Rail Financing White Paper
I-95 Intermodal Leadership Forum

Background

The I-95 Corridor Coalition region's rail network includes a private freight network with four Class I freight railroads (CSX, Norfolk Southern, Canadian National and Canadian Pacific), and over 100 regional and shortline freight railroads. These freight railroads share trackage with Amtrak and several commuter rail services, including Metro-North, NJ Transit, MBTA, SEPTA, MARC, and the VRE, across much of the region.

The Mid-Atlantic Rail Operations (MAROps) study recently completed by the I-95 Corridor Coalition, in conjunction with the five Mid-Atlantic states (Delaware, Maryland, Pennsylvania, New Jersey, and Virginia), the Norfolk Southern and CSX freight railroads, and Amtrak, found a network with the potential to carry more freight, but constricted by major network choke points. These choke points are the legacy of a rail system that was laid down more than 150 years ago and reflect the limitations of the engineering technologies and standards of those times. The Coalition, the states, and the railroads worked together to develop a consensus program of 71 rail infrastructure and information-technology improvements to be implemented over 20 years. The improvements would eliminate or reduce many of the major choke points, reversing almost a half-century of neglect and under-investment in the north-south rail network. The initial cost estimate for the improvements (not based on detailed engineering) is $6.2 billion.

These improvements are needed if rail in the region is to continue to grow; however, financing these improvements will be difficult. The railroad industry is extraordinarily capital-intensive. Freight railroads spend about five times more to maintain rail lines and equipment than the average U.S. manufacturing industry spends on plants and equipment. The freight railroads need to spend 20 percent or more of revenues on capital improvements each year; however, from 1981 to 2000 the railroads generated only 63 percent of the funds needed for capital investment. The remainder was obtained from the financial markets. Wary of the gap between the railroads' capital needs and their income, investors have been less and less willing to provide capital to the industry. This has reduced the amount of money available to railroads to invest in the freight rail system, forcing the railroads to limit their infrastructure improvements to lower-risk projects that will quickly generate growth and revenue. It is estimated that the national freight-rail

system needs additional capital investment of $2 billion to $4 billion annually to keep up with and increase freight rail's share of forecast demand.[1]

Passenger rail also has significant capital needs but has limited financial resources. Since Amtrak's creation in 1971, $11 billion in federal money has been spent on intercity passenger rail, while over the same period $750 billion dollars—almost 70 times more—has been spent on highways and aviation. Although it receives about $500 million dollars per year in federal funding, Amtrak argues that it needs a minimum of $850 million per year to adequately maintain the current system, and nearly $6 billion for overdue capital improvements and expansion.[2] Amtrak estimates that the cost to develop all of the high-speed corridor projects proposed by the states would cost $70 billion, or $3.5 billion per year over 20 years.[3] For fiscal year 2003, the national carrier is requesting $1.2 billion.[4]

The MAROps study concluded that "rail improvements serve a public purpose by helping to relieve the pressure on the region's highway system and meeting the region's social, economic, and quality-of-life needs. It is in the public interest for all levels of government —federal, state, regional, and local—to work cooperatively with the railroads to plan, finance, and deliver projects that deal with these Mid-Atlantic rail-system choke points."

Key Issues

There are several issues surrounding the financing of rail improvement projects. Some issues involve general trends affecting the railroad industry and the projected growth in freight movements by rail in the future. Others involve the difficulty some states face in programming and funding rail improvement projects. These issues, when taken together, can prevent the planning and delivery of rail improvement projects that may enhance the efficiency of transportation in the region and relieve truck pressure on the region's congested highways.

Overall freight growth/system capacity constraints

In 2000, the gross product of the I-95 Corridor region was about $2.9 trillion, or nearly 30 percent of the U.S. gross domestic product. If the 14-state Coalition were its own country, it would be the fourth largest economy in the world, behind the United States, China, and Japan. The Coalition is already home to over 80 million people and over the next 20 to 25 years, the population of the region will grow by almost four million, or about 12 percent; the equivalent of today's population of South Carolina, the 26th most populous state.

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[1] American Association of State Highway and Transportation Officials, "Freight Rail Bottom-Line Report." Washington, DC, 2002.

