

TRANSPORTATION OPTIONS IN AN ERA OF UNCERTAINTY---
The Intermodal and Railroad Opportunity

Speech Delivered By

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MISSISSIPPI WORLD TRADE CENTER QUARTERLY MEETING
Jackson, Mississippi
May 19, 2005

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At any current gathering of professionals involved in transportation and trade, it would be easy for the conversations to be dominated by the uncertainties we face. Make no mistake---there are plenty of uncertainties. Most visible right now is energy. Recent price levels have staggered the airlines, placed the trucking industry in a bind, and imposed a pay cut on most Americans, especially those who live in rural areas and face lengthy commutes to their jobs. We may be leaving the era of low-cost gasoline, diesel fuel, and aviation fuel. This in itself is a major uncertainty. But there are others. Sluggish economies affect some regions of the world, while other areas are recording solid growth. We are perplexed by the costs and headaches associated with securing the transportation system against terrorism. The public policy arena provides another list of uncertainties. Those of us who watch such things are troubled by the fact that revolutionary changes have taken place in transportation over the past quarter-century, yet Congress and the U.S. Department of Transportation remain mired in traditional notions of spending and program priorities. I could go on and on.

It would be easy to allow these uncertainties to paralyze our ability to think, or plan, or act. But we never will be free of uncertainties. And despite what seems to be an abnormal volume of them, it is useful to remember that there are such things as "enduring principles" that continue to hold value even when we are beset by confusion.

I'll offer my favorite transportation example---the global intermodal freight system. It has revolutionized both global and North American freight transportation. This intermodal system is sharply focused on speed, safety, reliable scheduling, and economic efficiency. It builds on the strengths of each mode--who have become partners in offering service. It also makes use of the versatility of the cargo container. Cargo ships and airplanes span the oceans. The freight railroad is the high-speed, long-distance transportation artery on the land. The truck provides local feeder service at origins and destinations. In some areas, barge traffic on the inland waterways augments the movement of containerized freight. The entire system of transportation modes and interchange terminals is designed to serve the container---and the long distance modes of rail and water are intended to handle large numbers of containers in each individual movement.

In only 25 years' time the intermodal concept has become the world-wide standard for the movement of container freight. It is still growing. For example, the Kansas City Southern Railway's latest annual report showed growth in intermodal traffic

for the year 2004 of almost 15 percent. KCS operates the "Meridian Speedway" through Mississippi, which provides an important intermodal connection between the railroads of the eastern and western U.S., but also for traffic to and from Mexico and Canada. The railroad's annual report tells us that KCS will continue to add capacity on the Meridian Speedway because, and I quote: "...long-term growth potential is more a factor of available capacity than market limitations." Double-digit annual growth in intermodal traffic has been the pattern for most U.S. freight railroads for about 15 years, so intermodal can hardly be described as "mature."

How does this intermodal phenomenon play out against the uncertainties which trouble us today? A doublestack train leaving a coastal port can replace 280 trucks, run at speeds up to 90 miles an hour on the western railroads, and afford as much as nine times the fuel efficiency of container transport by highway. I realize that these operations cannot always attain such lofty fuel savings, but intermodal's fuel efficiency benefits are inherently significant. The freight customer saves money when oil is priced at \$60 a barrel---or at \$40 a barrel. It is helpful to remember that capital investment in intermodal facilities and service made sense when oil was priced at \$20 a barrel.

That last point is important. One of today's uncertainties for American business and government is that of identifying prudent levels of capital investment to achieve energy efficiency or to develop energy alternatives. We all have long memories. During the 1973 OPEC embargo and the subsequent eight years of price shocks and shortages, countless billions of dollars were spent to improve energy efficiency and to identify substitutes for foreign oil. Most of the conservation investments were sound ones. However, when oil prices collapsed a few years later, high-profile alternative fuels ventures proved to be costly failures because the economics worked only if oil prices--in inflation-adjusted terms--were substantially higher than they are even today. Nobody wants to be burned twice.

It is my belief that we are entering an era of higher-priced fuel. If I am correct, capital investment in intermodal service is an obvious priority, because the fuel efficiency of its long-distance components--rail and water--are about the only way to cushion freight customers--and consumers--against high energy prices. If it turns out that I am wrong, it doesn't matter. Even at the lower price levels of the past decade, intermodal traffic volumes have increased at such robust rates that the system is bumping up against its capacity limits. Capital investment in intermodal service and facilities is a sound strategy even if oil prices eventually fall back to where they were five years ago. If they remain at today's levels, investing in intermodal is the best bargain available to us. It delivers customer value irrespective of those conditions. If the long-term petroleum price and supply situation remains troublesome, high-traffic rail corridors can be electrified using alternative energy sources.

