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**RAILROAD-SHIPPER TRANSPORTATION ADVISORY COUNCIL**  
Washington, DC

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**White Paper III**

Competition for capital dollars, private and public, is growing exponentially for all transportation modes. Whether we profile the airline industry, which projects annual passenger travel to increase from 650 million to 1 billion people in the next 10 years; waterborne trade, which is expected to double in volume over the next 20 years; or internet-spawned deliveries, which are projected to exceed 2.1 billion small parcels by 2003, <sup>1</sup> our country's transportation infrastructure is crumbling under the weight of growth.

Our nation's network of modal transportation is diverse, with waterways and ports linked to over 152,000 miles of rail, 460,000 miles of pipeline and 45,000 miles of interstate highway. <sup>2</sup> Unfortunately, we are not as diverse in distribution of public dollars to support these modes.

Congress approved a record \$217 billion, 6-year spending bill for highways in 1998. Federal highway spending ballooned from \$16.8 billion in FY 1992 to \$27.7 billion in FY 2000, despite the completion of the Interstate Highway System.

At the same time, waterway operators are contributing to the Inland Waterways Trust, a trust established by Congress to maintain the nation's waterway infrastructure. Under the trust, the federal government matches funds provided by private business for waterway projects. But due to current congressional budget caps, the federal government is unable to meet this obligation, rendering the almost \$600 million expected in the trust by 2003 unusable. <sup>3</sup>

Meanwhile, the only federal program for light density rail lines, the Local Rail Freight Assistance (LRFA) program, <sup>4</sup> was eliminated in 1995. This program provided an average of \$10 million per year in capital funds for light density rail until its elimination. To add to this increasing imbalance, since 1992, the railroad industry has paid a fuel tax in excess of \$170 million per year for the purpose of "deficit reduction." Short line railroads alone pay more than \$15 million annually toward this tax.

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<sup>1</sup> Traffic World, *The Envelope's Edge*, September 6, 1999, pg. 16

<sup>2</sup> Traffic World, *What Next?*, September 20, 1999, pg. 30

<sup>3</sup> Traffic World, *Special Report: Inland Waterways*, December 6, 1999, pg. 28-29

<sup>4</sup> American Association of State Highway and Transportation Officials – Standing Committee on Rail Transportation, *State Programs for Light Density Lines 1976-1995*, February 1997

Of equal importance, capital investment per revenue dollar varies greatly by mode and needs to be calculated into any private/public spending formula. Railroads invest an estimated \$2.50 in capital for every revenue dollar while motor carriers invest \$0.50 in capital for the same revenue dollar. Further, a 1999 U.S. Dept of Transportation study found that trucks between 80,001 to 100,000 pounds compensate the taxpayer for only 60% of the damage they impose on roadways.<sup>5</sup>

The government's disproportionate contribution of public dollars toward highway spending has created a "free capital" environment enjoyed by only one of the five modes of transportation on which our country relies.

The Railroad Shipper Transportation Advisory Council's (RSTAC) purpose is to advise Congress, the U.S. Department of Transportation and the Surface Transportation Board (STB) on rail issues affecting small shippers and small railroads. We would like to take this opportunity to address the public funding needs of the rail mode, why public dollars are necessary to maintain the long-term viability of this mode, and to provide examples of case studies of successful public/private partnerships.

## **I. Capital Needs**

The magnitude of the capital shortfall for our nation's short line and secondary branch line rail system is still being researched, but it is clearly in the billions of dollars. Two studies are pending to address this issue in further detail. The first study will use Federal Railroad Administration (FRA) funds to determine short line railroad investment needs and the public interest benefits associated with light density rail networks. The second study will use rail industry funding to determine track and bridge requirements for handling 286,000-pound railcars. The results should be available in late 2000.

A final draft of a 1999 report by the American Association of State Highway and Transportation Officials extrapolates the short line and regional railroad unmet capital needs over the next 10 years to be between \$6.11 to \$9.5 billion. Specifically, AASHTO found there is a myriad of unmet capital needs faced by short line and regional railroads, including deferred maintenance, increased safety requirements, the need for faster operation times, and increased use of 286M GWOR. In a survey funded by AASHTO, and performed by American Short Line and Regional Railroad Association (ASLRRA) members, the total 10-year capital need estimated by 185 responding railroads was over \$2.93 billion, of which \$2.26 billion was unfunded. Expanding the survey results to the entire short line and regional industry yields a total capital need figure in the

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<sup>5</sup> Draft U.S. Dept of Transportation, *Comprehensive Truck Size and Weight Study Volume III Scenario Analysis*, December 30, 1998

range of \$7.93 billion to \$11.75 billion, of which \$6.11 to \$9.5 billion would be unfunded. <sup>6</sup>

Importantly, the AASHTO estimation does not include the capital needs of the secondary gathering networks of Class I railroads, which could easily meet or exceed the capital needs of short line and regional railroads.

