Obviously, the number of these locations is limited and railroads have little incentive to allow competitive access. Eliminating so-called "captive-shipper" situations reduce transportation costs and increase the efficiency of rail movements. Wherever possible, public transportation and economic development officials and prospective new industries should work together to locate sites that would allow competitive access or to develop initiatives with which to conduct negotiations to allow either physical or operational access by more than one railroad.

As the number of rail and Interstate highway intersections are limited, another source of valuable property for smaller intermodal transfer functions and related development opportunities are locations where major highways cross major rail lines. These transfer facilities are especially suitable for bulk commodities such as aggregates, building materials, and agriculture among other commodities. This arrangement allows for rail to operate the long-haul portion of these heavy goods movements and trucking for the so-called "last mile" to the final destination. These facilities have limited employment potential, but can divert heavy truck movements to rail, thus reducing the cost of transportation to shippers and reducing wear to the highway network.

13.4.3 Integrated Transportation and Land Use Activities

There are a number of methods whereby transportation and land use analysis are carried out concurrently with the primary goal of enhancing economic development.

South Carolina, with its strong mainline rail system, interstate highway network, international port, and land available for development, is a prime candidate for comprehensive multimodal corridor studies. These studies, undertaken primarily on corridors with parallel highway and rail lines that link a number of large or medium sized municipalities, aim to develop an understanding of the character of the corridor, the development goals of the state and

municipalities located on the corridor, identify developable land, and evaluate existing infrastructure and future needs. These studies are carried out with a high level of public and stakeholder participation. In addition to the identification of economic development opportunities, corridor studies can also define such issues as environmental impacts from sprawl (e.g. the loss of farm land, threats to adjacent rural areas), and mobility and operational goals.

From the rail perspective, corridor studies can identify opportunities to expand rail markets with innovative services such as short-haul rail movements. This is especially applicable to transportation demands involving heavy commodities moving in significant volumes. Corridor studies can also evaluate intercity rail passenger service and its connection to local transit services.

13.5 Create Stable Rail Funding Sources

Difficult choices face states wishing to establish active rail improvement programs. The lack of significant rail funding available from federal sources requires states to either identify a source of state revenue for grants or loans, or to reallocate federal funds normally used for highway improvements to rail uses, where allowable.

13.5.1 Use of Available Federal Funds

With the exception of the federal Railway-Highway Crossing Program and Rail Line Relocation and Improvement Program, allocating funds from other rail-eligible programs would require diverting resources from the state's highway program. Although it is unlikely that the state could afford to divert scarce highway resources at this time, a review of the use of these funds in relation to rail needs could lead to identifying projects where mutual benefits could result.

One area of potential mutual benefit is the highway system connecting rail intermodal facilities to the state and national highway systems. National Highway System (NHS) Program funds can be used for this purpose. A number of states and MPOs are also increasing the use of Congestion Mitigation and Air Quality (CMAQ) Improvement Program funds for rail use for intermodal facilities and the retrofitting of diesel locomotives in air quality non-attainment areas. Charleston area operations would provide a prime candidate if new air quality standards are adopted.

Regardless of state policies regarding the use of existing federal highway funding programs for rail purposes, it is important that policy makers monitor federal proposals that could provide either increased rail funding or increased flexibility for states regarding eligible rail-related uses.

13.5.2 Creation of a State Assistance Program

At this time approximately two-thirds of all states offer some type of state rail assistance. States surrounding South Carolina have established rail programs that range from rail intercity passenger, commuter and freight improvement programs to rail industrial access. The existence of either a state rail assistance fund or an economic development fund with rail eligibility would serve as a useful tool in remaining competitive for economic development opportunities in the region.

The size of a state rail assistance program is of secondary importance to having a predictable and sustaining assistance program. This allows the establishment of eligibility and project benefit evaluation criteria that fit the goals of the state.

Once the decision is made to establish a rail assistance program, the next step is to determine a funding source. Budget allocations serve as the most expedient but unpredictable source of funding. Programs with a dedicated source of revenue are preferable for applicants due to the reliable flow of funding and allow administrators to develop long-term strategies.

14. Next Steps

The preceding sections of this report have identified and discussed a number of rail issues in South Carolina involving both the public and the rail carriers. Several of the issues concerning rail capacity and rail passenger service can be addressed with state participation in the Passenger Rail Investment and Improvement Act of 2008, which became public law on October 16, 2008 after this rail plan effort had been initiated. Participation in the various railroad corridor initiatives offers further opportunities. Many other issues will need to be addressed through local or state initiatives. Taken in order of urgency and necessity in the South Carolina context, it is recommended the following steps be taken.

14.1 Funding

Of paramount importance is program funding. Three principal need categories exist.

