

**THE CASE FOR "INTERSTATE II"**

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**Speech to "The Road Gang"---Washington's  
Highway Transportation Fraternity**

**Washington, D. C., May 20, 1999**

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People identify me with railroad issues and advocacy. They forget that I came out of the highway lobby. As late as 1987 I was active in promoting a \$1.6 billion, 1077-mile, four-lane highway development program for my home state of Mississippi. During my business career I have owned five auto dealerships and an air charter service. My first involvements at the federal level were in highway safety. President Nixon named me to the National Highway Safety Advisory Committee. In 1975 President Ford appointed me to the National Transportation Policy Study Commission, which was chaired by Bud Shuster. I led the subcommittee on advanced technology.

I went into this process a strong believer in highway transportation. After three years, I was transformed into a believer in intermodal transportation. Those sentiments were confirmed by my later work as Federal Railroad Administrator under President Bush--which also brought me into contact with leaders in aviation and transit. My comments today reflect nearly 30 years of hands-on experience.

#### **The Interstate Highway Program**

Forty years ago America embarked upon the Interstate Highway System. We built 46,000 miles of multi-lane routes without stoplights or grade crossings. It was a grand achievement. But if you think about it, the Interstate system was not designed for high-speed travel. In most states the top speed limits are only five miles an hour above those posted on the conventional federally-numbered roadways of the 1950s. The great benefit of the Interstates was that we increased capacity by a large factor, and avoided the stop lights, traffic jams, and slow-downs that held average speeds to 50 miles an hour or less.

The Interstate system had dramatic impacts upon mobility, economic growth, and transportation efficiency. But its development created problems that we did not consider important at that time. Some urban areas experienced economic growth which was spurred by their access to modern highway corridors. Others confronted more disruptive consequences. Urban interstates also became commuter routes which fragmented downtowns, and helped spread residential and commercial development to widely-scattered suburbs. Many city centers were devastated, and many small towns withered as the new routes chose green-field rights-of-way.

Few people worried about air pollution in the 1950s. In one respect, our air had become cleaner because Americans of that era switched from coal furnaces and coal-fired industrial boilers to cleaner units which used natural gas or electricity. Meanwhile, our modern highways stimulated the explosion of personal transportation by automobile, instead of public transportation by

transit or rail. By the 1970s, vehicle emissions represented the primary source of urban pollutants.

For a time, Detroit built smaller cars, but the growth in overall numbers of trucks and automobiles soon offset the pollution savings. Local governments chose to pursue industrial polluters instead of confronting the tricky problem of restricting autos and trucks. The result was to drive manufacturing out of urban counties.

Today, commuters coming to the city to work in service industries pass outbound commuters headed for factories which have relocated to the urban fringe. City governments are losing the battle against air pollution, and have resorted to such strategies as urging residents not to run their lawn mowers on high-ozone days, or avoid fueling their autos until after dark. Yet most large cities will flunk the new EPA air-quality standards.

Interstates are regarded as safer than conventional highways, but higher vehicle counts, rush-hour traffic jams, and rising driver frustration are degrading the safety performance. Highway fatalities remain at an unacceptable 40,000-plus per year. We would not tolerate this situation in air or rail service.

### **The Problem of Congestion and "Externalities"**

Only in recent years have transportation engineers and analysts begun to focus on these impacts. They commonly are referred to as "externalities"---the costs of pollution, energy waste, land disruption, accidents, and time wasted in traffic jams. These costs sometimes are hidden--but they are real. More to the point, they are not covered by highway user fees. A study conducted for the American Trucking Associations concluded that the trucking industry alone was responsible for \$30 billion in annual costs which exceed the user fees it pays. Those costs have been transferred to the general taxpayer---and to the consumer in the form of higher prices. And that's only part of the true cost of these external impacts.

Right now, our highway and airway-based passenger system is ailing. Highway and airport gridlock is getting worse--and we have found that we cannot afford to build our way out of this gridlock. Hundred-million-dollar interchanges only move traffic jams to new locations. Highway engineers now recognize in most cases that adding lanes to urban interstates won't solve the problem. Congestion is worse. Rush-hour in Chicago now covers eight hours per day. Average speeds in big-city downtowns are slower than they were 100 years ago, and the true cost of operating a new automobile is in the 40-cents-a-mile range--and rising. It's currently about \$6,000 a year. That works out to

\$500 after-tax dollars per month to move you an average of 1,200 miles a month. That's pretty expensive to move your body in your car 15,000 miles a year.