[2] As reported by the National Association of Railroad Passengers (www.narprail.org)

[3] Amtrak Reform Council Report to Congress (www.amtrakreformcouncil.gov)

[4] Amtrak press releases (www.amtrak.com)

Domestic freight tonnage moving in the region will increase apace with the national economy, growing between 50 and 60 percent by 2020. Almost 80 percent of the new freight tonnage will be carried by truck on the region's highways.

This growth will put immense pressure on the transportation system. Highway travel will increase from about 300 trillion vehicle-miles-of-travel (VMT) today to nearly 470 trillion VMT by 2020, an increase of 53 percent. These new trips will be squeezing onto highways that already are saturated with traffic and unacceptably congested. If the rail system cannot absorb its share of new freight and passenger trips, highway travel could increase nationally by an additional one to three percent as rail tonnage is diverted to trucks.

Multi-Jurisdictional Coalition Programming and Implementation of Projects

Individual states and railroads often cannot afford larger improvements to the rail system, especially since the costs and benefits of these improvements are unevenly distributed. When investments in one state result in benefits to several other states, it is often difficult to determine how costs, risks, and benefits should be shared. Some states find it difficult to justify spending money on projects that are perceived to inordinately benefit the private sector freight community (i.e., railroads), or on projects whose costs are local, but whose benefits accrue regionally or nationally.

Multi-jurisdictional coalitions like the I-95 Corridor Coalition have been instrumental in identifying regionally-significant transportation improvement projects, including the program of regional rail improvements identified in the MAROps study, but find it difficult to actually implement improvement projects, as they often have little controlling authority to address the issues and concerns raised by coalition members[5] or provide funding to projects that may address those concerns. This often prevents such regional improvement projects from moving beyond the planning stage.

Limitations of Existing Funding Programs

All states commit a large portion of their budgets to the maintenance and preservation of their current highway systems, leaving limited resources for rail improvement and other non-highway projects. Highway-related freight improvement projects usually are eligible for funding under federal and state highway programs, but rail improvement projects must often be shoehorned into air-quality mitigation (e.g., CMAQ) or safety programs (e.g., highway-rail grade-crossing separation programs). The Coalition's Regional Rail Financing White Paper identified existing approaches to financing rail improvements, which include:

[5] "Challenges with Multi-State/Jurisdictional Transportation Issues" FHWA, May, 2001.

- **Self-funding of improvements by railroads.** By themselves, private railroads cannot support the full cost of rail system improvements. Though the railroads typically invest billions of dollars in their systems annually, these investments generally cover system maintenance and support of near-term business opportunities for near-term revenue. Borrowing significant amounts of new capital on the open market is not an option because the freight railroads currently are not earning their full cost of capital, and Amtrak is dependent on federal funding.

- **State rail programs.** The Northeast and Mid-Atlantic states have invested more than $4 billion since 1992 in infrastructure and operations that directly or indirectly support intercity passenger rail. This state investment includes $2.8 billion in infrastructure improvements and more than $1.4 billion in operations support of intercity passenger rail service on the Northeast Corridor and its feeder services.[6] While some individual states also have invested in short line freight-rail improvements, their sources of funding for large-scale projects are severely limited. A number of states in the region cannot by law spend highway gas-tax revenue on rail projects, and other states are prohibited by statute from investing in projects outside their state boundaries, even if such an investment would benefit them significantly.

- **Federal grant programs.** Existing federal transportation programs such as the surface transportation program and the congestion mitigation and air quality program are heavily committed to the maintenance and preservation of the nation's roadway systems. Expanded state eligibility and flexibility in the use of these funds is appropriate where freight-rail improvements have significant highway and public benefits, but the available funds are not adequate. Federal-aid is allocated by formula and must be matched by state or local funds, making it difficult for states to invest in projects beyond their state boundaries.

- **Federal loan and credit enhancement programs.** Use of federal loan and credit enhancement programs, such as the Rail Rehabilitation and Improvement Financing program (RRIF) and the Transportation Infrastructure Finance and Innovation Act (TIFIA) program, is difficult.

  - RRIF is a credit program targeted at rail infrastructure and equipment. Current program requirements governing credit access and risk premiums have discouraged use of the program and the railroads, which currently are not earning their return on capital, are reluctant to take on additional indebtedness.