Rail Passenger and Railroad Capacity Projects - Compliance with the State Rail Plan requirements contained in the Passenger Rail Investment and Improvement Act of 2008 is necessary to obtain capital investment grants for rail passenger service and railroad congestion contained in the same legislation. The projected rail funding needs attributed to these projects contained in this plan will take some time to fully develop. This provides an opportunity to meet the provisions for the new State Rail Plan requirements referred to in **Section 14.2**.

Intermodal Projects - Funding needs for intermodal projects associated with the Port of Charleston are imminent as discussed, but public investment needs are dependent on the alternative(s) to be implemented and operating party(s) involved.

Short Line Needs - Short line needs are current, in many cases immediate, and are not likely to qualify for grants available under the new 2008 Act. They require much less investment for individual projects than those associated with passenger or Class I mainline projects and most can be made ready for implementation in a very short period of time.

14.2 Rail Program Organization

Currently three state agencies have direct roles in rail matters in South Carolina:

- The Department of Commerce through the South Carolina Public Railways;
- The South Carolina Department of Transportation (SCDOT); and
- The Office of Regulatory Staff.

Basically they are responsible, respectively, for freight rail, passenger rail and highway-rail crossings, and rail safety. The contents of this document demonstrate the overlapping involvement of these responsibilities, and the need for a coordinated effort to fulfill the obligations of all involved while working to improve the state's rail system. A single point of state government contact for rail matters is also desired by many stakeholders.

A coordinated effort is also going to be needed to meet the provisions for a State Rail Plan, established in the Passenger Rail Investment and Improvement Act of 2008, and to obtain funding provided in that legislation. The new requirements for a State Rail Plan require, among others, that:

- “A State Rail Transportation Authority” be established or designated to “prepare, maintain, coordinate and administer the plan”; and
- “A State rail plan approval authority” be established or designated to approve the plan.

It is recommended that of the two agencies now involved in rail planning, the SCDOT be selected as the “State Rail Transportation Authority” for purposes of progressing the effort. From 1977 to 1984 The South Carolina Public Service Commission was designated as the state agency responsible for rail planning in response to requirements for state rail plans in effect at that time (CFR 49, Part 266.15). In November of 1984, the Division of Transportation-Office of the Governor was designated to fulfill the function. The SCPR assisted the Governor’s office in that effort. As stated earlier, that program, based principally on rail line preservation, is no longer funded and the focus of public involvement in the rail system has shifted.

The South Carolina Public Railways was originally established to accept transfer of rail operations then under control of the South Carolina State Ports Authority. Act No. 361 of 1994, as set in the South Carolina Code of Laws, Sections 13-1-1310 and 13-1-1330 established the Division of Public Railways within the Department of Commerce and assigned the Director of the division the power and duty “to acquire, construct, maintain, equip and operate connecting, switching, terminal and other railroads.” The other powers and duties specified are in support of that principal assignment. Thus, the Division is basically an operating unit, not a planning entity.

It is recommended that the SCDOT be designated as the “State Rail Transportation Authority”.

The Department of Transportation, Division of Mass Transit, on the other hand, among its power and duties (Section 57-3-40, South Carolina Code of Laws) is “designated as the agency of the State principally responsible for preserving railroad rights-of-way for future use, and coordinating rail passenger service and high-speed rail planning and development.”

Given the basic charge of the two organizations, it would appear that the Mass Transit Division of the DOT is the logical choice for the designated State Rail Transportation Authority. In addition, the routes that will be involved in passenger efforts are for the most part the same ones that the Class I carriers are proposing for PPP corridor improvement initiatives and the two efforts will go hand-in-hand. Justification for public participation in these initiatives will be derived principally from reduction in highway congestion, and maintenance and capital expenditures that the DOT is in a much better position to evaluate than the SCPR. The same principals apply to congestion relief problems such as those in Charleston requiring a variety of approaches rather than a single solution. The SCDOT will be in a much better position to prioritize actions in order to achieve the most beneficial results for a given investment.

The “State Rail Plan Approval Authority” should be comprised of representatives of each agency involved in rail transportation. In the case of the SCDOT, it is suggested that planning and safety representatives be included.

It is also recommended that a rail advisory committee be established comprised of stakeholders--representatives from the railroad industry, the users of rail service, community and regional planners and other interested agencies such as the State Ports Authority. This body would function

to advise the State Rail Transportation Authority during the rail plan process and function as a first line of review for proposals formulated.

14.3 Port of Charleston

Rail intermodal service in general, near-dock intermodal access for the new Navy Base Container Terminal, and dual rail service for Veterans Terminal comprise the elements of the single largest current rail issue in the state for both rail service users and providers, namely service to the Port of Charleston. Several options are discussed in this report, none of which are without complications and implementation issues.

The intermodal terminals of the two Class I railroads in Charleston are near capacity and will not be able to absorb projected long-term growth in containers at the Port of Charleston. Both also lack room to expand in their current locations. Ideally, the rail terminals should be located as close as possible to the port terminals but as revealed in the discussion of near-dock potentials, the availability of suitable sites is almost non-existent. Potential alternative sites on both railroads are far removed from the port terminals that would result in long drays and would only serve to increase truck traffic on area highways.