We have learned in the past 10 years that internally generated private capital is not enough to sustain and grow our nation's rail system. A 1993 FRA study concluded:

*“While the shortline industry is generally healthy... a significant number of lines formed after the passage of the Staggers Rail Act of 1980 have unmet capital needs, particularly in the area of track structures. It is also clear that the private capital markets may not be providing adequate financing for such investments, even in cases where the loans appear to have an otherwise acceptable level of risk.” <sup>7</sup>*

Further, in the same 1993 study, even the FRA questioned the effectiveness of loan guarantee programs such as the new TEA-21 program:

*“While the analysis has shown that a Federal loan guarantee program would have beneficial impact, the responding Class III carriers, as a group, still would be unable to meet more than 50 percent of their needs for track, structures, and equipment financing... Even if the term of the loan were extended to 25 years, the interest rate were 8.5 percent, and carriers were able to leverage 100 percent of their cash flow – exceedingly generous assumptions – Class IIIs could only repay approximately \$278 million (\$156.1 million for refinancing current debt, plus borrowing capability of \$121.7 million in new loans for equipment, track, and structures) of their estimated needs of \$452 million.”*

Clearly, the capital needs of the short line, regional and Class I secondary gathering lines far exceed the coffers of private dollars. If keeping some select, critical segments of the rail network intact is deemed to be in the public interest, how can we garner taxpayer support to dedicate public dollars to maintain this network?

## **II. Justification for Public Funds**

Since the Staggers Act was passed, railroads have been left to make their decisions based on the economics of their business. Certainly this is not

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<sup>6</sup> American Association of State Highway and Transportation Officials – Standing Committee on Rail Transportation, *The Ten-Year Needs of Short Line and Regional Railroads*, 1999

<sup>7</sup> US Federal Railroad Administration, *Small Railroad Investment Goals and Financial Options*, January 1993, pg. 46-47

unique in our American system. But, it does force railroads to make economically sound decisions that may be in stark contrast to localized public good.

Why should public funds be invested in the rail system? The short answer is because such investment can create public benefits. As our nation faces constrained transportation capacity, a number of areas of potential public benefit to investing in rail infrastructure can be identified, including:

- **Improving the Safety of Rail Operations** – With capital dollars, railroads can implement new technologies focused on safety such as enhanced grade crossing protection, computer-aided dispatching systems, electronically controlled pneumatic braking systems, and positive train separation systems. Through directed and coordinated financing of infrastructure projects, we can eventually achieve the ultimate safety device for motorists and railroads – total grade separations at crossings.
- **Avoiding Greater Capital Costs in Rural Road Networks** – In the absence of rail service, trucks will be used to concentrate goods at origin and distribute goods at destination. If the railroad industry finds that it is not in their economic interest to invest capital in their gathering network, the public will invest more to maintain the highway system. If the Class I railroads continue to de-market light density lines and short lines do not have capital required to improve their lines, then trucks will naturally move significantly more freight. This is especially troubling in rural areas. Rural states already struggle to maintain their road system and federal funds are already used at a greater ratio relative to rural population. <sup>8</sup>
- **Reducing Highway Congestion and Enhancing Highway Safety** – Highways are currently congested in many parts of the country. For example, a 1999 Maryland State Commission on Transportation Investment final report states congested highways, failed intersections, crowded buses, deferred transit maintenance, and the constraints of shared rail service will hamper Maryland's economic development goals and further erode citizen's quality of life. Due to rapid growth in demand, and financial and environmental constraints, it is clear *the State cannot rely entirely on adding capacity to build its way out of congestion*. As other parts of the country realize we cannot build our way out of congestion, our attention must shift to more efficiently utilizing the multi-modal transportation network already in place.
- **Reducing Airborne Contaminants** – According to the Association of American Railroads (AAR), <sup>9</sup> if just 10 percent of freight moved by highway were diverted to rail, the nation could save as much as 200 million gallons of fuel

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<sup>8</sup> US Department of Agriculture, *Maintaining Local Freight Service*, January 1997

<sup>9</sup> Association of American Railroads (AAR) Web Site ([www.AAR.org](http://www.AAR.org)), *Rail Facts and Statistics – Railroads: Building a Cleaner Environment*

annually. Further, according to the Environmental Protection Agency, for every ton mile, it is estimated a typical truck emits roughly three times more nitrogen oxides and particulates than a locomotive.