The intermodal approach also reduces pollution. The less fuel used, the less pollution created. In addition, the intermodal system relies upon convenient and highly-efficient connections at hubs and interchange points. As the quality of these connections improves, dramatic economic and environmental savings occur.

My favorite example is Chicago, the historic gateway between the eastern and western railroad route systems. Over time Chicago became home to a bizarre patchwork of rail switching and storage yards, and a woefully inadequate web of tracks winding through this vast urban region to connect all of these terminals. Rail passengers were no luckier. It was bad enough that one always had to change trains in Chicago, but often that process involved changing railroad stations as well--and there were seven of them. The Windy City's highways were no better, and today the morning and evening "rush hour" on Chicago's expressways is spread over nearly ten hours. Contributing to this mess were the thousands of trucks which transferred containers between railroads, because the antiquated rail network could not do the job without days of costly delay. Meanwhile, one of transportation's major challenges centers on the fact that most of our major hubs are in urban regions--like Chicago--where air quality flunks federal standards.

Although railroad executives knew for decades that their freight equipment fleets spent far too much time in switching yards or on customer sidings, before deregulation occurred in 1980 they often were unwilling to come to grips with the problems that made delays so commonplace. Intermodal science is changing their habits. Intermodal service is feasible only if it achieves high quality at low rates--which requires an assault upon every practice or situation which causes delay, adds cost, degrades safety, or impairs reliability. Intermodal specialists quantify these obstacles in terms of the costs they add to operations, and then seek cost-effective ways to obliterate them. Sometimes infrastructure wasn't the problem. Operating practices were inefficient. Managements persisted in outmoded thinking because "we always did it that way." Intermodal pioneers asked searching questions. Does it make more sense to invest the money to bring trains to dockside, rather than pay huge drayage bills for years on end to move containers by truck from ports to inland railroad yards? Why does a trainload of containers assembled at a Pacific Coast port and headed for a common destination ever have to stop at a rail classification yard? Why are we sending all these freight cars through Chicago anyway?

Although I have used railroad examples, the other modes have faced similar scrutiny over the past 25 years. The intermodal system is still a work in progress. We don't have all the answers. But intermodal's impact has been remarkable. Think about it. Double-digit annual growth with no end in sight. We have identified many of the barriers to further improvement. We also have learned that intermodal principles can be applied to other categories of freight as well.

As we look to the future of transportation, here are a few thoughts that the transportation and trade leaders of Mississippi might keep in mind.

Increasingly, the main lines of transportation are being defined by the intermodal system. If a state or region is not efficiently connected to this network, it will be burdened with second-class transportation service. At the same time the global intermodal network will serve as a magnet for economic growth. Communities, states, regions, and nations that are well-served by this network will be the winners. The others stand to lose out. Each of us has a stake in the quality of Mississippi's transportation system and the quality of its intermodal capabilities---today and in the future.

This system is built upon many specific components. All of them must perform at a high level or the entire system suffers. A coastal port authority may believe that it is ensuring its future by investing in high-tech cargo handling equipment. But the value of that investment will be diminished if the port's landside access routes are inferior. The time saved in faster unloading of a ship will be wiped out if the freight train hauling that cargo from the port lumbers along at ten miles an hour through nearby urban regions littered with highway grade crossings. Even improving the condition of the tracks and roadbed won't allow for improved speeds if all of these grade crossings remain. Many of them are unnecessary and can be closed. Others will require high-tech safety devices. Major highway traffic arteries must be grade-separated. The grade crossing issue is not limited to urban areas. It creates a safety problem and an operations problem on most of our mainline rail routes in North America.

Although remarkable progress has been achieved in modernizing freight transportation through the application of intermodal principles, America is lagging badly when it comes to applying these concepts to passenger transportation---and they are no less valid and useful. I suspect that most of your professional interests in transportation center on the freight side. Remember that most transportation infrastructure is used for both passenger and freight service---our highways, railways, airways...and even some urban waterways.

The intermodal freight system was designed to provide a nearly-seamless flow of containers between carriers, among modes, and through terminals. With a few exceptions, the notion of seamless service for passengers in the United States is a joke. Airports are designed and operated on the assumption that all passenger will arrive or depart by private auto, taxi, or shuttle van. Airport authorities generally are hostile to intercity bus service and refuse to provide space for bus company operations on their properties. Yet, as aviation has retreated from serving smaller feeder airports, the intercity bus is a logical replacement. Even when public officials try to do the right thing, they sometimes end up getting it wrong. I recall a Florida official's pride in describing the development of a commuter rail line that could serve a local airport. But the rail terminal was nearly a mile away from the airport terminal. They didn't solve a problem. They simple erected yet another obstacle to public acceptance of traveling to the airport by an alternative mode.