Aviation's ability to expand is on a par with the problem of leg room in its passenger seats. The cabin can be reconfigured to add an inch or two, but that's about all. Load factors are at record levels. Passengers are furious over delays and overcrowding. With Herculean effort we are able to add an airport like Denver International once every 20 years. Alternatives such as VTOL aircraft have stalled out. Airport managers' visions now are limited to their existing property boundaries. A few airport commissions--like those in New Orleans and Miami--are trying to bring high-speed rail to their terminal escalators...but most airports are not.

It has become clear that we cannot solve our transportation needs of the 21st Century just by adding ever-more-costly highway lanes. This approach simply is not sustainable. When I use the term "sustainable", I intend it to mean a system that we can afford to build...and a system whose adverse impacts upon safety, land use, energy consumption, and air quality are held to acceptable limits.

### **The Global, High-Speed Intermodal System**

As I thought about how to overcome these challenges, I was drawn to our recent experience in intermodal transportation. What has taken place during the past 20 years is nothing short of revolutionary. Intermodal transportation has become the global standard for moving freight--using a system which is sharply focused on speed, safety, reliable scheduling, and economic efficiency.

Today, that network emphasizes moving freight in North America and passengers in Europe and Asia. It is beginning to include passenger service in the United States.

The global high-speed intermodal freight system 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. Cargo airplanes deliver high-value, specialized freight. This system works--but it urgently needs dramatic improvements to its land component in order to handle growing volumes of containers delivered by ship and airplane.

Modern, high-efficiency, high-capacity intermodal terminals are key to the system, providing almost "seamless" interchange. Secondary rail and highway routes support the intermodal system

and connect cities, rural regions, and individual freight customers to the main-line corridors.

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. Overall, the operational and economic efficiency of freight's intermodal network conserves fuel, reduces other environmental impacts, and is significantly safer. It represents the most economically and environmentally "sustainable" approach to transportation services.

Meanwhile, this new intermodal science is redrawing the railroad map of North America, linking the populations and economies of the United States, Canada, and Mexico in a true "North American Rail System." Our continental network serves 90 states and provinces with 240,000 miles of routes--and almost 400 million people. Most of its main lines are in excellent shape. Over \$60 billion in private funds has been spend for upgrading to heavy-duty welded rail.

Another key point is this---customers are driving the intermodal freight network. North American customers suffer when it comes to moving people. Passengers take what the modes have to offer, shuffle between terminals, wait at the curb for the hourly bus downtown, or head for the latest addition to the airport parking garage, where we fork over above-market rates for the "privilege" of being an airline customer. Or we find ourselves at the mercy of higher rental car prices.

One could make the case that the worst defect of our passenger transportation system is the limited number of choices it offers. Residents of cities under 100,000 population often have only one practical option for intercity travel--the private automobile. Where bus and Amtrak service exist, the frequencies often are insufficient to meet the customer's needs. Airlines have retreated from short-haul markets. Where air service remains, the fare levels have driven people back to their automobiles.

### **It's Time for "Interstate II"**

It seems to me that our success in freight intermodal points the way to the most promising strategy for transportation improvements in the years ahead.

I call it "Interstate II." It is a new 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!

Interstate II already is under way. The New York-Washington Northeast Corridor has been in place since the 1970s. High-speed trains will serve Boston later this year. Turbotrains now operate on the Empire Corridor in New York state. Washington, Oregon, and British Columbia are developing a high-speed route in the Pacific Northwest. Eight years ago Congress authorized five new high-speed rail corridors. Today, with the TEA-21 Act, 13 have been approved for development. When Congress voted \$2.3 billion in capital funds for Amtrak, it sent a message that intercity rail passenger service is here to stay. It is interesting to note that Amtrak's package express business is booming, because express companies cannot expand if they are limited to clogged highways. Interstate II will attract mail and package express business away from highways and airways--adding to the new system's revenues, and helping to share the increased traffic loads that the other modes confront.

The evolution of Interstate II reminds me of the conditions which prevailed during the decade prior to our construction of the first Interstate routes. The old two-lane roads were not adequate for traffic volumes. Several states took the lead in building toll roads---Pennsylvania, New Jersey, New York, Ohio, Indiana, Illinois, Kansas, and Oklahoma. Important segments of "Interstate I" already were in operation before Congress voted to launch that project.

The same thing is happening in the 1990s. These state and regional initiatives represent the beginning of a network of high-speed rail lines. Many of them will parallel Interstate highways. During the first quarter of the 21st Century, I believe that we can build about 20,000 miles of corridors capable of running trains at 90 to 150 miles per hour. That network will be augmented by as much as another 10,000 miles of high-quality conventional rail routings.