- Enhancing Competitiveness and Employment in Rural Areas – Viewing railroads as infrastructure upon which to build economic development is a way to look at railroads in order to maintain and capitalize on those rail attributes that will allow us to compete in the global marketplace. We must ensure that the rail infrastructure of the U.S. is not retarding inventory velocity, not as a guarantee of greater profits, but as a guarantee of ability to compete in a world economy...We must compete on total per unit production cost, a cost impacted significantly by inventory velocity. <sup>10</sup>
- Preserving Rail Segments for Current or Future Passenger/Transit Use – Railroads have strong incentive to base these allocation systems solely on their own economics, which might conflict with the public good. A freight railroad has different business motivations than a passenger line. We need to view our rail network as a whole system in order to determine efficient utilization, which may include differentiation of freight and passenger lines with additional build outs of line for mass transit.

### **III. Critical Components of a New Program**

Any program developed by the federal government to fund U.S. transportation infrastructure requirements will need to identify alternative sources of funding and expand existing funding in order to generate sufficient capital to meet the nation's long-term transportation requirements.

In the meantime, some capital has found its way to rail projects through the use of diverse sources of funding. There are examples of successful private business, railroad, and government partnerships where shared investment has led to economic benefits for all parties. Limited federal funding for rail projects has been available through programs such as TEA-21, Congestion Management and Air Quality (CMAC), the Transportation Enhancement Program, Economic Development Administration (EDA) funds, Federal Railroad Administration (FRA) funds, and Section 130 Crossing Safety funds, but this federal funding is limited and often misdirected toward short lines on the brink of financial ruin.

In addition, some capital is being provided by at least nine states that currently own railroad rights of way, and by many states that rely on motor fuel taxes to support the revenue needs of their railroads.

We are not proposing indiscrete distribution of public dollars to support the rail-gathering network. If a decision to fund our rail-gathering network with

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<sup>10</sup> US Department of Agriculture, *Maintaining Local Freight Service*, January 1997

public dollars is reached, partnerships between federal, state and local governments, railroad and business representatives should be required prior to capital investment. And prior to distribution of capital funds, all railroad projects should be reviewed for cost sharing criteria based on a project's geographic location, job potential (number of jobs), and number of carloads.

While public interest can create public benefits, not every light density line warrants public investment. In fact, one objective goal of any public program should be to prioritize projects based on public benefits as measured by a common set of criteria.

#### **IV. Case Studies**

##### **State Government Case Study "The State of Iowa" Preserving State Rail Service**

In the early 1970's, the State of Iowa's rail lines were in serious disrepair. The Rock Island and the Milwaukee railroads were in bankruptcy and their properties were near collapse with millions of dollars in deferred maintenance. The Chicago Northwestern and the Illinois Central, while not in bankruptcy, were not able to generate sufficient revenues to maintain their Iowa lines.

In 1974, the Russian grain crisis was developing and with it the need to generate significant grain export capacity from the Midwest. Iowa faced a potential crisis with the opportunity for Iowa farmers to sell their grain constrained by a failing rail infrastructure.

The State, through its department of transportation, took the initiative to identify those rail lines necessary to protect the State's economy and then developed strategies to finance, acquire or otherwise support rail lines determined to be essential.

##### **State Government and Class I Railroad Case Study "The State of Maryland and Norfolk Southern Corporation" Upgrading Short Lines to 286,000 lbs. GWOR**

Over the past 23 years, Maryland has expended millions of state and federal dollars on its 220 miles of state-owned rail rights-of-way to enhance and preserve service to rural areas of the State. A new six-year program exists in Maryland's proposed capital budget program to further improve select "critical areas of state-owned lines" to 286,000 GWOR capability. Before embarking on these upgrades, the State of Maryland contacted the railroad connecting the bulk of Maryland's short lines, Norfolk Southern Corporation (NS), and shippers on the lines to discuss future needs for 286,000 GWOR capability.

