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### Opportunities for Rail

Commonwealth of Virginia Energy and Sustainability Conference

Transportation: Moving People & Freight  
Session A – Environmental Impacts and Opportunities

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I want to thank the folks at VMI for their work and vision in putting this conference together and for inviting me to speak here this afternoon in the Foster Room.

Some environmental issues are fairly straightforward to communicate. If I am campaigning to save the red cockaded woodpecker, I can show pictures of the bird, talk about its habitat, outline threats to that habitat, talk about encroaching development, and so on. Communicating the importance of transportation decision-making, however, is an order of magnitude more difficult and complex.

I go out to talk to a League of Woman Voters group, an AARP luncheon, or a Kiwanis Club, and when I get going on the importance of wise, balanced transportation decisions, eyes tend to glaze over, minds wander, and mundane matters like the errands that need doing on the way home, or what's going to be for dinner tonight, edge me out.

I know public speakers are supposed to start with a joke or anecdote to draw the audience in. But I also know that you're here at this conference today because you are concerned with energy and our environment. So I'm going to go straight into what I want to say today.

The big reason transportation decisions are so important is that they are long-lasting. They can affect our standard of living, our economic well-being, and our quality of life for decades to come. So if we screw it up, we're not the only ones who will suffer. We have our children and grandchildren to think of here too.

For years building more highways, or adding more lanes, has been seen as a panacea for every problem of congestion and growth. That's because we're all products of the Interstate Era. The nation observed the 50<sup>th</sup> anniversary of the start of the Eisenhower Interstate System earlier this year. The build-out of the Interstate highways has been an inextricable part of our lives.

For 50 years virtually all land transportation investment in this country has gone into highways. As a result, we have a great national highway network. Though some old guys like me can recall those days, I don't think anyone would say we should go back to where we were in the 1950s.

But it's time to move on. The system is mature. We've passed the point of diminishing returns. Each new expansion costs more and produces less public benefit. We have to get past the knee-jerk response to congestion and think smarter.

I'm a rail advocate, so you no doubt figured railroads would come in here sometime. They will. But first let me read to you briefly what AASHTO has to say. That's the American Association of State Highway and Transportation Officials. AASHTO is mainly a highway trade organization and professional group. So when they say we face a transportation crisis and have to do things smarter in the years ahead, it adds more weight and an imprimatur of acceptability over what David Foster or RAIL Solution might say.

Recounting the history and benefits of the Interstate Highway System, AASHTO is quick to say it was right for its time, but that we need a new national approach now, "not just more of the same." They go on to say, "It has meant far more to our economy and way of life than its designers could have imagined. While that vision served the country well for the period from the 1950s to the 1990s, circumstances have changed so dramatically that is no longer adequate for what is needed in the 21st Century." (1)

This is an energy conference, so we need to get oil in here, too. The Interstate Era was also the Era of Cheap Oil. Without cheap and abundant oil, we could not have had the build-out of the interstate highways, the enormous increase in trucking, or mushrooming suburban development. Even our population growth would have been unsustainable.

But now we are in the Era of Peak Oil. Oil will become increasingly less available, then prohibitively expensive, and finally unavailable. The transportation sector of our economy is the largest user of oil, and, with the small exception of Amtrak in the Northeast Corridor, is completely dependent on oil – cars, trucks, boats, trains, planes – all fueled with petroleum. The new Virginia Energy Plan says that transportation accounts for 43% of energy use in the state, and that Virginia's transportation is 94% dependent on petroleum.<sup>(2)</sup>

Here's where the thinking smarter comes in. Here's where we need to make prudent, balanced transportation decisions. It is vital to start planning now for the end of cheap, abundant petroleum. Many large highway projects being proposed today, some slated to take 15 or 20 years to complete, may well be obsolete when finished, simply because no one will be able to afford to use them.

Yet in state after state our DOTs are staffed by people who, like us, are products of the Interstate Era. They know only one way to cope with congestion and growth. Build more highways. But it won't work. And it won't wean us from our dependence on oil. So what needs to be done? How are we to move goods and people in this country?

We need to plan now for a "Steel Interstate System." By this I mean a core national network of high-capacity rail lines that can be the backbone for the movement of goods and people in decades ahead. Our railroads today are where the nation's highways were in the 1950s. There has been a huge net disinvestment in rail capacity over the past 50 years, as more and more freight switched to the interstate highways. Now the interstates are jammed with trucks, in many cases far beyond their design parameters. Freight has moved back to the railroads, overwhelming their diminished capacity, and our rail lines, too, are becoming congested.

In many cases today, because the rail industry has been relatively starved for investment, a dollar invested in freight capacity there will yield far more public benefit than in more highways. In moving a ton-mile of freight, railroads offer more than five times the energy efficiency of trucks, and produce less than a third of the pollution of trucks.<sup>(3)</sup> This is so important in many ways, ranging from public health considerations, to non-attainment zones, to carbon dioxide and greenhouse gasses. Railroads are also safer, and a better choice for movement of hazardous commodities than over the public highways. Adding new capacity on rail lines often can be done with little or no new land, so the disastrous environmental impact, and disruption of homes, farms, and businesses that comes with widening interstate highways, can be largely avoided.