  - TIFIA provides loans, loan guarantees, and lines of credit for large projects. The program is modeled after a loan provided for the Alameda Corridor Transportation Project, a roadway grade crossing and rail corridor project improving access to the ports of Los Angeles and Long Beach. To qualify for assistance under TIFIA, a project must have a source of revenue to cover debt service costs and be valued at

[6] Coalition of Northeast Governors (CONEG) Policy Research Center, Inc., "The Northeast and MidAtlantic States: Investors in Intercity Passenger Rail That Serves the Region and the Nation." Washington, DC, June 2002.

over $100 million or 50 percent of the state's annual federal-aid highway apportionments, whichever is less. The federal TIFIA loan cannot exceed one-third of the total project cost, and the project's senior debt obligations must receive an investment-grade rating from at least one of the major credit rating agencies. These factors limit TIFIA's applicability, and neither private railroad projects nor rail-only projects are eligible today.

- **Joint investment/toll programs.** The State of Delaware and the Norfolk Southern have invested jointly in the rehabilitation of the Shellpot Bridge, which provides rail access to the Port of Wilmington. The state is paying the cost of rehabilitating the bridge, and the Norfolk Southern will pay a toll, with an annual minimum guarantee, on railcars crossing the bridge. To encourage Norfolk Southern to grow the rail traffic, the toll per railcar decreases as the total volume of railcars increases. The approach allows the state and the railroad to share the future benefits and risks of the investment.

Though the funding strategies outlined above are useful for making small, localized improvements to the rail system, addressing issues such as grade crossings, rural branch lines, and commuter rail services, they are not well suited for funding improvements to the regional infrastructure issues facing the rail system within the I-95 Corridor region. Financing rail capacity improvements will require a regional approach and investments must be made at the network level. The present need is to treat the key elements at the top of the system: capacity choke points along nationally significant corridors; at intermodal terminals; and at urban rail interchanges and connectors. Improvements to these elements of the system are key to retaining and growing freight-rail and intercity passenger-rail traffic in the region.

Regional Strategies for Financing Rail Improvements

A regional approach to organizing and financing rail investment ensures that adequate funds are available to meet the needs of large-scale projects and takes into account the distribution of costs and benefits. A regional approach:

- Addresses the rail network serving a multistate trade area;
- Involves the states and the freight, intercity passenger, and commuter railroads;
- Provides a forum to identify needs, define improvements, describe benefits, set priorities for investment, organize multi-year programs, and evaluate results;
- Provides a mechanism for financing the improvements; and
- Provides a mechanism for recouping investments and sharing risks and benefits.

Three regional strategies are recommended for consideration: development of a National Transportation Finance Corporation; creation of a Regional Rail Finance Corporation or Regional Rail Investment Bank; and the establishment of a National Rail Network Program.

National Transportation Finance Corporation

The first strategy would create a National Transportation Finance Corporation and regional rail advisory committees.

- By an act of Congress, create a National Transportation Finance Corporation (NTFC) as a non-federal, non-profit enterprise with the ability to grant and lend money to the states as well as to regional and local entities to make rail capacity improvements.
- Capitalize the NTFC by direct Congressional appropriation, by authorizing the NTFC to issue tax-credit bonds, or a combination of measures. The direct Congressional appropriation could be a grant or subsidy authority to the NTFC to fund a long-term, low-interest capitalizing loan.
- Authorize the formation of regional rail advisory committees through which coalitions of states would identify regional rail network investment needs, set priorities, support individual state applications for funding, and commit to coordinated sharing of project risks and benefits. The legislation could specify regional rail programs and committees or authorize the Secretary of Transportation to underwrite the development of one or more programs and committees on a pilot basis (e.g., Mid-Atlantic and/or I-95 Corridor Coalition region, the Midwest, the Pacific Northwest, etc.).
- Provide economic development incentives for state participation by making businesses in states that participate in regional rail advisory committees and projects eligible for federal tax benefits if the businesses invest in qualified rail and intermodal infrastructure projects.[7]
- Adopt procedures for soliciting applications from states or groups of states and awarding funds for rail network improvements. Awards should consider transportation needs and benefits, consistency with the regional rail advisory committee's master plan, state and railroad contributions, and provisions to capture future benefits through tolls or other value-capture mechanisms.
- Allow the states and the railroads, working through the regional advisory committees, to negotiate their contributions on a project-by-project basis, considering public sector benefits, private sector benefits, and risks.