A clear understanding of NS's infrastructure plans is imperative to any decision Maryland will make regarding upgrading GWOR capability. For example, if Maryland upgraded their short line infrastructure to 286M GWOR or 315M GWOR and Norfolk Southern was constrained to 263M GWOR or 270M GWOR weight, the infrastructure investment by Maryland would have been wasted. In order to avoid such an investment disaster, a Maryland short line and NS are currently working together to reach common goals for gross weight on rail.

An example of a successful partnership exists on the Delmarva Peninsula, where the State of Maryland, Norfolk Southern and shippers were able to agree on an infrastructure need of 286M GWOR and gear future investment toward this goal. At this time, Norfolk Southern has officially rated their lines on the Delmarva Peninsula at 286M GWOR and the State of Maryland is in the process of upgrading selected state-owned short lines to this standard.

**State Government and Class I Railroad Case Study**  
**“The State of South Dakota and Burlington Northern Railroad”**  
**Preserving State-Wide Rail Service**

In 1981, Burlington Northern Santa Fe (BNSF) and the State of South Dakota became partners to allow BNSF to ship grain and other products to and from South Dakota customers. Born out of the Milwaukee bankruptcy, the BNSF-South Dakota relationship has proven what is possible when government and the private sector work together to achieve common goals.

Until 1980, the Chicago, Milwaukee, St Paul and Pacific Railroad provided the majority of South Dakota's railroad service. When the Milwaukee filed for bankruptcy in 1977, and terminated service on many of its lines west of the Twin Cities in 1980, no railroads were interested in acquiring the deteriorated track in South Dakota. South Dakota decided to purchase most of the Milwaukee's rail system in the state, thereby preserving the lines and the opportunity to restore rail services essential to South Dakota's agricultural economy.

In 1981, Burlington Northern (BN) agreed to operate key portions of the trackage. BN also agreed to pay the debt South Dakota incurred to purchase and rehabilitate the Milwaukee's former main line, between Ortonville, MN and Terry, MT, in exchange for an option to purchase. In July 1990, BN completed these commitments and, in September 1990, exercised its option to buy the line.

BNSF still maintains an operating contract on other South Dakota-owned track which includes 365 miles between Aberdeen, SD and Sioux City, IA (“the Core System”). BNSF pays rent based on the freight revenues produced by the system. In 1991, South Dakota agreed to temporarily dedicate a portion of those payments to infrastructure improvements. This included relaying rail

and improving yard facilities. BNSF contributed to the cost of the repair and performed the work.

When BN began operating the Core System in 1981, the traffic potential was projected to be less than 5,500 carloads annually. Traffic quickly surpassed this level and has continued to grow. In 1990, more than 22,000 carloads moved on the Core System and in 1999, more than 40,900 carloads were handled.

**Federal, State and Local Government and Private Industry Case Study  
"The State of Washington"  
Preserving Rail Service and Local Businesses**

The State of Washington has established a biennial fund of \$6 million for freight rail assistance. Grants and loans may be used for track upgrades, equipment purchases or bridgework, with loans available to private owners for up to 15 years at no interest.

A successful example of the use of this fund is how the City of Tacoma invigorated the local job market by reopening a rail line between Frederickson and Morton, which in turn fostered the expansion of three local saw mills. Shippers (10%), the State of Washington (15%) and the federally funded Economic Development Administration (75%) financed the project.

**Conclusion**

Since its creation, RSTAC has been faced with a fundamental dilemma that has grown out of the post-Staggers era of consolidation and capacity constraints. What public sector role is appropriate to balance the need to preserve the economic viability of small railroads and their shippers without undermining the overall efficiency of the rail transportation system?

Class One railroads have focused capital investment on high volume traffic corridors in order to increase capacity. However, some small railroads and small shippers on those corridors have experienced erosion of their economic viability. The economics of density, critical for rail profitability, favor the large over the small. New technology – notably in the form of 286,000 or 315,000 gross weight on rail cars – will substantially intensify this problem.

To support economic growth in our country, an efficient transportation network is vital – a network comprised of all transportation modes. Public attention and dollars must be readily available to support all modes, not just the truck industry.

We are at a critical juncture in the history of our nation's rail network. At this moment, we have a unique opportunity to recognize as a nation the public



benefit inherent in a strong, healthy rail-gathering network. We can choose to support the continued economic vitality of our rural communities and small railroads by crafting a program to maintain and grow our rail infrastructure or we can abandon this country's great rail-gathering network and by default our rural communities. <sup>11</sup>

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<sup>11</sup> RSTAC public member, Edward Wytkind dissented to "White Paper III".