All this is good. Freight should be on the railroads, not choking our highways. We can even take through trucks off the highway and carry them on

trains, greatly reducing the scope and urgency of needed highway construction. It hasn't been done in North America, but it's done routinely in Europe. In many ways other developed nations of the world are outpacing us in transportation infrastructure and decision-making.

But here's the kicker. Railroads are easy to electrify! By concentrating the movement of people and goods, including long-distance trucks, on a core national network, the volumes over those routes would easily justify the investment in electrification.

Now whatever mix of fuels we are using at that time and place to generate electricity, be it nuclear, coal, solar, wind, hydro, or biofuels, will power the transportation sector of our economy. National mobility is indispensable to our economy and way of life. Otherwise threatened by the lack of oil, it can be preserved with an electrified Steel Interstate.

Even AASHTO comes close to the Steel Interstate concept: "AASHTO believes it would be in the national interest if a trunk rail system for the 21st Century with the efficiency and direct connections needed for the future were planned, designed, and built." (4)

Let me share with you something else prophetic from AASHTO. This caught my eye in reading their comments on the history of the Interstate Highway System: "There is a tendency in hindsight to see the creation of the system as inevitable. Anything so fundamental to our way of life had to exist. It did not! The system had to be sold. People had to be convinced." (5)

Now we have to sell the Steel Interstate. Like its highway counterpart, it may well take 50 years to implement fully. So we need to get started. Skeptics may say it would be too expensive. In the 1950s the hundreds of billions of dollars ultimately spent on the Interstate Highway System would have seemed similarly daunting. But few of us now would want to revert to the pre-Interstate world of domestic transportation.

Throughout history the single greatest cause for failures of great civilizations has been depletion of natural resources. Second is breakdown of civil order and internal warfare. But I suspect in many cases that was a direct result of increasingly bitter competition for increasingly scarce resources. How the United States copes with the inevitable depletion of oil will be pivotal to survival of our way of life.

We can take a big step now. We can wean our transportation sector from its near total dependence on oil. Europe is far ahead of us. The Swiss have a national network of double-track, electrified rail lines for movement of people and

goods that's the envy of the world. Their power is hydro generated. The French have done much the same thing. Their power is predominantly nuclear.

RAIL Solution got its start here in the I-81 Corridor of Virginia. We were fighting the proposed privatizing of the highway and turning it into an 8 – 12 lane truck toll road. Our grassroots advocacy stressed that equivalent freight-carrying capacity could be provided by upgrading the parallel rail line between Knoxville and Harrisburg at far lower dollar cost and environmental impact.

We're still vitally concerned about the I-81 Corridor. We participated in last month's initial meetings in Carlisle, PA to form a multi-modal I-81 Corridor Coalition, and we have been working closely with people in Tennessee where public hearings and debate are getting underway on expanding capacity in the I-81/I-40 Corridor. We were pleased to see that a key recommendation of the Virginia Energy Plan when it came out this summer was to move more freight from truck to rail as a means of enhancing transportation efficiency in the state, and that Virginia should "...include, as part of I-81 improvements, facilities to move freight from truck to rail." (6)

Nationally RAIL Solution is focused more and more on the benefits of the Steel Interstate as we try to rally support for it as the backbone of a national network for movement of freight and passengers. AASHTO tells us that more and more interstate highways becoming clogged with trucks "...will almost certainly force State DOTs to handle this traffic through dedicated truck lanes." (7)

So we come full circle. We don't want that to happen. Here in Virginia that's where we came in. The fuel, energy, and environmental implications of such an approach are simply unacceptable. We must have a smarter choice for the 21<sup>st</sup> Century. I invite you to join with us in this crucial campaign for the Steel Interstate.

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#### FOOTNOTES

- (1) *Surface Transportation Policy Recommendations for the National Surface Transportation Policy and Revenue Study Commission* (AASHTO, March 2007, p. 77)
- (2) *The Virginia Energy Plan* (Commonwealth of Virginia, Department of Mines, Minerals & Energy, August, 2007, pp 3-4)
- (3) *Ibid.* p. 69
- (4) *Surface Transportation Policy Recommendations for the National Surface Transportation Policy and Revenue Study Commission* (AASHTO, March 2007, p. 42)
- (5) *Future Needs of the U.S. Surface Transportation System* (AASHTO, February 2007, p. 66)
- (6) *The Virginia Energy Plan* (Commonwealth of Virginia, Department of Mines, Minerals & Energy, August, 2007, p. 158)
- (7) *Future Needs of the U.S. Surface Transportation System* (AASHTO, February 2007, p. 35)