Freight's intermodal network offers us another object lesson. The system works because it is customer-driven. It's fair to say that the intermodal network exists because large freight users and ocean shipping companies joined forces to demand that it be put in place. One of the qualities freight customers demand in their transportation service is that of choices among modes and routings. By contrast, passenger transportation in the U.S. is not customer-driven. Passengers take what the modes have to offer, shuffle between terminals, wait at the curb for the hourly transit bus downtown, or head for the parking garage. Unlike the freight user, America's passengers have few choices among modes. Other than at hub airports and the Northeast Corridor, intercity travelers using commercial modes have few choice with respect to departure times.

America's passengers and taxpayers are entitled to something better than this. Equally important, it will be difficult to accommodate future growth in freight traffic unless we alleviate the congestion on our urban highways and on rail lines that now face capacity constraints.

Our success in freight transportation points the way to what I believe is the most promising strategy for transportation improvements in the coming years. I call it "Interstate II." It is a vision of truly high-speed intercity travel that is based upon steel, not pavement. The concept is not radical. It combines the proven efficiency of rail transportation with the strengths of the intermodal system. Interstate II can take advantage of rights-of-way that already exist--both rail and highway. On many routes the capacity can be doubled or tripled without expanding existing rights-of-way. Railroad corridors are transportation's vast untapped resource for the 21st Century.

In the early years of this century, I believe that we must build or upgrade about 20,000 miles of corridors capable of running trains at speeds in excess of 90 miles an hour. That network will be augmented by as much as another 10,000 miles of high-quality conventional rail routings. These corridors are the basis for Interstate II, a high-efficiency network of steel---able to move vast numbers of people and vast quantities of freight---through a network of steel stretching from coast to coast and from Mexico City to Montreal.

I contend that we must do this for several reasons. For one thing, current growth trends in freight intermodal traffic are forcing us in this direction. We also need Interstate II because freight moving in and out of our large cities by highways is plagued by gridlock. Congestion is turning into strangulation. As I noted earlier, if fuel prices remain high, using railroads is the only meaningful way to combat high freight bills. Finally, Interstate II offers the potential for improved and more frequent passenger service.

Over the past quarter-century nearly all of the improvements to the railroad segments of the intermodal system have been financed by the freight railroads themselves. However, the next generation of capital projects simply won't happen

without public financial support. Most senior executives in the freight railroad industry comprehend this fact. They are trying to come up with solutions that improve the freight intermodal system while also providing public benefits. This is a tricky proposition, because few federal, state, or local public officials know anything about freight transportation. These officials may believe that their financial involvement gives them the right to dictate how this freight infrastructure is to be operated--and the results easily could be counterproductive.

Is Interstate II affordable? Let me put things in perspective. For the equivalent of two cents on the motor fuel tax this country could have within 20 years time a network of rail corridors that approaches the scale of the Interstate highway system. Note that I have used the terminology "for the equivalent of two cents on the motor fuel tax." I am not saying raise the motor fuel tax by two cents, or divert two cents of the existing amount. What I am saying is that for one cent of the federal fuel tax and one cent of each state's fuel tax we can build Interstate II. Determining the specific funding approach is a matter for the public officials to decide. And they should keep in mind that the financing mix can include the potential for private investment and tax-exempt bond issuances by state government.

To be honest with you, I think it is reasonable to reallocate existing funds. Current highway construction projects are not solving the gridlock problem. Gridlock gets worse each year. Hugely-expensive urban highway projects have the effect of relocating traffic jams to new locations--which then gives rise to future mega-projects that only perpetuate this dismal process. No, the issue isn't the availability of money. A transportation revolution has occurred during the past quarter-century, but if one looks at today's congressional efforts to enact a transportation funding bill, they reflect policies and priorities that really haven't changed since the 1950s. Although some state transportation officials have expressed sympathy for better alternatives, most states have remained tied to traditional solutions that have turned out to be no solutions at all. I favor Interstate II...and greater reliance upon the vast potential of our nation's railroad rights-of-way...because there are no other practical options.

I believe that the challenge for us...for the transportation and trade leaders of Mississippi...is to change the prevailing political attitudes and to place our state and local governments in the forefront of transportation reform. I am convinced that if the intermodal system is to prosper in future years, and if we are to give the intercity traveler the passenger system he or she deserves, it will be the result of state and local leadership. In time, the states together can exert the influence that will close the federal government's 50-year gap between outmoded policies and new realities.