Often, we will be able to use the same right of way that freight railroad now occupy--if we deal with a number of key issues--including grade separation and liability. An important element of Interstate II is the requirement to eliminate at-grade highway-rail crossings. Many of them can be closed, because they are unnecessary. Others will require separation. The remainder can be fitted with high-tech crossing devices. We cannot have efficient rail corridors--conventional or high-speed, if trains encounter grade crossings every mile in the country and every block in town. Some people will shy away from the crossing-closure issue as too controversial. But think back to the 1950s. We closed tens of thousands of road intersections when the Interstate highways were built.

For Interstate II to function properly, we also must create terminals to transfer passengers and freight among modes and routes. Fast, modern and highly efficient intermodal terminals and yards are essential to freight's intermodal system--providing "seamless" service. Get off an airplane at Dulles or Denver airports and you are reminded that seamless service hasn't arrived. The seams are ripped apart just on the other side of the baggage claim.

Another important element of Interstate II will be the city center terminal. The city center terminal serves the intermodal passenger network. It also serves cities both large and small and helps to revitalize the downtown. These facilities should be developed by local government--just as they built and financed airports. City center terminals can be hubs for people and retailing. In larger cities they can provide a financial contribution to the overall corridor development project.

Amtrak will have a key role in the intercity passenger component of Interstate II. But we need to start thinking about Amtrak in a more realistic context. Amtrak should be in the business of moving people intermodally--in partnership with intercity bus companies and local transit--but not owning track or terminals. Amtrak should operate and be treated like an airline. Airlines don't build airports. They don't carry those debt costs on their books. If airlines had been compelled to finance airports, they would not have had the capability to undertake the remarkable expansion of fleets and service that has occurred during the past forty years. What's fair for airlines ought to be fair for Amtrak, which today is burdened with aging station facilities that in many cases are an embarrassment which discourages use.

#### **"Interstate" II is Affordable**

I also favor Interstate II because it represents the option we can afford.

For the equivalent of two cents on the motor fuel tax--one penny at the federal level and a second penny from the states--America could have within twenty years' time a network of high-speed rail corridors that approaches the scale of the Interstate highway system. That commitment of fuel tax dollars would offer a powerful incentive to additional private investment as well. States and cities should be partners in the process, bringing additional revenues to the table. Again, we are talking about the equivalent of one cent on each state's motor fuel tax.

Some people will argue that motor fuel taxes should only go to highway projects. But highway construction is not solving the gridlock problem. More important, the existing level of highway user fees doesn't even come close to covering the costs that

highway transportation now inflicts upon our economy and society. More to the point, it is not building the system we need, one that captures the safety and capacity of the 21st-Century intermodal passenger and freight network.

Cities, towns, counties and citizens already are paying for that funding gap in many indirect ways. Law enforcement costs. Emergency services costs. Land lost to highway rights-of-way that goes off the tax rolls. Pollution rules that drive industrial jobs out of urban counties despite the fact that most of the emissions are highway-related.

Aside from the obvious benefits from Interstate II, I favor it because there are no alternatives. If trends of the 1980s and 1990s persist into the new century--and there is no reason to believe that they will not--conventional solutions based upon individual modes simply cannot cope with the growth. Does anyone here seriously believe that we can double the capacity of our urban highway system within the next 15 years? The price tag for just a 10 percent increase would be staggering. And does anyone think that we will add eight or nine airports on the scale of Denver International? I would be surprised if we completed even one of them.

We are long overdue in coming to grips with the huge costs of trying to make the highways and airways solve all of our transportation needs--especially since there are efficient alternatives. It is our job to convince the American people and their opinion leaders that Interstate II is possible...and is the obvious solution to our mobility needs for a new century. Rail corridors will prove to be cheaper than hundred-million-dollar interchanges that only relocate traffic jams. They will be safer than 43,000 deaths per year on America's roadways.

This new ethical intermodal transportation system will conserve fuel, reduce pollution, and be less disruptive in using land. And just as America's toll roads used private money to finance construction, Interstate II can attract major private investment cost-sharing. Private money can be applied to construction, operations, station development, and equipment--especially modern passenger, mail and express train-sets.

How many times have you heard people ask: "Why can't we have trains like those in Europe?" The answer is--we can. It's a question of priorities, strategy, partnerships, leadership, and policy. We need to explain to the people of America that they can have a customer-driven passenger system. They can have choice within that system--and it doesn't have to cost 40 cents a mile to get anywhere. Americans also can obtain an even more efficient, low-cost freight and express network that will reap even more benefits through its intermodal design. Americans can have interstates of steel for less cost than interstates of



concrete and asphalt. And Interstate II will provide plenty of work for the traditional highway-builders.

Building this very safe, 20,000-mile, grade-separated, high-speed intercity rail network is the key to the quality of transportation services during the next century. The money is there to do the job. The "road gang's" next goal should be to build it. It is up to you. I believe that the concept makes sense. I hope that you will agree. Thank you.