[7] Rail-related tax incentives might include: 1) reduced tax recovery periods (e.g., to three years for freight handling machinery and equipment, intermodal information infrastructure, and railroad track and signals; and to seven years for wharves and docks, bridges, tunnels, railroad grading, and intermodal transfer facilities [TOFC/COFC, marine container, airport freight, and truck terminals; distribution warehouses; transload facilities; bulk-load facilities; and automotive ramps]); 2) expensing of investments in "qualified intermodal property;" 3) tax credits for some percentage of the cost of investments in or improvements to qualified intermodal property; and 4) tax-exempt financing for investments in qualifying assets. For additional discussion, see proposals for "Tax Incentives for Intermodal Investments," Association of American Railroads, February 2002.

- Encourage the use of regional network tolls or other value-capture mechanisms to recoup a portion of the investment in rail capacity from future growth in rail traffic. Tolls should be based on reasonable expectations of the future network growth that would be catalyzed by the investments and apportioned equitably among the railroads, including where appropriate intercity passenger and commuter railroads, based on network access, use, and public and private benefits.[8]
- Permit a portion of toll revenues to be used to capitalize a revolving fund supporting additional rail capacity improvements.

Regional Rail Finance Corporation or Regional Rail Investment Bank

A second strategy would create independent, regional versions of the NTFC. A Regional Rail Finance Corporation (RRFC) or Regional Rail Investment Bank (RRIB) would operate in a manner similar to national corporation and with similar results, but its scope and scale would be smaller. A national corporation, with a larger and more diverse portfolio, would create a bigger, more stable market for tax credit bonds, but a regional corporation or bank serving an economic bloc as large as the Mid-Atlantic region and the 14-state I-95 Corridor Coalition would be equally viable.

- By an act of Congress, establish RRFCs or RRIBs for specific multi-state regions and rail networks. The RRFCs or RRIBs could be established as non-federal, non-profit enterprises or as multi-state investment banks and authorized to receive funding directly from Congress or from a NTFC (if created).
- Capitalize the RRFCs or RRIBs by direct Congressional appropriation, by authorizing the RRFCs or RRIBs to issue tax-credit bonds, by authorizing them to accept funds from a NTFC (if created), or a combination of measures. The direct Congressional appropriation could be a grant or subsidy authority to the RRFCs or RRIBs to fund a long-term, low-interest capitalizing loan.
- Charge the RRFCs or RRIBs to identify regional rail network investment needs, set priorities, support individual state applications for funding, and commit to coordinated sharing of project risks and benefits.
- Provide economic development incentives for state participation by making businesses in states that participate in regional rail advisory committees and projects eligible for federal tax benefits if the businesses invest in qualified rail and intermodal infrastructure projects.
- Adopt procedures for soliciting applications from states or groups of states and awarding funds for rail network improvements. Awards should consider

[8] Understanding and allocating equitably the costs, risks, and benefits of regional rail network improvements eventually will require development of network simulation models akin to the highway network models developed the states and the FHWA. Congress and the Secretary of Transportation may wish to consider early funding for initial development of a pilot regional rail network model. The model also would be of use to the railroads, the FRA, and others developing national security and emergency preparedness strategies.

transportation needs and benefits, consistency with a regional rail master plan, state and railroad contributions, and provisions to capture future benefits through tolls or other value-capture mechanisms.

- Allow the states and the railroads, working through the regional advisory committees, to negotiate their contributions on a project-by-project basis, considering public sector benefits, private sector benefits, and risks.
- Encourage the use of regional network tolls or other value-capture mechanisms to recoup a portion of the investment in rail capacity from future growth in rail traffic. Tolls should be based on reasonable expectations of the future network growth that would be catalyzed by the investments and apportioned equitably among the railroads, including where appropriate intercity passenger and commuter railroads, based on network access, use, and public and private benefits.
- Permit a portion of toll revenues to be used to capitalize a revolving fund supporting additional rail capacity improvements.

National Rail Network Program

A third strategy would establish a federal-aid rail program.

