

## Rail Infrastructure – An RSTAC Review of the Issues August 6, 2003

*It is estimated in ten years there will be an un-funded need for \$50 billion of additional freight-rail infrastructure improvements. Rail infrastructure is privately funded and many projects may have public benefits that private funds cannot support. Proposed tax mechanisms such as trust funds reduce the amount of private funds available to be used to support an already shrinking rail network. Rail infrastructure investment has many public benefits, including: reduced highway congestion and costs, greater economic development opportunities, less fuel consumption and reduced environmental impact.*

**Investing in Railroad Infrastructure:** Investing in a viable multi-modal transportation network could shift 600 million tons of freight and 25 billion truck vehicle miles traveled off the highway system, save shippers \$239 billion, save highway users \$397 billion, and reduce highway costs by \$17 billion. In addition, investing in a sound rail infrastructure would provide shippers with a competitive multi-modal transportation network in areas where rail upgrades would not materialize if dependent upon private railroad investment justified purely on market volumes. Privately funded rail infrastructure projects are funded based on market volumes and improving individual rail operations, not to provide a competitive alternative for shippers or based upon local or national special interests.

**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.

**Short-Line Improvements:** “This issue now comes to the forefront because of the Class One adoption of the 286,000-pound freight car as the industry standard. These heavier cars cause additional stress on an already weak system of track, bridges, turnouts, and roadbed. A recent study concluded that nearly \$7 billion is required in order for smaller railroads to safely and efficiently accommodate these new 286,000-pound cars. Without such investment, the lower-density feeder network will effectively cut off from the larger railway system because of its inability to handle this traffic.” While the entire \$7 billion may not be a justified public or private expenditure, the dollar magnitude does illustrate the problem.

**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 and Conservation of Fuel:** According to the Association of American Railroads (AAR), 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 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 leverages 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 slowing 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. Enhanced access to rail freight will provide multi-modal transportation that is essential to insure that business and communities in rural America can compete globally.

**Emergency Response:** Freight rail is vital to military mobilization and provides critically needed transportation system redundancy in national emergencies. At issue is the capacity of the freight-rail system to grow with the economy and continue to respond to public emergencies. Large-scale deployments will stress the freight transportation system and could disrupt the complex supply chain networks of civil commerce and defense industry production. This has become even more evident since September 11<sup>th</sup>.