Of the near-dock sites reviewed, the Cooper Yard-Macalloy site holds the most promise as it is clearly available and could function like an on-dock facility. However, a means of developing the terminal without negatively impacting the port access road permit and construction of the port terminal itself must be employed.

The second choice would be the Clemson site on the CNC as it has some potential to function similar to an on-dock terminal but availability and rail access issues have to be resolved.

The Noisette site on the CNC would be the third choice as it is most likely too far removed from the Navy Base Container Terminal to possess any potential to function as on-dock, but it has more room for future expansion than the Clemson site. However, it too has the same availability and rail access issues as the Clemson site.

Continued pursuit of all of the options is necessary, however, as more than one site is likely to be required, and locations for new intermodal facilities once the capacity of the existing railroad intermodal terminals is exceeded, will result in excessive dray distances to remote locations. Competitive access to Veterans Terminal should be included in site selection considerations.

It is also recommended that a market study be conducted of establishing intermodal rail service to the Upstate. While there is a large market base in the area, and significant public benefits could be generated with such a service, it is not clearly understood if there is enough interest on the part of the industries located in the area to make it feasible.

As concluded in a prior study in South Carolina, discussed earlier, and confirmed in other studies and in practice, inland terminals are hard-pressed to operate as viable financial stand-alone facilities. Public assistance is necessary to cover capital and/or operating costs. The justification for public investment is attraction of new port cargo or relief from highway impacts.

Financial viability is more difficult to achieve at the Port of Charleston than at ports with on-dock rail facilities as, with the potential exception of the new Navy Base Container Terminal, a truck dray is required between the port terminals and the rail terminals plus a lift to the rail car



before the container ever begins its eventual journey. The process is reversed at destination. Depending on the distance between the rail terminals, the two drays and rail terminal lifts may well exceed the cost of the dray delivering the container directly to its destination from the port terminal. The breakeven distance, the point at which the savings in rail line-haul costs over truck transport are enough to cover the cost of the lifts and local drays, is typically between 500 and 750 miles (prior to the fuel cost experience in 2008). Commonly discussed inland terminal locations in South Carolina, I-26 at I-95, Orangeburg, and the Upstate are much shorter distances, with the longest, the Upstate, just over 200 miles.

The shorter distances also fail to generate the level of benefits necessary to fully justify public participation. The *South Carolina Inland Container Port Study* did reveal, however, a level of public benefits with the potential to justify investment in such a service to the Upstate. In addition, the SCSPA feels there is a large enough nucleus of business to seriously consider the potential.

14.4 Rail Capacity

Recently conducted National Studies have indicated that Class I rail capacity needs exist now and will increase significantly in the relatively short future with rail freight flows projected to double by 2035. At least that was the projection at the initiation of this study before the current recession deepened to today's (early March 2009) levels. Rather than increasing, rail traffic levels have fallen 15-20 percent over the last several months compared to the same months in 2008. Many believe, however, that rail service demand will come back even stronger once the economy recovers.

While no significant capacity problems were revealed in South Carolina in past studies, the railroads do have corridor improvement initiatives running through the state, and regional and local rail passenger proposals, intercity and commuter, will also increase demand in the same corridors.

The state should prepare to participate in these public-private partnership initiatives as well as both intercity and commuter rail services.

The state's short line carriers that are involved in 25-30 percent of the state's rail traffic have also identified needs to increase track capacity to interchange traffic with connecting Class Is and handle larger and heavier carloadings. The state should work to fund as many of these projects as possible with public funds available from programs identified in this document. It is recommended that the designated State Rail Transportation Authority examine existing state and federal programs for applicable project eligibility, availability of remaining funds, and qualification requirements and match them with the list of projects. Looking beyond the current downturn and budget constraints, an effort should be initiated to identify a dedicated funding source for such projects.

The state should prepare to participate with railroads in public-private partnership initiatives for rail corridor improvements, as well as both intercity and commuter rail services.

14.5 Competitive Rail Service

Since the state no longer has rail regulatory authority since passage of the Stagger's Rail Act, the only means it can influence competitive service is through federal legislative efforts and

promoting dual access where available. Areas of the state with dual rail access potential have been identified in this study. It is recommended that industrial sites in these areas be identified and protected as described in **Section 13.4.2** of this document, Land Use Planning.

14.6 Railroad Support

Once the State Rail Transportation Authority is established, it is recommended as its first duty that it “set forth state policy involving freight and passenger rail transportation including commuter rail operations, in the state.” This is also a stated rail plan purpose.¹⁰² Today, a unified state rail policy does not exist but is desperately needed to guide planning and project participation including funding.

It is recommended that the first duty of the State Rail Transportation Authority be to address state policy involving freight and passenger rail transportation including commuter rail operations.

¹⁰² Section 22703 of the Passenger Rail Investment and Improvement Act of 2008.