- By an act of Congress, establish and fund a federal-aid rail program under the aegis of the U.S. Department of Transportation. The model for this program would be the Federal-Aid Highway Program.
- Fund the program through general revenue or other sources and provide a mix of grants, loans, and credit enhancements. The program also could incorporate an expanded RRIF program or a modified TIFIA program utilizing low- or no-interest loans and revolving funds.
- Authorize the Secretary of Transportation to underwrite the development of one or more regional transportation coalitions and utilize them to identify regional rail network investment needs, set priorities, support individual state applications for funding, and commit to coordinated sharing of project risks and benefits.[9]
- Make individual states eligible to receive funding for state-specific projects, but encourage and provide incentives to states to coordinate with neighboring states in regional rail coalitions. Incentives for participation in a regional coalition program could include priority consideration, more favorable match requirements, and lower loan rates.
- Provide economic development incentives for state participation by making businesses in states that participate in regional rail coalitions and projects eligible for

[9] A possible model for regional, interstate coordination is the Chesapeake Bay Program, created in 1983 as a cooperative restoration effort among Maryland, Pennsylvania, Virginia, the District of Columbia, the Chesapeake Bay Commission, and the Environmental Protection Agency.

federal tax benefits if they invest in qualified rail and intermodal infrastructure projects.

- Adopt procedures for soliciting applications from states and awarding funds for rail network improvements. Awards should consider transportation needs and benefits, consistency with a regional rail master plan, state and railroad contributions, and provisions to capture future benefits through tolls or other value-capture mechanisms.
- Allow the states and the railroads, working through their regional coalition, to negotiate their contributions on a project-by-project basis, considering public sector benefits, private sector benefits, and risks.
- Encourage the use of regional network tolls or other value-capture mechanisms to recoup a portion of the investment in rail capacity from future growth in rail traffic. Tolls should be based on reasonable expectations of the future network growth that would be catalyzed by the investments and apportioned equitably among the railroads, including where appropriate intercity passenger and commuter railroads, based on network access, use, and public and private benefits.
- Permit a portion of toll revenues to be used to capitalize a revolving fund (or regional funds) supporting additional rail capacity improvements.

Future Strategies and Recommended Coalition Roles

Building a regional rail program will be a challenge, but failing to act will weaken the regional and national transportation systems and undermine the vitality and competitiveness of the U.S. economy. Three actions are recommended to lay the foundation for a regional rail program:

- **Reinforce the mandates of the Intermodal Surface Transportation Efficiency Act (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21)** to provide for economically efficient and environmentally sound movement of people and goods in a energy efficient manner, and affirm the importance of freight rail and passenger rail transportation in achieving these goals and underpinning economic development, trade, and commerce. The Coalition, working with AASHTO, NASTO, and other organizations, can reinforce the mandates of ISTEA and TEA-21 through the development of white papers, such as the *White Paper Recommending a Regional Approach to Organizing and Financing Rail Improvements* completed as a follow-on to the MAROps study. These and other white papers can serve as important documents to help facilitate policy discussions among regional and national freight stakeholders.
- **Provide Coalition funding to formally convene and support a regional rail advisory committee**. The charge of the Coalition and the committee would be to develop a national model for organizing and financing regional rail improvement programs. The Coalition and committee should develop and detail the policies, procedures, organization arrangements, and funding mechanisms needed to support a regional rail improvement program, including identifying regional rail network investment

needs, setting priorities, soliciting and supporting applications from states or groups of states for funding, assessing risks and benefits, and supporting the implementation of projects. The Coalition and committee should report the lessons learned and recommend model legislation for a national program that would assist other regions facing similar rail transportation issues.

- **Support a pilot program of regional rail improvement projects**. The core challenges in building a regional rail program are institutional and political—learning how to solve problems across public and private sector boundaries—challenges that can only be met by the experience of building a program. The states and railroads have identified a pilot program of early-action projects totaling $725 million over 3 years. These are standalone projects; they are not dependent upon completion of many other elements. They focus on projects that are of utility to the entire region, not just small segments of many corridors. And they do not require lengthy engineering or environmental reviews. By working with the states and railroads, along with other organizations such as AASHTO and NASTO, to provide funding for these early-action improvements, the Coalition will see immediate, lasting improvements on the region's rail system.

The states and the railroads have the experience to initiate and manage a regional rail program, but federal and Coalition initiative and support are needed. The problems of the railroads and the consequences of not addressing them are clearer today than when ISTEA and TEA-21 were enacted, and they will sharpen in the coming years. The Coalition must advance solutions such as regional rail programs that will improve the productivity and security of the rail system as an integral part of the region's transportation system.